Docket	:	A.25-06-017
Exhibit Number	:	CA-03-SA
Commissioner	:	M. Baker
Admin Law Judge	:	R. Haga
Witness	:	B. Tang

PUBLIC ADVOCATES OFFICE
CALIFORNIA PUBLIC UTILITIES COMMISSION

APPENDIX B

SUPPORTING ATTACHMENTS ON TESTIMONY

San Francisco, California
December 12, 2025

Attachment #	Title	Bates No.
1	Decision D.16-05-036, *Decision Adopting Fire Map 1*	CA-03-0001
2	Decision D.17-01-009, *Decision Adopting Regulations to Enhance Fire Safety in the High Fire-Threat District*	CA-03-0041
3	Decision D.17-12-024, *Decision Adopting Regulations to Enhance Fire Safety in the High-Fire Threat District*	CA-03-0187
4	PG&E Advice Letter 5211-E and SDG&E Advice Letter 3172-E, Joint Filing – *Adoption of the Final California Public Utilities Commission Fire-Threat Map*	CA-03-0416
5	California Public Utilities Commission, High Fire-Threat District Map, "Fire-Threat Maps and Fire-Safety Rulemaking." https://www.cpuc.ca.gov/industries-and-topics/wildfires/fire-threat-maps-and-fire-safety-rulemaking	CA-03-0427
6	Decision D.20-12-030, *Decision Modifying the High Fire-Threat District Boundaries in Southern California Edison Company's Service*	CA-03-0432
7	Safety Enforcement Division, High Fire-Threat District Map Archive. https://files.cpuc.ca.gov/safety/fire-threat_map/	CA-03-0443
8	California Energy Commission, Open Data Portal, Administrative Boundaries Dataset "Electric Load Serving Entities (IOU & POU)." https://cecgis-caenergy.opendata.arcgis.com/	CA-03-0445
9	California Department of Forestry and Fire Protection, Fire Resource and Assessment Program, "Historical Fire Perimeters." https://www.fire.ca.gov/what-we-do/fire-resource-assessment-program/fire-perimeters	CA-03-0449
10	Liberty's Response to Data Request CalAdvocates-LIB-A2506017-006	CA-03-0453
11	Tahoe Regional Planning Agency, Lake Tahoe Boundary Dataset "Lake Tahoe." https://nationaldataplatform.org/catalog/dataset/lake-tahoe	CA-03-0458
12	Bureau of Land Management, Nevada Wildfire Intelligence, Nevada Wildland Fire Perimeters Dataset "Nevada Wildland Fire Perimeters." https://nvfireintel-nifc.hub.arcgis.com/	CA-03-0461

Attachment #	Title	Bates No.
13	The Pine Tree, "Slink Fire Grows to 11,000 Acres, Evacuations Lifted, Hwy 395 Reopens & Smoke Output Drops," September 1, 2020. https://new.thepinetree.net/?p=106522	CA-03-0463
14	NBC News 4 and Fox 11, "Slink Fire grows to 26,752 acres with 86% containment; evacuations lifted," September 28, 2020. https://mynews4.com/news/local/slink-fire-west-of-coleville-grows-to-4700-acres-5-contained	CA-03-0467
15	National Weather Service, "Red Flag Warning." https://www.weather.gov/mqt/redflagtips	CA-03-0475
16	Iowa State University, Iowa Environmental Mesonet, Red Flag Warnings Dataset "Archived NWS Watch, Warnings, Advisories." https://mesonet.agron.iastate.edu/request/gis/watchwarn.phtml	CA-03-0477
17	Liberty's Response to Data Request CalAdvocates-LIB-A2506017-006, Question 4, September 5, 2025, Excel spreadsheet file "*TZP_2016_2020_RFW_Data.xlsx*".	CA-03-0483
18	Colin McKellar, National Weather Service Reno, Email Communication, November 18-19, 2025.	CA-03-0485
19	National Weather Service, "CON/COR/EXP/CAN VTEC Logic." https://vlab.noaa.gov/web/hazard-services/con-cor-exp-can-vtec-logic	CA-03-0488
20	National Weather Service, "National Digital Forecast Database Definitions." https://graphical.weather.gov/supplementalpages/definitions.php	CA-03--0498
21	University of Utah, MesoWest, Weather Station Measurements Dataset. https://mesowest.utah.edu/	CA-03-0505
22	Oregon State University PRISM Group, "PRISM Time Series Data." https://prism.oregonstate.edu/data/	CA-03-0507
23	Liberty's Response to Data Request CalAdvocates-LIB-A2506017-006, Question 3, September 5, 2025, Excel spreadsheet file "*CalAdvocates-LIB-A2506017-006-Q3.xlsx*".	CA-03-0509

Attachment #	Title	Bates No.
24	Latham and Rothermel (1993), "Probability of fire-stopping precipitation events," in National Wildfire Coordinating Group, "Weather: Fire Season Climatology." https://www.nwcg.gov/publications/pms437/weather/fire-season-climatology	CA-03-0511
25	Oregon State University PRISM Group, "Time Series Values for Individual Locations." https://prism.oregonstate.edu/explorer/	CA-03-0530
26	National Weather Service, National Operational Hydrologic Remote Sensing Center, "Interactive Snow Information." https://www.nohrsc.noaa.gov/nearest/index.html	CA-03-0533
27	Office of Energy Infrastructure Safety, 2023-2025 Wildfire Mitigation Plan Technical Guidelines, December 7, 2022, Appendix A: Definitions, at A-15 to A-16. https://efiling.energysafety.ca.gov/Lists/DocketLog.aspx?docketnumber=2023-2025-WMPs	CA-03-0535
28	Liberty's Response to Data Request CalAdvocates-LIB-A2506017-001, Question 11, September 10, 2025, Excel spreadsheet file "*CalAdvocates-LIB-A2506017-001-Q11.xlsx*".	CA-03-0588
29	Liberty's Response to Data Request CalAdvocates-LIB-A2506017-001, Question 12, September 10, 2025, Excel spreadsheet file "*CalAdvocates-LIB-A2506017-001-Q12.xlsx*".	CA-03-0590
30	National Wildfire Coordinating Group, "Weather and Fuel Moisture." https://www.nwcg.gov/publications/pms425-1/11-weather-and-fuel-moisture	CA-03-0597
31	National Oceanic and Air Administration, "Dead Fuel Moisture." https://www.ncei.noaa.gov/access/monitoring/dyk/deadfuelmoisture	CA-03-0610

ATTACHMENT 1

Decision 16-05-036, *Decision Adopting Fire Map 1*

Decision 16-05-036 May 26, 2016

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Develop and Adopt Fire-Threat Maps and Fire-Safety Regulations.	Rulemaking 15-05-006 (Filed May 7, 2015)

DECISION ADOPTING FIRE MAP 1

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DECISION ADOPTING FIRE MAP 1

1. Summary

This decision adopts Fire Map 1 that was developed by the California Department of Forestry and Fire Protection in collaboration with the Commission's Safety and Enforcement Division and the many parties in this proceeding. Fire Map 1 depicts areas of California where there is an elevated hazard for the ignition and rapid spread of power-line fires due to strong winds, abundant dry vegetation, and other environmental conditions. These are the environmental conditions associated with the catastrophic power-line fires that burned 334 square miles of Southern California in October of 2007. A copy of Fire Map 1 is in Appendix A of today's decision.

Fire Map 1 will serve as the foundation for the development of Fire Map 2, which will delineate the boundaries of a new High Fire-Threat District where utility infrastructure and operations will be subject to stricter fire-safety regulations. Importantly, the development of Fire Map 2 will address fire hazards associated with historical power-line fires besides the October 2007 fires in Southern California. These other power-line fires include the Butte Fire that burned 71,000 acres in Amador and Calaveras Counties in September 2015.

Today's decision directs the parties to immediately commence the preparation of a work plan for the development of Fire Map 2.

2. Regulatory Background

In response to devastating wildfires in 2007 that were reportedly ignited by power lines, the Commission in Rulemaking (R.) 08-11-005 adopted regulations to reduce the fire hazards associated with overhead power lines and aerial communication facilities in close proximity to power lines (referred to herein as "power-line fires"). Many of the fire-safety regulations adopted in

R.08-11-005 apply only to areas where environmental conditions pose an elevated hazard for the ignition and rapid spread of power-line fires (referred to herein as "high fire-hazard areas").

In order for fire-safety regulations to be deployed effectively and at least cost, it is essential to have accurate maps of high fire-hazard areas. To this end, the Commission in R.08-11-005 issued Decision (D.) 12-01-032, which adopted interim fire-hazard maps pending the development of maps that are specifically designed to identify high fire-hazard areas.

In D.14-01-010, the Commission approved a work plan for the first step of a two-step process for the development of a statewide fire-hazard map. The goal of the first step was to develop a scientifically based fire-hazard map that depicts the environmental conditions associated with an elevated potential for the ignition and spread of power-line fires ("Fire Map 1"). The second step was to develop a statewide map that depicts utility fire-hazard zones where the fire-safety regulations adopted in R.08-11-005 for high fire-hazard areas would apply ("Fire Map 2"). Decision D.14-01-010 also accepted the California Department of Forestry and Fire Protection's (Cal Fire) offer to lead the development of Fire Map 1 using an independent expert team (IET) selected by Cal Fire and funded by several electric utilities. The same decision directed the Commission's Safety and Enforcement Division (SED) to provide administrative support to Cal Fire and the IET.

On May 7, 2015, the Commission issued Order Instituting Rulemaking (OIR) 15-05-006 as a successor proceeding to R.08-11-005. The scope of R.15-05-006 includes:

1. Develop and adopt Fire Map 1. The purpose of Fire Map 1 is to depict the environmental conditions associated with an elevated potential for utility-associated wildfires.

2. Develop and adopt Fire Map 2. The purpose of Fire Map 2 is to delineate the boundaries of a new High Fire-Threat District where stricter fire-safety regulations adopted in R.08-11-005 and R.15-05-006 will apply.
3. Determine the need for new fire-safety regulations in light of Fire Map 2. These new regulations may include, for example, new standards for the design and operation of overhead utility facilities in the High Fire-Threat District.
4. Assess whether any of the new fire-safety regulations adopted pursuant to Item 3 should apply to existing facilities in the High Fire-Threat District based on cost-benefit considerations and Rule 12 of General Order (GO) 95 and, if so, develop a plan, timeline, and cost estimate for upgrading existing facilities to meet the new regulations.
5. Consider proposals related to the "multiply by" provision in Rule 48 of GO 95, provided that such proposals are consistent with the primary purpose of this proceeding of enhancing the fire safety of overhead utility facilities.[1]
6. Revise GO 95 to include (a) the new High Fire-Threat District, (b) maps of the High Fire-Threat District, and (c) fire-safety regulations developed pursuant to Items 3 - 5.
7. Implementation issues associated with the previous Items, including cost recovery and the timeframe for implementing any new regulations.

Today's decision addresses the adoption of Fire Map 1 (Item 1, above) that was developed by Cal Fire and the IET working in close collaboration with SED and the many parties in this proceeding.

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[1] D.14-02-015, as modified by D.14-12-089, states at page 69: "To the extent practical, Rule 48 and related rules should reflect location-specific fire hazards. For example, Rule 44 currently specifies a single statewide wind-load safety factor of 4.0 for new Grade A wood poles. We anticipate the fire-threat map(s)… will allow a more granular and cost effective wind-load standard that better protects public safety... We expect that some areas of the State may need to retain the existing standard, some areas may need a higher standard, and in other areas a lower standard may be reasonable."

3. Procedural Background

The development of Fire Map 1 took much longer than initially anticipated. The first product was delivered on September 3, 2015, when SED served the Draft Fire Map 1 Review and Development Report (hereafter, the "Draft Fire Map 1 Report") prepared by Cal Fire and the IET.[2] Written comments on the draft report were filed on October 29, 2015, by the Mussey Grade Road Alliance (MGRA), San Diego Gas & Electric Company (SDG&E), and jointly by the following investor-owned electric utilities, communications infrastructure providers, and others (collectively, the "Joint Parties"):

- Bear Valley Electric Service (Bear Valley)
- Liberty Utilities (CalPeco Electric) LLC (Liberty Utilities)
- Pacific Gas and Electric Company (PG&E)
- PacifiCorp d/b/a Pacific Power
- Southern California Edison Company (SCE)
- AT&T California and New Cingular Wireless PCS (AT&T)
- Comcast Phone of California, LLC (Comcast)
- Crown Castle NG West, Inc., LLC (Crown Castle)
- CTIA-The Wireless Association® (CTIA)
- The California Cable & Telecommunications Association (CCTA)
- Consolidated Communications
- The Small Local Exchange Carriers
- Sunesys, LLC (Sunesys)
- Time Warner Cable Information Services (California), LLC
- Verizon California Inc.
- Frontier Communications

[2] The IET includes experts in the fields of fire science, fire weather climatology, rare events statistics, mechanical engineering, and spatial modeling. (Final Fire Map 1 Report at 8.)

- Sprint Telephony PCS, L.P., and affiliates
- T-Mobile West LLC d/b/a T-Mobile

Reply comments were filed on November 9, 2015, by the City of Laguna Beach, MGRA, and SDG&E.

A two-day public workshop was held on November 12 - 13, 2015, to review the Draft Fire Map 1 Report.[3] The workshop included presentations by the IET, Reax Engineering (Reax) representing many of the Joint Parties, and SDG&E regarding methodologies and datasets for preparing Fire Map 1.

The parties resolved several technical issues during the workshop but could not reach a consensus on the IET's initial version of Fire Map 1. At the conclusion of the workshop, the assigned Administrative Law Judge (ALJ) encouraged parties to work collaboratively to resolve outstanding issues and reach a consensus.

Following the workshop, Cal Fire, the IET, Reax, SED, and the parties expended considerable effort in collaboratively resolving technical issues regarding Fire Map 1.[4] On February 3, 2016, an all-party status conference was held with the assigned ALJ to review progress on Fire Map 1. On February 16, 2016, SED filed and served the Final Map Review and Development Report (hereafter, "Final Fire Map 1 Report"), which included the final "print" version of Fire Map 1 and the datasets and models that comprise Fire Map 1.[5]

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[3] OIR 15-05-006 at 11, directed SED to "convene public workshops where: (1) Cal Fire and its experts will explain their recommendations, and (2) stakeholders may present alternative recommendations."

[4] Reax's participation in this proceeding has been very constructive with respect to correcting, refining, and improving Fire Map 1.

[5] The datasets and computer models that comprise Fire Map 1 were filed on a hard drive.

On February 29, 2016, SED filed and served the report for the workshops held on November 12 - 13, 2015 (hereafter, the "Workshop Report"). SED submitted the Workshop Report on behalf of itself and the following parties: AT&T; Bear Valley; CCTA; Cal Fire and the IET; California Municipal Utilities Association; City of Laguna Beach; Comcast; Crown Castle; CTIA; Desert Research Institute; Liberty Utilities; Los Angeles County Fire Department; Los Angeles Department of Water and Power; Modesto Irrigation District; MGRA; PG&E; PacifiCorp; SDG&E; Spatial Informatics Group; SCE; Sunesys; and The Utility Reform Network.

Written comments on the Workshop Report were filed on March 10, 2016, by the Joint Parties and the City of Laguna Beach. Reply comments were filed on March 21, 2016, by MGRA, SDG&E, and SED on behalf of itself, Cal Fire, and the IET. The deadline to file motions for evidentiary hearings was March 28, 2016. No such motions were filed.

4. Summary of Fire Map 1

The purpose of Fire Map 1 is to depict those areas of California where environmental conditions pose an elevated hazard for the ignition and rapid spread of power-line fires.[6] To achieve this objective, Fire Map 1 divides California into a grid in which each cell is 2 kilometers (km) by 2 km, or 4 km^2. The IET used the Weather Research and Forecasting (WRF) model and historical weather data for the ten-year period of 2004 – 2013 to reconstruct each cell's hourly fire weather over the ten-year period using the Fosberg Fire Weather Index (FFWI) for temperature, humidity, and wind gusts. The IET extracted the

[6] OIR 15-05-006 at 6; and D.14-01-010 at 2 and 10.

73 maximum daily FFWI values (top 2%) for each cell over the 10-year period to describe the nature and likelihood of severe fire weather across space.[7] The 73 records for each cell are referred to as the "fire-weather dataset."

Next, the IET developed the Ignition Potential Index (IPI) to estimate the likelihood of utility-related fires during severe fire-weather conditions. The IPI uses (1) wind force as a proxy for the likelihood that overhead utility facilities might produce a spark that could ignite a fire, and (2) the Schroeder Ignition Probability to describe the likelihood that an ember will ignite vegetation fuel beds. The IPI was calculated using the maximum hourly wind gust for each of the 73 records in the fire-weather dataset for each cell. All 73 IPIs were averaged to create the cell's final IPI.[8]

To model the spread of fires ignited by overhead utility facilities, the IET developed the Fire Spread Potential Index (FSPI). The FSPI uses a model called GridFire to simulate fire spread based on specified terrain, vegetation fuel complexes, and weather conditions. To determine the FSPI for each cell, the IET randomly selected 1,000 discrete ignition points in each cell coupled with a random draw from the 73 records in the cell's fire-weather dataset. Each discrete ignition served as the initial condition to simulate fire spread over a one-hour period by the GridFire model. For each model run, the IET created a three-dimensional index equal to the area burned (in acres) multiplied by the average

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[7] The Final Fire Map 1 Report at 20, Figure 10, provides a statewide map that shows the average value of the FFWI for each cell based on the 73 records for each cell in the fire-weather dataset.

[8] The Final Fire Map 1 Report at 23, Figure 11, provides a statewide map that shows the IPI for each cell.

flame length (in feet) to arrive at fire volume (acre-feet). The FSPI for each cell is the average fire volume for all 1,000 simulations.[9]

The final step in the development of Fire Map 1 was to calculate the Utility Fire Threat Index for each cell, which is equal to the IPI multiplied by the FSPI. Fire Map 1 is a visual depiction of the Utility Fire Threat Index for each cell.[10]

A print copy of Fire Map 1 is contained in Appendix A of today's decision. The yellow to red colors on Fire Map 1 are areas in the top 50% of the Utility Fire Threat Index. All areas in the top 50% have a history of large fires.[11]

This simplified description of Fire Map 1 should not obscure the enormous effort needed to develop Fire Map 1. Cal Fire and the IET, in collaboration with Reax, SED and the parties, had to identify, obtain, and merge huge datasets for weather, topography, vegetation, and other variables.[12] They also had to develop or modify complex models that employed these datasets. Running one of the models required supercomputers at the Argonne National Laboratory.[13]

Cal Fire and the IET acknowledge that Fire Map 1 has several limitations that constrain its usefulness as a tool for designating areas where stricter fire-safety regulations should apply. These limitations include:

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[9] The Final Fire Map 1 Report, at page 32, Figure 15, provides a statewide map that shows the FSPI for each cell.

[10] The Final Fire Map 1 Report at 36, Figure 17, provides a statewide map that shows the Utility Fire Threat Index for each cell.

[11] The Final Fire Map 1 Report at 35.

[12] One of the datasets is approximately 1,240 terrabytes.

[13] Final Fire Map 1 Report, at pages 12 and 15. Letters from assigned Commissioner Florio and the Commission's Executive Director helped to secure access to supercomputer resources.

- The spatial resolution of Fire Map 1 is 4 km^2 for each cell, and Fire Map 1 assigns a single Utility Fire Threat Index rating to each cell. However, within a cell there may be variation in the actual Utility Fire Threat Index.
- The climate reconstruction model used to produce the Fosberg Fire Weather Index (FFWI) for each cell makes several simplifying assumptions regarding the maximum wind-gust speed that occurred in a cell during each hour over a ten-year period. There is likely much greater special variation in wind-gust speeds than assumed by Fire Map 1, and wind-gust speeds may be underestimated by 20% or more in some areas.
- The FFWI for each cell is based on historical weather data for spatial scales that exceed the cell size of 4 km^2. The FFWI for each cell was not validated at scales smaller than 4 km^2 against historical observations at Remote Automatic Weather Stations.
- The FFWI for each cell is based on ten years of historical weather data, which may not adequately represent the frequency and magnitude of severe fire weather.
- Fire Map 1 was not validated against historical fires.
- Fire Map 1 is based on a snapshot of weather and vegetation patterns that need to be updated periodically.

5. Summary of the Workshop Report

The Workshop Report provides background information regarding the development of Fire Map 1, a summary of Fire Map 1, and a brief description of resolved issues and outstanding issues.

5.1. Resolved Issues

5.1.1. Climatology Data

The historical climatology data used to prepare Fire Map 1 contained errors, which the IET corrected in coordination with Reax. With these corrections, the parties agreed to use the IET's dataset to prepare Fire Map 1.

5.1.2. Wind Input

The parties agreed to use wind gusts in the Ignition Potential Index. This index is defined as the Schroeder Ignition Probability multiplied by wind-gust speed squared. The parties further agreed to use wind gust speed at 10 meters above ground level, as determined by the WRF model, multiplied by 1.62.[14]

5.1.3. Surface Fuel Input

Fire Map 1 uses surface fuel data from a dataset known as LANDFIRE. While generally correct, the parties agreed to modify LANDFIRE to increase the accuracy of Fire Map 1's fire-spread model. Specifically, the parties agreed to use Wildlife Habitat Relationships attributes in a statewide vegetation dataset maintained by Cal Fire to replace certain fuel classifications in LANDFIRE.

5.1.4. Live Fuel Moisture Input

The fidelity of Fire Map 1's ignition model and fire-spread model depends, in part, on accurate maps of live fuel moisture. However, accurately mapping live fuel moisture is a challenge because there is considerable variation in vegetation moisture, both seasonally and across California.

The IET and Reax developed a dataset for the variation of live fuel moisture using measured fuel moisture data from approximately 175 weather stations across California. The IET and Reax averaged the fuel moisture data from 2012 - 2015 for the months of July, August, September, and October; spatially interpolated the averaged data to 20 km^2 resolution; and incorporated this information into Fire Map 1.

[14] The wind-gust speeds used to prepare Fire Map 1 are not intended to be a design standard for utility structures.

5.1.5. Adoption of Fire Map 1

With the exception of the City of Laguna Beach, all parties support the Commission's adoption of Fire Map 1, provided that it is clear that Fire Map 1 may be refined and adjusted during the development of Fire Map 2.

5.1.6. Update Cycle for Fire Map 1

The parties agreed that Fire Map 1, with any additional refinements and adjustments that are implemented as part of the development of Fire Map 2, would not need to be updated for at least ten years.

5.1.7. Action Items for Fire Map 2

Cal Fire, the IET, Reax, and the parties agreed to address the following issues as part of the planning and development of Fire Map 2:

- Examining vegetation issues in low wind areas.
- Including utility knowledge of local conditions in setting the boundaries of the High Fire-Threat District.
- Investigating whether wind should be a factor in the definition of the High Fire Threat District and whether wind should apply differently in Northern California and Southern California.

5.2. Unresolved Issue - Fire Spread Modeling

The parties did not reach full agreement on the Fire Map 1 model for fire spread and fire volume. This issue includes bias in wind direction, linkage between surface fire and crown fire, and fire spread in response to wind direction. The parties agreed to consider further work on fire-spread modeling when drafting the Fire Map 2 Work Plan.

6. Summary of Comments on the Workshop Report

6.1. City of Laguna Beach

The City of Laguna Beach (hereafter, "City" or "City of Laguna Beach") objects to Fire Map 1 because the map shows the City is in a low fire-hazard area. The City declares that contrary to Fire Map 1, the City faces a very high fire risk because of challenging topography, older development patterns, and 16,000 acres of open space surrounding the City. Compounding the fire risk is a highway adjacent to the open space that is lined with SCE utility poles that have been associated with at least 46 vehicle accidents and several fires in recent years.

The high fire risk the City faces is demonstrated by a fire in 1993 that burned 14,333 acres, damaged and destroyed 441 homes, and caused approximately $838 million in damage. In addition, there have been at least five fires in recent years that involved power-line facilities, including a 15-acre fire on July 3, 2015, that was caused by downed power lines.

The City does not contest that Fire Map 1 accurately depicts open spaces full of dry vegetation as having a high wildfire risk. The problem, according to the City, is that Fire Map 1 depicts developed areas such as the City as having a very low wildfire risk, despite a history of fires. The City believes the Commission should not adopt Fire Map 1 without correcting what appears to be the exclusion of developed communities from high wildfire risk categories.

The City also asks the Commission to state that Fire Map 1 is only an interim step for the development of Fire Map 2 and should not be used for public policy decisions or the allocation of resources. Otherwise, utilities may use Fire Map 1 to claim that communities like the City are not at risk for wildfires.

Lastly, the City urges the Commission to encourage utilities to enter into wildfire safety partnerships with at-risk communities, such as the City, for the purpose of taking steps to reduce the consequences of wildfires.

6.2. Joint Parties

The Joint Parties aver that Fire Map 1 is a major step forward in developing a spatial fire-hazard model. However, the Joint Parties contend that Fire Map 1 has several limitations and unresolved issues that need to be considered during the development of Fire Map 2.

First, the Joint Parties state that Fire Map 1 has not been validated against historical fires and local knowledge of fire hazards. Therefore, the Workshop Report's statement that "the parties… reached consensus on the IET's version of Fire Map 1,[15]" while accurate, needs clarification. The Joint Parties believe that adjustments to reflect historical fires and local knowledge must be considered in the development of Fire Map 2.

Second, Fire Map 1 uses live fuel moisture as variable for both fire ignition and fire spread. For modeling purposes, the live fuel moisture for each grid cell is the average moisture for the cell during the 4-month period of July – October. The problem with this approach, according to the Joint Parties, is that it uses a static measure of live fuel moisture instead of continually changing moisture levels. For example, live fuel moisture is likely higher in July than September, and likely higher than the 4-month average. Consequently, using a 4-month average for live fuel moisture with worst-case fire weather may occur in spring, before fuels have dried, would overestimate the fire hazard. For these reasons,

[15] Workshop Report at 4.

the Joint Parties recommend that during the development of Fire Map 2, the dates associated with the top two percent of the climatology that drives both the fire ignition and fire spread models be reviewed to see how these dates compare with the 4-month window used to develop average live fuel moisture.

Third, the Joint Parties state that the LANDFIRE surface fuel dataset used in Fire Map 1 may overstate the fire hazard in some areas because it assumes continuous vegetation. In reality, there are areas where vegetation is sparse or discontinuous and therefore propagate fire slowly, if at all, such as desert shrub lands. The Joint Parties request that this issue be further analyzed during the development of Fire Map 2.

Fourth, as noted in the Workshop Report, the parties did not reach full agreement regarding Fire Map 1's model for fire spread and fire volume. For example, simulated ignition points near ridge tops exhibited counterintuitive fire spread behavior. The Joint Parties recommend further analysis of fire spread and fire volume during the development of Fire Map 2.

Fifth, the Joint Parties submit that the development of Fire Map 2 needs to recognize that Fire Map 1 has a resolution of 4 km^2. As noted in Section 9 of the Final Fire Map 1 Report, "while results are a huge step forward in understanding spatially explicit details of existing fire hazard across California, results are still much coarser than those desired by many stakeholders that need to make management and planning decisions at highly localized scales.[16]"

Sixth, Fire Map 1 includes non-burnable area such as large bodies of water (e.g., Lake Tahoe) and Central Valley agricultural areas. The Joint Parties

[16] Final Fire Map 1 Report at 36.

recommend that evaluation of excluded areas and addition of new excluded areas be considered during the development of Fire Map 2.

Finally, the Joint Parties acknowledge the concern expressed by the City of Laguna Beach that Fire Map 1 places the City in a low fire-hazard area. The Joint Parties believe the City's concern can be addressed during the development of Fire Map 2, which will consider local knowledge of fire hazards.

6.3. Mussey Grade Road Alliance

MGRA states that while all parties agree that certain types of adjustments and validation may be appropriate during the development of Fire Map 2, it is important to ensure that these are carefully overseen. To this end, MGRA recommends that Cal Fire have a supervisory role in the development of Fire Map 2. This will ensure that adjustments are developed collaboratively with Cal Fire and are applied in a consistent and scientifically sound manner.

MGRA acknowledges the concern raised by the City of Laguna Beach that Fire Map 1 assigns a low wildfire hazard to developed communities, even though developed communities such as Laguna Beach face a high risk for the consequences of wildfires. MGRA responds that Fire Map 1 is purposely limited to identifying areas where there is an elevated potential for utility-related fires to ignite and spread rapidly. MGRA agrees with the Joint Parties that addressing the consequences of wildfires should be deferred to Fire Map 2.

MGRA opines that the data cited by the City to support its claim that Laguna Beach faces a higher fire risk than shown on Fire Map 1 suggests that the City may not understand that the intent of this proceeding is to reduce the risk of catastrophic fires ignited by utility facilities. Specifically:

- The cause of the catastrophic 1993 Laguna Fire cited in the City's comments is listed by Cal Fire as "arson",[17] not power lines.
- Among the fire ignition causes listed by Laguna Beach are transformer fires and vehicle-pole collisions, which are probably not correlated with severe fire weather that causes small power-line fires to grow into catastrophic fires.
- Frequent ignition of power-line fires under normal conditions is not unique to Laguna Beach. For example, there were 289 power-line fires in SDG&E's service territory during the period of 2003 - 2015.

MGRA asserts that the most catastrophic power-line fires in California history ignited in less developed areas and then grew explosively under severe fire-weather conditions characterized by strong winds, low humidity, and elevated temperatures. For instance, the Witch Fire in 2007 was ignited by overhead utility facilities in a remote area and travelled 29 miles from its ignition point. MGRA submits that the primary goal of this proceeding is to ensure that utility fires do not become megafires by specifically addressing utility infrastructure in areas with abundant fuels and severe fire weather.

That said, MGRA agrees that power-line fires that ignite in developed areas under fire-weather conditions can pose a grave risk to communities. MGRA concurs that this is an appropriate topic for Fire Map 2. However, MGRA cautions against artificially inflating fire risk in developed areas because megafires typically do not start where people live.

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[17] Cal Fire; Top 20 Most Damaging California Wildfires; http://www.fire.ca.gov/communications/downloads/fact_sheets/Top20_Damaging.pdf ; downloaded 3/20/2016.

6.4. Safety and Enforcement Division

SED filed reply comments on behalf of itself, Cal Fire, and the IET. SED states that the Joint Parties' comments erroneously focus on issues relating to Fire Map 2. The issue before the Commission, SED asserts, is whether to adopt Fire Map 1. SED requests that the Commission adopt Fire Map 1 as is and address Fire Map 2 issues during the development of Fire Map 2.

SED represents that Cal Fire and the IET broadly agree with the Joint Parties that Fire Map 1 should be validated against historical fire records as part of the development of Fire Map 2. However, SED cautions that validation against most historical fires is relevant only to assessing Fire Map 1's fire-spread model, as most historical fires were not ignited by utility facilities.

SED also advises against spending too much effort in fine-tuning the influence of live fuel moisture on fire spread as suggested by the Joint Parties. SED reports that it is Cal Fire and the IET's expert opinion that the effect of live fuel moisture on fire spread is modest compared to other factors.

In response to the concerns raised by the City of Laguna Beach, SED opines that the City misconstrues Fire Map 1 as a "fire risk" map. In reality, Fire Map 1 depicts the potential for utility-related fires to ignite and spread rapidly, not risks to lives and property. SED adds that the City's concerns about fire risks specific to its location can be addressed during the development of Fire Map 2.

6.5. SDG&E

SDG&E avers that Fire Map 1 is a good starting point for development of Fire Map 2. SDG&E recommends the following steps to transform Fire Map 1 into Fire Map 2:

1. **Display Fire Map 1 by Fire-Threat Tiers** across the utility's service territory. SDG&E suggests a three or four Tier system.
2. **Layer electric facilities** against the backdrop of Fire-Threat Tiers.
3. **Adjust the Tier boundaries** with the following in mind:
    - Local fire history.
    - Areas known to have extreme winds during the local fire season.
    - Areas with a history of weather-related outages.
    - Areas with a history of car-pole accidents.
    - Downwind risk to communities.
    - When adjusting Tier boundaries, err on the side of enlarging the higher Fire-Threat Tier.
4. **Adjust Tier Boundaries Based on Fire Impacts.**
    - Threats to life, property, infrastructure, and the environment.
    - Access and travel times for firefighting resources.
    - Societal costs such as evacuations and employment disruption.
5. **Tier Boundaries Should Make Operational Sense.**
    - All of a circuit should be in the same Tier when the fire-threat logic of doing so is defensible. This will provide for efficient and effective inspection, maintenance, mapping, etc.
    - There should be logical isolation points on circuits that cross Tier boundaries such as switches, fuses, etc.
6. **Process and Documentation.**
    - Additions and exclusions of high fire-hazard areas relative to Fire Map 1 should follow a clearly defined process of selection and justification. All exclusions and significant inclusions should be documented.

SDG&E agrees with the Joint Parties that (1) Fire Map 2 should incorporate local knowledge of terrain, vegetation, weather, and other factors; and (2) the City of Laguna Beach's issues can be addressed in Fire Map 2.

7. Discussion

7.1. Adoption of Fire Map 1

The main issue in today's decision is whether to adopt Fire Map 1. The purpose of Fire Map 1 is to accurately depict areas of the State where environmental conditions pose an elevated hazard for the ignition and rapid spread of power-line fires. Once adopted, Fire Map 1 will be the foundation for the development of Fire Map 2, which will designate the boundaries of a newly created High Fire-Threat District where stricter fire-safety regulations adopted in R.08-11-005 and possibly this proceeding will apply.[18] The ultimate objective is to prevent devastating power-line fires like those in October 2007.

In October 2007, strong Santa Ana winds swept across Southern California and caused dozens of wildfires. The resulting conflagration burned more than 780 square miles, killed 17 people, and destroyed thousands of homes and buildings. Hundreds of thousands of people were evacuated at the height of the fire siege. Transportation was disrupted over a large area for several days, including many road closures. Portions of the electric power network, public communication systems, and community water sources were destroyed. Several of the worst wildfires were reportedly ignited by power lines. These included the Grass Valley Fire (1,247 acres), Malibu Canyon Fire (4,521 acres), Rice Fire

[18] The fire-safety regulations adopted in R.08-11-005 are currently being implemented using interim fire-hazard maps adopted by D.12-01-032.

(9,472 acres), Sedgewick Fire (710 acres), and Witch Fire (197,990 acres). The area burned by these five power-line fires exceeded 334 square miles.

These power-line fires were reportedly ignited when strong Santa Ana winds damaged overhead utility facilities in remote locations with flammable vegetation. Once ignited, the fires spread uncontrollably in severe fire-weather conditions of strong winds, low humidity, and elevated temperatures.

Fire Map 1 is specifically designed to identify areas where environmental conditions pose an elevated hazard for the ignition and rapid spread of the power-line fires. Cal Fire supervised the development of Fire Map 1 by a team of experts working collaboratively with SED, Reax, and the many parties in this proceeding. Except for the City of Laguna Beach, all parties agree that Fire Map 1 is scientifically sound and should be adopted by the Commission.[19]

We conclude that it is reasonable to adopt Fire Map 1 as the foundation for the development of Fire Map 2. The adopted map may be adjusted by the Commission during the development of Fire Map 2.

The Joint Parties identified several issues regarding Fire Map 1 that they believe should be addressed during the development of Fire Map 2. We will defer these issues to the Fire Map 2 Work Plan described below.

We emphasize that Fire Map 1 adopted by today's decision is an interim product. As described in more detail below, our development of the final product — Fire Map 2 — will address fire hazards associated with historical power-line fires besides the October 2007 fires in Southern California. These

[19] We acknowledge the City's position that Fire Map 1 incorrectly assigns a low Utility Fire Threat Index rating to the City of Laguna Beach. We will consider this matter further during the development of Fire Map 2, as described in Sections 7.3 and 7.5.1, below.

other power-line fires include the Butte Fire that burned 71,000 acres in Amador and Calaveras Counties in September 2015.

7.2. No Need to Re-Submit Fire Map 1

In OIR 15-05-006, the Commission anticipated that following its decision adopting Fire Map 1, the map would be finalized to incorporate any changes necessitated by the decision and submitted to the Commission via a Tier 1 advice letter.[20] We conclude that it is not necessary to submit Fire Map 1 via an advice letter because today's decision does not alter the Fire Map 1 that was filed on February 16, 2016, as part of the Final Fire Map 1 Report.

The Fire Map 1 that was filed on February 16, 2016, shall serve as the map adopted by today's decision. A visual depiction of the adopted Fire Map 1 is contained in Appendix A of today's decision and the Final Fire Map 1 Report. The datasets and models that comprise Fire Map 1 are contained on the hard drive that was filed on February 16, 2016, as part of the Final Fire Map 1 Report.

7.3. Interim Use of Fire Map 1

Decision 12-01-032 adopted interim fire-hazard maps that designate high fire-hazard areas where stricter fire-safety regulations adopted in R.08-11-005 apply. Electric utilities and communications infrastructure providers shall continue to use the interim fire-hazard maps for this purpose until the interim maps are replaced by Fire Map 2.

The purpose of Fire Map 1 is to serve as the foundation of Fire Map 2. Despite this limited purpose, we decline to adopt the City of Laguna Beach's recommendation to prohibit the use of Fire Map 1 to identify areas where stricter

[20] OIR 15-05-006 at 11 – 12 and Appendix A.

fire-safety measures should be implemented pending the development and adoption of Fire Map 2. The City does not contest that areas on Fire Map 1 with a high Utility Fire Threat Index rating have an elevated hazard for the ignition and rapid spread of power-line fires.[21] We believe it would be reckless to prohibit electric utilities and communications infrastructure providers (CIPs) from using Fire Map 1 to protect public safety in areas that are identified by the map as having an elevated hazard for power-line fires.

For the previous reasons, we conclude that it is reasonable to authorize, but not require, electric utilities and CIPs to use Fire Map 1 to supplement the interim fire-hazard maps adopted by D.12-01-032. For example, if Fire Map 1 depicts an area with a high Utility Fire Threat Index rating, utilities may implement in this area the stricter fire-safety regulations adopted in R.08-11-005, even if the area is not labeled as a high fire-hazard area on the interim maps.

We acknowledge the City's position that Fire Map 1 incorrectly assigns a low Utility Fire Threat Index rating to the City of Laguna Beach. We will consider this matter during the development of Fire Map 2. The City will have an opportunity at that time to show that historical fires and other factors demonstrate that the City of Laguna Beach should be designated as a high fire-hazard area on Fire Map 2.[22]

Finally, consistent with the City's recommendation, we encourage utilities to engage in dialog with communities that face an elevated fire risk. If SCE has not done so already, we encourage SCE to meet with City officials to explain the

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[21] City of Laguna Beach Comments at 1 and 3.

[22] SDG&E suggests that high fire-hazard areas may be expanded relative to Fire Map 1 to reflect utility-related fire hazards associated with developed areas, such as vehicle-pole accidents.

fire-safety regulations in GO 95, GO 165, and GO 166,[23] and to discuss what additional measures may be warranted for the Laguna Beach area.

7.4. Coordination with the Governor's Proclamation

On October 30, 2015, Governor Brown issued a Proclamation of a State of Emergency (Proclamation) regarding an epidemic of tree mortality caused by severe drought and a massive bark beetle infestation, resulting in worsened wildfire risk in much of the State, among other significant impacts. To cope with the emergency, the Proclamation directs Cal Fire and other State agencies to identify areas that represent high hazard zones for wildfire and falling trees (hereafter, "high hazard zones") and to endeavor to remove dead or dying trees in high hazard zones. Among the Proclamation's other directives are orders for the Commission to use its authority to direct electric utilities to procure energy from bioenergy facilities that use feedstock from the high hazard zones and to facilitate interconnection of the same.[24] The Commission is currently implementing its directives via Resolution E-4770 (March 17, 2016), R.15-02-020,[25] and other means.

The high hazard zones designated by Cal Fire pursuant to the Governor's Proclamation depict areas where there is elevated tree mortality close to infrastructure or resources that would be harmed by wildfire and/or falling

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[23] These fire-safety regulations include (i) shorter inspection intervals, stricter vegetation management standards, and priority of repairs in high fire-hazard areas; and (ii) a requirement to submit plans to prevent power-line fires during extreme fire weather.

[24] Proclamation, at Ordering Paragraphs 1, 2, and 8 - 10.

[25] *See*, for example, the ALJ ruling issued in R.15-02-020 on February 12, 2016.

trees. However, these zones are not equivalent to Fire Map 1.[26] Nonetheless, because high hazard zones represent areas where recent vegetation mortality has resulted in a worsened wildfire risk and a statewide emergency, we conclude that these zones should inform the development of Fire Map 2 as noted in Section 7.5.1, below.

Fire Map 1 adopted by today's decision does not affect or supersede the map of high hazard zones prepared by Cal Fire pursuant to the Proclamation. More generally, today's decision should not be interpreted in a way that impedes or delays any actions that may be taken by the Commission, Cal Fire, electric utilities, or others to implement the Proclamation.

7.5. Next Steps

7.5.1. Development of Fire Map 2

As required by OIR 15-05-006, the Fire Safety Technical Panel[27] (Panel) shall convene as soon as practical to prepare a detailed work plan for the development, adoption, and implementation of Fire Map 2. All parties may participate in the Panel. The Panel shall be co-chaired by SED, SCE, and any other parties designated by SED and SCE.

The Fire Map 2 Work Plan shall address:

- The matters identified in the *Assigned Commissioner's Amended Scoping Memo and Ruling* that was issued in R.08-11-005 on May 15, 2013 at 10 – 12, to the extent these matters pertain to Fire Map 2.

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[26] High hazard zones can be viewed via the online map viewer on the Tree Mortality Task Force website, http://www.fire.ca.gov/treetaskforce.

[27] The duties of the Fire Safety Technical Panel are identified in OIR 15-05-006 at 11 - 13, and in the *Assigned Commissioner's Amended Scoping Memo and Ruling* that was issued in R.08-11-005 on May 15, 2013 at 7 - 12.

- Validation of Fire Map 1 against historical fires.
- Incorporating into Fire Map 2 additional factors and conditions that affect fire hazards associated with overhead utility facilities generally and at specific locations (e.g., Laguna Beach). Such factors and conditions may include the parties' knowledge of (i) terrain; (ii) vegetation (e.g., potential contact between trees and power lines in low-wind areas); (iii) areas designated as high hazard zones pursuant to the Governor's Proclamation of a State of Emergency in response to widespread tree mortality; (iv) microclimates; (v) historical power-line fires besides the October 2007 fires in Southern California (e.g., the September 2015 Butte Fire in Amador and Calaveras Counties); (vii) other historical fires; and (vii) other factors and conditions.
- Other matters deemed appropriate by the parties.

The Panel shall prepare the Fire Map 2 Work Plan using the same process that was used to prepare the Fire Map 1 Work Plan that is attached to D.14-01-010 unless directed otherwise by the assigned Commissioner and/or the assigned ALJ.[28]

We believe the public interest was well served by the collaborative approach used by Cal Fire, the IET, SED, Reax, and the parties to develop Fire Map 1. We strongly encourage all parties to collaborate in the development of the Fire Map 2 Work Plan.

7.5.2. Role of Cal Fire and the IET

In OIR 15-05-006, the Commission anticipated "that the knowledge and experience gained by Cal Fire and [the IET] during the development of Fire Map 1 may be useful in the development of Fire Map 2 and in advising the

[28] OIR 15-05-006 at 12 – 13.

Commission regarding any disputes that may arise pertaining to the development, adoption, or implementation of… Fire Map 2.[29]" To this end, OIR 15-05-006 established a mechanism to fund Cal Fire's and the IET's ongoing participation in this proceeding.[30]

We are impressed by Cal Fire's and the IET's work on Fire Map 1, and we are grateful that they are willing to assist in the development of Fire Map 2 in the manner described by the Final Fire Map 1 Report:

> The IET, in as much as it is available, feels a duty to facilitate Fire Map 2 development, and at least provide ongoing insight into how Fire Map 1 may or may not comport with specific regulatory requirements. At a minimum, Cal Fire will continue to act both as party and as technical representative of the IET regarding issues concerning quantification of fire hazards, their application to spatial modeling routines, and emerging new science that provides insight into wildland fire potential. (Final Fire Map 1 Report at page 42.)

We strongly encourage Cal Fire and the IET to participate actively in the development of Fire Map 2. We expect their expertise will be accorded great weight by the parties and the Commission.

7.5.3. New Fire-Safety Regulations

Concurrent with the development of Fire Map 2,[31] the Fire Safety Technical Panel shall convene at least quarterly to:

- Consider the need for new fire-safety regulations based on Fire Maps 1 and 2.

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[29] OIR 15-05-006 at 15.

[30] OIR 15-05-006 at 5 – 16.

[31] OIR 15-05-006 at 13 – 14.

- If appropriate, develop a menu of potential fire-safety regulations for the design, construction, operation, and/or maintenance of overhead utility facilities in the new High Fire-Threat District.
- Develop criteria regarding: (i) where the fire-safety regulations developed pursuant to the previous bullet should apply with respect to new installations and reconstruction in the High Fire-Threat District; and (ii) whether existing facilities in the High Fire-Threat District should be retrofitted or replaced to conform to the new regulations developed pursuant to the previous bullet. These criteria should include methods for: (a) estimating the costs and safety benefits of proposed fire-safety regulations, and (b) weighing the costs and safety benefits.
- Consider and, if appropriate, develop proposed revisions to the "multiply by" provision in GO 95's Rule 48 in accordance with the guidance provided by Ordering Paragraph 5 of D.14-02-015.

Panel meetings should be conducted in a manner consistent with (1) the instructions in the *Assigned Commissioner's Amended Scoping Memo and Ruling* that was issued in R.08-11-005 on May 15, 2013, at 7 - 8; and (2) the workshop protocols in Appendix D of the Fire Safety Technical Panel Report that was filed in R.08-11-005 on September 23, 2013.

7.5.4. Prehearing Conference

The assigned ALJ shall convene a prehearing conference (PHC) as soon as practical to address (1) the schedule and procedures for preparing the Fire Map 2 Work Plan; (2) the role of Cal Fire and the IET with respect to the development of Fire Map 2; and (3) any other matters deemed appropriate by the assigned Commissioner and the assigned ALJ.

8. Comments on the Proposed Decision

The proposed decision of the assigned ALJ in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code, and comments were allowed pursuant to Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on May 16, 2016, by the City of Laguna Beach and MGRA. Reply comments were filed on May 23, 2016, by SCE.

The City of Laguna Beach and MGRA generally support the proposed decision. Neither party identified any factual, legal, or technical errors in the proposed decision.

MGRA comments that the development of Fire Map 2 should address the fire hazards associated with the Butte Fire that burned 71,000 acres, killed two people, and destroyed hundreds of homes in Amador and Calaveras Counties in September 2015. Cal Fire's investigation of the Butte Fire found that the fire ignited when an improperly maintained tree contacted power lines in light wind conditions of 4 to 5 miles per hour.[32] In contrast, the catastrophic power-line fires that ravaged Southern California in October 2007 ignited when strong Santa Ana winds were blowing.

We agree with MGRA that the development of Fire Map 2 should address the fire hazards associated with the Butte Fire. As stated in the proposed

[32] MGRA Comments on the Proposed Decision, at 3 - 4, citing Cal Fire's Investigation Report on the Butte Fire, Case No. 15CAAEU024918. Cal Fire's Investigation Report is dated April 25, 2016 (Report at page 29), the same date the proposed decision was issued. We take official notice of the Butte Fire pursuant to Rule 13.9 of the Commission's Rules of Practice and Procedure and Evidence Code Section 452(h). We take official notice of the existence of Cal Fire's Investigation Report pursuant to Rule 13.9 and Evidence Code Sections 452(c), (g), and (h). Other than noting that the Butte Fire was reportedly caused by contact between an improperly maintained tree and power lines in light wind conditions, today's decision does not reach any conclusions about the cause of the Butte Fire.

decision, it is our intent that the development of Fire Map 2 should address not only the October 2007 fires in Southern California, but other historical fires, too.[33] We have revised today's decision to better express our intent that the Butte Fire and other historical fires should be considered in the development of Fire Map 2.

9. Assignment of the Proceeding

Michel Peter Florio is the assigned Commissioner for this proceeding and Timothy Kenney is the assigned ALJ.

Findings of Fact

1. The purpose of Fire Map 1 is to depict the areas of California where there is an elevated hazard for the ignition and rapid spread of power-line fires due to strong winds, abundant dry vegetation, and other environmental conditions. These are the environmental conditions associated with the catastrophic power-line fires that burned 334 square miles of Southern California in October of 2007.

2. Fire Map 1 provides a scientifically sound foundation for the development of Fire Map 2, which will delineate the boundaries of a new High Fire-Threat District where utility infrastructure and operations will be subject to stricter fire-safety regulations.

3. D.12-01-032 adopted interim fire-hazard maps that designate areas where (i) there is an elevated hazard for power-line fires, and (ii) the stricter fire-safety regulations adopted in R.08-11-005 apply.

4. It would be reckless to prohibit electric utilities and CIPs from using Fire Map 1, in addition to the interim fire-hazard maps adopted by D.12-01-032,

[33] Proposed decision at 26 and Ordering Paragraph 3.

to identify areas where (i) there is an elevated hazard for power-line fires, and (ii) the stricter fire-safety regulations adopted in R.08-11-005 should apply.

5. Fire Map 1 adopted by today's decision was filed on February 16, 2016, as part of the Final Fire Map 1 Review and Development Report. There is no need for parties to submit a Tier 1 advice letter that contains Fire Map 1 adopted by today's decision as was contemplated in OIR 15-05-006.

6. On October 30, 2015, Governor Brown issued a Proclamation of a State of Emergency regarding an epidemic of tree mortality. The Proclamation directs Cal Fire and other State agencies to identify areas that represent high hazard zones for wildfire and falling trees (hereafter, "high hazard zones") and to endeavor to remove dead or dying trees in high hazard zones. Among the Proclamation's other directives are orders for the Commission to use its authority to direct electric utilities to procure energy from bioenergy facilities that use feedstock from the high hazard zones and to facilitate interconnection of the same. The Commission is currently implementing its directives via Resolution E-4770 (March 17, 2016), R.15-02-020, and other means.

7. The high hazard zones designated by Cal Fire pursuant to the Governor's Proclamation depict areas where there is elevated tree mortality close to infrastructure or resources that would be harmed by wildfire and/or falling trees. These high hazard zones are not equivalent to Fire Map 1.

8. In September 2015, the Butte Fire burned 71,000 acres, killed two people, and destroyed hundreds of homes in Amador and Calaveras Counties. The Butte Fire reportedly ignited when an improperly maintained tree contacted overhead power lines in light wind conditions.

9. Cal Fire and the IET have knowledge and expertise that is relevant to the development of (i) Fire Map 2, and (ii) new fire-safety regulations based on Fire Map 2.

Conclusions of Law

1. Fire Map 1 that was filed on February 16, 2016, as part of the Final Fire Map 1 Review and Development Report, should be adopted as the foundation for the development of Fire Map 2.

2. Fire Map 1 adopted by today's decision should be subject to adjustment by the Commission during the development of Fire Map 2.

3. There is no need to submit Fire Map 1 adopted by today's decision via a Tier 1 advice letter as contemplated by OIR 15-05-006.

4. Today's decision does not affect the requirement in D.12-01-032 to use the interim fire-hazard maps adopted by that decision to identify areas where the stricter fire-safety regulations adopted in R.08-11-005 apply.

5. Utilities should be authorized, but not required, to use Fire Map 1 to supplement the interim fire-hazard maps adopted by D.12-01-032 to identify areas where stricter fire-safety regulations should apply.

6. Fire Map 1 adopted by today's decision does not affect or supersede the map of high hazard zones prepared by Cal Fire pursuant to Governor Brown's Proclamation of a State of Emergency that was issued on October 30, 2015.

7. Today's decision should not be interpreted in a way that impedes or delays any actions that may be taken by the Commission, Cal Fire, electric utilities, or others to implement Governor Brown's Proclamation of a State of Emergency that was issued on October 30, 2015.

8. The high hazard zones designated by Cal Fire pursuant to the Governor's Proclamation should inform the development of Fire Map 2.

9. The Fire Safety Technical Panel (Panel) should convene as soon as practical to prepare a detailed work plan for the development, adoption, and implementation of Fire Map 2. All parties should be allowed to participate on the Panel. The Panel should be co-chaired by SED, SCE, and any other parties designated by SED and SCE. The Panel should follow the same process that was used to prepare the Fire Map 1 Work Plan unless directed otherwise by the assigned Commissioner and/or the assigned ALJ.

10. The Fire Map 2 Work Plan should address the matters identified in the body of today's decision.

11. OIR 15-05-006 established a mechanism to fund Cal Fire's and the IET's ongoing participation in this proceeding.

12. OIR 15-05-006 requires the Fire Safety Technical Panel to convene at least quarterly to consider the need for new fire-safety regulations based on Fire Maps 1 and 2.

13. The assigned ALJ should convene a PHC to address (i) the schedule and procedures for preparing the Fire Map 2 Work Plan; (ii) the role of Cal Fire and the IET with respect to the development of Fire Map 2; and (iii) any other matters deemed appropriate by the assigned Commissioner and the assigned ALJ.

14. The following order should be effective immediately so that the preparation of the Fire Map 2 Work Plan can commence forthwith.

O R D E R

IT IS ORDERED that:

1. Fire Map 1 that was filed on February 16, 2016, as part of the Final Fire Map 1 Review and Development Report, is adopted. A visual representation of Fire Map 1 is in Appendix A of today's decision. The adopted Fire Map 1 may be adjusted by the Commission during the development of Fire Map 2.

2. Electric utilities and communications infrastructure providers are authorized, but not required, to use Fire Map 1 to supplement the interim fire-hazard maps adopted by Decision 12-01-032 to identify areas where the stricter fire-safety regulations adopted in Rulemaking 08-11-005 should be implemented.

3. The Fire Safety Technical Panel ("Panel") shall convene as soon as practical to prepare a detailed work plan for the development, adoption, and implementation of Fire Map 2. All parties may participate on the Panel. The Panel shall be co-chaired by the Commission's Safety and Enforcement Division (SED), Southern California Edison Company (SCE), and any other parties designated by SED and SCE. The Panel shall follow the same process that was used to prepare the Fire Map 1 Work Plan that is attached to Decision 14-01-010 unless directed otherwise by the assigned Commissioner and/or the assigned Administrative Law Judge. The Fire Map 2 Work Plan shall address:

   i. The matters identified in the *Assigned Commissioner's Amended Scoping Memo and Ruling* that was issued in Rulemaking 08-11-005 on May 15, 2013, at 10 – 12, to the extent these matters pertain to Fire Map 2.

   ii. Validation of Fire Map 1 against historical fires.

iii. Incorporating into Fire Map 2 additional factors and conditions that affect fire hazards associated with overhead utility facilities generally and at specific locations (e.g., Laguna Beach). Such factors and conditions may include the parties' knowledge of (A) terrain; (B) vegetation (e.g., potential contact between trees and power lines in low-wind areas); (C) areas designated as high hazard zones pursuant to the Governor's Proclamation of a State of Emergency issued on October 30, 2015; (D) microclimates; (E) historical power-line fires besides the October 2007 fires in Southern California (e.g., the September 2015 Butte Fire in Amador and Calaveras Counties); (F) other historical fires; and (G) other factors and conditions.

iv. Other matters deemed appropriate by the parties.

4. The Fire Safety Technical Panel shall convene at least quarterly to consider the need for new fire-safety regulations based on Fire Maps 1 and 2.

5. The assigned Administrative Law Judge (ALJ) shall convene a prehearing conference to address (i) the schedule and procedures for preparing the Fire Map 2 Work Plan; (ii) the role of the California Department of Forestry and Fire Protection and its Independent Expert Team with respect to the development of Fire Map 2; and (iii) any other matters deemed appropriate by the assigned Commissioner and the assigned ALJ.

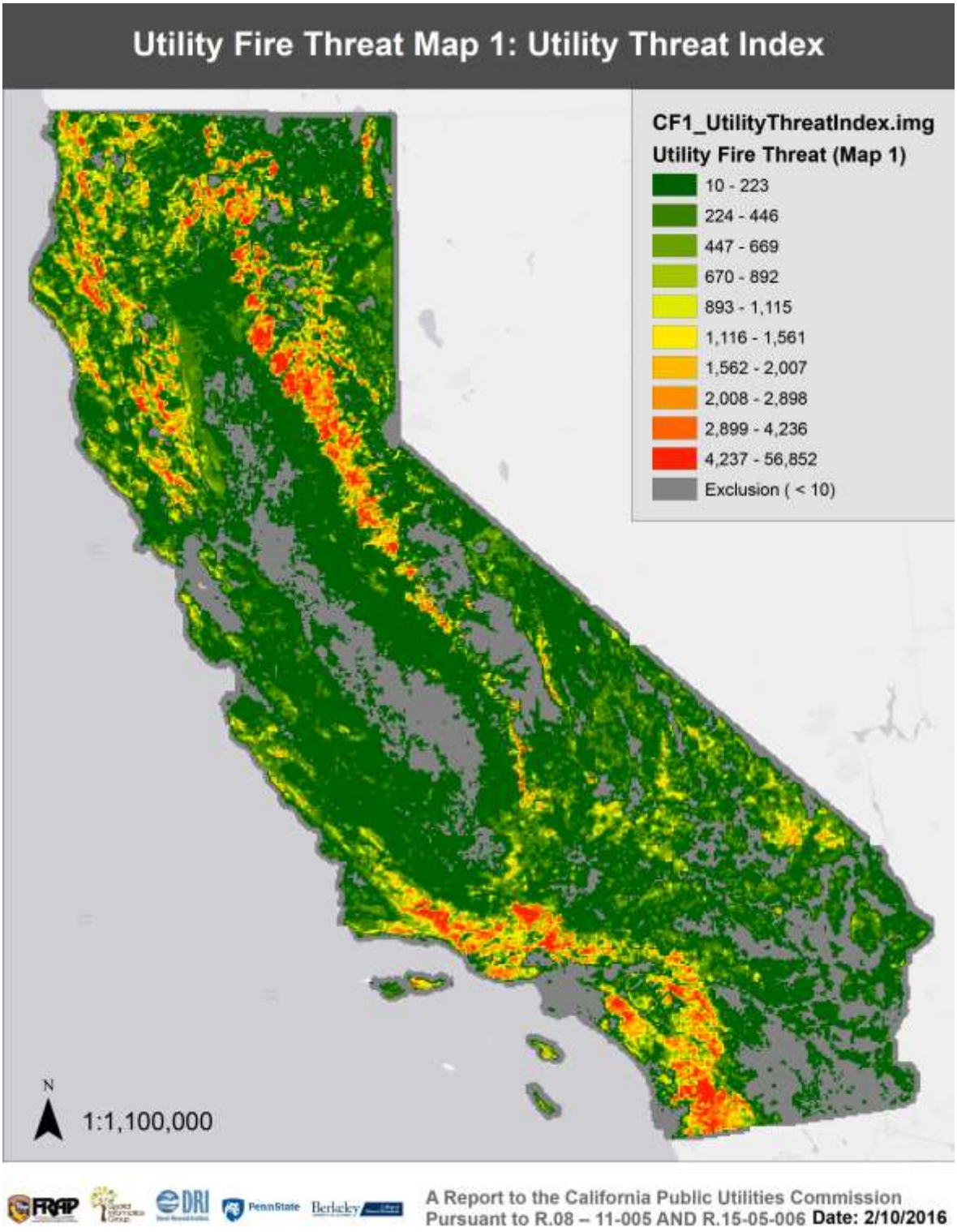
6. This proceeding remains open to address the matters set forth in Order Instituting Rulemaking 15-05-006.

This order is effective today.

Dated May 26, 2016, at San Francisco, California.

MICHAEL PICKER
President
MICHEL PETER FLORIO
CATHERINE J.K. SANDOVAL
CARLA J. PETERMAN
LIANE M. RANDOLPH
Commissioners

Appendix A: Adopted Fire Map 1



ATTACHMENT 2

Decision 17-01-009,
Decision Adopting Regulations to Enhance Fire Safety in the High Fire-Threat District

Decision 17-01-009 January 19, 2017

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Develop and Adopt Fire-Threat Maps and Fire-Safety Regulations.	Rulemaking 15-05-006 (Filed May 7, 2015)

DECISION ADOPTING A WORK PLAN FOR THE DEVELOPMENT OF FIRE MAP 2

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DECISION ADOPTING A WORK PLAN FOR THE DEVELOPMENT OF FIRE MAP 2

1. Summary

This decision adopts a work plan for the development and adoption of a statewide fire-threat map known as Fire Map 2. The purpose of Fire Map 2 is to designate areas where there is an elevated hazard for utility-associated wildfires to occur and spread rapidly, and where communities face an elevated risk from utility-associated wildfires. Fire Map 2 will be used to delineate the boundaries of a new High Fire-Threat District where stricter fire-safety regulations apply. The Fire Map 2 work plan adopted by today's decision reflects input and advice from the California Department of Forestry and Fire Protection (CAL FIRE).

Electric utilities will have primary responsibility for the development of Fire Map 2, and CAL FIRE will have a significant role in overseeing the development of Fire Map 2. Three electric utilities (Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company) will jointly provide up to $500,000 to pay for expert consultants to assist CAL FIRE in overseeing the development of Fire Map 2. This decision establishes a rebuttal presumption that the electric utilities' payments to expert consultants are reasonable and may be recovered in rates.

This decision also establishes a schedule to adopt new fire-safety regulations for the High Fire-Threat District by December 2017.

2. Regulatory Background

In October 2007, devastating wildfires driven by strong Santa Ana winds burned hundreds of square miles in Southern California. Several of the worst wildfires were reportedly ignited by overhead utility power lines and aerial communication facilities in close proximity to power lines. In response to these

wildfires, the Commission initiated Rulemaking (R.) 08-11-005 to consider and adopt regulations to protect the public from potential fire hazards associated with overhead power-line facilities and nearby aerial communication facilities.

The Commission issued several decisions in R.08-11-005 that together adopted dozens of new regulations.[1] Most of the new regulations consist of new or revised rules in General Order (GO) 95. Several of the new regulations rely on maps that designate areas where there is an elevated hazard for power-line fires to occur and spread rapidly (fire-threat maps). These regulations include:

- GO 95, Rule 18A, which requires electric utilities and communication infrastructure providers (CIPs) to place a high priority on the correction of significant fire hazards in high fire-threat areas of Southern California.
- GO 95, Rules 31.2, 80.1A, and 90.1B, which set the minimum frequency for inspections of aerial communication facilities located in close proximity to power lines in high fire-threat areas throughout California.
- GO 95, Rule 35 and Appendix E, which mandate increased time-of-trim clearances between vegetation and energized conductors in high fire-threat areas of Southern California.
- GO 95, Rule 35, Table 1, Case 14, which requires increased radial clearances between bare-line conductors and vegetation in high fire-threat areas of Southern California.
- GO 165, Appendix A, Table 1, which requires more frequent patrol inspections of overhead power-line facilities in rural, high fire-threat areas of Southern California.
- GO 166, Standard 1.E., which requires each electric utility in Southern California to develop and submit a plan to reduce the risk of fire ignitions by overhead facilities in high fire-threat areas during extreme fire-weather events. Electric utilities in

[1] These decisions include Decision (D.) 09-08-029, D.12-01-032, D.14-02-015, and D.14-05-020.

> Northern California must also develop and submit a plan if they have overhead facilities in high fire-threat areas that are subject to extreme fire-weather events.

The Commission in R.08-11-005 adopted three fire-threat maps on an interim basis for use in conjunction with the previously identified fire-safety regulations. Each map covers a different part of California. In D.12-01-032, the Commission concluded that it was in the public interest to (1) develop and adopt a permanent fire-threat map that covers the entire State; and (2) incorporate into GO 95 a new High Fire-Threat District based on the newly adopted fire-threat map; and (3) consider and adopt new fire-safety regulations for electric utility and CIP structures in the High Fire-Threat District. The Commission also determined that the first step towards the development of a permanent statewide fire-threat map would be the preparation of a work plan for completing this task.

In D.14-01-010, the Commission adopted a work plan for the funding, development, adoption, and implementation of a statewide fire-threat map. The adopted work plan specified a two-step process. The first step was to develop and adopt a scientifically based fire-threat map that depicts the physical and environmental conditions associated with an elevated potential for utility-associated wildfires (hereafter, "Fire Map 1"). The second step was to develop a statewide map that depicts utility fire-threat zones where the fire-safety regulations adopted in R.08-11-005 for high fire-threat areas would apply (hereafter, "Fire Map 2").

The Commission adopted a two-step approach based on the recommendation by the parties that the mapping of fire hazards must precede the mapping of utility fire-threat zones. Thus, the work plan adopted by D.14-01-010 was limited to the development of Fire Map 1. Once Fire Map 1 was

adopted, the Commission would turn to the development of Fire Map 2 and revising GO 95 to incorporate a new High Fire-Threat District and fire-safety regulations for the new district.

The California Department of Forestry and Fire Protection (CAL FIRE) agreed to take the lead role in the development of Fire Map 1. This required CAL FIRE to organize and lead a team with expertise in a range of disciplines, including wildland fuels and fire behavior; meteorology; and geographic information systems (GIS). CAL FIRE was also authorized by D.14-01-010 to identify, select, and oversee the internal and external experts and resources that it deemed necessary to develop Fire Map 1. D.14-01-010 approved a funding mechanism to pay for experts selected and overseen by CAL FIRE.

The development of Fire Map 1 did not proceed as quickly as anticipated by D.14-01-010. Therefore, in Order Instituting Rulemaking (OIR) 15-05-006 the Commission closed R.08-11-005 and opened this current rulemaking proceeding. As summarized in OIR 15-05-006, the scope this current proceeding is to:

> [D]evelop and adopt maps that depict areas of the State where there is an elevated risk of power-line fires igniting and spreading rapidly. The California Department of Forestry and Fire Protection will have a primary role in the development of these fire-threat maps. The adopted fire-threat maps will be used to: (1) accurately designate the high fire-threat areas where many of the fire-safety regulations adopted in Rulemaking (R.) 08-11-005 apply, and (2) assess the need for additional fire-safety regulations. New fire-safety regulations will be adopted, as appropriate. (OIR 15-05-006 at 2.)

After lengthy and complex development, the Commission adopted Fire Map 1 in D.16-05-036. The same decision directed the parties to immediately commence the preparation of a work plan for the development of Fire Map 2.[2] Significantly, D.16-05-036 expanded the scope of the Fire Map 2 work plan to include "fire hazards associated with historical power-line fires besides the October 2007 fires in Southern California. These other power-line fires include the Butte Fire that burned 71,000 acres in Amador and Calaveras Counties in September 2015.[3]"

With the end goal in mind, D.16-05-036 directed the parties to continue the quarterly meetings ordered by OIR 15-05-006 and earlier decisions to[4]:

- Consider the need for new fire-safety regulations based on Fire Maps 1 and 2.
- If appropriate, develop a menu of potential fire-safety regulations for the design, construction, operation, and/or maintenance of overhead utility facilities in the new High Fire-Threat District.

On June 2, 2016, the assigned Administrative Law Judge (ALJ) issued a ruling that set a prehearing conference (PHC) and authorized parties to file PHC statements. The following parties filed PHC statements on June 17, 2016:

- A coalition of communication infrastructure providers (collectively, "the CIP Coalition") comprised of the following entities:
  - AT&T California and New Cingular Wireless PCS (AT&T)

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[2] D.16-05-036, at 2 and Ordering Paragraph 3.

[3] D.16-05-036, at 2.

[4] D.16-05-036, at 27 - 28 and Ordering Paragraph 4.

  - The California Cable & Telecommunications Association (CCTA)
  - Comcast Phone of California, LLC (Comcast)
  - Consolidated Communications of California Company (Consolidated Communications)
  - Cox Communications California, LLC (Cox)
  - Crown Castle NG West, Inc., (Crown Castle)
  - CTIA – The Wireless Association (CTIA)
  - Frontier Communications
  - The Small Local Exchange Carriers
  - Sprint Telephony PCS, L.P., and affiliates (Sprint/Nextel)
  - Sunesys, LLC (Sunesys)
  - T-Mobile West LLC d/b/a T-Mobile
  - Time Warner Cable Information Services (California), LLC (TWC)
- The City of Laguna Beach (Laguna Beach)
- The Mussey Grade Road Alliance (MGRA)
- The Commission's Safety and Enforcement Division (SED)
- A group of investor-owned and publicly owned electric utilities consisting of the following entities:
  - Bear Valley Electric Service (Bear Valley)
  - Liberty Utilities (CalPeco Electric) LLC (Liberty Utilities)
  - Pacific Gas and Electric Company (PG&E)
  - PacifiCorp d/b/a Pacific Power (PacifiCorp)
  - The California Municipal Utilities Association (CMUA)
  - Los Angeles Department of Water and Power (LADWP)
  - Sacramento Municipal Utility District
- San Diego Gas & Electric Company (SDG&E)
- Southern California Edison Company (SCE)

A PHC was held on June 22, 2016, and the *Assigned Commissioner's Scoping Memo and Ruling* (Scoping Memo) was issued on July 15, 2016.

The Scoping Memo directed the Fire Safety Technical Panel (FSTP) to convene workshops to prepare a detailed work plan for the development, adoption, and implementation of Fire Map 2.[5] Publicly noticed workshops were held in August - September 2016. On October 7, 2016, SCE filed and served the *Joint Parties' Workshop Report for Workshops Held August - September 2016* (hereafter, the "Workshop Report") on behalf of the following parties: AT&T, Bear Valley, CCTA, CMUA, SED – Electric Safety and Reliability Branch, Laguna Beach, Comcast, Cox, Crown Castle, CTIA, the County of Los Angeles Fire Department, LADWP, Liberty Utilities, MGRA, PacifiCorp, PG&E, SCE, SDG&E, Consolidated Communications, the Small LECs, SMUD, Sprint/Nextel, Sunesys, TWC, T-Mobile, and The Utility Reform Network (TURN).

The Workshop Report included a proposed work plan for the development of Fire Map 2 (hereafter, the "Fire Map 2 Work Plan"). A copy of the Workshop Report is contained in Appendix A of today's decision.

Opening comments on the Workshop Report were filed on October 14, 2016, by AT&T, the CIP Coalition, Laguna Beach, PG&E, SDG&E, and a group of publicly owned electric utilities consisting of CMUA, LADWP, and SMUD. Reply comments were filed on October 21, 2016, by the same parties plus MGRA, PacifiCorp, and SCE.

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[5] The membership and duties of the Fire Safety Technical Panel are identified in OIR 15-05-006 at 11 - 13 and in the Assigned *Commissioner's Amended Scoping Memo and Ruling* that was issued in R.08-11-005 on May 15, 2013, at 7 - 12.

The Scoping Memo provided an opportunity for parties to file motions for evidentiary hearings on the Workshop Report. No such motions were filed.

3. Summary of Comments on the Workshop Report

All parties who filed comments and/or reply comments on the Workshop Report generally support the Fire Map 2 Work Plan. At the same time, many of the commenting parties recommended one or more revisions to the Work Plan.

4. The Adopted Fire Map 2 Work Plan

We concur with the general consensus among the parties that the Workshop Report provides a reasonable and scientifically driven plan for developing Fire Map 2. Therefore, we will adopt the Workshop Report's plan for developing Fire Map 2, but with several modifications. Most of the adopted modifications are intended to streamline the development of Fire Map 2. The modified Fire Map 2 Work Plan adopted by today's decision reflects input and advice from CAL FIRE.

We recognize that the development of a statewide Fire Map 2 will be a challenging task that will require considerable time and resources from CAL FIRE, electric utilities, and the parties. To keep the development of Fire Map 2 moving forward, parties should not let their desire for perfection in Fire Map 2 delay the development of a reasonable Fire Map 2. As a general principle, parties should resolve uncertainties and disputes quickly by choosing the alternative that best protects public safety.

4.1. Three-Step Process for Developing Fire Map 2

Consistent with the Workshop Report, we adopt a three-step process to develop and adopt Fire Map 2. Step 1 is the creation of a map known as

Shape A, Step 2 is the creation of a map known as Shape B, and Step 3 is the creation of a final map known as Shape C. Each step is summarized below.

4.1.1. Step 1: Creation of Shape A

The first step in the development of Fire Map 2 is the creation of a preliminary statewide fire-threat map called Shape A. Shape A will be fashioned from the following inputs specified in the Workshop Report:

1. Cells on Fire Map 1 with a Utility Fire-Threat Index value that is equal to or greater than 800.[6]
2. Cells on CAL FIRE's Fire Resource and Assessment Program (FRAP) map of fire threats (FRAP map) classified as High, Very High, or Extreme.
3. Historic fire perimeter data (all causes) in CAL FIRE's FRAP data base.
4. The intersection of the following areas associated with communities at risk from wildfire (CARs):
    i. Areas classified as "Very High" on CAL FIRE's map of Fire Hazard Severity Zones (FHSZs), and
    ii. Areas within the boundaries of communities on record with CAL FIRE as being at risk from wildfire and to a distance of 1.5 miles outside the edges of the CARs boundaries.[7] In cases where there are no municipal boundaries for a particular CAR, the area for the CAR that will be used to develop Shape A is the CAR's point

[6] Cells on Fire Map 1 with a Utility Fire-Threat Index value of 800 or higher cover an area equal to approximately 13% of California and constitute approximately 15% of the cells on Fire Map 1 with a Utility Fire-Threat Index value of 10 or higher.

[7] There are approximately 1,329 communities currently on record with CAL FIRE as being at risk from wildfire, including the City of Laguna Beach. The list is available at: http://osfm.fire.ca.gov/fireplan/fireplanning_communities_at_risk.

> location on CAL FIRE's statewide map of CARs plus a radius of 1.5 miles around the point location.[8]

The Workshop Report states that Shape A will be created by SDG&E and Reax Engineering (Reax), and submitted to CAL FIRE or another neutral expert designated by the Commission. Today's decision designates CAL FIRE.

On December 8, 2016, SDG&E filed and served notice of the Shape A approved by CAL FIRE. The notice included an electronic copy of the CAL FIRE-approved Shape A in portable document format (PDF) and instructions for obtaining a data file for Shape A that is readable by commonly available geographic information system (GIS) software.[9]

The CAL FIRE-approved Shape A covers more than half of California. We find that the CAL FIRE-approved Shape A provides a reasonable starting point for the creation of Shape B. We address the creation of Shape B in the following sections of today's decision.

We decline to adopt the proposal in the Workshop Report to require Shape A to be filed at the Commission via a Tier 1 advice letter. This procedure allows any person (including non-parties, individuals, groups, or organizations) to protest an advice letter within 20 days of the date the advice letter is filed.[10]

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[8] It would only be necessary to determine CAR boundaries for those CARs that are not otherwise included in Shape A as a result of applying Factors 1 – 3. As noted in the Workshop Report, there may be some CARs that do not meet the intersecting criteria in Item 4 (i.e., none of the CAR is within an area classified as "Very High" on CAL FIRE's map of Fire Hazard Severity Zones) and thus not included in Shape A. (Workshop Report, Attachment A, Footnote 4.)

[9] The notice also included an internet link to a statewide map prepared by CAL FIRE that shows the intersection of CARs and associated FHSZs that was used to develop Shape A.

[10] GO 96-B, General Rule 7.4.

Thus, the status of Shape A would be uncertain for at least 20 days, and longer if protests are filed. This uncertainty could delay the development of Fire Map 2.

Moreover, the advice letter would serve little purpose because Shape A is not the final map, but only the starting point for the creation of Shape B. As described below, parties will have an opportunity to recommend corrections of any perceived defects in Shape A during the development of Shape B. We believe it would be a better use of the Commission's and the parties' limited resources to focus on developing Shape B rather than reviewing, approving, and possibly litigating Shape A through the advice letter process.

4.1.2. Step 2: Creation of Shape B

Except as noted below, we adopt all provisions in the Workshop Report regarding the creation and approval of Shape B.

Shape B will be a refinement of the CAL FIRE-approved Shape A. The refinements will be based on utilities' and other Stakeholders' knowledge of local conditions affecting utility-associated wildfire hazards and risks. Additionally, Shape B will be subdivided geographically into fire-threat Tiers to delineate different levels of utility-associated wildfire hazards and risks.

To ensure consistency and technical rigor, Shape B will be (1) developed by the Peer Development Panel (PDP) described below, which will assign territory-specific mapping roles to Territory Leads; and (2) reviewed and approved by an Independent Review Team (IRT) led by CAL FIRE.

4.1.2.1 The Peer Development Panel and Territory Leads

The PDP will have overall responsibility for developing the statewide Shape B and Shape C maps, which will be the main building blocks for Fire Map 2. The core of the PDP will consist of a small number of persons with expertise in areas directly related to development of the fire-threat maps. The

Workshop Report anticipates that the PDP will include personnel from PG&E, SDG&E, SCE, PacifiCorp, AT&T, SMUD, LADWP, and Reax.[11] We adopt the recommendation by Laguna Beach to allow the Fire Chief for the City of Laguna Beach, who has been actively participating in this phase of the proceeding, to be included on the PDP as an expert on wildfire risks to communities.[12]

We adopt the Workshop Report's proposal for the PDP to be led by SDG&E and Reax.[13] We also adopt the CIP Coalition's proposal to add PG&E as a co-leader.[14] We further adopt SDG&E's recommendation to limit the membership of the PDP to persons with expertise in areas directly related to the development of fire-threat maps.[15] The PDP co-leaders will file and serve the PDP roster,[16] and the Assigned Commissioner and/or the assigned ALJ may resolve disputes regarding the PDP roster.[17]

The Workshop Report describes the Territory Leads as the individuals or entities responsible for assisting the PDP by developing territory-specific maps for Shapes B and C. The investor-owned electric utilities (IOUs) and publicly-owned electric utilities (POUs) are the presumptive Territory Leads for their service areas. If there is no utility with electric facilities in a given territory,

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[11] Workshop Report, at 6.

[12] Laguna Beach Comments on the Proposed Decision, at 2.

[13] Workshop Report, at 6.

[14] CIP Coalition Comments at 2 – 3. PG&E is willing to serve as a co-lead of the PDP. (PG&E Reply Comments, at 2 – 3.)

[15] SDG&E Comments on the Proposed Decision, at 3.

[16] Workshop Report, at 6.

[17] Workshop Report, at 6, Footnote 10.

or the IOU or POU does not want to be the Lead for its service territory, the PDP will be responsible for creating the Shape B for that territory.[18]

The Workshop Report allows CIPs, IOUs, and POUs with facilities adjacent to or in a territory to have specialists (with the appropriate expertise) participate with the Territory Lead in the development of Shapes B and C for a given territory. Parties participating as Territory Leads or working with the Territory Leads are not necessarily part of the statewide PDP but may be.[19]

We decline to adopt the Workshop Report's proposal that Stakeholder Parties should have no role in the creation of Shape B unless they are a member of the PDP, a Territory Lead, or part of the Independent Review Team.[20] We will allow all Stakeholder Parties to submit informal comments to a Territory Lead using the web-based integrated project management/version control software used by the PDP. The Territory Lead shall consider all comments offered by Stakeholder Parties as the Territory Lead creates Shape B for its service territory.

To facilitate collaboration with the Territory Leads, we will require the PDP to file and serve a roster of all Territory Leads, the territory covered by each Lead, and contact information for each Lead. The areas covered by the Territory Leads listed on the roster shall together encompass all of California.

4.1.2.2 Stakeholders

The Workshop Report describes Stakeholders as entities that may be subject to regulations based on Fire Map 2 (e.g., IOUs, POUs, and CIPs) and

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[18] Workshop Report, at 6.

[19] Workshop Report, at 6 - 7.

[20] Workshop Report, at 8.

other interested groups (e.g., CAL FIRE, local municipalities and fire districts, and TURN). Any Stakeholder may request party status in this proceeding in accordance with Rule 1.4 of the Commission's Rules of Practice and Procedure. Stakeholder Parties may contribute to the development of Shape B by submitting informal comments to the Territory Leads as described previously, and by filing formal comments at the Commission regarding Shape B as descried below.

4.1.2.3 The Independent Review Team

The Workshop Report proposes the establishment of a group called the Technical Review Team to independently review the PDP's development of Shapes B and C. Consistent with the Workshop Report, we will establish a group called the Independent Review Team (IRT) to provide independent oversight and review of the PDP's development of Shapes B and C.

We adopt the Workshop Report's recommendation to have CAL FIRE lead the IRT.[21] CAL FIRE is exceptionally well qualified to provide independent oversight and review of the PDP's development of Shapes B and C, which will be based on data and maps prepared by CAL FIRE, including Fire Map 1, the FRAP fire-threat map, CAL FIRE's list of communities at risk (CARs) from wildfire, and CAL FIRE's maps of the fire hazard severity zones (FHSZs) within or adjacent to the CARs. More broadly, CAL FIRE has unsurpassed expertise, experience, and knowledge with respect to mapping fire threats across California's vast and complex landscape. We appreciate CAL FIRE's willingness to take on the important role of leading the IRT.

[21] Workshop Report, at 7.

To preserve the independence of CAL FIRE and the IRT, CAL FIRE will have sole authority to (1) determine the internal and external resources needed for the IRT, (2) determine the number and qualifications of the IRT's members, and (3) identify, select, and manage the IRT members. CAL FIRE will control the IRT's activities, and all IRT work products will reflect CAL FIRE's independent judgement and expertise.

Although the Workshop Report requires the IRT to file and serve the final IRT roster, we will direct SED's Advocacy Staff to file and serve the roster because of SED's extensive experience with the Commission's regulatory procedures. We decline to adopt the Workshop Report's recommendation to authorize the Assigned Commissioner and/or the assigned ALJ to resolve disputes regarding the composition of the IRT. As stated previously, CAL FIRE will have complete control over the IRT.

So that the development of Fire Map 2 does not become bogged down in disputes over technical issues and other matters, we adopt SDG&E's recommendation to empower the IRT to provide guidance and to decide deadlocked issues regarding the development of Fire Map 2.[22] Providing the IRT with such authority well help ensure that Fire Map 2 is technically sound and developed expeditiously. It will also require the IRT to be available and engaged throughout the development of Fire Map 2. The PDP shall develop Shape B and Shape C in accordance with the IRT's guidance and decisions.

The IRT's authority to render guidance and decisions regarding the development of Fire Map 2 does not constitute an improper delegation of the

[22] SDG&E Comments, at 4.

Commission's authority as suggested by the CIP Coalition.[23] The Commission recognized in D.16-01-014 that public agencies may delegate the performance of ministerial tasks, including (1) the investigation and determination of facts preliminary to agency action, and (2) making preliminary recommendations and draft orders. An agency's subsequent approval or ratification of a delegated act validates the act, which becomes the act of the agency itself.[24]

Here, the role of the IRT is to oversee the PDP's development of Shapes B and C. Parties will have an opportunity to submit formal comments and/or protests to the Commission regarding the Shapes B and C that are developed in accordance with the IRT's guidance and decisions. The Commission will review any comments or protests, revise Shapes B and/or C as the Commission deems appropriate, and adopt a final Fire Map 2. Consequently, there is no improper delegation of authority to the IRT.

To ensure that the IRT has adequate expertise and resources to perform its responsibilities within the schedule adopted by today's decision, we adopt the following variant of the Workshop Report's recommendation[25] to hire and fund expert consultants to assist the IRT:

- CAL FIRE will identify the specific experts and resources needed to assist the IRT.
- PG&E, SCE, and SDG&E shall contract with, and pay for, expert consultants and resources identified by CAL FIRE.

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[23] CIP Coalition Reply Comments, at 6 – 7.

[24] D.16-01-014 at 88, citing D.09-05-020 at 2 – 3.

[25] Workshop Report, at 17 – 19.

- To ensure independence, the activities and work products of the expert consultants hired by the IOUs shall be determined and overseen by CAL FIRE.
- CAL FIRE will review and approve the expert consultants' invoices and deliverables. If requested by CAL FIRE, SED Advocacy Staff shall assist CAL FIRE in reviewing and processing invoices.
- PG&E, SCE, and SDG&E shall choose one among themselves to prepare and execute the contract(s) appropriate to CAL FIRE's requirements[26] and the utility's normal contracting practices.[27] The contractor(s) shall record billable costs for time, materials, and expenses, which will be reviewed for accuracy and reasonableness by CAL FIRE and/or SED Advocacy Staff. After approval from CAL FIRE and/or SED, the contractor(s) shall directly bill the lead IOU, which in turn may bill the two other IOUs for their proportionate shares of the lead IOU's payments to the contractor(s).

[26] For example, the contract may provide that services will be subject to the supervision of CAL FIRE and any limits as to time, expenses and costs will be determined by CAL FIRE, with the understanding that payment would be subject to any provisions adopted by the Commission.

[27] For example, IOUs routinely include contract provisions that encourage the contractor, to the extent subcontractors are engaged, to utilize Commission-audited firms owned by women, minorities and/or disabled veterans.

- In conjunction with the previous bullet, one expert consultant may be selected as the lead vendor to prepare and execute sub-contracts with other expert consultants under terms and conditions appropriate to CAL FIRE's requirements and the utility's normal contracting practices.[28] The lead vendor will manage and make payments to the sub-contractors. The lead vendor will record billable costs for time, materials, and expenses, which will be reviewed for accuracy and reasonableness by CAL FIRE and/or SED Advocacy Staff. After approval from CAL FIRE and/or SED, the lead vendor will directly bill the lead IOU, which in turn may bill the other two IOUs for their proportionate shares of the lead IOU's payments to the lead vendor.
- PG&E, SCE and SDG&E shall share the total payments using the following allocation: PG&E (49%), SCE (41%) and SDG&E (10%). This allocation is based on 2011 annual electric revenue as an allocation proxy.
- Total IOU payments for expert consultants and other resources, as determined by CAL FIRE, through the creation of a final statewide Fire Map 2 is capped at $500,000.
- PG&E, SCE, and SDG&E may record their payments (or allocated share of payments) to the contractor(s) in their Fire Hazard Prevention Memorandum Accounts (FHPMAs) that are described in D.12-01-032 at 153-156.
- Because the need for expert consultants and other resources to assist the IRT will be determined by CAL FIRE, and the work will be directed and reviewed by CAL FIRE, there will be a rebuttable presumption that the payments (or allocated share of payments) recorded in the FHPMAs, not to exceed $500,000, are reasonable and may be recovered in rates.

[28] *Ibid*.

- CAL FIRE and/or SED must seek Commission approval to exceed the cost cap, if needed. The cost responsibility for any additional expenditures above the initial cost cap of $500,000 will be considered at that time. If PG&E, SCE and SDG&E volunteer to pay for additional expenditures, any payments booked in the respective FHPMAs will be presumed reasonable up to any new/revised cost cap authorized by the Commission.

The funding mechanism adopted by today's decision to pay for expert consultants and other resources to assist the IRT in overseeing the development of Fire Map 2 is substantially similar to the funding mechanism adopted by D.14-01-010 for the development of Fire Map 1.

We recognize that it may be necessary to enter into sole-source contracts for expert consultants and resources to assist the IRT because of (1) the need to hire expert consultants quickly for IRT-related work that will begin immediately after the issuance of today's decision; and (2) the potentially small number of consultants who have the requisite expertise, knowledge, and experience; can begin work immediately; and can devote considerable time to the IRT for a period of 11 to 12 months.[29]

We also recognize that CAL FIRE, in anticipation of today's decision, has been working with expert consultants since December 2016 to expedite the development of Fire Map 2. This work has included the formation of the IRT, planning the IRT's specific duties and responsibilities, consulting with the PDP regarding the development of the project management software described below,

[29] The adopted schedule for the development of Fire Map 2 is contained in Section 4.5 of today's decision.

and performing other work with the assistance of expert consultants. Therefore, we will authorize the funding mechanism adopted by today's decision to encompass work performed by expert consultants under CAL FIRE's direction beginning in December 2016.

Although the Workshop Report recommends a cost cap of $250,000 for outside experts and resources, we will adopt a higher cost cap of $500,000 based on our experience with the development of Fire Map 1, which required nearly $500,000 of funding from the IOUs for outside experts and resources. We believe it is prudent to establish a higher cost cap in order to avoid any interruption in the IRT's work – and the consequent delay in the development of Fire Map 2 – that could occur if the recommended cost cap of $250,000 were to be exceeded.

We agree with the Workshop Report's recommendation that the payments made to contractor(s) by PG&E, SCE, and SDG&E pursuant to today's decision shall have no precedential value as to the percentage of cost responsibility or non-responsibility of other parties for any other aspects of this proceeding.[30]

4.1.2.4 Creation of Shape B

The PDP will have overall responsibility for creating Shape B, with heavy reliance on the Territory Leads and oversight by the IRT.[31]

To help manage the process of creating Shape B, we adopt the Workshop Report's suggestion to require the PDP to use web-based integrated project management/version control (IPM/VC) software.[32] This software will allow the

[30] Workshop Report, at 18.

[31] Workshop Report, at 5, 6, and 8.

[32] The contemplated IPM/VC software is akin to a web-based enterprise data application.

IRT, PDP, and each Territory Lead to create an account that makes it possible to initiate "tickets" that feature proposed changes. For example, a Territory Lead may propose a modification to Shape B by initiating a ticket, attaching a GIS shapefile for the proposed change, and providing a written justification for the proposed change. This ticket and its attachments will be immediately viewable by anyone with a web browser. The PDP will use the ticket to comment on the proposed change, ask questions, request additional information, and accept, modify, or reject the change. As a result, the entire process for creating Shape B will be transparent and documented.[33] To ensure that the IPM/VC software meets the needs of the IRT, we will direct the PDP to consult with the IRT prior to selecting and implementing the software.

So that Stakeholder Parties can monitor and participate in the development of Fire Map 2, we will require the PDP to provide Stakeholder Parties with access to the IPM/VC software and the ability to view all tickets, create their own tickets, and respond to other parties' tickets. The PDP shall file and serve instructions for Stakeholder Parties to access and use the IPM/VC software within 30 days from the effective date of today's decision.[34]

In their comments on the Proposed Decision, the Joint POUs state that a Territory Lead or Stakeholder Party may wish to use sensitive information regarding the nature and location of critical infrastructure (sensitive information)

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[33] Workshop Report, Attachment 2, Section 3.2.1. The PDP, in consultation with the IRT, may use procedures other than "tickets," but the selected procedures must be transparent to Stakeholder Parties and Territory Leads.

[34] The 30-day period is based on the Joint IOUs' Comments on the Proposed Decision, at 4 and 14.

to demonstrate that a particular area should be included in Tier 2 or Tier 3. The Joint POUs request a means for Territory Leads and Stakeholder Parties to (1) propose a change to Tier boundaries based on sensitive information that is not provided through the "transparent" IPM/VC software, and (2) remove sensitive information that is inadvertently posted on the IPM/VC software.[35]

We strongly discourage the use of sensitive information to justify changes to Tier boundaries. Territory Leads (TLs) and Stakeholder Parties (SPs) should use publicly available information such as Google Earth to identify the location of critical infrastructure. TLs and SPs should also use general, non-sensitive descriptions of critical infrastructure such as "transmission line," "government facility," or other general descriptors. However, if it becomes necessary to use sensitive information to justify a proposed change to a Tier boundary, which we strongly discourage, a TL or SP may submit the sensitive information directly to CAL FIRE and the PDP co-leads PG&E and SDG&E (but not Reax) using a secure and confidential means of communication (e.g., thumb drive). CAL FIRE and the PG&E and SDG&E co-leads may share sensitive information with other members of the IRT and PDP, as appropriate, who are authorized to view sensitive information.

Sensitive information should not be posted on the IPM/VC software. If sensitive information is inadvertently posted on the IPM/VC software, the PDP should remove the material as soon as possible after learning of the incident.

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[35] Joint POUs' Comments on the Proposed Decision, at 4 – 5.

4.1.2.4.1 Step 2(a): Initial Statewide Shape B

Using the CAL FIRE-approved Shape A from Step 1 as the starting point, the development of Shape B will occur in the following sequence. In Step 2(a), the PDP will run statewide GIS operations to carve out areas from the CAL FIRE-approved Shape A that cannot propagate wildfires such as barren landscapes, irrigated agricultural land, and high-density urban areas. The PDP will also refine Shape B on a statewide basis to: (i) Include and exclude polygons from Shape B based on demonstrably incorrect logic in Fire Map 1 or the FRAP fire-threat map, and (ii) to exclude high fire-threat cells that are isolated spatially. We will require the PDP to consult with the IRT prior to executing these carve outs and refinements, and the IRT to approve carve outs and refinements so as to avoid the possibility of having to re-do this initial step and all subsequent steps.

Any impasse between the PDP and IRT in Step 2(a) shall be resolved in favor of the IRT. Stakeholder Parties may use their preferred carve outs and refinements to create and submit alternative Shape Bs for the Commission's consideration in Step 2(e).

4.1.2.4.2 Step 2(b): Fire-Threat Tiers

In Step 2(b), the PDP will develop a conceptual framework to divide Shape B into geographic fire-threat Tiers. However, the number of Tiers was left for parties to address in their comments on the Workshop Report and for the Commission to decide.

We adopt SDG&E's recommendation to divide Shape B into three fire-threat Tiers.[36] We agree with the Workshop Report's suggestion, as modified

[36] SDG&E Comments at 5, and SDG&E Reply Comments at 2 – 3.

by SED's comments on the Proposed Decision,[37] to broadly define the three Tiers as follows[38]:

Tier 1: Areas with zero to moderate wildfire risk.

Tier 2: Areas with elevated wildfire risk.

Tier 3: Areas with extreme wildfire risk.

Tiers 2 and 3 will together comprise Shape B. Tier 1 will consist of all areas outside of Shape B.

We decline to adopt AT&T's proposal to direct the PDP to determine if there should be more than three fire-threat Tiers as part of the development of Shape B. We appreciate AT&T's desire to assess whether Fire Map 2 should have more than three Tiers in order to (1) reflect the significant variability in vegetation, topography, weather, and other factors affecting wildfire risks across California; and (2) properly focus fire-safety regulations and utility resources.[39] However, we agree with Laguna Beach that AT&T's proposal could delay the development and adoption of Fire Map 2.[40] We also agree with Laguna Beach and SDG&E that adopting a Shape B with more than three Tiers would add complexity to mapping, fire-safety regulations, utility operations, and enforcement without a meaningful improvement to fire safety.[41]

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[37] SED Comments on the Proposed Decision, at 2 - 3and A-1.

[38] Workshop Report, at Attachment 2, Sections 4.1.1 and 4.1.2.

[39] AT&T Comments, at 1 – 9.

[40] Laguna Beach Comments, at 2 – 4.

[41] Laguna Beach Comments, at 3 – 4; Laguna Beach Reply Comments, at 5 – 6, SDG&E Comments, at 5; and SDG&E Reply Comments, at 2 – 3.

We disagree with AT&T's assertion that adopting three fire-threat Tiers is inconsistent with the interim fire-threat maps adopted in R.08-11-005 that have four tiers.[42] In D.12-01-032, the Commission adopted a *de facto* two-tier approach, and the areas depicted on the interim fire-threat maps were divided between the two tiers.[43] The 3-tier approach adopted by today's decision, while more complex than the previous two-tier approach, provides more granularity compared to the previous 2-tier approach and thereby allows fire-safety regulations to be deployed more effectively and efficiently.

The parties did not reach a consensus on the detailed definition of each of the three Tiers adopted by today's decision or the means for mapping each Tier. With one condition, we adopt the Workshop Report's proposal to have the PDP develop a more detailed definition of each Tier in consultation with the IRT, and to have the IRT approve the definitions.[44] Our one condition is that the Tier definitions shall have no more than a negligible effect on the exterior boundaries of Shape B. Put differently, the Tier definitions should not re-define or negate the fire-threats that comprise the Initial Statewide Shape B from Step 2(a).[45]

Our one condition will enable the PDP to focus on defining Tier 3. Once Tier 3 is defined, Tier 2 would consist of Shape B less the area defined as Tier 3.

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[42] AT&T Comments, at 4 – 5, and AT&T Reply Comments, at 1 - 4.

[43] D.12-01-032, at 148 and Ordering Paragraph 12.ii.

[44] Workshop Report, Attachment 2, Section 4.1.2.

[45] Tier definitions should incorporate the suite of data used to produce the Fire Map 1 Utility Fire Threat Index, and may include other relevant data regarding the ignition, propagation, and spread of wildfires. An example of other relevant data is an area's proximity to fire suppression resources, which affects the likelihood of a wildfire escaping initial attack.

Tier 1 would consist of all areas outside of Shape B. Two examples of possible definitions of Tier 3 provided in the Workshop Report are:

1. Areas where fire poses a significant threat to human life, has potential to damage/destroy multiple homes, or cause significant damage to the environment or other values at risk, or
2. Areas where fire consequences could be similar to the catastrophic Southern California firestorm of 2007.[46]

We agree with the Workshop Report's recommendation that the Tiers should be defined in a manner that can be applied statewide using either (1) the "narrative approach" in the Workshop Report, Attachment 2, Table 1, or (2) the "matrix approach" in Attachment 2, Section 5. Once the IRT has approved the Tier definitions, the PDP shall update the Tier parameters for the matrix approach in Workshop Report, Attachment 2, Section 5, Figure 1 and Table 2.[47] The PDP shall carry out these updates in consultation with the IRT.

The PDP shall notify the Territory Leads and Stakeholder Parties of the IRT-approved Tier definitions and the IRT-approved updates to the Tier parameters for the matrix approach. Notice should be provided through the IPM/VC software.

Any impasse between the PDP and IRT regarding Tier definitions shall be resolved in favor of the IRT. Stakeholder Parties may use their preferred Tier definitions to create and submit Shape Bs with alternative Tier definitions for the Commission's consideration in Step 2(e).

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[46] Workshop Report, Attachment 2, Section 4.1.2.

[47] Workshop Report, at 12 and Attachment 2, Section 4.1.2.

4.1.2.4.3 Step 2(c): Territory-Specific Development

In Step 2(c), each Territory Lead will develop a tiered Shape B for its assigned territory. The starting point for each Territory Lead will be the IRT-approved Initial Statewide Shape B from Step 2(a) and the IRT-approved Tier definitions from Step 2(b). The Territory Lead may propose to include or exclude areas for its territory-specific Shape B and Tiers using the criteria in the Workshop Report, Attachment 2, Section 4.3 (the "narrative approach") and/or Section 5 (the "matrix approach").

We will require all proposed exclusions from a territory-specific Shape B to be well supported and protect public safety. For example, a Territory Lead may propose to remove an area from Shape B if all three of the following conditions are satisfied:

1. The removed area has no significant fire history.
2. The removed area has no proximity to communities at risk or other significant assets at risk.
3. At least one other factor in the "removal" column of the Workshop Report, Attachment 2, Table 1 is present.[48]

We will also require each Territory Lead to submit to the PDP a proposed Shape B for the applicable geographic area within a timeframe set by the PDP, in such form as directed by the PDP, and accompanied by such maps, GIS files, information, and other material deemed necessary by the PDP. All substantive

[48] SDG&E Comments, at 4.

communications between a Territory Lead and the PDP shall occur through the IPM/VC software and be visible to all Stakeholder Parties.[49]

Each territory-specific Shape B proposal will be reviewed by the PDP, who may confer with the IRT, Territory Leads, and Stakeholder Parties. Each proposal will be approved, modified, or rejected by the PDP, or returned to the Territory Lead for further work. The PDP shall use the IPM/VC software to provide an explanation for each proposal that is approved, modified, or rejected. The IRT shall resolve any deadlocks between the PDP and Territory Leads.

We will not permit the PDP and Territory Leads to alter any carve outs or refinements to Shape B that were approved or rejected by the IRT in Step 2(a) unless there is good cause for doing so (e.g., the Territory Lead presents new information that was not considered in Step 2(a)). The PDP shall notify the IRT of any such alterations approved by the PDP and provide justification for each alternation. The IRT may accept, modify, or reject such alterations.

The PDP will compile a statewide draft Shape B using the PDP-approved Shape Bs submitted by the Territory Leads. The PDP-approved statewide Shape B shall reflect all decisions made by the IRT regarding the development of Shape B in Step 2(c). Any impasse between the PDP and the IRT in Step 2(c) shall be resolved in favor of the IRT. Stakeholder Parties (including Territory Leads and PDP members) may submit alternative Shape Bs for the Commission's consideration in Step 2(e).

[49] As described in Section 4.1.2.4 of today's decision, sensitive information regarding critical infrastructure should not be transmitted or disclosed publicly.

There will likely be at least six Territory Leads, and perhaps several more. If a Territory Lead does not fulfill its responsibilities in Step 2(c) in a timely manner, we will require the PDP to take over the development of the territory-specific Shape B at issue so that Step 2(c) is not delayed.

To accelerate the IRT's review of the draft statewide Shape B in Step 2(d), we will require the PDP in Step 2(c) to provide the IRT with advance copies of the PDP-approved, territory-specific Shape Bs as these become available.

4.1.2.4.4 Stakeholder Input

We decline to adopt the Workshop Report's proposal to have the PDP solicit input from the Stakeholders Parties regarding the draft statewide Shape B that is approved by the PDP in Step 2(c).[50] Today's decision authorizes Stakeholder Parties to communicate with the Territory Leads, the PDP, and the IRT throughout the development of Shapes B and C using the IPM/VC software. Stakeholder Parties will also have an opportunity in Step 2(e) to submit (1) written comments regarding the IRT-approved statewide Shape B, and (2) alternative Shape Bs. We conclude that today's decision provides a reasonable opportunity for Stakeholder Parties to provide input regarding the development of Shape B without the additional step of requiring the PDP to solicit input from Stakeholder Parties.

We agree with the consensus among the parties that the development of Fire Map 2 should include input from Stakeholders who are not parties in this proceeding. To achieve this objective, we adopt SDG&E's recommendation to require the Territory Leads, as part of the development of territory-specific

[50] Workshop Report, at 12 – 13 and Attachment 2, Section 4.4.

Shape Bs in Step 2(c), to solicit input from local, non-party Stakeholders with expertise regarding local, utility-associated wildfire hazards and risks. Such Stakeholders may include, for example, the local County Fire Chief's Association and/or local Fire Safe Councils.[51] We also adopt SDG&E's recommendation that because of regional differences, each Territory Lead should decide for itself how to identify and communicate with local, non-party Stakeholders.[52]

We decline to adopt the Workshop Report's proposal to require the PDP to solicit input on the draft statewide Shape B that is approved by the PDP in Step 2(c) from all 1,329 CARs and all "points of contact" designated by each city and county in California[53] pursuant to Pub. Util. Code § 768.6.[54] Although the Workshop Report's proposal to solicit input from thousands of communities across California is well intentioned, it would require considerable time and resources.[55] We conclude that the previously described process for soliciting Stakeholder input adopted by today's decision, while less comprehensive than the Workshop Report's proposal, is sufficient to develop a Fire Map 2 that reasonably incorporates relevant knowledge and expertise regarding local, utility-associated wildfire threats.

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[51] SDG&E Comments, at 4 – 5. In a somewhat similar recommendation, PG&E proposes that the Territory Leads should be permitted (but not required) to "invite participation from stakeholders (local fire marshals, fire safe councils, CARs, CIPs, etc.) with particular local knowledge or expertise." (PG&E Comments at 3 – 4.)

[52] SDG&E Comments, at 4 – 5.

[53] PG&E states that the "points of contact" include 482 cities and 2,407 unincorporated communities. (PG&E Comments, at 3.)

[54] Workshop Report, at 12 – 13 and Attachment 2, Section 4.4.

[55] The concerns of CARs should be addressed, to a large degree, by their inclusion in Shape A.

4.1.2.4.5 Step 2(d): IRT Review and Approval

In Step 2(d) the PDP will submit to the IRT for review and approval the draft statewide Shape B prepared by the PDP at the conclusion of Step 2(c).[56] We will require the PDP to submit to the IRT a package that contains:

1. The following maps:
   (i) The Initial Statewide Shape B approved by the IRT at the conclusion of Step 2(a).
   (ii) The draft statewide Shape B prepared by the PDP at the conclusion of Step 2(c).
   (iii) One or more maps that provide a detailed comparison of Shape B in Item (i) relative to Item (ii).
2. Instructions for obtaining an electronic copy of the required map(s) in PDF format. This requirement may be met by including a PDF copy in the package submitted to the IRT.
3. Instructions for accessing a publicly available data file for each map in Item 1, above, using commonly available GIS software.
4. A complete set of all proposed revisions to Shape B submitted by the Territory Leads in Step 2(c).
5. The PDP's explanation for each revision to Shape B that is approved, modified, or rejected by the PDP in Step 2(c).
6. Any other information and material deemed relevant by the PDP and/or requested by the IRT.

The PDP shall serve (but not file) either the package submitted to the IRT or a notice of availability of the package.

The IRT may (i) direct the PDP, Territory Leads, and/or Stakeholder Parties to provide additional information, and (ii) direct the PDP to modify the boundaries of Shape B and its Tiers. The IRT shall provide a written explanation

[56] Workshop Report, at 13 – 14 and Attachment 2, Section 4.5.

for each of its revisions to Shape B in Step 2(d). To ensure transparency, all of these communications should occur through the PDP's IPM/VC software.

The PDP shall prepare a final draft of Shape B in accordance with the IRT's instructions. Stakeholder Parties who disagree with the IRT-approved Shape B may submit alternative Shape Bs for the Commission's consideration in Step 2(e).

4.1.2.4.6 Step 2(e): Commission Review

In Step 2(e), the PDP shall file and serve a document that contains:

1. The IRT-approved Shape B Map from Step 2(d).
2. Instructions for obtaining an electronic copy of the required map in PDF format. This requirement may be met by including a PDF copy of the map in the document that is filed and served electronically.
3. Instructions for accessing a publicly available data file for the map in Item 1 using commonly available GIS software.
4. The IRT-approved Tier definitions from Step 2(b).
5. Any other information and documents deemed relevant by the PDP.

Five days later, Stakeholder Parties may file and serve a document that contains an alternative Shape B. Any such document shall include the following:

- One or more maps that depict the Stakeholder's proposed boundaries relative to the IRT-approved Shape B exterior boundaries and interior Tier boundaries.
- Instructions for obtaining an electronic copy of the required map(s) in PDF format. This requirement may be met by including a PDF copy of the map(s) in the document that is filed and served electronically.
- Instructions for obtaining a data file for the required map(s) that is readable by commonly available GIS software.
- A detailed explanation of why the Stakeholder Party's proposed boundaries for Shape B should be adopted.

Parties may file and serve written comments and reply comments that address both the IRT-approved Shape B and any alternative Shape Bs. Parties may also file and serve motions for evidentiary hearings.[57] The schedule for these filings is set forth in Section 4.5 of today's decision.

Depending on the record developed in Step 2(e), the Assigned Commissioner may take such actions as the Commissioner deems appropriate. For example, if there is no opposition to the IRT-approved Shape B, the assigned Commissioner may issue a ruling that (1) provides notice that the IRT-approved Shape B shall be used to develop Shape C, and (2) directs the IRT, PDP, and Territory Leads to proceed with the development of Shape C. On the other hand, if there is opposition to the IRT-approved Shape B, the assigned Commissioner may issue a proposed decision and/or take other appropriate actions.

We decline to adopt the Workshop Report's proposal for the IRT-approved Shape B from Step 2(d) to be filed at the Commission for review and approval via a Tier 1 advice letter.[58] The Tier 1 advice letter process would not provide an opportunity for parties to submit alternative Shape Bs or a procedural vehicle for the Commission to consider any alternative Shape Bs that are submitted. Also, the Tier 1 advice letter process is not suitable for documents that foreseeably could require more than ministerial review and approval by Commission staff, which may be the case with the IRT-approved Shape B.

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[57] Any such motion must (i) identify and describe the specific factual issues that require an evidentiary hearing; and (ii) provide a proposed schedule and dates for all hearing-related events, such as a PHC, service of prepared written testimony, the number of hearing days, briefs and reply briefs, etc.

[58] Workshop Report, at 14.

4.1.3. Step 3: Creation and Adoption of Shape C

Shape C is the final map product.[59] To develop Shape C, we will direct the PDP to deliver the Final Shape B from Step 2(e) to the Territory Leads, who will overlay their electric utility overhead facilities on the Final Shape B.

Each Territory Lead shall submit the draft Shape C for its territory to the PDP, who shall review the submittals for consistency in the way electric utility facilities are depicted on Shape C. The PDP shall consult with the IRT, compile a draft statewide Shape C Map, and submit the map to the IRT for review and approval.[60] The IRT may confer with the PDP, Territory Leads, and Stakeholder Parties. The PDP shall make any revisions deemed necessary by the IRT.

Consistent with the Workshop Report's recommendation, the PDP shall submit the IRT-approved Final Shape C Map via a Tier 1 advice letter. The Tier 1 advice letter shall be submitted to the Commission's Safety and Enforcement Division (SED) and shall be effective upon SED's or the Commission's disposition of the advice letter.[61] Put differently, the Final Shape C Map (and Fire Map 2) will be effective on the date the Tier 1 advice letter is approved by a disposition letter or, if necessary, by a Commission resolution.[62]

We will require the advice letter to include (i) the IRT-approved Final Shape C Map, (ii) instructions for obtaining an electronic copy of the Final

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[59] Workshop Report, at 14.

[60] Workshop Report, at Attachment 3.

[61] Workshop Report, at 15.

[62] GO 96-B, General Rule 7.3, and the Joint IOU Comments on the Proposed Decision, at 14.

Shape C Map in PDF format,[63] and (iii) instructions for obtaining a data file of the map that is readable in commonly available GIS software. Any person may protest or respond to the advice letter within 20 days.[64] If a protest is submitted, the PDP may file minor revisions in consultation with the IRT. If major revisions are required, SED will determine whether the advice letter must be resolved by a Commission resolution.[65]

The Commission's Energy Division shall provide whatever administrative support that SED may need to process the advice letter. Such support may include, for example, posting notice of the advice letter on the Commission's website, posting notice of SED's disposition of the advice letter, and archiving the advice letter.

We decline to adopt the Workshop Report's recommendation to adjust Tier boundaries during the development of Shape C to take into account the location of utility facilities. For example, if an overhead electric utility circuit crosses Tier boundaries, the Workshop Report proposes that there should be an opportunity to adjust Tier boundaries in a way that divides the circuit between the Tiers in a logical manner for the purpose of applying fire-safety regulations.

We conclude that public safety is better protected by having Fire Map 2 boundaries reflect actual fire threats instead of utility operational concerns. We believe that such concerns are better addressed by adjusting regulations rather than adjusting Tier boundaries. For instance, for an electric utility circuit that

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[63] This requirement may be met by including a PDF copy with the advice letter that is submitted and served electronically.

[64] GO 96-B, General Rule 7.4.

[65] GO 96-B, General Rule 7.3.

crosses Tier boundaries, the default rule could be that the electric utility would have the option of applying the stricter regulation applicable to the portion of the circuit in the higher fire-threat Tier to the nearest logical stopping point on the portion of the circuit in the lower fire-threat Tier.

In the next phase of this proceeding, parties may propose one or more rules for applying regulations to electric utility overhead circuits and other utility facilities that cross Tier boundaries.

4.1.4. Depiction of Utility Infrastructure on Shape C

The Scoping Memo contemplated that Fire Map 2 should identify the types and locations of (i) overhead power-line facilities in high fire-threat areas, and (ii) aerial telecommunication facilities in close proximity to overhead power-line facilities in high fire-threat areas.[66]

To achieve this objective with respect to electric utility facilities, we adopt the Joint IOUs' recommendation to require the Shape C Map to depict each overhead electric utility circuit as either a line or a buffered area that approximates the location of the circuit on the map, depending on the electric utility's available GIS data. Two or more circuits that share the same support structures may be shown as a single line or buffered area on the map, if appropriate.[67] Electric utilities shall provide to Commission staff, upon request, detailed information for any circuit depicted on the Shape C Map, such as voltage, cable size, span lengths, etc.

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[66] Scoping Memo, at Appendix B, page B-2.

[67] Joint IOUs Comments on the Proposed Decision, at 12, 14, and 21.

We adopt the CIP Coalition's recommendation that Fire Map 2 should not separately depict aerial telecommunication facilities that are in close proximity to overhead power-line facilities. We agree with the CIP Coalition that the depiction of overhead electric utility circuits on Shape C implicitly incorporates aerial communications facilities that are in close proximity.[68]

Moreover, as noted by the CIP Coalition, it would be challenging at this time to separately include on the Shape C Map all telecommunication facilities in close proximity to power-line facilities. There are hundreds of facilities-based telecommunication providers on the Commission's list of certificated or registered providers, the vast majority of which are not participating in this proceeding. Additionally, it is unclear whether all these providers have GIS-ready maps of their facilities that could be applied to Fire Map 2. Also complicating the mapping effort is the fact that in many instances there are multiple CIPs on the same pole.[69]

We emphasize that although we do not require the Shape C Map to depict aerial telecommunication facilities at this time, it will be the responsibility of every CIP to know where it has facilities that are located in close proximity to overhead power-line facilities depicted on the Shape C Map and to comply with all fire-safety regulations that are applicable to these CIP facilities. We also provide notice that in the future we may require aerial telecommunications facilities to be depicted on the Shape C Map if doing so is necessary to develop or enforce fire-safety regulations.

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[68] CIP Coalition Comments, at 4 – 5 and Attachment 1.

[69] CIP Coalition Comments, Attachment 1, page A-4.

4.2. Fire Map 2 and Tree Mortality

We adopt SDG&E's recommendation for Fire Map 2 to incorporate by reference a separate map for Tree Mortality that is independent of the Shape C Map.[70] The independent map of Tree Mortality shall consist of Tier 1 High Hazard Zones on the United States Forest Service (USFS) and CAL FIRE's joint map of Tree Mortality High Hazard Zones (HHZs).[71] As a result, there is no need to develop a map for Tree Mortality HHZs.

Fire Map 2 shall consist of the Shape C Map and the Tier 1 HHZs on the Tree Mortality HHZs Map. While the Shape C Map component of Fire Map 2 is expected to remain unchanged for 10 years, the Tree Mortality HHZs Map may be revised regularly by the USFS and CAL FIRE and thus is not suitable for inclusion in Fire Map 2 as an embedded layer.

The following table illustrates how we anticipate fire-safety regulations will apply to Fire Map 2's Shape C and Tree Mortality HHZs:

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[70] SDG&E Comments at 6. SDG&E's proposal for incorporating tree mortality into Fire Map 2 is similar to the Revised Scoping Memo set forth in the ALJ ruling dated September 6, 2016.

[71] The current Tree Mortality HHZs Map is available at: http://www.fire.ca.gov/treetaskforce/downloads/HighHazardZones_Tier1_Tier2_lite.pdf. This map describes Tier 1 HHZs as "zones in direct proximity to communities, roads, and utility lines. They represent a direct threat to public safety."

	Fire Map 2			
	Shape C			Tree Mortality
Regulation	**Tier 1 Moderate**	**Tier 2 Elevated**	**Tier 3 Extreme**	**Tier 1 HHZs**
Regulation X	No	No	Yes	No
Regulation Y	5 Feet	10 Feet	15 Feet	15 Feet
Regulation Z	5 Years	3 Years	2 Years	2 Years

Fire Map 2 will be effective on the date the PDP's Tier 1 advice letter containing the Shape C Map in Step 3 is approved by a disposition letter or, if necessary, by a Commission resolution.

4.3. Fire Hazards Associated with the Laguna Beach Area and the Butte Fire

Decision 16-05-036 requires the Fire Map 2 Work Plan to address the fire hazards associated with (1) overhead facilities generally and at specific locations such as Laguna Beach, and (2) parties' knowledge of historical power-line fires besides the October 2007 fires in Southern California, such as the Butte Fire that burned 71,000 acres in Amador and Calaveras Counties in September 2015.[72]

The modified Fire Map 2 Work Plan adopted by today's decision defines Shape A in a way that incorporates the fire hazards identified in D.16-05-036.[73] In addition, the procedures adopted by today's decision for developing Shape B will allow Territory Leads and Stakeholder Parties to propose inclusions of fire-threat areas on Shape B relative to Shape A. Thus, if Shape A inadvertently

[72] D.16-05-036 at 2, 34 – 35, and Ordering Paragraph 3.iii.

[73] Shape A includes (i) Fire Hazard Severity Zones adjacent to Laguna Beach, and (ii) the area burned by the Butte Fire.

omits a high fire-threat area, a Territory Lead or Stakeholder Party may call attention to this omission during the development of Shape B.

4.4. Dispute Resolution

We agree with MGRA that Stakeholder Parties should be able to raise concerns regarding the development of Fire Map 2 prior to the final review process in order to avoid lengthy revisions cycles at the end of the process. Accordingly, we adopt MGRA's recommendation to allow Stakeholder Parties to submit informal comments to the IRT, PDP, and Territory Leads throughout the development of Fire Map 2.[74] To achieve this objective, today's decision requires the PDP to provide Stakeholder Parties with access to the PDP's IPM/VC software so that parties can (1) communicate with the PDP, IRT, and Territory Leads; and (2) monitor information and documents that are transmitted between or among the IRT, PDP, Territory Leads, and Stakeholder Parties.

In Section 4.1.2.3 of today's decision, we provide the IRT with authority to resolve technical disputes raised by Stakeholder Parties, the PDP, and Territory Leads during the development of Fire Map 2, and we direct the PDP to develop Fire Map 2 in accordance with the IRT's decisions. In Step 2(e), Stakeholder Parties who have concerns about the IRT's resolution of disputes with respect to Shape B may file formal comments and/or alternative Shape Bs. In Step 3, Stakeholder Parties who have concerns about the IRT's resolution of disputes with respect to Shape C may file protests and responses to the Tier 1 advice letter that contains the Shape C Map. We will address Stakeholder Parties' concerns, if any, in Step 2(e) and Step 3.

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[74] MGRA Reply Comments, at 2.

We strongly encourage Stakeholder Parties to use the previously described dispute resolution processes if they have concerns regarding the development of Fire Map 2. Stakeholder Parties should request intervention from the Assigned Commissioner and/or the assigned ALJ only as a last resort, and only when the IRT is acting in a manner inconsistent with the direction or authority provided by today's decision, making decisions not based on sound science, or otherwise acting arbitrarily or capriciously.

4.5. Schedule for Fire Map 2

We adopt the Joint IOUs' proposed schedule for the development and adoption of Fire Map 2.[75] The adopted schedule is shown in the following Table 1.

Table 1
Schedule for the Development and Adoption of Fire Map 2

Row	EVENT / TASK	Timeframe
1.	**Step 1 re: Creation of Shape A** • SDG&E and Reax create the draft Shape A. • CAL FIRE reviews the draft Shape A for conformance with the Workshop Report. SDG&E and Reax revise Shape A in accordance with CAL FIRE's instructions. • CAL FIRE approves Shape A. SDG&E files and serves notice of the final Shape A approved by CAL FIRE.	Completed on Dec. 8, 2016

[75] Joint IOUs Comments on the Proposed Decision, at 14 – 18.

Table 1 **Schedule for the Development and Adoption of Fire Map 2**		
Row	**EVENT / TASK**	**Timeframe**
2.	**Step 2 re: PDP Formed and Territory Leads Identified** • PDP formed and Territory Leads identified. • PDP develops Shape B work/review processes and decision-making criteria. • PDP files and serves the roster of Territory Leads. • This task performed concurrently with the tasks in Rows 1 and 3.	Dec. 2016 I Feb. 2017
3.	**Step 2 re: IRT Formed** • CAL FIRE identifies IRT members and expert consultants. • IOUs initiate contract negotiations with IRT expert consultants. Contracts finalized following the Commission decision in Row 4, below. • SED Advocacy Staff files and serves the IRT roster. • These tasks performed concurrently with the tasks in Rows 1 – 2, above.	Dec. 2016 I Feb. 2017
4.	Commission issues a decision adopting a work plan for the development and adoption of Fire Map 2.	Jan. 19, 2017 ("Day 0")
5.	**Step 2(a) re: Initial Statewide Shape B** • Using the CAL FIRE-approved Shape A from Row 1, the PDP develops an Initial Statewide Shape B by: (i) carving out areas that cannot propagate wildfires; (ii) including and excluding polygons based on demonstrably incorrect logic in Fire Map 1 or the FRAP fire-threat map; and (iii) excluding high fire-threat cells that are isolated spatially. • PDP consults regularly with the IRT. IRT approves the Initial Statewide Shape B. • These tasks performed concurrently with the tasks in Row 6, below.	Completed by March 20, 2017 (Day 60)

Table 1 **Schedule for the Development and Adoption of Fire Map 2**		
Row	**EVENT / TASK**	**Timeframe**
6.	**Step 2(b) re: Shape B, Fire-Threat Tiers** • PDP develops Tier definitions in collaboration with the IRT. IRT approves the Tier definitions. • These tasks performed concurrently with the tasks in Rows 2 – 5, above.	Completed by March 20, 2017 (Day 60)
7.	**Step 2(c) re: Shape B, Territory-Specific Development** • Each Territory Lead develops a tiered Shape B for its assigned territory using as a starting point the IRT-approved Initial Statewide Shape B from Row 5 and the IRT-approved Tier definitions from Row 6. • Each Territory Lead solicits input from local, non-party Stakeholders with knowledge and expertise regarding local, utility-related wildfire hazards and risks. • Each Territory Lead submits to the PDP a proposed Shape B for the applicable territory. The Territory Lead may propose to include or exclude areas from its territory-specific Shape B and Tiers using the criteria in the Workshop Report, Attachment 2. • Proposed Shape B for each territory reviewed by PDP. • PDP compiles a draft statewide Shape B using the PDP-approved Shape Bs for each territory. • To accelerate the IRT's review of the draft statewide Shape B in in Row 8, below, the PDP provides the IRT with advance copies of the PDP-approved, territory-specific Shape Bs as these become available.	Completed by July 17, 2017 (Day 179)
8.	**Step 2(d) re: Shape B, IRT Review** • PDP submits to the IRT, and serves on the service list, the PDP-approved draft statewide Shape B from Row 7. • IRT reviews the PDP's draft statewide Shape B. • PDP prepares the statewide Final Draft Shape B in accordance with the IRT's instructions.	Completed by Aug. 21, 2017 (Day 214)

Table 1 **Schedule for the Development and Adoption of Fire Map 2**		
Row	**EVENT / TASK**	**Timeframe**
9.	**Step 2(e) re: Shape B, CPUC Review** • PDP files & serves the IRT-approved Shape B from Row 8. Completed by **August 28, 2017** (Day 221). • Stakeholder Parties file & serve alternative Shape Bs. Completed by **September 1, 2017** (Day 225). • Stakeholder Parties file & serve comments regarding the IRT-approved Shape B and alternative Shape Bs, if any. Completed by **September 11, 2017** (Day 235). • Reply comments and motions for evidentiary hearings (EHs). Completed by **September 21, 2017** (Day 245). • Responses to motions for EHs. Completed by **September 29, 2017** (Day 253).	Completed by Sept. 29, 2017 (Day 253)
10.	**Step 2(e) re: Shape B, CPUC Review** Depending on the record developed in Row 9: • The Assigned Commissioner issues a ruling that (1) provides notice of the Final Shape B that will be used to develop Shape C, and (2) directs parties to immediately start the development of Shape C, and/or • The Assigned Commissioner takes such other actions that the Commissioner deems appropriate.	Completed by Oct. 16, 2017 (Day 270)

Table 1 **Schedule for the Development and Adoption of Fire Map 2**		
Row	**EVENT / TASK**	**Timeframe**
11.	**Step 3 re: Shape C Development** • PDP delivers the Final Shape B from Step 2(e), Row 10 to the Territory Leads, who overlay electric utility overhead circuits onto Shape B. • Territory Leads submit their Shape Cs to the PDP. • PDP reviews the territory-specific Shape Cs for quality control and compiles the statewide Shape C. • PDP delivers the final Shape C, with justification for any changes, to the IRT for review and approval.	Completed by Nov. 10, 2017 (Day 295)
12.	**Step 3 re: Shape C and Fire Map 2 Review, Approval, and Effective Date** • IRT reviews the Shape C submitted by the PDP in Row 11. PDP revises Shape C in accordance with the IRT's instructions. • The PDP submits the IRT-approved Shape C Map to SED via a Tier 1 advice letter (A/L).	Completed by Nov. 30, 2017 (Day 315)
13.	• Fire Map 2 consisting of the Shape C Map and the Tree Mortality HHZs Map is effective on the date the Tier 1 A/L is approved by disposition letter or, if necessary, by a Commission resolution.	December 2017 (Estimated)
14.	**New Fire-Safety Regulations** • Proposed decision mailed by Oct. 27, 2017. • Fire-safety regulations for the High Fire-Threat District considered and adopted, as appropriate.	November 30, 2017

Table 1 **Schedule for the Development and Adoption of Fire Map 2**		
Row	**EVENT / TASK**	**Timeframe**
15.	**Fire Map 2 Dissemination** • The Director of SED incorporates the Shape C Map into GO 95 and disseminates the map in accordance with the instructions in Section 5 of today's decision. • Interim fire-threat maps replaced by Fire Map 2.	Completed within 60 days of SED's or the Commission's disposition of the Tier 1 A/L in Row 13.

Under the adopted schedule, Fire Map 2 will be submitted to the Commission for approval by November 30, 2017, and go into effect soon thereafter. The adopted schedule assumes there are no disputes that require a Commission decision or an evidentiary hearing.

The schedule adopted by today's decision for the development of Fire Map 2 is based on the schedule recommended by Joint IOUs in their comments on the Proposed Decision, provides significantly more time for the development of Fire Map 2 compared to the Proposed Decision, and has the support of all but one of the parties[76] that submitted comments on the Proposed Decision. Today's decision also allows the electric IOUs to track and request recovery of the costs they incur to develop Fire Map 2. In light of extra time and resources provided by today's decision for the development of Fire Map 2, parties should not expect any additional extensions of the schedule for the development of Fire Map 2.

[76] The City of Laguna Beach is the only party that supports the more aggressive schedule in the Proposed Decision. (City of Laguna Beach Reply Comments on the Proposed Decision, at 1 - 3.)

In Section 9 of today's decision, we adopt a separate schedule to consider and possibly adopt fire-safety regulations for the new High Fire-Threat District by November 2017.

4.6. SED Assistance to CAL FIRE

CAL FIRE is participating in this proceeding in an advisory capacity to aid the Commission's development and adoption of Fire Map 2. The Commission's SED Advocacy Staff, who are participating in this proceeding as a party, shall provide whatever administrative and regulatory support that CAL FIRE may need to participate in this proceeding. Such assistance may include, but is not limited to, filing and serving documents on CAL FIRE's behalf. SED Advocacy Staff shall stay in regular contact with CAL FIRE for the purpose of monitoring CAL FIRE's need for support, if any.

5. Incorporating Fire Map 2 into GO 95

Fire Map 2 will consist of two independent maps – the Shape C Map and the Tree Mortality HHZs Map. The Shape C Map will be available in two forms:

1. High resolution PDF file (no special software required for viewing). This file should be less than 50 megabytes in size.
2. Zip archive of native GIS files (when unzipped, requires GIS software and/or Google Earth for viewing). This file should be less than 50 megabytes in size.[77]

The Tree Mortality HHZs Map is available on CAL FIRE's website.[78]

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[77] Workshop Report at Section III.D.1.

[78] The Tree Mortality HHZs Map that is current as of today's decision is available at: http://www.fire.ca.gov/treetaskforce/downloads/HighHazardZones_Tier1_Tier2_lite.pdf.

The Scoping Memo directed the Fire Map 2 Work Plan to address the procedure for incorporating Fire Map 2 into GO 95 and other GOs, if applicable. The Workshop Report suggests this can be accomplished by way of reference to a webpage that can be accessed from the Commission's website.[79]

In accordance with the Workshop Report's suggestion, we will instruct the Director of SED or the Director's designee to:

1. Arrange for the PDF and GIS files for the Final Shape C Map from Step 3 to be hosted on a Commission server and/or other server deemed appropriate by the Director.
2. Post on the Commission's website (A) static download links to the PDF and GIS files for the Final Shape C Map, and (B) a download link to the then-current version of the Tree Mortality HHZs Map.
3. Update GOs 95, 165, 166, and other GOs, if applicable, to replace references to the interim fire-threat maps with references to Fire Map 2. The current interim fire-threat maps will be retired at that time.

The Director shall complete these tasks no later than 60 days after the date of SED's or the Commission's disposition of the PDP's Tier 1 advice letter submittal that contains the Final Shape C Map. For the purpose of today's decision, the date of the SED's disposition shall be the reported "date closed" on the Commission's website.

[79] Workshop Report, at 19.

6. Correcting the Shape C Map

As electric utilities, CIPs, and other Stakeholder Parties begin to use the Shape C Map and become familiar with it, they may find material errors that warrant correction. Today's decision invites Stakeholder Parties and CAL FIRE to notify SED of any material errors they discover in the Shape C Map so that the errors can be corrected.

If SED learns of a material error in the Shape C Map, SED shall take the following actions, as appropriate: (1) Confer with CAL FIRE; (2) correct the error by preparing a resolution for the Commission's consideration that explains the error, describes the correction, and provides a corrected Shape C Map in PDF and GIS formats; and (3) replace the download links on the Commission's website to the erroneous Shape C Map with links to the corrected Shape C Map.

7. Updating Fire Map 2

The Tree Mortality HHZs Map that is incorporated into Fire Map 2 by reference may be revised from time-to-time by the USFS and CAL FIRE. We will direct SED to periodically check CAL FIRE's website for revisions to the map. If and when there are revisions, SED shall update the link to the Tree Mortality HHZs Map that SED placed on the Commission's website in accordance with Section 5 of today's decision.

Consistent with the recommendation in the Workshop Report,[80] we intend to update Fire Map 2 in ten-year cycles. The Commission will have discretion in the future to determine the exact timing of the next update cycle, the scope of the update, and the associated processes and procedures.

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[80] Workshop Report, at Section IV.B.

8. Transition of Existing Regulations to Fire Map 2

The Commission adopted a number of fire-safety regulations in R.08-11-005 that apply only to certain high fire-threat areas on the interim fire-threat maps adopted in that proceeding. These fire-safety regulations are summarized in Section 2 of today's decision.

The Scoping Memo directed the Fire Map 2 Work Plan to address the transition of existing fire-safety regulations that rely on interim fire-threat maps to Fire Map 2. The Workshop Report did not address this topic. Instead, the Workshop Report states that this topic should be deferred until fire-threat Tiers are adopted during the development of Fire Map 2 so that the adopted Tiers can be correlated with the high fire-threat areas on the interim fire-threat maps.

We decline to adopt the Workshop Report's proposal to defer this topic. We conclude that the existing fire-safety regulations which apply only to high fire-threat areas in Northern California on the interim fire-threat maps shall apply only to areas in Northern California designated as Tier 3 (extreme fire threat) on Shape C of Fire Map 2. Similarly, the existing fire-safety regulations which apply only to high fire-threat areas in Southern California on the interim fire-threat maps shall apply only to areas in Southern California designated as Tier 3 (extreme fire threat) on Shape C of Fire Map 2.[81]

We adopt the Joint IOUs' recommendation that the transfer of existing regulations to Tier 3 should take effect as soon as possible after the Commission's

[81] Consistent with D.12-01-032, today's decision defines Southern California as consisting of Imperial, Santa Barbara, Ventura, Los Angeles, Orange, San Diego, Riverside, and San Bernardino Counties. Northern California is defined as all other counties in California. (D.12-01-032 at Ordering Paragraph 16.)

adoption of Shape C as set forth in Section 4.1.3 of today's decision.[82] Consistent with the Joint IOUs' recommendation, we will require the transfer of existing fire-safety regulations to be completed no later than September 1, 2018, in time for the autumn fire season in Southern California.

We disagree with the CIP Coalition's position that there must be a cost-benefit analysis to determine where on Fire Map 2 it is cost effective to apply existing fire-safety regulations, which can only occur after Fire Map 2 is complete.[83] We conclude that public safety requires the most restrictive fire-safety regulations which currently apply only to certain high fire-threat areas on the interim fire-threat maps should transfer automatically to Tier 3 areas on Shape C of Fire Map 2. Pursuant to today's decision, Tier 3 of Shape C will be areas with extreme wildfire risk that require the most restrictive fire-safety regulations.

In the next phase of this proceeding, parties may request refinements to the areas on Fire Map 2 where the transferred fire-safety regulations should apply.

9. Schedule and Procedures for New Fire-Safety Regulations

In D.14-01-010, the Commission directed the Fire Safety Technical Panel (FSTP) to convene quarterly meetings for the purpose of developing a menu of potential fire-safety regulations for the design, construction, operation, and/or maintenance of overhead electric utility facilities and aerial communication

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[82] Joint IOUs Comments on the Proposed Decision, at 9, 18, and 22. See also SDG&E Comments on the Proposed Decision, at 3.

[83] CIP Coalition Comments, at 5.

facilities in the contemplated High Fire-Threat District.[84] The objective was to identify and develop new fire-safety regulations concurrently with, and informed by, the development of Fire Maps 1 and 2. These directions were repeated in OIR 15-05-006, D.16-05-036, and the Scoping Memo for this proceeding.[85]

To accelerate the possible adoption of new fire-safety regulations, the Scoping Memo informed the parties that the FSTP should plan to submit a list of proposed fire-safety regulations shortly after the Commission's adoption of the Fire Map 2 Work Plan, if not sooner. The Scoping Memo further stated that a ruling, decision, or other guidance would be issued that sets (1) the date for submitting the proposed regulations, and (2) the procedures for considering and adopting the proposed regulations.

As contemplated by the Scoping Memo, today's decision adopts the following schedule[86] and procedures to (1) integrate Fire Map 2 into GO 95 as a new High Fire-Threat District; and (2) identify, evaluate, and possibly adopt new fire-safety regulations for the High Fire-Threat District:

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[84] D.14-01-010 at 27 – 28 and Ordering Paragraph 2.

[85] OIR 15-05-006 at 13 – 14; D.16-05-036 at 27 – 28 and Ordering Paragraph 3; and *Assigned Commissioner's Scoping Memo and Ruling* dated July 15, 2016, at 3 – 4.

[86] Today's decision adopts, with minor modifications, the schedule in the Joint IOUs Comments on the Proposed Decision, at 19 – 20.

Table 2 **Schedule and Procedures to (1) Integrate Fire Map 2 into GO 95 as a new High Fire-Threat District, and (2) Consider and Adopt New Fire-Safety Regulations**		
Row	**EVENT / TASK**	**Timeframe**
1.	FSTP holds meetings pursuant to D.14-01-010, OIR 15-05-006, D.16-05-036, and the Scoping Memo to develop a menu of potential fire-safety regulations for overhead electric utility facilities and aerial communication facilities in the High Fire-Threat District.	Nov. 2016 I May. 2017
2.	Commission decision adopting a work plan for Fire Map 2.	Jan. 19, 2017 ("Day 0")
3.	**Submittal of Proposed Regulations** • FSTP files and serves a document containing (1) proposed revisions to GO 95 to integrate Fire Map 2 into GO 95 as a new High Fire-Threat District. (See, for example, GO 95, Rules 21.1 and 43.); and (2) a menu of proposed fire-safety regulations for the High Fire-Threat District. • Other parties may file and serve their own proposed regulations for the High Fire-Threat District. • Every proposed fire-safety regulation must include (i) the text of the proposed regulation (including any revisions to the text of existing regulations); (ii) areas where the regulation will apply (e.g., Tier 2, Tier 3, Northern California, Southern California, etc.); (iii) justification; and (iv) anticipated benefits and costs.	May 1, 2017 (Day 102)
4.	Comments filed and served regarding the proposed fire-safety regulations for the High Fire-Threat District.	May 12, 2017 (Day 113)
5.	**Workshops, Workshop Report, and Written Comments** • The FSTP convenes publically noticed workshop(s) to discuss, evaluate, and refine the proposed regulations. • SED Advisory Staff places a notice of the workshop(s) in the Commission's Daily Calendar. • FSTP files and serves a workshop report that contains the information identified below this Table.	Completed by July 10, 2017 (Day 172)

Table 2 **Schedule and Procedures to (1) Integrate Fire Map 2 into GO 95 as a new High Fire-Threat District, and (2) Consider and Adopt New Fire-Safety Regulations**		
Row	**EVENT / TASK**	**Timeframe**
6.	• Parties file and serve comments regarding the workshop report. The comments should follow a common outline that is agreed to at the workshops. • The workshop report and comments should together provide a comprehensive summary of each party's position. These documents may be used as a primary record for drafting a proposed decision (PD). Parties should assume that if a particular fact, argument, position, etc., is not in (or is not cited in) the workshop report or comments, it may not be considered in the PD.	July 24, 2017 (Day 186)
7.	Parties file and serve reply comments on the workshop report.	Aug. 4, 2017 (Day 197)
8.	**Motions for Evidentiary Hearings** • Motions for evidentiary hearings filed and served. • Any such motion must (i) identify the specific proposed regulation(s) for which the movant seeks an evidentiary hearing; (ii) identify and describe the specific factual issues that require an evidentiary hearing; and (iii) provide a proposed schedule and dates for all hearing-related events, such as a PHC, service of prepared written testimony, the number of hearing days, briefs and reply briefs, etc.	Aug. 9, 2017 (Day 202)
9.	Responses to motions for evidentiary hearings filed and served.	Aug. 16, 2017 (Day 209)
10.	**Proposed Decision (PD) mailed re:** Fire-safety regulations for the High Fire-Threat District. PD placed on the agenda for the Commission meeting on Nov. 30, 2017	Oct. 27, 2017 (Day 281)

The adopted schedule for considering and possibly adopting new fire-safety regulations for the High Fire-Threat District assumes there are no

evidentiary hearings. It is our intention that any adopted fire-safety regulations should go into effect as soon as possible. The specific timeframe(s) and/or deadline(s) for implementing any new fire-safety regulations will be addressed, as appropriate, in our decision adopting the fire-safety regulations.

The workshop report that is filed and served by the FSTP in accordance with Row 5 of Table 2 shall include the following information:

- The final iteration of all proposed fire-safety regulations (PRs) for the High Fire-Threat District.
    - Pursuant to today's decision, the PRs shall include proposed revisions to GO 95 to integrate Fire Map 2 into GO 95 as a new High Fire-Threat District. (See, for example, GO 95, Rules 21.1 and 43.)
    - Pursuant to today's decision, the PRs may include:
        - Proposed rules for applying fire-safety regulations to electric utility overhead circuits and other utility facilities that cross Tier boundaries.
        - Refinements to the areas on Fire Map 2 that will be subject to the fire-safety regulations adopted in R.08-11-005 that apply to high fire-threat areas on the interim fire-threat maps adopted in R.08-11-005.
    - Pursuant to D.16-05-036, the PRs may include proposals to revise the "multiply by" provision in GO 95's Rule 48, subject to the requirement in Ordering Paragraph 5 of D.14-02-015 that such proposals must be consistent with the primary purpose of this proceeding of enhancing the fire safety of overhead utility facilities.[87]
- For each PR, a list of the parties who support the regulation and the parties who oppose the regulation. Parties may

[87] D.16-05-036 at 27 – 28 and Ordering Paragraph 5.

explain their support/opposition in their post-workshop comments.

- Each PR shall be accompanied by a detailed description and justification that includes the following:
  - The specific electric utilities, CIPs, and others affected by the PR.
  - The current text of the affected General Order(s), if any.
  - New and/or revised text for the affected General Order(s), if applicable, showing (i) proposed revisions in strikeout/underline form, and (ii) the final proposed rule.
  - The geographic areas covered by the PR (e.g., Tier 2 areas, Tier 3 areas, Tiers 2 and 3, Northern California, Southern California, both Northern and Southern California, etc.).
  - How the PR reduces or otherwise addresses fire hazards and/or risks in the High Fire-Threat District.
  - The estimated costs of the PR, including, if available, costs incurred by IOUs, POUs, CIPs, and customers.
  - Whether and how the costs will be recovered from customers.
  - Whether and how costs will be shared among electric utilities, CIPs, and others.
  - The timeframe for implementing the PR.
  - Why it is in the public interest to adopt the PR.
  - If the PR applies to electric transmission, why the regulation does not conflict with other federal or state regulations.
  - Whether the PR is exempt from the California Environmental Quality Act (CEQA) and/or the National Environmental Policy Act (NEPA) and, if so, why. Any assertion that CEQA and NEPA do not apply must cite the relevant statues and/or regulations where the exemption is listed. Conversely, any assertion that CEQA and/or NEPA do apply must (1) cite the relevant statues and/or regulations that show this, and

(2) list the steps that need to occur under CEQA and/or NEPA before the PR can be adopted.

- A detailed summary of any ancillary issues with a direct nexus to the PRs.
- Criteria regarding: (i) Where the PRs should apply with respect to new installations and reconstruction in the High Fire-Threat District; and (ii) whether existing facilities in the High Fire-Threat District should be retrofitted or replaced to conform to the PRs. These criteria should include methods for: (a) Estimating the costs and safety benefits of the PRs, and (b) weighing the costs and safety benefits.
- Any other matters the workshop participants deem appropriate. Such matters may include, for example, proposed criteria for applying fire-safety regulations differently to areas having different fire risks within the same Tier.[88]

We respectfully disagree with the CIP Coalition's and PG&E's position that it is not feasible to consider and adopt new fire-safety regulations until after Fire Map 2 is adopted.[89] Today's decision provides detailed guidance regarding the fire threats that will be used to develop Fire Map 2 and its fire-threat Tiers 2 and 3. In our opinion, parties have sufficient knowledge of Fire Map 2 to assess the need for new fire-safety regulations[90] and to evaluate whether any proposed regulations would be cost effective.

We decline to adopt Laguna Beach's and SED's recommendations to scale back the scope of the information that today's decision requires parties to

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[88] CIP Coalition Comments at 4.

[89] CIP Coalition Comments at 5, and PG&E Reply Comments at 6.

[90] SDG&E reports that it is ready to propose at least one new fire-safety regulation. (SDG&E Reply Comments at 2.

provide for each proposed fire-safety regulation.[91] At the same time, we will not reject out-of-hand a proposed regulation that is not accompanied by all of the required information. When this occurs, the proponent of the proposed regulation should explain why the required information has not been provided (e.g., the required information is not available or could not be assembled with the resources available to the proponent). We remind all parties that the proponent of a proposed regulation has the burden of demonstrating that the regulation is reasonable and should be adopted by the Commission. Any party that does not provide all of the required information for a proposed regulation may have a higher risk of its proposed regulation being rejected by the Commission.

We decline to adopt SED's recommendation to expand the scope of this proceeding to consider and possibly adopt proposed fire-safety regulations that would apply to Tier 1.[92] We agree with the CIP Coalition and the Joint POUs[93] that it has been clear since the inception of this proceeding that the consideration and possible adoption of new fire-safety regulations would be limited to the High Fire-Threat District (i.e., Tiers 2 and 3).[94] Moreover, this proceeding is already overburdened as demonstrated by the numerous pleas in the parties' comments on the Proposed Decision to extend the proceeding schedule. There is simply no room to expand the scope of this proceeding further.

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[91] Laguna Beach Comments on the Proposed Decision, at 3; and SED Comments on the Proposed Decision, at 4 - 5.

[92] SED Comments on the Proposed Decision, at 3 – 4.

[93] CIP Coalition Reply Comments on the Proposed Decision, at 2 - 3, and Joint POUs Reply Comments on the Proposed Decision, at 2 - 3.

[94] See, for example, OIR 15-05-006, at 6-7.

This proceeding is not SED's only vehicle to propose new fire-safety regulations. SED has the option of filing a petition for rulemaking pursuant to Pub. Util. Code § 1708.5, which allows "interested persons to petition the commission to adopt, amend, or repeal a regulation."

10. Authority to Revise the Schedules and Procedures

The assigned Commissioner and/or the assigned ALJ may revise the schedules and procedures adopted by today's decision for (1) the development and adoption of Fire Map 2; and (2) the identification, evaluation, and potential adoption of fire-safety regulations for the High-Threat District.

11. Cost Recovery

In response to the Joint IOUs' comments on the Proposed Decision, we authorize cost-of-service electric utilities to recover the costs they incur pursuant to today's decision after the reasonableness of such costs has been verified by the Commission.[95] Depending on the utility, such costs may include expenditures for the development, adoption, and implementation of Fire Map 2; payments to expert consultants that are part of the IRT as described in Section 4.1.2.3 of today's decision; and for the transition of existing fire-safety regulations to Fire Map 2 as described in Section 8 of today's decision.

We adopt the Joint IOUs' recommendation to authorize electric IOUs[96] to record the costs incurred pursuant to today's decision in their Fire Hazard Prevention Memorandum Accounts (FHPMAs) established pursuant to

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[95] Joint IOUs Comments on the Proposed Decision, at 9 - 10, 21, and 23.

[96] For the purpose of today's decision, the term "electric IOU" includes Southern California Gas Company to the extent it operates overhead power-line facilities that are subject to the Commission's jurisdiction.

Commission decisions issued in R.08-11-005.[97] Each electric IOU may file one or more applications to recover the costs recorded in its FHPMA. The number and timing of such applications will be at the discretion of each IOU.[98] We will verify and assess the reasonableness of recorded costs in application proceedings.[99]

The electric IOUs may record in their FHPMAs only those costs which are not already being recovered in rates. Each electric IOU may continue to record authorized costs in its FHPMA until the first general rate case (GRC) that occurs after the close of this proceeding (R.15-05-006), at which time the FHPMA shall be closed. The electric IOU may then use the GRC mechanism to request recovery of any additional costs it incurs from that point forward pursuant to today's decision. The electric IOU may seek to recover the ending balance in its FHPMA, if any, by filing an application.

12. Comments on the Proposed Decision

The proposed decision was mailed to the parties in accordance with Pub. Util. Code § 311, and comments were allowed in accordance with Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on January 5, 2017, by the City of Laguna Beach, SDG&E, and SED; jointly by a group of electric IOUs consisting of Bear Valley, Liberty Utilities, PacifiCorp, PG&E, and SCE (the Joint IOUs); and jointly by group of POUs consisting of CMUA, LADWP, and SMUD (the Joint POUs). Reply comments were filed on January 10, 2017, by the CIP Coalition, the Joint IOUs, the Joint POUs, the City of

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[97] See, for example, D.09-08-029 at 43 – 44, and D.12-01-032 at 152 and Conclusion of Law 21.

[98] In lieu of filing applications, an electric IOU may seek to recover the costs recorded in its FHPMA in its next scheduled general rate case application.

[99] Joint IOUs Comments on the Proposed Decision, at 9 - 10, 21, and 23.

Laguna Beach, MGRA, SDG&E, and SED. These comments and reply comments have been incorporated, as appropriate, in the final decision adopted by the Commission.

13. Assignment of the Proceeding

Michael Picker is the assigned Commissioner for this proceeding and Timothy Kenney is the assigned Administrative Law Judge.

Findings of Fact

1. The purpose of Fire Map 2 is to delineate the boundaries of a new High Fire-Threat District that encompasses (a) areas where there is an elevated hazard for utility-associated wildfires occurring and spreading rapidly, and (b) communities that face elevated risks from utility-associated wildfires.

2. The Fire Map 2 Work Plan in the Workshop Report, with the modifications adopted by today's decision, is a reasonable approach for developing and adopting Fire Map 2.

3. The Fire Map 2 Work Plan adopted by today's decision reflects input and advice from CAL FIRE.

4. On December 8, 2016, SDG&E filed and served notice of the Shape A Map approved by CAL FIRE.

5. The CAL FIRE-approved Shape A Map is a reasonable starting point for the development of the Shape B Map.

6. The Workshop Report's proposal to file the CAL FIRE-approved Shape A Map at the Commission via a Tier 1 advice letter could delay the development of Fire Map 2 and would serve little purpose because the Shape A Map is not a final product, but the starting point for the development of the Shape B Map.

7. The CIP Coalition's proposal that PG&E serve as a co-lead of the PDP is reasonable. PG&E is willing to serve as a co-lead of the PDP.

8. CAL FIRE is well qualified to lead the IRT, which will provide independent oversight and review of the PDP's development of Shapes B and C.

9. Adopting SDG&E's recommendation to provide the IRT with authority to decide deadlocked issues during the development of Fire Map 2 will help ensure that Fire Map 2 is technically sound and developed expeditiously.

10. It may be necessary to enter into sole-source contracts for expert consultants to assist the IRT because of (a) the need to hire expert consultants quickly for IRT-related work that will begin immediately after the issuance of today's decision; and (b) the potentially small number of consultants who have the requisite expertise, knowledge, and experience; can begin work immediately; and can devote considerable time to the IRT for a period of 11 to 12 months.

11. CAL FIRE, in anticipation of today's decision, has been working with expert consultants since December 2016 for the purpose of expediting the development of Fire Map 2.

12. The development of Fire Map 1 by CAL FIRE required nearly $500,000 of funding from the IOUs to pay for expert consultants and other resources.

13. Adopting three fire-threat Tiers provides more granularity compared to the existing two-tier approach adopted by D.12-01-032.

14. Adopting more than three fire-threat Tiers would add complexity to mapping fire threats, fire-safety regulations, utility operations, and enforcement without a meaningful improvement to fire safety.

15. The Fire Map 2 Work Plan adopted by today's decision provides a reasonable opportunity for Stakeholder Parties to provide input regarding the development of Shapes B and C.

16. SDG&E's recommendation that the Territory Leads should solicit input from local non-party Stakeholders with expertise regarding local, utility-

associated wildfire hazards and risks is reasonable. SDG&E's related recommendation that each Territory Lead should determine its own method to identify and communicate with local non-party Stakeholders is reasonable.

17. The Workshop Report's proposal to solicit input from thousands of communities across California would require considerable time and resources.

18. The procedures adopted by today's decision for soliciting Stakeholder input from both parties and non-parties is sufficient to produce a Fire Map 2 that reasonably incorporates relevant knowledge and expertise regarding local, utility-associated wildfire hazards and risks.

19. Public safety is better protected by having Fire Map 2 boundaries reflect actual fire threats instead of utility operational concerns.

20. The Scoping Memo instruction that Fire Map 2 should depict aerial telecommunication facilities that are in close proximity to overhead power-line facilities is reasonably achieved with the depiction of overhead electric utility circuits on Fire Map 2.

21. The Tier 1 HHZs on the Tree Mortality HHZs Map are zones in direct proximity to communities, roads, and utility lines. These zones represent a direct threat to public safety.

22. The Tree Mortality HHZs Map may be revised from time-to-time by the USFS and CAL FIRE.

23. Cost-of-service electric utilities will incur costs pursuant to today's decision. Depending on the utility, such costs may include expenditures for the development, adoption, and implementation of Fire Map 2; for payments to expert consultants as described in Section 4.1.2.3 of today's decision; and for the transition of existing fire-safety regulations to Fire Map 2 as described in Section 8 of today's decision.

Conclusions of Law

1. For the reasons set forth in the body of today's decision and the Findings of Fact, it is in the public interest to adopt the Fire Map 2 Work Plan in the Workshop Report, subject to the conditions and modifications identified in the Ordering Paragraphs of today's decision.

2. For the reasons set forth in the body of today's decision, the following proposals in the Workshop Report should not be adopted:

   a. The CAL FIRE-approved Shape A should be filed at the Commission via a Tier 1 advice letter.
   b. Stakeholder Parties should be excluded from the initial steps in the creation of Shape B unless they are a member of the PDP, a Territory Lead, or part of the IRT.
   c. The Assigned Commissioner should be authorized to resolve disputes regarding the IRT roster.
   d. Funding for the IRT should be capped at $250,000.
   e. CAL FIRE should file and serve the final IRT roster.
   f. The PDP should solicit input on Shape B from all Stakeholder Parties, all 1,329 communities at risk from wildfire, and all "points of contact" designated by each city and county in California pursuant to Pub. Util. Code § 768.6
   g. The IRT-approved Shape B from Step 2(d) should be submitted for Commission approval via a Tier 1 advice letter
   h. Shape B boundaries should be adjusted during the development of Shape C to take into account the location of utility facilities.

3. The CAL-FIRE-approved Shape A that was filed and served by SDG&E on December 8, 2016, should be used as the starting point for creating Shape B.

4. The Fire Chief for the City of Laguna Beach should be allowed to participate on the PDP as an expert on wildfire risks to communities.

5. The membership of the PDP should be limited to persons with expertise in areas directly related to the development of fire-threat maps.

6. The PDP should have the following co-leads: SDG&E, Reax, and PG&E.

7. In Step 2(c), the Territory Lead should consider all informal comments offered by Stakeholder Parties via the IPM/VC software as the Territory Lead creates the draft Shape B for its service territory.

8. The PDP should use web-based IPM/VC software to help manage the process of creating Shapes B and C. The PDP should consult with the IRT prior to selecting and implementing the IPM/VC software.

9. If it becomes necessary to use sensitive information to justify a proposed change to a Tier boundary, which is strongly discouraged, a Territory Lead or Stakeholder Party should be allowed to submit the sensitive information directly to CAL FIRE and the PDP co-leads PG&E and SDG&E (but not Reax) using a secure and confidential means of communication (e.g., thumb drive). CAL FIRE and the PG&E and SDG&E co-leads should be allowed to share sensitive information with other members of the IRT and PDP, as appropriate, who are authorized to view sensitive information.

10. Sensitive information should not be posted on the IPM/VC software. If sensitive information is inadvertently posted on the IPM/VC software, the PDP should remove the material as soon as possible after learning of the incident.

11. To facilitate collaboration with the Territory Leads, the PDP should file and serve a roster of all Territory Leads, the territory covered by each Lead, and contact information for each Lead. The areas covered by the Territory Leads listed on the roster should together encompass all of California.

12. Today's decision should establish the Independent Review Team (IRT) to oversee and review the PDP's development of Shapes B and C. CAL FIRE should lead the IRT.

13. To preserve the independence of the IRT, CAL FIRE should have sole authority to (a) determine the internal and external resources needed for the IRT; (b) determine the number and qualifications of the IRT's members; (c) identify, select, and manage the IRT members; and (d) control the IRT's activities. All IRT work products should reflect CAL FIRE's independent judgement and expertise.

14. SED Advocacy Staff should file and serve the final IRT roster.

15. So that the development of Fire Map 2 does not become bogged down in disputes over technical issues and other matters, the IRT should have authority to decide deadlocked issues regarding the development of Fire Map 2.

16. Any impasse between the IRT and the PDP, Territory Leads, and/or Stakeholder Parties during the development of Fire Map 2 should be resolved in favor of the IRT. The PDP should develop Shape B and Shape C in accordance with the IRT's guidance and decisions.

17. The Commission may delegate the performance of ministerial tasks, including (a) the investigation and determination of facts preliminary to Commission action, and (b) making preliminary recommendations and draft orders. The Commission's subsequent approval or ratification of a delegated act validates the act, which becomes the act of the Commission itself.

18. The IRT's authority pursuant to today's decision to render preliminary decisions regarding the development of Fire Map 2 is a permissible delegation of the Commission's authority because the Commission will have final authority regarding the contents and approval of Fire Map 2.

19. The funding mechanism adopted by today's decision to pay for expert consultants and resources to assist the IRT in overseeing the development of Fire Map 2 is substantially similar to the procedures and funding mechanism adopted by D.14-01-010 for the development of Fire Map 1.

20. If requested by CAL FIRE, SED Advocacy Staff should assist CAL FIRE in reviewing and processing invoices from expert consultants and other resources that are contracted to assist the IRT.

21. The funding mechanism adopted by today's decision should encompass work performed by expert consultants under CAL FIRE's direction beginning in December 2016.

22. It is reasonable to adopt a cost cap of $500,000 for outside experts and resources to assist the IRT, rather than the Workshops Report's recommended cost cap of $250,000, because (a) the development of Fire Map 1 required nearly $500,000 of funding from the IOUs for outside experts and resources; and (b) exceeding the recommended cost cap of $250,000 could interrupt the IRT's work and delay the development of Fire Map 2.

23. There should be a rebuttable presumption that up to $500,000 of payments made collectively by PG&E, SCE, and SDG&E to expert consultants and other contracted resources identified by CAL FIRE to assist the IRT are reasonable and may be recovered in rates.

24. Parties should be authorized to create and submit alternative Shape Bs for the Commission's consideration in Step 2(e).

25. In Step 2(a), the PDP should consult with the IRT prior to executing carve outs and refinements to the CAL FIRE-approved Shape A. The IRT should approve all carve outs and refinements in order to avoid the possibility of having to re-do this initial step and all subsequent steps.

26. Fire Map 2 should be divided into three fire-threat Tiers consisting of:

    a. Tier 1: Areas with zero to moderate wildfire risk.
    b. Tier 2: Areas with elevated wildfire risk.
    c. Tier 3: Areas with extreme wildfire risk.

27. Tier 1 should consist of all areas outside of Shape B. Tiers 2 and 3 should together comprise Shape B.

28. The PDP should develop more detailed definitions for each Tier in consultation with the IRT. The IRT should approve the definitions.

29. Tier definitions should have no more than a negligible effect on the exterior boundaries to the Initial Statewide Shape B from Step 2(a). Tier definitions should not re-define or negate the fire-threats that comprise the Initial Statewide Shape B from Step 2(a).

30. Tier definitions should be defined in a manner that can be applied statewide using either (i) the narrative approach in the Workshop Report, Attachment 2, Table 1, or (ii) the matrix approach in Attachment 2, Section 5.

31. Once the IRT has approved Tier definitions, the PDP should update the Tier parameters for the matrix approach in the Workshop Report, Attachment 2, Section 5, Figure 1 and Table 2. The PDP should implement these updates in consultation with the IRT.

32. The PDP should notify the Territory Leads and Stakeholder Parties of the IRT-approved Tier definitions and the IRT-approved updates to the Tier parameters for the matrix approach.

33. In Step 2(c):

    a. Each Territory Lead should solicit input from local non-party Stakeholders with expertise regarding local, utility-associated wildfire hazards and risks. Each Territory Lead should decide for itself how to identify and communicate with local non-party Stakeholders.

b. All proposed exclusions from Shape B that are submitted by Territory Leads to the PDP should be well supported and protect public safety.
c. Each Territory Lead (TL) should submit to the PDP a proposed Shape B for the applicable geographic area within a timeframe set by the PDP, in such form as directed by the PDP, and accompanied by such maps, information, and other material deemed necessary by the PDP. The proposed territory-specific Shape B submitted by each TL should be reviewed by the PDP and then approved, modified, or rejected by the PDP. The PDP should use the IPM/VC software to provide an explanation for each proposal that is approved, modified, or rejected.
d. The PDP and Territory Leads should not alter any carve outs or refinements to Shape B that were approved or rejected by the IRT in Step 2(a) unless there is substantial good cause for doing so. The PDP should notify the IRT of any such alterations and provide justification for such alternations. The IRT should be authorized to accept, modify, or reject such alterations.

34. If a Territory Lead does not fulfill its responsibilities under Step 2(c) in a timely manner, the PDP should take over the development of the territory-specific Shape B at issue so that Step 2(c) is not delayed.

35. To accelerate the IRT's review of the statewide Shape B in Step 2(d), the PDP in Step 2(c) should provide the IRT with advance copies of the PDP-approved, territory-specific Shape Bs as these become available.

36. In Step 2(d) the PDP should submit to the IRT for review and approval the statewide draft Shape B prepared by the PDP at the conclusion of Step 2(c). This submittal should include:

a. The following maps:
    i. The Initial Statewide Shape B approved by the IRT at the conclusion of Step 2(a).
    ii. The draft statewide Shape B prepared by the PDP at the conclusion of Step 2(c).

iii. One or more maps that provide a detailed comparison of Shape B in Item (ii) relative to Item (i).

b. Instructions for obtaining an electronic copy of the required map(s) in PDF format. This requirement may be met by including a PDF copy of the map(s) in the package submitted to the IRT.

c. Instructions for accessing a publicly available data file for each map in Item a, above, using commonly available GIS software.

d. A complete set of all proposed revisions to Shape B submitted by the Territory Leads during Step 2(c).

e. The PDP's explanation for each proposed revision to Shape B that is approved, modified, or rejected by the PDP in Step 2(c).

f. Any other information and material deemed appropriate by the PDP and/or requested by the IRT.

37. In Step 2(d):

a. The PDP should serve (but not file) either the package submitted to the IRT in Step 2(d) or a notice of availability of the package.

b. The IRT should be authorized to (i) direct the PDP, Territory Leads, and/or Stakeholder Parties to provide additional information, and (ii) direct the PDP to modify the boundaries of Shape B and its Tiers. The IRT should provide an explanation for each of its revisions to Shape B in Step 2(d). To ensure transparency, all of these communications should occur through the PDP's IPM/VC software.

c. The PDP should prepare a statewide Final Shape B in accordance with the IRT's instructions.

38. In Step 2(e), the PDP should file and serve a document that contains (a) the IRT-approved Final Shape B Map from Step 2(d); (b) instructions for obtaining an electronic copy of the map in PDF format (note: this requirement may be met by including a PDF copy with the document that is filed and served electronically); (c) instructions for obtaining a publicly available data file for the map that is readable by commonly available GIS software; (d) the IRT-approved Tier

definitions from Step 2(b); and (e) any other information and documents deemed relevant by the PDP.

39. In Step 2(e), Stakeholder Parties should be authorized submit alternative Shape Bs by filing and serving a document that includes:

a. One or more maps that depict the Stakeholder's proposed Shape B boundaries relative to the IRT-approved Shape B exterior boundaries and interior Tier boundaries.
b. Instructions for obtaining an electronic copy of the required map(s) in PDF format. This requirement may be met by including a PDF copy with the document that is filed and served electronically.
c. Instructions for obtaining a data file for the required map(s) that is readable by commonly available GIS software.
d. A detailed explanation of why the Stakeholder Party's proposed boundaries for Shape B should be adopted.

40. Based on the record developed in Step 2(e), the Assigned Commissioner should take appropriate actions to keep the development of Fire Map 2 moving forward expeditiously. For example, if there is no opposition to the IRT-approved Final Shape B in Step 2(e), the assigned Commission may issue a ruling that directs the IRT, PDP, and Territory Leads to use the IRT-approved Final Shape B to develop Shape C as quickly as possible.

41. In Step 3:

a. The PDP should provide the Final Shape B from Step 2(e) to the Territory Leads, who should overlay maps of electric utility overhead circuits on the Final Shape B.
b. Each Territory Lead should submit the draft Shape C for its territory to the PDP, who should review the submitted Shape Cs for consistency in the way electric utility facilities are depicted on Shape C. The PDP should consult with the IRT, compile a statewide draft Final Shape C Map, and submit the map to the IRT for review and approval. The PDP should make any revisions to the map deemed necessary by the IRT.

c. The PDP should submit the IRT-approved Final Shape C Map via a Tier 1 advice letter. This advice letter should (i) be submitted to SED; (ii) be effective on the date the Tier 1 advice letter is approved by a disposition letter or, if necessary, by a Commission resolution; and (iii) include (A) the IRT-approved Final Shape C Map, (B) instructions for obtaining an electronic copy of the map in PDF format, and (C) instructions for obtaining a data file of the map that is readable in commonly available GIS software.

d. The Commission's Energy Division should provide whatever administrative support that SED may need to process the Tier 1 advice letter.

42. The Shape C Map should depict each overhead electric utility circuit as either a line or a buffered area that approximates the location of the circuit on the map, depending on the electric utility's available GIS data. If appropriate, two or more circuits that share the same support structures may be shown as a single approximate line or buffered area on the map.

43. Electric utilities should provide to Commission staff, upon request, detailed information for any circuit depicted on the Shape C Map.

44. The Scoping Memo instruction to separately depict on Fire Map 2 all aerial telecommunication facilities that are in close proximity to overhead power-line facilities should not be adopted at this time.

45. It is the responsibility of every CIP to know where it has facilities that are located in close proximity to overhead power-line facilities depicted on Shape C of Fire Map 2 and to comply with all fire-safety regulations that apply to these CIP facilities.

46. Fire Map 2 should incorporate by reference the Tier 1 HHZs on the USFS/CAL FIRE joint map of Tree Mortality HHZs.

47. The modified Fire Map 2 Work Plan adopted by today's decision complies with the requirement in D.16-05-036 that the Work Plan address incorporating into Fire Map 2 the fire hazards associated with (a) overhead facilities generally and at specific locations such as Laguna Beach, and (b) parties' knowledge of historical power-line fires besides the October 2007 fires in Southern California, such as the Butte Fire that burned 71,000 acres in Amador and Calaveras Counties in September 2015.

48. Stakeholder Parties should be allowed to submit informal comments to the IRT, PDP, and Territory Leads throughout the development of Shapes B and C in order to avoid potentially lengthy revisions to Shape B and/or Shape C at the end of the process. To achieve this objective, the PDP should provide Stakeholder Parties with access to the IPM/VC software so that parties can (a) communicate with the PDP, IRT, and Territory Leads, and (b) monitor information and documents transmitted between or among the IRT, PDP, Territory Leads, and Stakeholder Parties.

49. The PDP should file and serve instructions for Stakeholder Parties to access and use the IPM/VC software within 30 days from the effective date of today's decision.

50. The schedule for the development and adoption of Fire Map 2 in Section 4.5 of today's decision should be adopted.

51. Fire Map 2 should be effective on the date that the Tier 1 advice letter that is submitted to SED in Step 3 is approved by a disposition letter or, if necessary, by a Commission resolution.

52. SED Advocacy Staff should (a) provide whatever administrative and regulatory support that CAL FIRE may need to participate in this proceeding,

and (b) stay in regular contact with CAL FIRE for the purpose of monitoring CAL FIRE's need for support.

53. The Director of SED or the Director's designee should:

    a. Arrange for the following files that depict the Final Shape C Map from Step 3 to be hosted on a Commission server and/or other server deemed appropriate by the Director:
        i. High resolution PDF file.
        ii. Zip archive of native GIS files (when unzipped, requires GIS software and/or Google Earth for viewing).
    b. Post on the Commission's website (i) static download links to each of the files for the Final Shape C identified in Item a, above, and (ii) a link to the then-current version of the USFS/CAL FIRE map of Tree Mortality HHZs.
    c. Update GOs 95, 165, 166, and other GOs, if applicable, to replace references to the interim fire-threat maps with references to Fire Map 2.
    d. Complete these tasks no later than 60 days after the date of SED's or the Commission's disposition of the PDP's Tier 1 advice letter submitting the Final Shape C Map. For the purpose of today's decision, the date of SED's disposition should be the "date closed" that is reported on the Commission's website. The interim fire-threat maps should be retired at that time.

54. If SED learns of a material error in Shape C of Fire Map 2, SED should take the following actions, as appropriate: (a) Confer with CAL FIRE; (b) correct the error by preparing a resolution for the Commission's consideration that explains the error, describes the correction, and provides a corrected Shape C Map in PDF and GIS formats; and (c) replace the download links on the Commission's website to the erroneous Shape C Map with links to the corrected Shape C Map.

55. SED should periodically check CAL FIRE's website for revisions to the Tree Mortality HHZs Map. When such revisions occur, SED should update the

link to the map that SED has placed on the Commission's website in accordance with Section 5 of today's decision.

56. To protect public safety, the most restrictive fire-safety regulations that currently apply only to high fire-threat areas on the interim fire-threat maps should transfer automatically to Tier 3 areas on the Shape C Map of Fire Map 2.

57. The existing fire-safety regulations that apply only to high fire-threat areas in Northern California on the interim fire-threat maps adopted in R.08-11-005 should apply only to areas in Northern California designated as Tier 3 (Extreme) on the Shape C Map of Fire Map 2. Likewise, the existing fire-safety regulations that apply only to high fire-threat areas in Southern California on the interim fire-threat maps should apply only to areas in Southern California designated as Tier 3 on the Shape C Map of Fire Map 2. For the purpose of this Conclusion of Law, Southern California should be defined as Imperial, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura Counties. Northern California should be defined as all other counties in California.

58. The transfer of existing fire-safety regulations that is described in the previous Conclusion of Law should (a) take effect as soon as possible after the Commission's adoption of Shape C as set forth in Section 4.1.3 of today's decision, and (b) no later than September 1, 2018, in time for the autumn fire season in Southern California.

59. The schedule and procedures in Section 9 of today's decision to (a) integrate Fire Map 2 into GO 95 as a new High Fire-Threat District, and (b) consider and possibly adopt new fire-safety regulations for the High Fire-Threat District should be adopted.

60. The assigned Commissioner and/or the assigned ALJ should be authorized to revise the schedules, procedures, and requirements adopted by

today's decision for (a) the development and adoption of Fire Map 2; and (b) the identification, evaluation, and possible adoption of fire-safety regulations for the High Fire-Threat District.

61. Cost-of-service electric utilities are entitled to recover the reasonable costs they incur pursuant to today's decision after the reasonableness of such costs has been verified by the Commission. Cost-of-service electric utilities should be authorized to seek recovery of such costs on an interim basis until such costs can be incorporated into each utility's GRC.

62. The following Order should be effective immediately so that the adopted Fire Map 2 Work Plan can be implemented expeditiously.

O R D E R

IT IS ORDERED that:

1. The Fire Map 2 Work Plan described in the *Joint Parties' Workshop Report for Workshops Held August – September 2016* ("Fire Map 2 Work Plan" or "Workshop Report") that is contained in Appendix A of this decision is approved with the following modifications:

    a. The Shape A Map that was approved by the California Department of Forestry and Fire Protection (CAL FIRE), and filed and served by San Diego Gas & Electric Company (SDG&E) on December 8, 2016, shall be used as the starting point for the creation of Shape B.

    b. The Workshop Report proposal to file the CAL FIRE-approved Shape A Map via a Tier 1 advice letter is not adopted.

    c. Pacific Gas and Electric Company (PG&E), SDG&E, and Reax Engineering shall serve as the co-leads of the Peer Development Panel (PDP).

d. The Fire Chief for the City of Laguna Beach may serve on the PDP as an expert on wildfire risks to communities.

e. The membership of the PDP shall be limited to persons with expertise in areas directly related to the development of fire-threat maps.

f. The Workshop Report proposal to exclude Stakeholder Parties from the creation of Shape B, unless they are a member of the PDP, a Territory Lead, or part of the Independent Review Team, is not adopted.

g. The PDP shall use web-based integrated project management/version control (IPM/VC) software to help manage the process of creating Shapes B and C. The PDP shall consult with the Independent Review Team prior to selecting and implementing the IPM/VC software.

h. If it becomes necessary to use sensitive information regarding critical infrastructure to justify a proposed change to a Tier boundary, which is strongly discouraged, a Territory Lead or Stakeholder Party shall submit the sensitive information directly to CAL FIRE and the PDP co-leads PG&E and SDG&E (but not Reax) using a secure and confidential means of communication. CAL FIRE and the PG&E and SDG&E co-leads may share sensitive information with other members of the IRT and PDP, as appropriate, who are authorized to view sensitive information.

i. Sensitive information regarding critical infrastructure shall not be posted on the IPM/VC software. If sensitive information is inadvertently posted on the IPM/VC software, the PDP shall remove the material as soon as possible after learning of the incident.

j. Stakeholder Parties may submit informal comments to a Territory Lead using the PDP's IPM/VC software. The Territory Lead shall consider all informal comments offered by Stakeholder Parties as the Territory Lead creates a draft Shape B for its service territory.

k. The PDP shall file and serve a roster of all Territory Leads, the territory covered by each Lead, and contact information for each listed Lead. The areas covered by the Territory Leads listed on the roster shall together encompass all of California.

l. The Independent Review Team (IRT) shall (i) be led by CAL FIRE, and (ii) provide independent oversight and review of the PDP's development of Shapes B and C.

m. CAL FIRE shall have sole authority to (i) determine the internal and external resources needed for the IRT; (ii) determine the number and qualifications of the IRT's members; (iii) identify, select, and manage the IRT members; and (iv) control the IRT's activities. All IRT work products shall reflect CAL FIRE's independent judgement and expertise.

n. The Advocacy Staff of the Commission's Safety and Enforcement Division (SED) shall file and serve the final IRT roster.

o. The Workshop Report proposal to authorize the Assigned Commissioner and/or the assigned Administrative Law Judge (ALJ) to resolve disputes regarding the IRT roster is not adopted.

p. The IRT may decide deadlocked issues regarding the development of Fire Map 2. The PDP shall develop Shape B and Shape C in accordance with the IRT's decisions. Any impasse between the PDP and IRT during the development of Fire Map 2 shall be resolved in favor of the IRT.

q. Parties may create and submit alternative Shape Bs for the Commission's consideration in Step 2(e).

r. If requested by CAL FIRE, SED Advocacy Staff shall assist CAL FIRE in reviewing and processing invoices from expert consultants and other resources that are contracted to assist the IRT.

s. The funding mechanism adopted by today's decision encompasses work performed by expert consultants under CAL FIRE's direction beginning in December 2016.

t. Total funding by utilities to pay for expert consultants and other resources identified by CAL FIRE to support the IRT is capped at $500,000.

u. In Step 2(a), the PDP shall consult with the IRT regarding carve outs and refinements to the CAL FIRE-approved Shape A. The IRT shall approve all carve outs and refinements to Shape A.

v. Fire Map 2 shall be divided into three fire-threat Tiers consisting of:

   i. Tier 1: Areas with zero to moderate wildfire risk.

   ii. Tier 2: Areas with elevated wildfire risk.

   iii. Tier 3: Areas with extreme wildfire risk.

   iv. Tier 1 shall consist of all areas outside of Shape B. Tiers 2 and 3 shall together comprise Shape B.

w. The PDP shall develop more detailed definitions for each Tier in consultation with the IRT. The IRT shall approve the definitions.

x. Tier definitions shall have no more than a negligible effect on the exterior boundaries to the Initial Statewide Shape B from Step 2(a); and shall not re-define or negate the fire-threats that comprise the Initial Statewide Shape B from Step 2(a).

y. Tier definitions shall be defined in a manner that can be applied statewide using either (i) the narrative approach in the Workshop Report, Attachment 2, Table 1, or (ii) the matrix approach in Attachment 2, Section 5.

z. Once the IRT has approved the Tier definitions, the PDP shall update the Tier parameters for the matrix approach set forth in Workshop Report, Attachment 2, Section 5, Figure 1 and Table 2. The PDP shall carry out these updates in consultation with the IRT.

aa. The PDP shall use its IPM/VC software to notify the Territory Leads and Stakeholder Parties of the IRT-approved Tier definitions and the IRT-approved updates to the Tier parameters for the matrix approach.

bb. In Step 2(c):

i. Territory Leads shall solicit input from local non-party Stakeholders with expertise regarding local, utility-associated wildfire hazards and risks as part of the development of territory-specific Shape Bs. Each Territory Lead may decide how to identify and communicate with local non-party Stakeholders.

ii. Each Territory Lead shall submit to the PDP a draft Shape B for the applicable geographic area within a timeframe set by the PDP, in such form as directed by the PDP, and accompanied by such maps, information, and other material deemed necessary by the PDP.

iii. All proposed exclusions from Shape B relative to Step 2(a) that are submitted by Territory Leads to the PDP shall be well supported and have no adverse effects on public safety.

iv. The PDP shall (A) review the proposed territory-specific Shape Bs submitted by each Territory Lead, and (B) use the IPM/VC software to provide an explanation for each proposal that is approved, modified, or rejected.

v. The Territory Leads and PDP shall not alter any carve outs or refinements to Shape B that were approved or rejected by the IRT in Step 2(a) unless there is substantial good cause for doing so. The PDP shall notify the IRT of any such alterations and provide justification for such alternations. The IRT may accept, modify, or reject such alterations.

vi. If a Territory Lead does not fulfill its responsibilities in Step 2(c) in a timely manner, the PDP shall take over the development of the territory-specific Shape B at issue so that Step 2(c) is not delayed.

vii. The PDP shall compile a draft statewide Shape B based on the PDP-approved, territory-specific Shape Bs submitted by the Territory Leads.

viii. The PDP shall provide the IRT with advance copies of the PDP-approved, territory-specific Shape Bs as these become available.

cc. The Workshop Report proposal to require the PDP to solicit input on Shape B from all Stakeholder Parties, all 1,329 communities at risk from wildfire, and all "points of contact" designated by cities and counties pursuant to Pub. Util. Code § 768.6 is not adopted.

dd. In Step 2(d) the PDP shall submit to the IRT for review and approval the draft statewide Shape B prepared by the PDP at the conclusion of Step 2(c). This submittal shall include:

i. The following maps:

(A) The Initial Statewide Shape B approved by the IRT at the conclusion of Step 2(a).

(B) The draft statewide Shape B prepared by the PDP at the conclusion of Step 2(c).

(C) One or more maps that provide a detailed comparison of Shape B in Item (B) relative to Item (A).

ii. Instructions for obtaining an electronic copy of the required map(s) in PDF format. This requirement may be met by including a PDF copy of the map(s) in the package submitted to the IRT.

iii. Instructions for accessing a publicly available data file for each map in Item i, above, using commonly available geographic information system (GIS) software.

iv. A complete set of all proposed revisions to Shape B submitted by the Territory Leads during Step 2(c).

v. The PDP's explanation for each proposed revision to Shape B that is approved, modified, or rejected by the PDP during Step 2(c).

vi. Other information and material deemed appropriate by the PDP and/or requested by the IRT.

ee. In Step 2(d):

i. The PDP shall serve (but not file) either the package submitted to the IRT in Step 2(d) or a notice of availability of the package.

ii. The IRT may (A) direct the PDP, Territory Leads, and/or Stakeholder Parties to provide additional information, and (B) direct the PDP to modify the boundaries of Shape B and its Tiers. The IRT shall provide an explanation for each of its revisions to Shape B in Step 2(d). All of these communications shall occur through the PDP's IPM/VC software.

iii. The PDP shall prepare a Final Shape B Map in accordance with the IRT's instructions.

ff. The Workshop Report proposal for the IRT-approved Final Shape B from Step 2(d) to be submitted for Commission approval via a Tier 1 advice letter is not adopted.

gg. In Step 2(e):

i. The PDP shall file and serve a document that contains (A) the IRT-approved Shape B Map from Step 2(d); (B) instructions for obtaining an electronic copy of the map in PDF format (note: this requirement may be met by including a PDF copy with the document that is filed and served electronically); (C) instructions for obtaining a publicly available data file for the map that is readable by commonly available GIS software; (D) the IRT-approved Tier definitions from Step 2(b); and (E) any other information and documents deemed relevant by the PDP.

ii. Stakeholder Parties may submit alternative Shape Bs by filing and serving a document that includes:

(A) One or more maps that depict the Stakeholder's proposed boundaries relative to the IRT-approved Shape B exterior boundaries and interior Tier boundaries.

(B) Instructions for obtaining an electronic copy of the required map(s) in PDF format. This requirement

may be met by including a PDF copy with the document that is filed and served electronically.

(C) Instructions for obtaining a data file for the required map(s) that is readable by commonly available GIS software.

(D) A detailed explanation of why the Stakeholder Party's proposed boundaries for Shape B should be adopted.

hh. Depending on the record developed in Step 2(e), the Assigned Commissioner may:

i. Issue a ruling that (A) provides notice that the IRT-approved Shape B shall be used to develop Shape C, and (B) directs the IRT, PDP, and Territory Leads to proceed immediately with the development of Shape C, and/or

ii. Take such other actions as the Assigned Commissioner deems appropriate.

ii. Shape C shall consist of the Final Shape B Map from Step 2(e) overlaid with electric utility overhead circuits. Each circuit shall be depicted either as a line or a buffered area that approximates the location of the circuit on the map, depending on the electric utility's available geographic information system data. Two or more circuits that share the same support structures may be shown as a single approximate line or buffered area on the map, if appropriate.

jj. In Step 3:

i. The PDP shall provide the Final Shape B Map from Step 2(e) to the Territory Leads, who shall overlay electric utility overhead circuits on the Final Shape B Map.

ii. Each Territory Lead shall submit the draft Shape C for its territory to the PDP, who shall review the submitted Shape Cs for consistency in the way electric utility circuits are depicted on Shape C. The PDP shall consult with the IRT, compile a draft statewide Final Shape C Map, and submit the map to the IRT for review and approval. The PDP shall make any revisions to the map required by the IRT.

iii. The PDP shall submit the IRT-approved Final Shape C Map via a Tier 1 advice letter. The advice letter shall (A) be submitted to SED; (B) be effective on the date the advice letter is approved by a disposition letter or, if necessary, by a Commission resolution; and (C) include (1) the IRT-approved Final Shape C Map, (2) instructions for obtaining an electronic copy of the Final Shape C Map in PDF format (note: this requirement may be met by including a PDF copy with the advice letter that is submitted and served electronically), and (3) instructions for obtaining a data file of the map that is readable in commonly available GIS software.

iv. The Commission's Energy Division shall provide whatever administrative support that SED may need to process the Tier 1 advice letter. Such support may include, for example, posting notice of the advice letter on the Commission's website, posting notice of SED's disposition on the Commission's website, and archiving the advice letter.

kk. The Workshop Report proposal to adjust Shape B boundaries during the development of Shape C to take into account the location of utility facilities is not adopted.

ll. The Scoping Memo instruction to depict on Fire Map 2 all aerial telecommunication facilities that are in close proximity to overhead power lines is not adopted at this time.

mm. Fire Map 2 shall consist of the Final Shape C Map from Step 3 and the Tier 1 High Hazard Zones (HHZs) on the United States Forest Service and CAL FIRE's joint map of Tree Mortality HHZs. Fire Map 2 shall incorporate by reference the Tier 1 HHZs on the Tree Mortality HHZs Map.

nn. Fire Map 2 shall be effective on the date that the Tier 1 advice letter submitted to SED in Step 3 is approved by a disposition letter or, if necessary, by a Commission resolution.

oo. Stakeholder Parties may submit informal comments to the IRT, PDP, and Territory Leads throughout the development Shapes B and C. The PDP shall provide Stakeholder Parties with access to the IPM/VC software so that Stakeholder Parties can (A) communicate with the PDP, IRT, and Territory Leads, and (B) monitor information and documents transmitted between or among the IRT, PDP, Territory Leads, and Stakeholder Parties.

pp. The PDP shall file and serve instructions for Stakeholder Parties to access and use the IPM/VC software within 30 days from the effective date of this Order, stated below.

2. There shall be a rebuttable presumption that payments up to $500,000 made collectively by Pacific Gas and Electric Company, San Diego Gas & Electric Company, and/or Southern California Edison Company to the expert consultants and other contracted resources identified by the California Department of Forestry and Fire Protection to assist the Independent Review Team pursuant to today's decision are reasonable and may be recovered in rates.

3. Electric utilities shall provide to Commission staff, upon request, detailed information for any overhead powerline depicted on the Shape C Map.

4. It is the responsibility of every communication infrastructure provider (CIP) to know where it has facilities that are located in close proximity to overhead power-line facilities depicted on the Shape C Map of Fire Map 2 and to comply with all fire-safety regulations that are applicable to these CIP facilities.

5. The schedule for the development and adoption of Fire Map 2 in Section 4.5 of today's decision is adopted.

6. The Advocacy Staff of the Commission's Safety and Enforcement Division (SED) shall provide whatever administrative and regulatory support that the California Department of Forestry and Fire Protection (CAL FIRE) may need to participate in this proceeding. SED Advocacy Staff shall stay in regular contact with CAL FIRE for the purpose of monitoring CAL FIRE's need for support.

7. The Director of the Commission's Safety and Enforcement Division (SED) or the Director's designee shall:

a. Arrange for the following data files that depict the Final Shape C Map from Step 3 to be hosted on a Commission server and/or other server deemed appropriate by the Director:

   i. High resolution, portable document format file.

   ii. Zip archive of native geographic information system (GIS) files (when unzipped, requires GIS software and/or Google Earth for viewing).

b. Post on the Commission's website (i) static download links to each of the files for the Final Shape C Map identified in Item a, above; and (ii) a download link to the then-current version of the United States Forest Service and California Department of Forestry and Fire Protection's joint map of Tree Mortality High Hazard Zones.

c. Update General Orders 95, 165, 166, and other General Orders, if applicable, to replace references to the interim fire-threat maps with references to Fire Map 2.

d. Complete these tasks no later than 60 days after the date of SED's or the Commission's disposition of the Tier 1 advice letter submitting the Final Shape C Map. For the purpose of this Ordering Paragraph, the date of SED's disposition shall be the "date closed" that is reported on the Commission's website. The interim fire-threat maps shall be retired at that time.

8. If the Safety and Enforcement Division (SED) learns of a material error in the Shape C Map of Fire Map 2, SED shall take the following actions, as appropriate: (a) Confer with the California Department of Forestry and Fire Protection; (b) correct the error by preparing a resolution for the Commission's consideration that explains the error, describes the correction, and provides a corrected Shape C Map in both a portable document format and geographic information system-readable format; and (c) replace the download links on the Commission's website to the erroneous Shape C Map with links to the corrected Shape C Map.

9. The Safety and Enforcement Division (SED) shall periodically check the California Department of Forestry and Fire Protection's website for revisions to the map of Tree Mortality High Hazard Zones. If and when there are revisions to the map, SED shall update the link to the map that SED has posted on the Commission's website in accordance with Section 5 of today's decision.

10. The existing fire-safety regulations that currently apply only to high fire-threat areas in Northern California on the interim fire-threat maps adopted in Rulemaking (R.) 08-11-005 shall apply only to areas in Northern California designated as Tier 3 (Extreme) on the Shape C Map of Fire Map 2. The existing fire-safety regulations that currently apply only to high fire-threat areas in Southern California on the interim fire-threat maps adopted in R.08-11-005 shall apply only to areas in Southern California designated as Tier 3 (Extreme) on the

Shape C Map of Fire Map 2. For the purpose of this Ordering Paragraph, Southern California is defined as Imperial, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura Counties. Northern California is defined as all other counties in California. The transition of existing fire-safety regulations to Tier 3 of the Shape C Map shall take effect as soon as possible after the Commission's adoption of the Shape C Map as set forth in Section 4.1.3 of today's decision and no later than September 1, 2018.

11. The schedule and procedures in Section 9 of today's decision to (a) integrate Fire Map 2 into General Order 95 as a new High Fire-Threat District, and (b) consider and possibly adopt new fire-safety regulations for the High Fire-Threat District are adopted.

12. The assigned Commissioner and/or the assigned Administrative Law Judge may revise the schedules and procedures adopted by today's decision for (a) the development and adoption of Fire Map 2, (b) the integration of Fire Map 2 into General Order 95 as a new High Fire-Threat District, and (c) the consideration and possible adoption of fire-safety regulations for the High Fire-Threat District.

13. The electric investor-owned utilities (IOUs) shall use the following procedures to seek recovery of the costs they incur pursuant to today's decision:

a. The IOUs may only seek to recover costs that are recorded in the Fire Hazard Prevention Memorandum Accounts (FHPMAs) they have established pursuant to decisions issued in Rulemaking 08-11-005. The IOUs shall record in their FHPMAs only those costs that are not being recovered elsewhere. For the purpose of this decision, the term "IOUs" includes Southern California Gas Company to the extent it operates overhead power-line facilities that are subject to the Commission's jurisdiction.

b. Each IOU may file one or more applications to request the recovery of the costs recorded in its FHPMA. The number and timing of applications will be at the discretion of the IOU. Each electric IOU may continue to use this procedure until the first general rate case (GRC) that occurs after the close of this proceeding. At that time, the IOU shall close its FHPMA and thereafter use the GRC mechanism to request recovery of the costs it incurs to comply with the regulations adopted in this proceeding. The IOU may seek to recover the ending balance in its FHPMA, if any, by filing an application.

14. This proceeding remains open for (a) the development and adoption of Fire Map 2, (b) the integration of Fire Map 2 into General Order 95 as a new High Fire-Threat District, and (c) the consideration and possible adoption of new fire-safety regulations for the High Fire-Threat District.

This Order is effective today.

Dated January 19, 2017, at San Francisco, California.

MICHAEL PICKER
President
CARLA J. PETERMAN
LIANE M. RANDOLPH
MARTHA GUZMAN ACEVES
CLIFFORD RECHTSCHAFFEN
Commissioners

Appendix A: Workshop Report

With Attachments 1 - 5

Note: The attached Workshop Report has non-substantive pagination and formatting changes that are not reflected in the copies of the Workshop Report that were filed and served.

Note: The attached Workshop Report does not include Attachments 6 and 7 of the Report due to their length and largely non-substantive content with respect to today's decision. Attachments 6 and 7 are included with the copies of the Workshop Report that were filed and served.

Joint Parties' Workshop Report for Workshops
Held August – September 2016

Pursuant to the Administrative Law Judge's Ruling Extending the Schedule for the Workshop Report and Associated Filings, dated September 23, 2016, Southern California Edison Company submits this Workshop Report on behalf of the following parties: AT&T California & New Cingular Wireless PCS, LLC, Bear Valley Electric Service, California Cable & Telecommunications Association, California Municipal Utilities Association (CMUA), Safety Enforcement Division – ESRB, City of Laguna Beach, Comcast Phone of California, LLC, Cox Communications California, LLC, Crown Castle NG West, Inc., CTIA-The Wireless Association, County of Los Angeles Fire Department, Los Angeles Department of Water & Power, Liberty Utilities (CalPeco Electric) LLC, Mussey Grade Road Alliance (MGRA), PacifiCorp, Pacific Gas & Electric Company, Southern California Edison Company, San Diego Gas & Electric Company, Consolidated Communications of California Company (formerly SureWest Telephone) and the Small LECs, Sacramento Municipal Utility District (SMUD), Sprint / Nextel, Sunesys, LLC, Time Warner Cable Information Services (California), LLC, T-Mobile West LLC dba T-Mobile, and The Utility Reform Network.

The Workshop Report consists of the following Fire Map 2 Work Plan and 7 Attachments:

Attachment 1: Shape 'A' Development
Attachment 2: Shape 'B' Development
Attachment 3: Shape 'C' Development
Attachment 4: Event/Task Timeline
Attachment 5: Scoping Memo Appendix B Cross-Reference Chart
Attachment 6: Fire Map 2 Development Plan Workshop Protocols

Attachment 7: FSTP Workshop Agendas – Recaps/Notes – Attendee Lists

FIRE MAP 2 WORK PLAN SUMMARY

I. BACKGROUND AND OVERVIEW

A. The OIR and 7/15 Scoping Ruling

The California Public Utilities Commission (Commission) issued the Order Instituting Rulemaking (OIR) 15-05-006 on May 7, 2015, which established the preliminary scope of this proceeding including the development and adoption of Fire Map 1. The Commission adopted Fire Map 1 in Decision (D.) 16-05-036. On July 15, 2016, the Assigned Commissioner's Scoping Memo and Ruling ((7/15 Scoping Ruling) was issued. The 7/15 Scoping Ruling established that the "next step in this proceeding is to prepare the Fire Map 2 Work Plan, which will provide a detailed road map for development and adoption of Fire Map 2." The 7/15 Scoping Ruling further directed the Fire Safety Technical Panel (FSTP) to convene and prepare a Fire Map 2 Plan using the same process as the Fire Map 1 Work Plan while addressing the matters identified in Appendices B and C of the 7/15 Scoping Memo.[100]

Appendix B of the 7/15 Scoping Memo provides in part that the Fire Map 2 Plan:

> …shall include a detailed work plan for the development, adoption, and implementation of a Fire Map 2 that:
> i. Incorporates Fire Map 1. ii. Covers the entire state.
> iii. Identifies the types and locations of overhead power-line facilities in the high fire-threat areas. iv. Identifies the types and locations of aerial telecommunications facilities in close proximity to overhead power-line facilities in the high fire-

[100] 7/15 Scoping Ruling at 5-7.

> threat areas. v. Integrates with the fire-prevention measures adopted in R.08-11-005 and this proceeding (R.15-05-006) that rely on fire-threat maps for their implementation. vi. Will be available to Commission staff, fire-safety agencies, and the public, while also protecting information about critical infrastructure or which may be proprietary.[101]

Appendix B also specifies a number of elements that should be included in the work plan including; (i) the types of information, the level of detail and other characteristics Fire Map 2 must possess (Item 2.i); (ii) proposals for contracting with and funding any necessary technical experts for neutral review and the funding of the same (Items 2ii-vi); a recommended schedule, recommended procedures and needed Commission action (Items 2.vii and xii); frequency and process for updating fire map to one is complete (Item 2.ix); and alternative recommendations on any issues where parties cannot reach consensus (Item 2.xi).[102] Appendix B also requires that Fire Map 2 be validated against historical fire data and incorporate utilities' knowledge of local conditions (Item 3).[103] Of note, Appendix B provides that "When possible, the Fire Map 2 Work Plan and any alternatives to the Work Plan should enable the *rapid development and adoption* of Fire Map 2" (Item 6).[104] Appendix C sets forth a specific proposal for the development of a statewide Fire Map 2.

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[101] 7/15 Scoping Ruling, Items 1(i) – (vi) at B-1.

[102] 7/15 Scoping Ruling at B-1 – B.3

[103] 7/15 Scoping Ruling at B-3 – B-4.

[104] 7/15 Scoping Memo at b-4 (emphasis added).

B. Revised Scoping Memo

Originally, there were two proposals for the Fire Map 2 Work Plan: (i) a proposal by San Diego Gas & Electric Company (SDG&E) (involving a 3-step map creation process); and (ii) the July 15 Scoping Memo, Appendix C proposal. After considerable discussion and consideration at both public workshops and within the FSTP Core Team,[105] a decision was made to try to combine the two approaches into a hybrid approach. While that work was underway, a revised Scoping Memo proposal was issued on September 6, 2016 (Revised Scoping Memo). The Revised Scoping Memo proposed to "combine the advantages of both [SDG&E and Appendix C] proposals" including, but not limited to, the SDG&E proposal to use a 3-step map development process.

After clarification of the Revised Scoping Memo proposal with the ALJ, the consensus of the group was generally to proceed with the process of the 3-step map development as outlined in the Revised Scoping Memo,[106] which would involve the development of Shape A, followed by B and then by Shape C as described below:

> Shape A: The initial map based the inputs from Fire Map 1, Cal Fire's FRAP map, historic fire perimeter data, and communities at risk from wildfire.
>
> Shape B: Shape A further refined based on the utilities' and other stakeholders' knowledge of local conditions and fire hazard s/risks in particular areas.

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[105] The Core Team is composed of FSTP members or representatives of FSTP members with unique knowledge and skill sets appropriate to the task of creating necessary technical details for the development of the FM 2 Plan.

[106] The Revised Scoping Memo also provided that the FM 2 Plan should address the proposals in the Revised Scoping Memo in lieu of the original Scoping Memo Proposal set forth in Appendix C. *See* Revised Scoping Memo at 5.

Shape C: Shape B further refined based on the overlay of utility facilities and other operational concerns. Shape C is the final Fire Map 2 work product.

C. S.B. 1463

In an email dated September 6, the assigned ALJ directed the parties to include in the Fire Map 2 Plan provisions regarding compliance with S.B. 1463. S.B. 1463 would have required the Commission, "in consultation with the Department of Forestry and Fire Protection, [to] prioritize areas in which communities are subject to conditions that increase fire hazards associated with overhead utility facilities.…" The legislation further would have required that "[a]ny findings supporting a decision to approve the boundaries for areas described in subdivision (a) shall describe how the commission incorporated the concerns of local governments, fire departments, or both in determining those boundaries."

Consistent with the ALJ's direction, the parties worked to incorporate compliance with S.B. 1463's requirements into the Fire Map 2 Plan. On September 24, 2016, however, Governor Brown vetoed S.B. 1463 noting that the Commission has already been working to prioritize areas with increased fire hazards associated with overhead utility facilities through R.15-05-006 and that this "deliberative process should continue and the issues this bill seeks to address should be raised in that forum."[107] Because the veto occurred after the conclusion of the workshops, the Fire Map 2 Plan set forth below continues to reflect compliance with S.B. 1463 particularly with respect to the public notice and input provisions (see Section III below) and the inclusion of communities at

[107] Gov. Brown's S.B. 1463 veto message.

risk from wildfires (CARs) in Shape A. *See* Section III below. If any workshop participant or party believes that the work plan requires adjustment as a result of the S.B. 1463 veto, any proposed adjustment should be addressed in comments on the workshop report.

II. Roles And Responsibilities of the PDP, TRT and Territory Lead

The process described herein is based on existing peer review approaches found in scientific, engineering, architectural and utility disciplines[108] and applicable requirements relating to stakeholder input. The composition and roles of the groups are more specifically described as follows.

Peer Development Panel (PDP). The PDP has overall responsibility (working with the Territory Leads) for developing statewide Shape B, and Shape C maps which will ultimately form the basis for Fire Map 2. The PDP is primarily composed of a small number of subject matter experts in areas directly related to development of the maps and may include specialists in fire weather, fire behavior, fire protection engineering, vegetation management, risk management, forestry, structural engineering, utility and/or electrical engineering and computational modeling (among others) who are willing to devote resources to develop the statewide Fire Map 2 effort. SDG&E and Reax Engineering have agreed to be the co-leads of PDP, and based on workshop discussions, it is anticipated that the PDP will include personnel from PG&E, SDG&E, SCE, PacifiCorp, Reax Engineering, AT&T, SMUD, LADWP, and possibly other

[108] The use of peer panels is widely used to develop and reconcile technical issues in various industries including the utility industry. See for example, the North American Transmission Forum http://www.natf.net/, and for the North American Electric Reliability Corporation http://www.nerc.com/Pages/default.aspx.

organizations. The PDP co-leads will prepare the final PDP roster and will serve the final PDP roster on the parties to the OIR.[109]

Territory Leads. The Territory Leads are the individuals or entities responsible for assisting the PDP by developing territory-specific proposals for Shape B and Shape C. The investor-owned utilities (IOUs) or publicly-owned utilities (POUs) with facilities in a given territory will presumptively be the Territory Lead for its service area, but are not required to be the lead.[110] If there is no utility with electric facilities in a given territory or the IOU or POU does not want to take the lead for its territory, the PDP will be responsible for creating the Shape B for that territory. Communications providers with facilities *in* the territory and communications providers, IOUs, or POUs with facilities *adjacent* to or in the territory can have specialists (with the appropriate technical expertise) participate with the Territory Lead in the Shape B and C development effort for a given territory. Parties participating as Territory Leads or working with the Territory Leads in Shape B development are not necessarily a part of the statewide PDP (but may be).[111]

Technical Review Team (TRT). The primary role of the TRT is to critically, and independently, review the Shape B and Shape C development executed by the PDP. Like the PDP, the TRT is to be composed of technical experts in areas related to development of the maps and may include specialists in fire weather, fire behavior, fire protection engineering, vegetation management, risk

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[109] The Assigned Commissioner or the Assigned ALJ will resolve disputes, if any, over the composition of the PDP roster.

[110] IOUs and POUs that choose not to be the lead would have input later in the process.

[111] For example, Territory Leads not serving on the PDP might include Liberty and Bear Valley.

management, forestry, structural engineering, utility and/or electrical engineering, and computational modeling (among others) who are willing to devote resources to develop the statewide Fire Map 2 effort. Collectively, members of the TRT should have the expertise necessary to independently execute the work being performed by the PDP in development of Fire Map 2.

During the September 21-22 workshops it was not possible to affirm that the TRT will be led by CAL-FIRE. To the extent CAL-FIRE is willing and able to lead this effort, it is proposed that it do so. It is further proposed that external independent experts (to be funded and hired as specified in Section IV below) would be provided to support CAL-FIRE's effort -- much in the way that the Fire Map 1 effort was led by CAL-FIRE using the support and guidance of an external independent expert team. In addition to the TRT lead, representatives from state agencies, city and county fire departments, qualified intervenors, and others as-needed, may serve on the TRT, provided such participants possess the requisite expertise. The TRT lead (e.g., CAL-FIRE) will prepare the final TRT roster and serve the final TRT roster on the parties to the OIR.[112]

*(*Non consensus Item)* During the September 21-22 workshops, attendees surmised that if CAL-FIRE or a Commission designee cannot lead the TRT, the TRT could be led by a SED – ESRB engineer. However, SED was unable to affirm its ability to take on this role and thus, there was no consensus reached on this point among workshop participants. Alternate arrangements may be proposed in comments to this Work Plan.

[112] The Assigned Commissioner or the Assigned ALJ will resolve disputes, if any, over the composition of the TRT roster.

PDP/TRT Coordination and Decision Making. The TRT shall provide expertise and resources for the purpose of technical review of PDP work product. The TRT should communicate on a regular basis with the PDP and the Territory Leads. The PDP and the TRT shall make good faith efforts to resolve all disputes; obtaining, when necessary and appropriate, input from outside resources including Territory Leads, academic experts, and consulting experts. It shall be the goal of PDP/TRT interaction to reach agreement on all refinements on Shape B so that rapid, final approved Fire Map 2 is facilitated**.** Only as a last resort, shall the Commission be called upon to resolve technical disputes.

Stakeholders (Stakeholders). Stakeholders consist of entities that may be subject to regulations based on Fire Map 2 (i.e., IOUs, POUs, and CIPs) as well as other entities or interest groups (CAL-FIRE, local municipalities, land managers, fire safe councils, community groups, TURN, etc.). Stakeholders will be provided with the ability to publicly comment on the Fire Map 2 development process but will not (unless they are also participating as a member of the PDP, TRT or are a Territory Lead) play a role in the creation of Shapes A, B or C or Fire Map 2 in general (which is the purview of the PDP) or their review and approval (which is the purview of the TRT).

III. Shapes A, B and C Development, Review and Approval Processes

Overview of Fire Map 2 Plan Development. During the Workshops, consensus was reached that Fire Map 2 will be developed in a three-step process starting with the development of Shape A, which is then refined to a Shape B, and then is further refined to Shape C. A summary of the development process for each of the Shapes, along with the process for review and approval of the shapes is set forth below. Additional details and technical guidance for (i) the

creation of Shape A, (ii) moving from Shape A to Shape B, and (iii) moving from Shape B to Shape C, is provided in **Attachments 1, 2, and 3**. The estimated time for the completion of each of these steps is discussed below and a comprehensive timeline is provided in **Attachment 4**.

Consensus was also reached at the workshops that the shapes will be initially developed by the PDP, with assistance from Territory Leads. Shapes B and C will then be reviewed by the TRT. The composition, roles, and responsibilities of the PDP, the Territory Leads that will assist the PDP, and the TRT are described in Section II above.

A. Shape A

Shape A Development Process. Under the Revised Scoping Memo, an initial map (called Shape A) is to be the starting point for the development of Fire Map 2. Shape A will be developed by Reax and SDG&E, generally using the inputs specified in the Revised Scoping Memo proposal, as further refined and clarified in this docket. Given the breadth of the specified Shape A inputs, it is anticipated that Shape A will necessarily be over-inclusive with respect to the areas identified and is not specifically designed to identify high fire areas or for any purpose other than as a starting point for Fire Map 2.

The Fire Map 2 Plan proposes a 2-week process to develop Shape A. Moreover, in order to "enable the rapid development and adoption of Fire Map 2" that is contemplated by the Revised Scoping Memo (at B-4), the Fire Map 2 Plan proposes that Shape A be developed in October 2016 —before the approval of the Fire Map 2 Plan. **Attachment 1** provides more detailed guidance regarding the development of Shape A.

Shape A Review and Approval Process. Once Shape A is developed, it will be provided to CAL-FIRE (or another neutral fire safety expert designated

by the Commission) for confirmation that it was prepared consistent with the factors specified in the Revised Scoping Memo.

Subject to the approval of the Fire Map 2 Plan, if CAL FIRE or Commission designee agrees that that Shape A was properly prepared, Shape A will be filed in the docket via a Tier 1 advice letter, which would be effective when filed, pending Energy Division disposition. (*See* General Order (G.O.) 96-B, General Rule 7.3.) Any person may protest or respond to the advice letter within 20 days of the date of filing of the advice letter. (*See* G.O. 96-B, General Rule 7.4.) If a protest is submitted, minor revisions to Shape A may be filed. If major revisions are required, the Energy Division, in consultation with the assigned ALJ, will determine whether the advice letter must be resolved by Commission resolution. (*See* G.O. 96-B, General Rule 7.3.)

If CAL-FIRE or Commission designee believes that Shape A was *not* properly prepared, Shape A will be referred back for refinement until either (i) CAL-FIRE approves Shape A (at which point it will be filed as a Tier 1 Advice letter in accordance with the procedure outlined above) or (ii) there is an impasse reached. (See Section II above regarding *PDP/TRT Coordination and Decision Making.)* The Work Plan proposes two weeks for CAL-FIRE's review of Shape A.

B. Shape B

Shape B Development Process. The next step will be the creation of Shape B. Shape B is a statewide map which will refine Shape A based on the utilities' and other stakeholders' knowledge of local conditions and fire hazards/risks in particular areas. As the Revised Scoping Memo recognizes: "the area covered by Shape B could be less than Shape A based on utilities' demonstrable knowledge

that Shape A overstates the fire hazards/risks in particular areas."[113] Additionally, tiers will be added to the Shape B map to delineate the level of risk from utility fires in various areas of the state. Shape B boundaries may be informed by additional data and consideration of fire rotation, probability and consequence. **Attachment 2** sets forth more detailed logistical and technical guidance regarding the development of Shape B.

*(i) Number of Tiers (*non-consensus item).* It should be noted that consensus was not reached on the appropriate number of tiers to be included in Fire Map 2. The draft work plan that was circulated for discussion at the Workshops, and the primary option discussed during the workshops, contemplated a 3-tier map. It should be noted that a 3-tier approach is foundational to the methodology described in the Scoping Memo and is used throughout the work plan. These tiers have previously been described as:

- Tier 3: Extreme
- Tier 2: Elevated
- Tier 1: Moderate (Not extreme or elevated. Baseline.)

Alternate Proposal. At the September 22, 2016 workshop, attendees engaged in a brief discussion on the 3-tier mapping described above. AT&T stated that it was premature to predetermine the number of tiers at this time and offered that the number of tiers ultimately to be included in Fire Map 2 should be left for the PDP to determine based on the level of differentiation observed after the development of Shape A. AT&T's comment was primarily borne out of concern that the three-tier classification noted above essentially resulted in only

[113] Revised Scoping Memo at 4.

two substantive fire threat areas (extreme and elevated) and thus would potentially place nearly all of the northern and central parts of the state's high fire district into a single "elevated" risk category despite what appear to be some substantive differences between some of these areas. AT&T's view is that such a result would likely constrain the Commission's and utilities' ability to tailor regulations pursuant to wildfire risks within a very large and diverse area. In the course of the discussion on this alternate proposal, ALJ Kenney indicated that different regulations may be applied to areas having different fire risks within the same tier.

AT&T's proposal directs the PDP to consider classification of the "elevated" area in northern and central California into more layers if observation of the underlying data and analysis justify such further identification of fire risk zones within tiers to provide the Commission and utilities a means by which to implement different regulations in areas having different fire risk levels within the same tier.

(ii) Tier Definition. No official vote was taken at the closing workshop in regards to the strict definition, or means of mapping, of each tier. Mapping the tiers could be accomplished in a number of ways, including identifying parameters related to fire probability and consequence (risk). If the Commission adopts, for example, a 3-tier system, Tier 3 would represent the areas with the highest risk (and require the most restrictive fire safety regulations), Tier 2 would represent areas with lesser risk than extreme (but may require enhanced fire safety regulations), and Tier 1 would represent areas with the least risk (and current regulations are sufficient to protect public safety).

In order to ensure statewide consistency, the PDP will develop written definitions for each tier. The specific criteria and parameters used to define

Shape B tiers should be developed by the PDP in consultation with, and subject to the approval of, the TRT. Generally, the highest tier should be associated with areas where significant fire potential exists. Two examples of possible definitions are provided below:

1. Areas where fire poses a significant threat to human life, has potential to damage/destroy multiple homes, or cause significant damage to the environment or other values at risk, or
2. Areas where fire consequences could be similar to the catastrophic fire Southern California firestorm of 2007.

In defining tiers, the PDP may assess potential fire consequences within the geographic areas designated in the draft Shape C and develop tier definitions consistent with fire risk in those tiers. Tier definitions should be developed in a manner to facilitate statewide application. For Territory Leads using the optional matrix methodology in Section 5, several tools are available for use including Table 2 (Table of Values, which will need to be updated at project execution) and Figure 1 (tier based metrics for the Tier Quadrant).

(iii) Timing. Once the number of tiers is determined in the Decision on the Work Plan, and the tiers are defined by the PDP, Territory Leads (presumptively the IOU or POU in a given service territory) will develop the Shape B proposal (with tiers) for their service territory. It is anticipated that it will take 16 - 24 weeks for the development of a statewide Shape B with tiers.

Public Input on Shape B. The Fire Map 2 Plan developed at the workshops, contemplated the need to obtain input on the fire map from "local governments, fire departments or both" and communities at risk, as contemplated by S.B. 1463. As noted above, to the extent that parties believe that the veto of this legislation necessitates any changes to the public input process outlined below, that should be reflected in their comments on the workshop report.

The Draft Statewide Shape B Map will be made available for public review and comment. Notice of availability of Draft Statewide Shape B Map will be provided to all city and county points of contact designated for emergency preparedness purposes pursuant to A.B.1650 (Pub. Util. Codes § 768.1) and to all Communities at Risk (CARs).[114] Notice will also be provided to all parties in R.15-05-006 (CARs and emergency preparedness contacts will be included in the term "Stakeholders," as defined above).

The PDP will establish a mechanism for the Stakeholders to provide comments and for those comments to be considered by the PDP. Any such mechanism must allow for the tracking and documentation of Stakeholder comments and responses thereto. The workshop participants recommend that one or more workshops will be held to: (i) explain the Shape B development; and (ii) explain how stakeholders can provide comment on the draft Shape B and the justification they need to provide for any proposed changes to Shape B. The PDP will consider all comments offered by Stakeholders, will make any necessary adjustments to Shape B, and will prepare a Revised Draft Statewide Shape B Map for review by the TRT. It is anticipated that the public input process and resulting PDP refinement of Shape B will take approximately 4-8 weeks, depending on the level of comments received.

Shape B Review and Approval Process. The TRT will review the Revised Draft Statewide Shape B Map and supporting material provided by the PDP. In order to facilitate and expedite the TRT review and approval process, it is anticipated that the PDP will regularly consult with the TRT about the

[114] The list of California communities at risk from wildfire is available at: http://osfm.fire.ca.gov/fireplan/fireplanning_communities_at_risk.

methodology used to develop Shape B and on key questions. The TRT may also request, in specific instances, that the PDP or Territory Leads provide additional rationale or justification for certain boundaries or tier designations. The TRT may propose modifications to the boundaries of certain proposed polygons based on a written scientific rationale that is consistent the work plan methodology and the requirements and scope of the rulemaking. An iterative process of repeated refinement is contemplated until Shape B is sufficiently refined to the TRT's reasonable satisfaction (See Section II *PDP/TRT Coordination and Decision Making.)* It is anticipated that the TRT review and approval of Shape B will take approximately 1 - 4 weeks, assuming there are no matters for which dispute resolution is required.

If the TRT approves Shape B the Shape B Map will be filed via a Tier 1 Advice letter in the docket,[115] effective pending approval of Energy Division. Any person (including Stakeholders) may protest or respond to the advice letter within 20 days of the date of filing of the advice letter. (*See* G.O. 96-B, General Rule 7.4.) If a protest is submitted, PDP/TRT may file minor revisions, or if major revisions are required, the Energy Division, in consultation with the assigned ALJ, will determine whether the advice letter must be resolved by Commission resolution. (*See* G.O. 96-B, General Rule 7.3.)

If the TRT does not approve Shape B, a report will be filed in R.15-05-006 and any issues in dispute will be put out for comment and Commission resolution (which may require evidentiary hearings).

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[115] A notice of availability of the map will be served on the service list for R.15-05-006 and on the city and county points of contact designated for emergency preparedness purposes pursuant to A.B.1650 (Pub. Util. Codes § 768.1) and CARs identified in Section II above.

C. Shape C

Shape C Development Process. The next step is the development of Shape C, which is the final mapping product. Shape C will further refine Shape B, taking into account the location of utility facilities and other operational concerns. It is anticipated that the development of Shape C will take approximately 6-8 weeks. The mechanics and criteria for Shape C development are set forth in **Attachment 3** and summarized below.

Territory Leads (in coordination with Communications Infrastructure Providers (CIPs) will work with the PDP to refine Shape C into a final map product. During the Shape B to Shape C process, Shape B will be overlaid with utility infrastructure and minimal changes will be made Shape C to account for facility location and operational concerns. The PDP will deliver the final Shape C with justification for any changes to the TRT for review and approval. It is anticipated that the TRT review and approval of Shape C will take approximately 2 weeks.

Shape C Review and Approval Process. If the TRT approves of Shape C, Shape C will be filed in the docket via a Tier 1 advice letter, which would be effective when filed, pending Energy Division disposition. *See* G.O. 96-B, General Rule 7.3. Any person (including individuals, groups, or organizations) may protest or respond to the advice letter within 20 days of the date of filing of the advice letter. (*See* G.O. 96-B, General Rule 7.4.) If a protest is submitted, PDP/TRT may file minor revisions, or if major revisions are required, the Energy Division, in consultation with the assigned ALJ, will determine whether the advice letter must be resolved by Commission resolution. (*See* G.O. 96-B, General Rule 7.3.)

If the TRT is not satisfied that Shape C was properly prepared, Shape C will be referred back to the PDP for refinement until either (i) TRT approves Shape C (at which point it will be filed as a Tier 1 Advice letter in accordance with the procedure outlined above) or (ii) there is an impasse reached. See Section II, *PDP/TRT Coordination and Decision Making.* If an impasse is reached then a report will be filed in R. 15-05-006 and any issues in dispute will be put out for comment and Commission resolution (which may require evidentiary hearings).

D. Tree Mortality.

The Revised Scoping Memo Proposal proposes that Fire Map 2 was a separate layer for Tree Mortality that is independent of Shape A (and Shapes B and C). This independent layer would consist of Tier 1 zones on the United States Forest Service (USFS) and CAL-FIRE's joint map of Tree Mortality High Hazard Zones (HHZs). The PDP, in consultation with the TRT, should undertake this work. Parties are encouraged to provide comments.

E. Publication / Dissemination of Fire Map 2

Once completed, Fire Map 2 will be disseminated in two forms:

1. High resolution .pdf file (no special software required for viewing)
2. Zip archive of native GIS files (when unzipped, requires GIS software and/or Google Earth for viewing)

A simple static web page will be created to provide basic information regarding Fire Map 2 and static download links to each of the two above files which should both be less than 50 MB in size. One example is FRAP's Fire Threat Map download page. (See attached link) (http://frap.fire.ca.gov/data/frapgismaps/fire_threat_download) Ideally, the

analogous Fire Map 2 web page would be hosted on a Commission or FRAP server since there is already a precedent for hosting maps on both sites.

IV. APPENDIX B ITEMS

In addition to the key components of the map development itself, Appendix B of the 7/15 Scoping Memo directed that the fire map work plan address a number of other items. Many of those items are addressed above and others are addressed below. For ease of review, attached as **Attachment 5** is a table that provides the locations where each of the Appendix B items is addressed in the workshop report.

A. Protection of Critical Infrastructure Locations

Appendix B to 7/15 Scoping Ruling contemplated the fire map to will identify both the (i) "types and locations of overhead power-line facilities in the high fire-threat areas," and (ii) "[t]he types and locations of aerial telecommunications facilities in close proximity to overhead power-line facilities in the high fire-threat areas."[116] The 7/15 Scoping Ruling further contemplates that Fire Map 2 "vi. Will be available to Commission staff, fire-safety agencies, and the public, while also protecting information about critical infrastructure or which may be proprietary."

During the workshops representatives of the communication infrastructure providers (CIPs) recommended that in order to protect information about critical communication infrastructure which is proprietary to the CIPs and which raises national security concerns, Fire Map 2 should not—

[116] 7/15 Scoping Ruling at B-2.

and cannot—include the location of CIP facilities consistent with both state and federal precedent.[117] Moreover, the consensus of the September 22, 2016 workshop participants was that the locations of communications facilities *is not necessary* to develop Fire Map 2—especially since the map will include IOU faculties. Thus, subject to further clarification from the Assigned Commissioner or the Assigned ALJ, the CIPs do not anticipate that such information will be provided.

1. Payment of Neutral Experts

- 2.ii, iv, v, vi (re contracting with and paying for neutral experts)

Assuming CAL FIRE is willing and able to lead the TRT, it is expected that funding will be required to support CAL-FIRE's use of experts. Experts will assist CAL FIRE in its review of both the methodology to be used by the Territory Leads and the PDP in developing Fire Map 2, as well as the proposed map products developed by the Territory Leads and the PDP, as further described elsewhere in the Fire Map 2 Plan.

It is contemplated that CAL FIRE will identify the resources and experts it deems necessary to represent CAL FIRE on the TRT. The selection and supervision of those resources would be directed by CAL FIRE and would be secured under the following procurement procedures and funding mechanism which are substantially similar to the procedures and funding mechanism adopted by the Commission in connection with the development of Fire Map 1.

[117] The CIPs provided a detailed but informal analysis of relevant state and federal law to the workshop participants. The CIPs intend to update and refine this analysis in their comments filed on the workshop report.

Based on CAL FIRE's determination of a need for expertise and resources and the expectation that expenses would be limited, consistent with the funding arrangements that supported the engagement of the independent expert team in the Fire Map 1 development phase, the three largest IOUs, PG&E, SCE and SDG&E, have volunteered to pay the cost of such resources—subject to the following additional provisions:

1. Total expenditures for any funding of needed experts or resources, as determined by CAL-FIRE, up to and including the creation of a final statewide Fire Map 2, will not exceed the sum of the balance of the remaining funds authorized for Fire Map 1 and $250,000 unless the requirements of No. 5 (below) are met.
2. The payment of costs by PG&E, SCE and SDG&E for the limited purpose identified in No. 1 shall have no precedential value as to the percentage of cost responsibility or non-responsibility of other parties for any other aspects of this proceeding.
3. PG&E, SCE and SDG&E may expense these costs to their Fire Hazard Prevention Memorandum Accounts (FHPMAs) that are described in D.12-01-032 at pages 153-156.
4. Based on the fact that the need for the TRT expertise will be determined by CAL-FIRE and that the work will be directed and reviewed by CAL-FIRE, expenditures by PG&E, SCE and SDG&E that do not exceed the cost cap specified in No. 1 shall be presumed reasonable by the Commission.
5. CAL-FIRE and/or SED must seek Commission approval to exceed the cost cap, if needed. The cost responsibility for any additional expenditures above the initial cost cap specified in No. 1 will be considered at that time. If PG&E, SCE and SDG&E again volunteer to pay the cost of any additional expert expense, any costs incurred and booked in the respective FHPMAs will be presumed reasonable up to any new/revised cost cap authorized by the Commission.
6. Arrangement of Contract Relationships

Parties have expressed a preference to simplify the contract structure based off the experiences encountered with Map 1 experts. Alternatives are being explored at the time of this reports submission. There are three potential solutions. The quantity of expert vendors required by the TRT to support the review process is yet to be determined and significant in recommending which approach will be most efficient.

a. Use the same contract structure as Map 1. While complex it has proven to be effective.
b. Assign one IOU as a lead to prepare and execute the appropriate contract or contracts under terms and conditions appropriate to TRT requirements[118] and the utility's normal contracting practices.[119] The contractor(s) would be required to record the billable cots of its time, materials and expenses, which would be reviewed for accuracy and reasonableness by the TRT and/or SED. After approval from the TRT and/or SED, the contractor would directly bill the lead IOU, which in turn will bill the two other IOU's for their respective proportionate shares of the total cost paid to vendors. PG&E, SCE and SDG&E agree to share the total billable costs using the following allocation: PG&E (49%), SCE (41%) and SDG&E (10%). This allocation is based on 2011 annual electric revenue as an allocation proxy.
c. Assign one expert vendor as a lead to prepare and execute the appropriate contract and sub-contracts with other expert vendors under terms and conditions appropriate to TRT

[118] As an example, the contract would provide that services would be subject to the supervision of CAL-FIRE and any limits as to time, expenses and costs to be determined by CAL-FIRE, with the understanding that payment would be subject to the five provisions above or any provisions adopted by the Commission

[119] As an example, IOUs routinely include provisions encourage any contractor, to the extent subcontractors are engaged, to utilize Commission-audited firms owned by women, minorities and/or disabled veterans.

requirements[120] and the utility's normal contracting practices.[121] The lead contractor manages and makes payment to the sub-contractors. The lead contractor would be required to record the billable cots of its time, materials and expenses, which would be reviewed for accuracy and reasonableness by the TRT and/or SED. After approval from the TRT and/or SED, the contractor would directly invoice the three IOU's. The lead contractor would have contracts in place with PG&E, SCE and SDG&E. The IOU's agree to share the total billable costs using the following allocation: PG&E (49%), SCE (41%) and SDG&E (10%). This allocation is based on 2011 annual electric revenue as an allocation proxy.

B. Other Appendix B Items

- 2.ix (updates of Map 2)

Fire Map 2 can be incorporated into G.O. 95 and other G.O.s, if applicable, by way of reference to a webpage that can be accessed via the Commission's website. SED is reviewing the requisite technical and administrative requirements of this approach. Parties may suggest additional means for incorporating Fire Map 2 into the G.O.s by submitting comments to this Fire Map 2 Plan.

It is recommended that the Fire Map 2 be updated in ten (10) year cycles as part of a rulemaking process that provides for public input, expert review and workshops that will (i) examine whether to incorporate recent advances, if any, in fire science modeling, (ii) incorporate recent fire history, and (iii) address any notable changes in the fuel landscape, urban growth and utility infrastructure and operational practices.

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[120] See fn. 20.

[121] See fn. 21.

Parties may suggest additional means for incorporating Fire Map 2 into the G.O.s by submitting comments to this Fire Map 2 Plan.

- 2.x (CEQA)

The development of Fire Map 2 and this Proposed Work Plan are exempt from environmental review under Section 15378 of the CEQA Guidelines because their approval and adoption do not constitute "projects" under the terms of the Act and will not have any potentially significant impact on the environment. Thus, the Proposed Work Plan schedule does not provide for a CEQA review.

- 3.(iii) (Butte fire inclusion)

Consideration of the fire hazards associated with historical power-line fires, including the Butte Fire, is addressed in both the Shape A and Shape B development processes described in this Fire Map 2 Plan.

- 3.iv (Laguna Beach as High)

The fire threat classification of the geographic area comprising and surrounding the City of Laguna Beach will be evaluated in the same manner as other geographic areas are evaluated using the Shape B methodology described in this Work Plan. In addition, parties, including the City of Laguna Beach, SCE and SDG&E, may address the issue of fire threat classification and/or Shape B methodology by submitting comments to this Fire Map 2 Plan.

- 3.vii and 1.v (transitioning regulations to Fire Map 2)

The FSTP did not address this Appendix B item in during the workshops. It is expected that the fire hazard tiers developed as part of the Fire Map 2 process will be defined and calibrated and, accordingly, may be correlated with the fire hazard designations utilized in the interim fire-threat maps. Parties may

address this issue more specifically by submitting comments to this Fire Map 2 Work Development Plan.

V. CONCLUSION AND ACKNOWLEDGEMENTS

Over the course of recent months, the FSTP has worked diligently to complete the Fire Map 2 Plan. Nearly ten full days of noticed public meetings were convened, including the initial FSTP teleconference on August 1, in-person/teleconference workshops held on August 11, August 18-19, August 29-30, September 7-9, and September 21-22, and a final teleconference on October 5, to review and discuss this workshop report prior to filing. Additionally, numerous teleconferences and in-person meetings were convened by FSTP's Core Team, many of whom also contributed to the content and refinement of this Workshop Report.

The FSTP wishes to recognize the efforts of SDG&E for their original proposal and initiative in promoting a 'hybrid' Fire Map 2 proposal; the Commission's Legal Division, Safety Enforcement Division, the Commission's technical staff; as well as PG&E, AT&T, and SCE for helping organize and host the above referenced in-person workshops, teleconferences, and meetings.

The FSTP also wishes to recognize the efforts of the Core Team and Editing Team members who have worked tirelessly before, during and after the workshops to refine the content of this work plan and reach consensus on material items both small and large.

Finally, the FSTP gratefully acknowledges the participation of ALJ Timothy Kenney and Ms. Charlyn Hook, advisor to Commissioner Florio, for their valuable input and encouragement throughout.

Respectfully submitted,

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ATTACHMENT 1

SHAPE A DEVELOPMENT

The Revised Scoping Memo Proposal provides that Shape A will consist of the five elements listed below. Shape A will be created by REAX Engineering and SDG&E. Given the specific direction in terms of the inputs to include, it is anticipated that the creation of Shape A will be largely formulaic, (with some manual processing) and should be readily confirmed by either CAL FIRE in consultation with the Peer Development Panel ("PDP"), a Commission's designee, or the Technical Review Team.

Shape A Elements

1. Cells on Fire Map 1 with a Utility Fire Threat Index value that is equal to or greater than 800.[1]
2. Cells on the Fire Resource Assessment Program (FRAP) Fire-Threat Map classified as Very High or Extreme.[2]
3. Historic fire perimeter data (all causes) in CAL FIRE's FRAP data base.
4. Cells on the FRAP Fire-Threat Map classified as High. With respect to Item 4, the Revised Scoping Memo Proposal would include in Shape A the great majority (but not all) of cells on the FRAP Fire-Threat Map classified as High.[3]

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[1] A PDF version of Fire Map (FM) 1 was filed in this proceeding on February 16, 2016, and is available on the Commission's Docket Card for this proceeding (R.15-05-006). The GIS version of FM 1 can be obtained in accordance with the instructions in the Notice of Availability that was concurrently filed with the PDF version of FM 1.

[2] The FRAP Map (Fire-Threat) has four fire-threat classes for wildland areas: Extreme, Very High, High, and Moderate. It has two classes for non-wildland areas: Non-Fuel and Not Mapped. The map is available at: http://frap.fire.ca.gov/data/frapgismaps/pdfs/fthreat_map.pdf.

[3] It may not be feasible to draw boundaries for Shape A that include all cells on the FRAP Fire Threat Map classified as High. For example, some cells classified as High are isolated and could be difficult to include in a coherent Shape A.

5. The intersection of the following areas associated with communities at risk from wildfire ("CARs"): [4]

    a. Areas classified as "Very High" on CAL-FIRE's map of Fire Hazard Severity Zones ("FHSZs"),[5] and

    b. Areas within the boundaries of communities on record with CAL-FIRE as being at risk from wildfire and to a distance of 1.5 miles outside the edges of the CARs boundaries.[6] In cases where there are no municipal boundaries for a particular CAR, the area for the CAR that would be used to develop Shape A would be the CAR's point location on CAL FIRE's statewide map of CARs[7] plus a radius of 1.5 miles around the point location.[8]

    During the workshops, SDG&E reported that CAL FIRE had produced a map of all the CARs that it would make available to the PDP for Shape A development.

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[4] There may be some CARs that do not meet the intersecting criteria in Item 5 (i.e., none of the CAR is within an area classified as "Very High" on CAL-FIRE's map of Fire Hazard Severity Zones) and thus not included in Shape A.

[5] Maps of FHSZs are available at: http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones_maps.

[6] There are approximately 1,329 communities currently on record with CAL-FIRE as being at risk from wildfire, including the City of Laguna Beach. The list is available at: http://osfm.fire.ca.gov/fireplan/fireplanning_communities_at_risk.

[7] A PDF version of CAL-FIRE's statewide map of CARs point locations is available at: http://frap.fire.ca.gov/data/frapgismaps/pdfs/comrisk_map.pdf.

[8] It would only be necessary to determine CAR boundaries for those CARs that are not otherwise included in Shape A as a result of applying Factors 1 – 4.

ATTACHMENT 2
SHAPE 'B' DEVELOPMENT

1.0 INTRODUCTION

This Attachment 2 describes how Shape A will be refined into Shape B and is based on the assumption that Shape A has been successfully developed and approved as part of a separate work stream.

Section 2.0 describes roles and responsibility of the participants, Section 3.0 describes the logistical framework, Section 4.0 describes the technical framework for development and approval of Shape B, and Section 5.0 describes an optional methodology.

As described in Section 4.0, Territory Leads will have primary responsibility to develop and refine Shape A for their assigned territories and, as described in Subsection 4.3, will be responsible for drafting and compiling a written proposal for submission to the peer development panel (PDP), which, at each Territory Lead's option, can take the form of:

- A narrative describing adjustments on the basis of considerations described in Table 1 and the tier definitions developed as described in Subsection 4.1;
- A matrix driven approach that evaluates key criteria as described in Section 5.0; or
- A combination of the narrative and matrix approaches.

2.0 ROLES AND RESPONSIBILITIES

To ensure consistency, transparency and technical rigor, this portion of the Fire Map 2 development process (i) will be executed by the PDP, which will assign territory specific mapping roles to Territory Leads, (ii) will be reviewed and approved by a Technical Review Team (TRT), and (iii) will provide for stakeholder (Stakeholder) input. The roles and responsibilities of each of these entities are set forth in the Work Plan Summary.

3.0 LOGISTICAL FRAMEWORK FOR SHAPE B CREATION

3.1 Overview of Shape B Creation and Adoption

As described in more detail in Section 4, the PDP, with heavy reliance on the Territory Leads, will create statewide Shape B polygons and designate the appropriate tier level. Proposed Shape B polygons will be internally reviewed and approved by the PDP before a statewide Shape B map is submitted for Stakeholder and TRT review. After the TRT reviews Shape B, it will be submitted to the Commission for approval. The review and approval process is described in more detail in Section III.B of the Fire Map 2 Work Plan Summary.

3.2 **Protocol** The adopted schedule assumes there are no disputes that require an evidentiary hearing or a Commission decision. **and Management Process**

The PDP will create internal protocols and management processes that promote:

- Transparency to TRT
- Version control (described in Section 3.2.1 below)
- Documentation (feedback/review)

3.2.1 Web-based integrated project management / version control software

It is proposed that the Shape B creation process be executed with web-based integrated project management / version control software. This makes the Shape B creation process completely transparent and provides a mechanism for stakeholders, municipalities, etc. to provide input to or comment on the Shape B creation process.

The concept of version control is prevalent in software development. With version control, each revision or modification to a project's source code is tracked. Particularly for open source projects, version control is often integrated with web-based project management and bug/issue tracking systems.

One possibility is to create a web site based on Trac (https://trac.edgewall.org/) with Subversion (https://subversion.apache.org/) for version control. This software has basic Wiki functionality, user accounts, and issue tracking. An example of a live site using this software combination can be seen at http://reaxengineering.com/trac/gpyro. Such a web site could be hosted on a virtual server for a cost of approximately $500 per year. Another possibility is to host the site on GitHub (https://github.com).

Using this type of software allows each member of the PDP and TRT and each Territory Lead (including those providing assistance to each Territory Lead)[1] to create accounts that make it possible to initiate and comment on "tickets" that feature proposed changes. As an example, a Territory Lead or the PDP may propose a modification to Shape B by creating a ticket, attaching a GIS shapefile for the polygon being proposed for change, and providing a written justification for the proposed change. This ticket and proposed change would be immediately viewable by anyone with a web browser. The TRT would be able to comment on the proposed revision by adding a comment to the ticket. The TRT could ask questions, request additional information, accept the revision, or reject the revision. In this way, the entire process of Shape B creation is well documented.

4.0 TECHNICAL FRAMEWORK FOR SHAPE B CREATION

4.1 Step 1: Calibration and Tier Definition

*4.1.1 The Number of Tiers (**Non-Consensus Item)*

It should be noted that a 3-tier approach is foundational to the Work Plan. However, consensus was not reached on the appropriate number of tiers to be included in Fire Map 2. The draft Work Plan that was circulated for discussion at the workshops, and the primary option discussed during the workshops, contemplated a 3-tier map. These tiers have previously been described as:

- Tier 3: Extreme
- Tier 2: Elevated
- Tier 1: Moderate (Not extreme or elevated. Baseline.)

Alternate proposal (**Non-Consensus Item) : To provide the Commission and utilities a means through which different regulations could be implemented in areas having different fire risk levels within the same tier, the PDP may consider further classification of Tier 2 into sub tiers—if the underlying data and analysis justify such further identification of fire risk zones. (See additional details on AT&T's alternate proposal in Summary of Fire Map Work Plan.)

[1] It is possible that Stakeholders could also use this or another web-based integrated system; this is an issue to be determined by the PDP.

4.1.2 Tier Definitions

No official vote was taken at the closing workshop in regards to the strict definition, or means of mapping, of each tier. Mapping the tiers could be accomplished in a number of ways, including identifying parameters related to fire probability and consequence (risk). If, for example, the Commission adopts a 3-tier system, Tier 3 would represent the areas with the highest risk (and require the most restrictive fire safety regulations), Tier 2 would represent areas with lesser risk than extreme (but may require enhanced fire safety regulations), and Tier 1 would represent areas with the least risk (and current regulations are sufficient to protect public safety).

In order to ensure statewide consistency, the PDP will develop written definitions for each tier. The specific criteria and parameters used to define Shape B tiers should be developed by the PDP in consultation with, and subject to the approval of, the TRT. Generally, the highest tier should be associated with areas where significant fire potential exists. Two examples of possible definitions are provided below:

1. Areas where fire poses a significant threat to human life, has potential to damage/destroy multiple homes, or cause significant damage to the environment or other values at risk, or
2. Areas where fire consequences could be similar to the catastrophic fire Southern California firestorm of 2007.

Tier definitions should be defined in a manner that can be applied statewide using the "narrative" approach. In addition, to support the efforts of Territory Leads using the optional matrix methodology described in Section 5, the PDP should, based on the final tier definitions, update the parameters for Low, Medium and High set forth in the Table of Values, **Table 2** and the tier based metrics for the Tier Quadrant, depicted in **Figure 1**.

4.2 Step 2: Create Statewide Refinements to Shape A

The (large group) PDP will execute statewide GIS operations to "carve out" areas of Shape A that are incapable of supporting propagating fires, perhaps using a burnable/non-burnable mask from LANDFIRE or CalVeg/FVEG. This includes waterbodies, barren cover types, irrigated agricultural land, and high-density urban areas. A raster sieve function could be used to prevent small groups of non-burnable pixels from being included in the non-burnable mask.

After areas incapable of propagating fire have been removed from Shape A, the result is a first draft of Shape B. The PDP's next step is to further refine and render Shape B on a statewide basis to: (i) include and exclude polygons from Shape B based on demonstrable incorrect logic in Fire Map 1 or FRAP Fire Threat Map, e.g., Northern California bias and (ii) to exclude cells that are isolated spatially.

Before moving on to **Step 3**, which involves a refinement process that is specific to the region assigned to each Shape B Territory Lead, the PDP should consult with the TRT regarding the work performed in **Step 2.**

4.3 Step 3: Territory Leads Develop Refinements to Shape B and Propose Tier 2 and Tier 3 Polygons for their Assigned Geographical Areas

Each Territory Lead will develop a proposed Shape B for its assigned territory.

The proposed Shape B may contain inclusions or exclusions from the Shape B as specified in the table below[2] and will include proposed tier designations for specified polygons based on the tier definitions established in **Step 1**. Alternatively, the Territory Lead may use the matrix methodology described in Section 5 as the basis for including or excluding geographical areas from Shape B and proposing tier designations to specified polygons.

[2] Application of the considerations in the table requires that local knowledge be combined with reasonable judgment. The greater the degree to which these considerations apply to an area under review, the greater the likelihood that the considerations will support a proposed change.

Table 1. Inclusion / Exclusion Criteria for Shape B

Considerations for movement either way	Considerations for including an area into Shape B	Considerations for removing an area from Shape B (where there is no significant fire history and no proximity to area at risk or community at risk)
Burnable/un-burnable mask (CalVeg)- 2015 CalVeg data was used as a 'mask' and the area under consideration needs to be moved based on whether or not it is covered by burnable vegetation. It was either included or excluded from Shape A in the course survey and this burnable/unburnable "test" will help determine its final disposition.	**Community at risk not captured elsewhere-** This area is covered by the CAR shape but did not get picked up when drawing the initial Shape A. It might not have had significant fire history or Fire Threat score, or its Map 1 signal fell below a visual threshold. Nonetheless, it falls within CAR and therefor needs to be included into Shape B.	**Cells that are isolated spatially-** These areas (cells) were captured 'wholesale' as part of one or more of the building block layers but due to their spatially isolated nature, they don't necessarily require consideration for enhanced regulations. They may be surrounded by cells of lesser threat, they may not represent significant fire history or they may not be proximate in a significant way to CAR or AAR. From an operational perspective, these cells may just be too small or isolated to require consideration for enhanced regulation.
Known land use changes- This area has undergone significant land use changes such as previously irrigated cropland reverting to a burnable landscape, or, an area of recent, significant construction/development.	**Demonstrable incorrect logic in Fire Map 1 or FRAP Fire Threat Map, e.g., Northern California bias -** This area lacked signal in one (or more) of the foundational layers but is known to represent significant threat of wildfire should an ignition occur. There may have been a singular, significantly damaging fire that is spatially removed from the preponderance of fire perimeters, or possibly, the area may have been omitted from Map 1 signal simply because of weather anomalies.	**Cells are too small to be significant when taken individually or in small clusters-** This guideline does not differ significantly from the one immediately above.
	Known specific hazard such as fuel accumulations, ingress/egress issues, proximity to dense assets at risk- These areas are likely to be small. The factors that make them candidates for inclusion into Shape B were not necessarily mapped or quantified in any of the foundational layers; assets at risk and ingress/egress for firefighters are but two examples.	**Demonstrable incorrect logic in Fire Map 1 or FRAP Fire Threat Map, e.g., Northern California bias** - A good example of this type of area is the north coast where significant fire signal is observed in Fire Map 1 but actual conditions are known to offer significantly less fire threat.
	Past catastrophic fires or exceptionally dense fire history- For some reason, the Shape A step did not capture an area of frequent or repeated burns, or there are known, significant fires on the landscape here but they are small in size or isolated from the main fire history footprint.	**Scarcity of Assets at Risk**- These areas, although they may be good candidates for enhanced regulations, do not abut areas of significant CAR/AAR nor do they have a history damaging fires originating in them.
		Lowered hazard due to fuel and weather - These areas present a lower requirement for enhanced regulations because of fuel or weather considerations not elsewhere captured.

		Good ingress/egress- These areas are well served by larger, more consistent traffic corridors (freeways, highways) to allow for either fire-fighting resource ingress or civilian egress. This travel corridor is sufficient to allow for a lessened need for enhanced regulation.

Since Shape B Tier 3 is based on a specific definition, it may be created in parallel with applying inclusions and exclusions from Shape B. For example, if Shape B Tier 3 is defined to be areas where elevated hazard associated with ignition and rapid spread of power line fires due to strong winds, abundant dry vegetation, or other environmental factors may negatively impact communities, structures, or people, then each Territory Lead should identify areas where communities, structures, or people (through communities at risk or wildland urban interface / intermix layers) intersects areas possessing the hazards above (using Fire Map 1 and possibly other data sources).[3]

Each Territory Lead will submit to the PDP one or more proposals for Shape B for the applicable geographic area which proposal(s) shall be in such form as is directed by the PDP. Such submissions may include:

- A GIS shapefile for proposed Shape B in the territory;
- An image comparing the **Step 2** version of Shape B to the **Step 3** version of Shape B for the territory for which the proposal is submitted; and
- Reasonable justification / rationale for the proposed Shape B, setting forth in reasonable detail:
    - A narrative describing adjustments on the basis of considerations described in Table 1 and the tier definitions developed as described in **Step 1**;
    - A matrix driven approach that evaluates key criteria as described in **Section 5**; or
    - A combination of the narrative and matrix approaches.

[3] It is contemplated that additional information such as the location of Wildland Urban Interface (WUI) zones on the basis of census data (*e.g.*, http://silvis.forest.wisc.edu/maps/wui) may also be used to develop Shape B and differentiate between tiers.

Each Territory Lead will submit its proposal package to the PDP within the timeframe indicated on the work plan schedule. Each proposal will be reviewed by the members of the PDP who will confer with the Territory Lead. Each proposal will be either referred back to the applicable Territory Lead for further consideration or approved by the PDP. This process will repeat until the PDP approves a revised, statewide Shape B. The TRT may be consulted on proposals unresolved by the Territory Leads and PDP.

4.4 Step 4: Stakeholder Input Process

Once the PDP has approved all of the proposals submitted by the Territory Leads, the PDP will compile a proposed statewide map for comment by the Stakeholders and solicit Stakeholder comment. Specifically:

(1) **Map Availability:** The maps will be made available for public review and comment on a website (for example GitHub)

(2) **Notice:** Notice of availability of Draft Statewide Shape B Map and workshop[s] will be provided to all city and county points of contact designated for emergency preparedness purposes pursuant to A.B. 1650 (P.U. Codes section 768.1) and to all Communities at Risk (CARs). Notice will also be provided to all parties in R.15-05-006.

(3) **Workshops:** It is recommended that one or more workshops will be held to: (i) explain the Shape B development; and (ii) explain how stakeholders can provide comment on the draft Shape B and the justification they need to provide for any proposed changes to Shape B.

(4) **Comment on Draft Shape B Map:** The PDP will establish a mechanism for the Stakeholders to provide comments and for those comments to be considered by the PDP. The mechanism must allow for the tracking and documentation of any stakeholder comments and responses thereto.

(5) **Draft Shape B Map Modification:** The PDP will consider all comments offered by stakeholders, will make any necessary adjustments to Shape B and will prepare a Revised Draft Statewide Shape B Map for review by the TRT.

4.5 Step 5: TRT Review and Adoption of Shape B

After the statewide PDP makes any adjustments to the map to address local concerns, the Shape B map will be sent to the TRT for review and approval. In

addition, the PDP shall deliver to the TRT a complete set of all the proposals submitted to the PDP by the Territory Leads and the PDP's responses to any Stakeholder comment. The TRT may also request, in specific instances, that the applicable Territory Leads (i) provide additional rationale/justification for certain boundaries or tier designations and/or (ii) modify the boundaries of certain proposed polygons based on a written scientific rationale that is consistent the work plan methodology and the requirements and scope of the rulemaking. An iterative process of repeated refinement is contemplated until Shape B is sufficiently refined to the TRT's reasonable satisfaction or any impasses are resolved and Shape B is provided to the Commission for approval. *See* Summary of Fire Map Workplan 2 for details on Commission Review and Approval Process and TRT/PDP dispute resolution process.

4.6 Process Flow Chart

A process flow chart for the process described in this Section 4 is depicted graphically in **3**. It is anticipated that it will take between 16 and 24 weeks for the development of a statewide Shape B with tiers.

5.0 OPTIONAL MATRIX METHODOLOGY

As indicated in Subsection 4.3, Territory Leads may develop and support proposed changes to Shape B and tier designations using the matrix methodology set forth in this Section 5. Generally, this methodology will result in support for inclusion of geographic areas within Shape B where:

1) Populations at high risk are not included in Shape A; and
2) Areas having a history of past catastrophic fires were not included in Shape A.

Conversely, this methodology should result in support for the exclusion of geographic areas where:

1) Shape A shows isolated or small clusters of cells that do not pose a risk of fire spread;
2) Shape A provides designations not supported by fire history and/or climatology.

5.1 Optional Matrix Methodology Step 1: Define Candidate HEZs

The Shape B Territory Lead will begin developing Shape B by within the assigned territory by partitioning the applicable portion of Shape A into *candidate*

homogenous exposure zones (HEZs) for initial evaluation based on Key Criteria (defined below) values derived from a representative sampling of GIS coordinates and the Shape B Territory Lead's general knowledge of the region.

An HEZ is an identifiable geographic area in which the key criteria (Key Criteria) for assessing the level of fire risk are substantially uniform in value and impact. Each of the Key Criteria are enumerated on **Table 2**, including specified value ranges (for High, Medium and Low) to aid in the evaluation of the appropriate fire threat tier for each HEZ (Table of Values).

By way of example, PacifiCorp expects to identify 10-12 candidate HEZs within its service territory in Northern California, including, e.g., Crescent City area, Patrick's Creek, Happy Camp/Scott Bar, Alturas/Tulelake/Newell, Weed/Mt. Shasta, Round Mountain, etc.

5.2 Optional Matrix Methodology Step 2: Subdivide/Finalize Boundaries of HEZs

For each candidate HEZ, the Shape B Territory Lead will review/evaluate the relative values for each of the Key Criteria at numerous representative GIS coordinates within the geographic area comprising the candidate HEZ and determine whether it is logical to subdivide the HEZ area into two or more new smaller HEZs.

5.3 Optional Matrix Methodology Step 3: Complete Key Criteria Spreadsheets for HEZ Coordinates and Worksheet for Assigning Key Criteria Values to Each HEZ

For each HEZ, the Shape B Territory Lead will create spreadsheets of Key Criteria values for each representative GIS coordinate within each HEZ to support the final HEZ boundaries and the Key Criteria values that are ultimately assigned to the HEZ. The HEZ values will be entered into the Worksheet for Assigning Key Criteria Values, a template of which is included in **Table 3**.

5.4 Optional Matrix Methodology Step 4: Assign Tier to Each HEZ

Based on the Key Criteria values assigned to the HEZs, the Shape B Territory Lead will assign a tier to each HEZ based on the tier definitions established in the calibration work stream (which definitions shall be incorporated, as applicable, into each tier quadrant in **Figure 1** below).

Figure 1. Tier Quadrant.

Tier 2		**Tier 3**	
Key Criteria	Value	Key Criteria	Value
Fuel		Fuel	
Type	High	Type	Med/High
Moisture Content	Low	Moisture Content	Low
Density	High	Density	High
Climatology		Climatology	
Fire Wind	High	Fire Wind	High
Temperature (During Fire Season)	High	Temperature (During Fire Season)	High
Precipitation (During Fire Season	Low	Precipitation (During Fire Season)	Low
Terrain		Terrain	
Slope	High	Slope	Med/High
Ruggedness	High	Ruggedness	Med/High
Access	Low	Access	Low
Fire Break	Med/High	Fire Break	Low
Based on definition of Tier 2: If [_____], then the HEZ falls into this Quadrant.*		Based on definition of Tier 3: If [_____], then the HEZ falls into this Quadrant.*	
Tier 1		**Tier 2**	
Key Criteria	Value	Key Criteria	Value
Fuel		Fuel	
Type	Low/Med	Type	Med
Moisture Content	Med/High	Moisture Content	Low/Med
Density	Low/Med	Density	Med/High
Climatology		Climatology	
Fire Wind	Low/Med	Fire Wind	Med/High
Temperature (During Fire Season)	Low/Med	Temperature (During Fire Season)	Med/High
Precipitation (During Fire Season	Med/High	Precipitation (During Fire Season	Low/Med
Terrain		Terrain	
Slope	Low/Med	Slope	Med/High
Ruggedness	Low/Med	Ruggedness	Med/High
Access	Low/Med	Access	Low/Med
Fire Break	Med/High	Fire Break	Low
Based on definition of Tier 1: If [_____], then the HEZ falls into this Quadrant.*		Based on definition of Tier 2: If [_____], then the HEZ falls into this Quadrant.*	

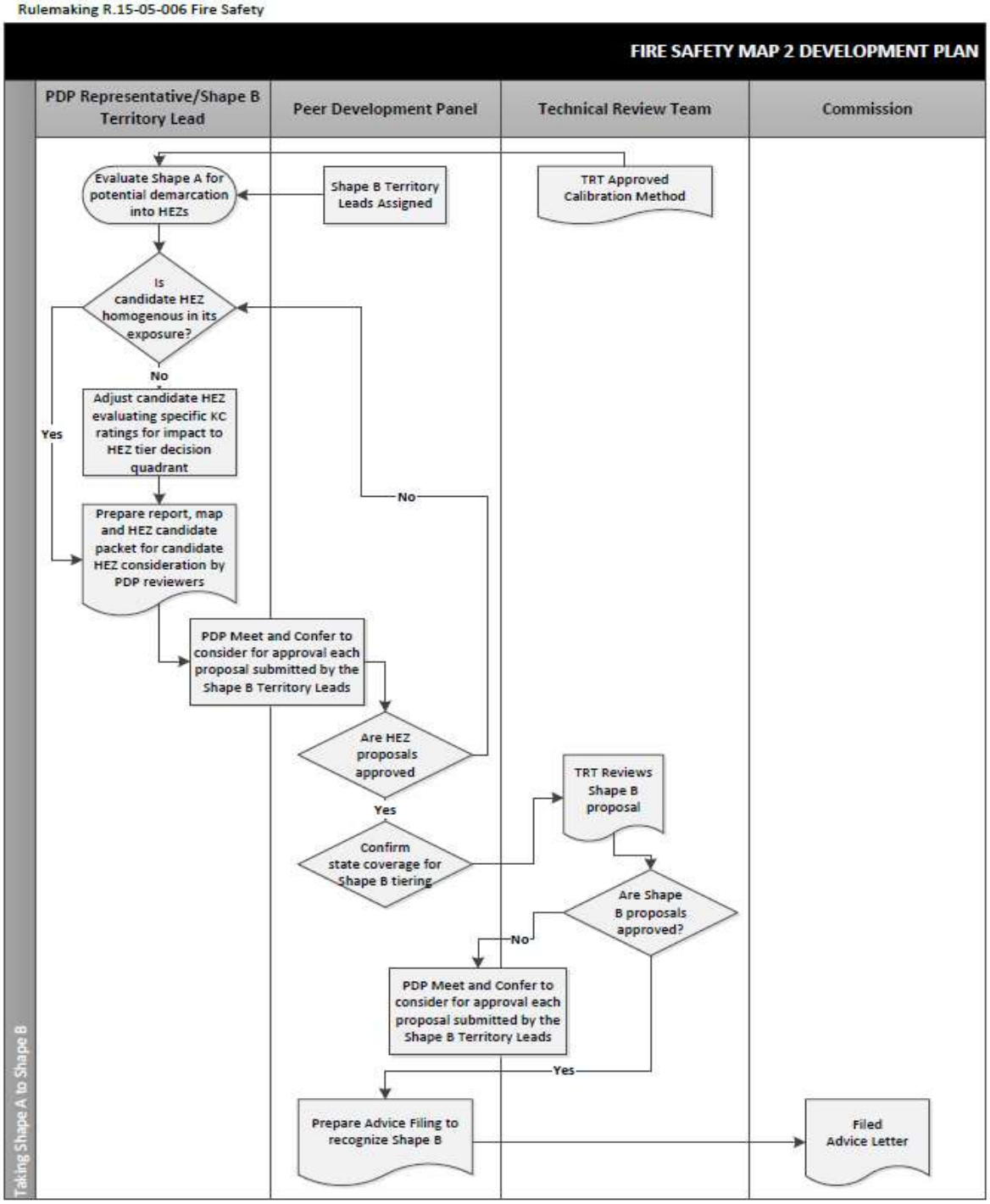
Populations at Low Risk Populations at Moderate Risk Populations at High Risk

*Final language will be determined by the PDP and TRT, weighting the key criteria based on final Tier definitions and results of calibration work stream.

Optional Matrix Methodology Process Flow Chart

A process flow chart for the optional matrix methodology described in this Section 5 is depicted graphically in **Figure 2.**

Figure 2. Process Flow Chart for Optional Matrix Methodology.



FIGURES AND TABLES (NOT DEPICTED ABOVE)

Figure 3. Process Flow Chart For Shape A to B Process.

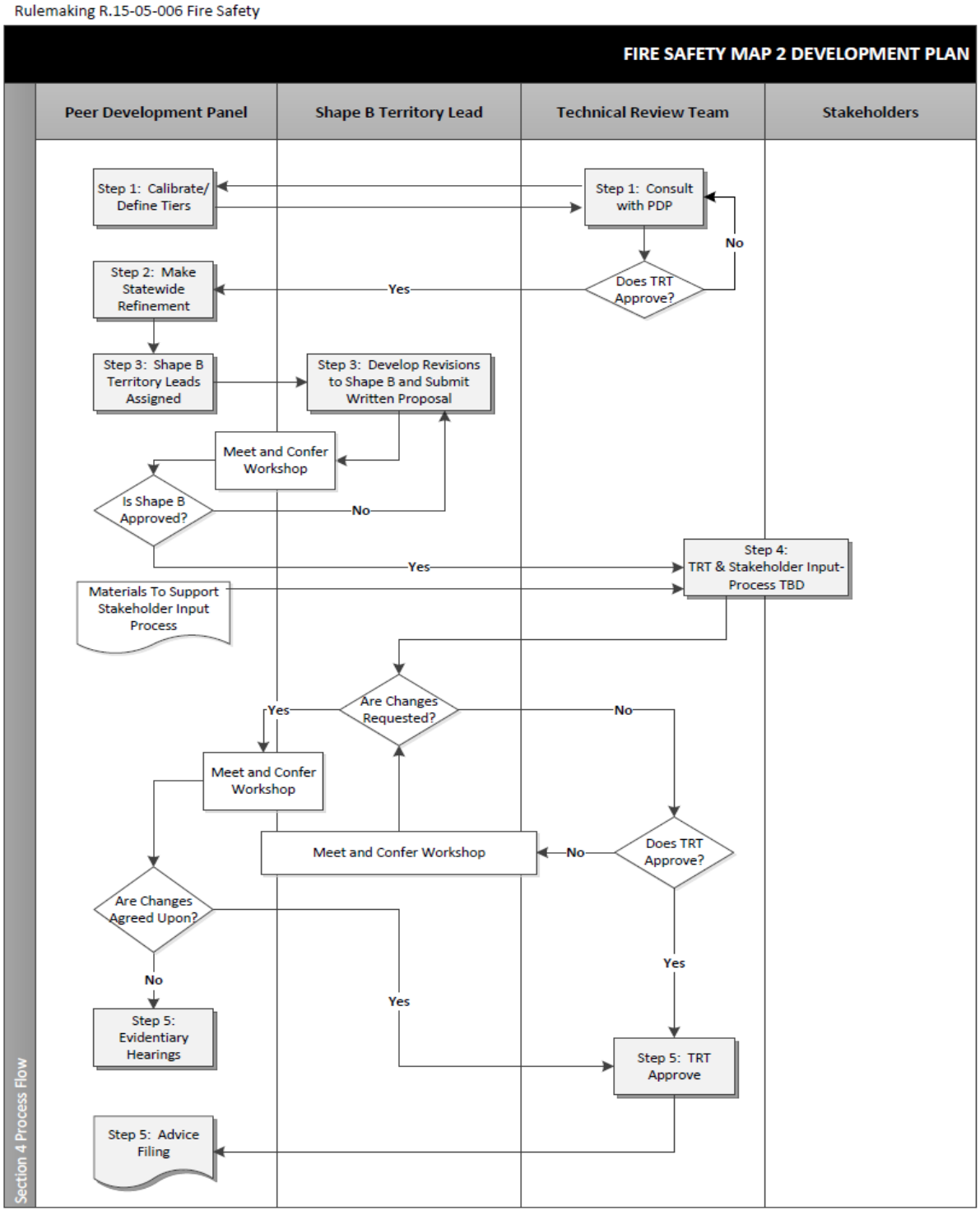


Table 2. EXAMPLE -Key Criteria-Table of Values. Values are Subject to Adjustment by PDP and TRT as Part of Calibration Work Stream. Low, Medium High values address fire threat level associated with the specified Key Criteria ranges.

Key Criteria	Low	Medium	High	Data Source
Fuel				
Type	Predominantly low fuel load fuels (e.g., non-burnable surfaces, pavement, grasslands)	Predominantly moderate low fuel load fuels (e.g., timber (> 15 feet in height) without ladder fuels, brush (< 15 feet in height))	Predominantly high fuel loads (e.g., timber (> 15 feet in height) with ladder fuels)	FRAP Map: GIS layer (GRID format) of Surface Fuels data (FBPS) compiled from multiple sources http://frap.fire.ca.gov/data/firedata-fuels-fuelsfr as adjusted by local knowledge
Average Dead Fuel Moisture Content (During Fire Season*)	>2% by weight	1-2% by weight	0-1% by weight	National Climatic Data Center, a division of NOAA (Past 30 years)
Density	Predominantly 0-30% crown cover	Predominantly 31% to 70% crown cover	Predominantly 71% to 100% crown cover	Crown cover codes and data -- FRAP Map: GIS layer (GRID format) of Surface Fuels data (FBPS) compiled from multiple sources http://frap.fire.ca.gov/data/firedata-fuels-fuelsfr as adjusted based on local knowledge
Climatology				
Fire Wind (Peak Gusts During Fire Season*)	Not Med or High	25 or more days of >10 mph winds without precipitation in prior 10 day period	25 or more days of >30 mph winds without precipitation in prior 10 day period	RAWS or WRF data (Past 20 years)
Maximum Temperature (During Fire Season*)	Not Med or High	500 or more days of >65°F & <80°F	500 or more days of >80°F	National Climatic Data Center, a division of NOAA (Past 30 years)
Precipitation (During Fire Season*)	Average annual measurable precipitation (during fire season) >10 days	Average annual measurable precipitation (during fire season) 5-10 days	Average annual measurable precipitation (during fire season) <5 days	National Climatic Data Center, a division of NOAA (Past 30 years)
Terrain				
Slope	Predominantly flat, 0-5% grade (rise over run)	Predominantly moderately steep, 5-15% grade (rise over run)	Predominantly extremely steep, >15% (rise over run)	GIS data
Ruggedness	Predominantly smooth, >[___]TRI	Predominantly moderate, >[___] TRI but <[___] TRI	Predominantly rugged, >[___] TRI	GIS data—Topographical Ruggedness Index
Access	Accessible to majority of ground based fire fighting resources/ equipment	Accessible to limited types of ground based fire fighting resources/ equipment	Arial access required for firefighting resources	Confer with local fire fighting resources
Fire Break	Nature and quantity of breaks substantially limits flame/ember spread	Nature and quantity of breaks mitigates flame/ember spread when combined with expected fire wind conditions	No or limited breaks	Confer with local fire fighting resources/evaluate fire spread history—CAL-FIRE

Populations at Risk	Definition	Data Source
Populations at Low Risk	Low population density OR populations substantially insulated from fire spread due to non-burnable infrastructure or otherwise (e.g., San Francisco)	Census track data (REAX work product), CARs (CAL-FIRE work product); GIS data for infrastructure
Populations at Moderate Risk	Moderate population density OR populations with some insulation from fire spread due to non-burnable infrastructure or otherwise	Census track data (REAX work product), CARs (CAL-FIRE work product); GIS data for infrastructure
Populations at High Risk	High population density OR populations with little or no insulation from fire spread due to non-burnable infrastructure or otherwise	Census track data (REAX work product), CARs (CAL-FIRE work product); GIS data for infrastructure

*Fire Season to be determined on a per HEZ basis by PDP based on fire rotation data set underlying CAL-FIRE's FRAP Map.

Table 3. Worksheet for Assigning Key Criteria Values to Each HEZ
[NAME OF SERVICE TERRITORY/OTHER GEOGRAPHIC AREAS COVERED]
[INSTRUCTIONS: Include both the assigned key criteria values (e.g., Low, Med and High) as well applicable descriptions and comments/considerations]

	HEZ 1 [Name]	HEZ 2 [Name]	HEZ 3 [Name]	HEZ 4 [Name]
FRAP Fire Threat Value(s)				
FM 1 Index Range of Values				
Fire History (From 1950-present)				
Fuel				
Type				
Average Live Fuel Moisture Content (During Fire Season*)				
Density				
Climatology				
Fire Wind (Peak Gusts During Fire Season)				
Maximum Temperature (During Fire Season)				
Precipitation (During Fire Season)				
Terrain				
Slope				
Ruggedness				
Access				
Fire Break				
Populations (*Check One*)				
Populations at Low Risk				
Populations at Moderate Low Risk				
Populations at High Risk				

ATTACHMENT 3

SHAPE 'C' DEVELOPMENT

Shape C is the final mapping product. Shape C will further refine Shape B, taking into account the location of utility facilities and other operational concerns. It is anticipated that following the approval of Shape B, the development and review of Shape C will take approximately 8-11 weeks.

1.0 Process

This step assumes a robust and complete Shape A to B process has delivered a Shape B that will be used to create Shape C. Shape B will have been subjected to stakeholder refinement and scrutiny and approved by the Commission. Shape B will be delivered to Territory Leads for final refinement. Territory Leads (in coordination with the Communication Infrastructure Providers (CIPS) will work with the Peer Development Panel (PDP) to refine Shape B into a final map product. During this process, Shape B will be overlaid with utility overhead infrastructure.

It is anticipated that minimal changes will be made to Shape C to account for overhead infrastructure location and system operational concerns. The Territory Leads will discuss refinements with and reach agreement with CIPs in their respective territories. The PDP will deliver the final Shape C with justification for any wholesale changes to the Technical Review Team (TRT) for review and approval. It is anticipated that the TRT review and approval of Shape C will take approximately 2 weeks.

2.0 Criteria

The goal is to group overhead electric infrastructure in a logical manner to account for facility locations and operational concerns. Two types of changes can be made—those that move facilities into higher risk tiers, and those that move facilities into lower risk tiers. Changes between Shape B and Shape C are expected to be minimal and not negatively impact public safety. Changes will be visible to and reviewed by the statewide PDP.

In conjunction with the TRT, the statewide PDP will develop more explicit criteria, the required justification (i.e., Tier 3 to Tier 2) and review feedback process for the Shape B to C refinement performed the Territory Leads.

3.0 FINAL REVIEW

The proposed Shape C will be reviewed by the TRT to ensure an unbiased view of the changes between Shape B and Shape C. *See* Fire Map 2 Workplan Summary for details of TRT review and Commission approval.

ATTACHMENT 4
Event / Task Timeline

	EVENT / TASK SUMMARY	Estimated w/ Consensus	Estimated w/o Consensus
i.	**REAX and SDG&E create Draft Shape A and submit to CAL FIRE or CPUC designee.** *(This task performed concurrently with Technical Review Team (TRT) and Peer Development Panel (PDP) formation.)*	October 2016 (2 weeks)	
ii.	**1. CAL-FIRE or CPUC designee review Draft Shape A with REAX and SDG&E.** **2. REAX-SDG&E revise Draft Shape A, as-necessary.** **3. Tier 1 Advice Letter filed; OR CAL FIRE or Commission Designee consults with Assigned Commissioner or ALJ to resolve impasse.**	November 2016 (2 weeks)	
iii.	**PDP formed and Territory Leads identified** *(This task performed concurrently with TRT formation and Shape A creation.)*	Oct. - Nov. 2016 (2 weeks)	
iv.	**PDP develops work/review process and decision making criteria** *(May include Territory Leads.)*	Nov. – Dec. 2016 (4 - 5 weeks)	
v.	**1. TRT formed.** **2. Contract negotiations initiated.** **3. Contracts finalized with TRT members following CPUC Decision.** *(This task performed concurrently with PDP formation and Shape A creation.)*	Nov. – Dec. 2016	
vi.	**CPUC issues Decision approving FM 2 work plan**	December 2016 (Day "0")	
vii.	**CPUC approves Shape A**	Day 0	Day 28 - 35 (4-7 weeks)
viii.	**Shape A refined by Territory Leads and PDP to create Draft Shape B (w/tiers).** *(Consultation w/TRT regularly to affirm refinement processes and protocols are followed.)*	Day 112 – 168 (16-24 weeks)	Day 140 – 203 (16-24 weeks)

	EVENT / TASK SUMMARY	Estimated w/ Consensus	Estimated w/o Consensus
ix.	**1. PDP prepares Draft Shape B for public comment.** **2. Public Comment period on Draft Shape B is completed.** **3. TRT and PDP address comments and refine Draft Shape B as-necessary.** **4. Tier 1 Advice Letter filed, OR Report filed with CPUC identifying impasse areas (all).**	Day 140 - 196 (4 Weeks)	Day 168 - 259 (4-8 Weeks)
x.	**Comment on and CPUC approval of Shape B** *(Assumes no Evidentiary Hearings.)*	Day 140 - 217 (0-3 weeks)	Day 224 – 343 (8-12 weeks)
xi.	**Territory Leads in coordination with CIPs refine Shape B and create Draft Shape C**	Day 182 – 273 (6-8 weeks)	Day 266 – 399 (6-8 weeks)
xii.	**1. TRT reviews Draft Shape C** **2. PDP refines Draft Shape C (as-needed)** **3. Tier 1 Advice Letter filed; OR Report filed with CPUC identifying impasse areas.**	Day 196 – 294 (2-3 weeks)	Day 280 – 420 (2-3 weeks)
xiii.	**Comment on and CPUC approval of Shape C** *(Assumes no Evidentiary Hearings.)*	Day 196 - 315 days (0-3 weeks)	Day 336 – 504 (8-12 weeks)
xiv.	**CPUC disseminates Fire Map 2**	Day 203 - 322 (1 week)	Day 343 - 511 (1 week)

ATTACHMENT 5

Scoping Memo Appendix B Cross-Reference Chart

Appendix B Section	Appendix B Topic	Section where App B Topic is Addressed in Workshop Report
1.	The Fire Map 2 Work Plan prepared jointly by the parties shall include a detailed work plan for the development, adoption, and implementation of a Fire Map 2 that:	
1.i	Incorporates Fire Map 1.	I.A; Attachment 1
1.ii	Covers the entire state.	III.B; Attachment 2
1.iii	Identifies the types and locations of overhead power-line facilities in the high fire-threat areas.	III.C; IV.A; Attachment 3
1.iv	Identifies the types and locations of aerial telecommunications facilities in close proximity to overhead power-line facilities in the high fire-threat areas.	III.C; IV.A; Attachment 3
1.v	Integrates with the fire-prevention measures adopted in R.08-11-005 and this proceeding (R.15-05-006) that rely on fire-threat maps for their implementation.	Attachment 1
1.vi	Will be available to Commission staff, fire-safety agencies, and the public, while also protecting information about critical infrastructure or which may be proprietary.	II; III; IV.A
2.	The Fire Map 2 Work Plan shall include the following:	
2.i	The types of information, the level of detail, and other characteristics that Fire Map 2 must possess.	I.A; III; Attachments 1-3
2.ii	A detailed work plan for the funding (if needed), development, expert review (if needed), adoption, and implementation of Fire Map 2	III; IV.B
2.iii	The specific technical expertise from neutral third parties such as CAL-FIRE that is needed, if any, to develop and/or review Fire Map 2, and an explanation of how this expertise can be obtained. Recommendations for obtaining assistance from CAL-FIRE should take into account that CAL-FIRE's ability to provide assistance is limited. (PHC Transcript at 58 – 63.)	II; IV.B
2.iv	If the Fire Map 2 Work Plan anticipates contracting with neutral experts, the work plan shall (a) identify who will select the neutral experts; (b) explain how the contracting process will work; and (c) identify who will oversee the work performed by the neutral experts.	IV.B
2.v	The estimated cost to carry out Item 2.ii above, including the cost of contracting with neutral experts, if necessary.	IV.B
2.vi	A recommended funding mechanism, if needed, for the	IV.B

Appendix B Section	Appendix B Topic	Section where App B Topic is Addressed in Workshop Report
	development, expert review (if needed), and implementation of Fire Map 2. One option is to provide utility funding and cost recovery using the Fire Hazard Prevention Memorandum Accounts that are described in D.12-01-032 at pages 153 – 156.	
2.vii	A proposed schedule, recommended procedures (e.g., workshops), and milestones for the actual development, expert review (if needed), adoption, and implementation of Fire Map 2, including conforming revisions to GO 95 and GO 165.	Attachment 4
2.viii	A discussion of whether electric utilities and communication infrastructure providers (CIPs) should be able to adjust the boundaries of Fire Map 2 based on their own expertise and local conditions and, if so, whether and how such adjustments should be vetted and incorporated into the approved Fire Map 2.	III.B; Attachment 2
2.ix	A description of how the adopted Fire Map 2 should be updated, the frequency of such updates, and the procedure by which the updated Fire Map 2 will be incorporated into GO 95 and other GOs, if applicable.	IV.C
2.x	A statement of whether the adoption of Fire Map 2 is subject to the California Environmental Quality Act (CEQA) and, if so, when and how the CEQA review would occur.	IV.C
2.xi	Alternative recommendations if the parties cannot reach a consensus on all issues. The alternatives should provide the same level of detail as the Fire Map 2 Work Plan. It will be the responsibility of any party proposing an alternative to prepare the alternative that is included in the Fire Map 2 Work Plan.	See III.B (alternative re number of tiers) II (backup plan for TRT leadership). Additionally parties have been invited to comment on several other issues where there was a change since the workshops (e.g. III.B , public input in light of SB 1463 veto) or which were not thoroughly discussed (e.g. IV.C, tree mortality layer, updates to Map 2, transitioning regulations)
2.xii	A list of Commission actions that may be required to implement the Fire Map 2 Work Plan and alternatives, such as rulings and/or Commission decisions approving the (a) work plan, (b) any associated funding mechanism, and/or (c) the final Fire Map 2.	III.A-C; Attachments 2-3
3.	The Fire Map 2 Work Plan shall address:	
3.i	Validation of Fire Map 2 against historical fires.	IV.C

Appendix B Section	Appendix B Topic	Section where App B Topic is Addressed in Workshop Report
3.ii	Incorporating into Fire Map 2 additional factors and conditions that affect fire hazards associated with overhead utility facilities generally and at specific locations (e.g., Laguna Beach). Such factors and conditions may include the parties' knowledge of (A) terrain; (B) vegetation (e.g., potential contact between trees and power lines in low-wind areas); (C) areas designated as high hazard zones pursuant to the Governor's Proclamation of a State of Emergency issued on October 30, 2015; (D) microclimates; (E) historical power-line fires besides the October 2007 fires in Southern California (e.g., the September 2015 Butte Fire in Amador and Calaveras Counties); (F) other historical fires; and (G) other factors and conditions.	IV.C; Attachment 2
3.iii	Incorporating into Fire Map 2 the fire hazards associated with historical power-line fires besides the October 2007 fires in Southern California. These other power-line fires include the Butte Fire that burned 71,000 acres in Amador and Calaveras Counties in September 2015.2	IV.C; Attachment 2
3.iv	Whether historical fires and other factors demonstrate that the City of Laguna Beach should be designated as a high fire-hazard area on Fire Map 2.3	IV.C
3.v	Incorporating into Fire Map 2 the utilities' knowledge of local conditions in setting the boundaries of the High Fire-Threat District.	III.B; Attachment 2
3.vi	Incorporating into Fire Map 2 the consequences (i.e., risks) of power-line wildfires.	IV.C
3.vii	Transitioning existing regulations that rely on interim fire-threat maps to Fire Map 2.	IV.C
4.	The Fire Map 2 Work Plan shall address the proposal for a statewide Fire Map 2 contained in Appendix C of this Scoping Memo and Ruling.	III
5.	Any other matters the parties deem appropriate, provided that such matters are within the scope of the Fire Map 2 Work Plan. Such matters may include those listed in Item 2 of the ruling dated June 2, 2016, at pages 4 – 5, but parties should be careful about slowing and/or overloading the development of Fire Map 2 with additional topics.	
6.	When possible, the Fire Map 2 Work Plan and any alternatives to the Work Plan should enable the rapid development and adoption of Fire Map 2.	Attachment 4

ATTACHMENT 6

Fire Map 2 Development Plan Workshop Protocols

Omitted.

Attachment 6 was provided with the
Workshop Report that was filed and served.

ATTACHMENT 7

FSTP Workshop Agendas – Recaps / Notes – Attendee Lists

Omitted.

Attachment 7 was provided with the

Workshop Report that was filed and served.

ATTACHMENT 3

Decision 17-12-024,
Decision Adopting Regulations to Enhance Fire Safety in the High-Fire Threat District

Decision 17-12-024 December 14, 2017

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Develop and Adopt Fire-Threat Maps and Fire-Safety Regulations.	Rulemaking 15-05-006

DECISION ADOPTING REGULATIONS TO ENHANCE FIRE SAFETY IN THE HIGH FIRE-THREAT DISTRICT

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DECISION ADOPTING REGULATIONS TO ENHANCE FIRE SAFETY IN THE HIGH FIRE-THREAT DISTRICT

Summary

This Decision adopts new regulations to enhance the fire safety of overhead electric power lines and communication lines located in high fire-threat areas. The most significant regulations adopted by this Decision are:

- A new High Fire-Threat District ("HFTD") is added to General Order 95 ("GO 95").[1] The HFTD consists of three areas:
  - **Zone 1** consists of Tier 1 High Hazard Zones ("HHZs") on the map of Tree Mortality HHZs prepared jointly by the United States Forest Service and the California Department of Forestry and Fire Protection ("CAL FIRE"). Tier 1 HHZs are in direct proximity to communities, roads, and utility lines, and represent a direct threat to public safety.
  - **Tier 2** consists of areas on the California Public Utilities Commission's Fire-Threat Map ("CPUC Fire-Threat Map") where there is an elevated risk for destructive utility-associated wildfires. The CPUC Fire-Threat Map is currently in an advanced stage of development.
  - **Tier 3** consists of areas on the CPUC Fire-Threat Map where there is an extreme risk for destructive utility-associated wildfires.
- Amendments to GO 95, Rule 18, to require utilities to (i) prioritize correction of safety hazards based, in part, on whether the safety hazard is located in the HFTD; (ii) correct within six months a Priority Level 2 fire risk that is located in

[1] The purpose of GO 95 is "to formulate, for the State of California, requirements for overhead line design, construction, and maintenance, the application of which will ensure adequate service and secure safety to persons engaged in the construction, maintenance, operation or use of overhead lines and to the public in general." (GO 95, Rule 11.)

Tier 3 of the HFTD; and (iii) correct within 12 months a Priority Level 2 fire risk that is located in Tier 2 of the HFTD.

- Amendments to GO 95, Rule 35, Table 1, to require utilities to maintain the stricter Case 14 vegetation clearances in the HFTD.
- Amendments to GO 95, Rule 38, to increase the effective minimum clearance between wires for new and reconstructed facilities in Tier 3 of the HFTD.
- Amendments to GO 95, Rule 80.1-A, to require minimum patrol and detailed inspection cycles for overhead communication lines in Tier 2 and Tier 3 of the HFTD. Inspections must be conducted twice as often in Tier 3 compared to Tier 2.
- Amendments to GO 95, Rule 80.1-B, to require a minimum intrusive inspection cycle for overhead communication lines in Tier 3 of the HFTD.
- Amendments to GO 95, Appendix E, to increase the recommended time-of-trim clearances between power lines and vegetation in the HFTD.
- Amendments to GO 165, Table 1, to require annual patrol inspections of overhead electric utility distribution facilities in rural Tier 2 and Tier 3 areas of the HFTD.
- Amendments to GO 166, Standard 1, Part E, to require every electric investor-owned utility ("Electric IOU") with overhead power lines in the HFTD to prepare a fire-prevention plan.
- Amendments to Electric Tariff Rule 11 to allow Electric IOUs to disconnect electric service to a customer in the HFTD when:
    - There is a breach of the minimum vegetation clearances required by California Public Resources Code §§ 4292 and 4293 for State Responsibility Areas.
    - The Electric IOU has obtained from an arborist a written determination that a dead, rotten, diseased, leaning, or overhanging tree (or parts thereof) poses an imminent or immediate risk for falling onto a power line.

The fire-safety regulations adopted by this Decision will help to protect public safety in accordance with Public Utilities Code Sections 451 and 8386(a).[2] It is likely that electric utilities and communications infrastructure providers will incur additional but unquantified costs to implement the fire-safety regulations adopted by this Decision. This Decision finds that the additional costs are exceeded by the substantial public-safety benefits of the adopted regulations.

Electric IOUs are authorized to track the costs they incur to implement the regulations adopted by this Decision and to file applications to recover these costs. Electric IOUs shall thereafter seek to recover such costs in their general rate case (GRC) proceedings. Small Incumbent Local Exchange Carriers may use their annual California High Cost Fund-A advice letters to request recovery of the costs they incur to implement the regulations adopted in this proceeding until their next GRC proceedings.

Finally, today's Decision instructs the Director of the Commission's Safety and Enforcement Division ("SED") or the Director's designee (together, "Director") to confer with CAL FIRE regarding the following matters:

- The development of a statewide fire-wind map, under the direction of CAL FIRE, to provide a scientifically sound basis for establishing fire-wind-load standards.
- Adoption of a six-month maximum timeframe for correcting Priority Level 2 fire risks in Tier 2 of the HFTD.

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[2] Section 451 states that "[e]very public utility shall furnish and maintain such adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities, including telephone facilities… as are necessary to promote the safety… of its patrons, employees, and the public." Section 8386(a) states that "[e]ach electrical corporation shall construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of catastrophic wildfire posed by those electrical lines and equipment."

CAL FIRE has agreed to confer with the Director regarding the above matters. After conferring with CAL FIRE, the Director shall submit a written report within six months to the Commission and the Commission's Executive Director that provides the Director's recommendations regarding whether and how to proceed with (1) the development and adoption of a statewide fire-wind map, (2) the development and adoption of fire-wind-load standards and possibly other fire-safety regulations tied to the fire-wind map, and (3) the adoption of a six-month timeframe for correcting Priority Level 2 fire risks in Tier 2 fire-threat areas. The Director shall concurrently post a copy of the report (or a link to the report) on SED's section of the Commission's website.

1. Background

This rulemaking proceeding is the successor to Rulemaking (R.) 08-11-005 ("R.08-11-005"). In R.08-11-005, the Commission adopted dozens of new fire-safety regulations in response to devastating Southern California wildfires in October 2007 that were reportedly ignited by power lines. These included the Grass Valley Fire (1,247 acres), the Malibu Canyon Fire (4,521 acres), the Rice Fire (9,472 acres), the Sedgewick Fire (710 acres), and the Witch Fire (197,990 acres). The total area burned by these five power-line fires exceeded 334 square miles.

Several of the fire-safety regulations adopted in R.08-11-005 apply only to areas where there is an elevated risk of power-line fires igniting and spreading rapidly (referred to herein as "high fire-threat areas"). These regulations include:

- A new General Order 95 ("GO 95")[3] rule that sets minimum frequencies for patrol inspections, detailed inspections, and intrusive inspections of aerial communication utility facilities in high fire-threat areas that are (i) attached to the same pole as electric utility facilities, or (ii) in close proximity to overhead electric utility facilities.
- A new GO 95 rule that expands vegetation clearances around power lines in high fire-threat areas of Southern California.
- A new GO 165 rule that increases the frequency of patrol inspections of overhead electric utility distribution facilities in rural high fire-threat areas of Southern California.[4]
- A new GO 166 rule that requires investor-owned electric utilities ("Electric IOUs")[5] in Southern California to prepare and submit plans to prevent power-line fires generally and during extreme fire weather. Electric IOUs in Northern California must assess if there is a credible threat of extreme fire-weather events in their service territories and, if so, to prepare and submit plans to prevent power-line fires from occurring during such events.

The Commission adopted several interim fire-threat maps in R.08-11-005 to designate areas where the previously identified fire-safety regulations apply. Each of the interim maps covers a different part of the State and uses its own method to identify high fire-threat areas. The Commission also commenced the

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[3] GO 95 contains rules for the design, construction, operation, and maintenance of overhead utility facilities such as power lines, communications lines, utility poles, and pole-mounted antennas.

[4] GO 165 prescribes inspection cycles for electric utility distribution facilities.

[5] GO 166 requires, among other things, that every electric utility subject to the Commission's jurisdiction shall annually prepare and submit a plan that sets forth the utility's anticipated responses to emergencies and major outages.

development of a single statewide fire-threat map to designate areas where (1) there is a heightened risk for destructive power-line fires, and (2) where stricter fire-safety regulations should apply.

The Commission instituted the instant rulemaking proceeding, R.15-05-006, to complete the work of R.08-11-005. The general scope of R.15-05-006 is to address the following matters carried over from R.08-11-005:

1. Develop and adopt a statewide fire-threat map that delineates the boundaries of a new High Fire-Threat District where the stronger fire-safety regulations adopted in R.08-11-005 will apply.
2. Determine the need for additional fire-safety regulations in the High Fire-Threat District in light of the statewide fire-threat map adopted pursuant to Item 1.
3. Consider proposals related to the "multiply by" provision in Rule 48 of GO 95, provided that such proposals are consistent with the primary purpose of R.15-05-006 of enhancing the fire safety of overhead utility facilities.
4. Revise GO 95 to include (a) a High Fire-Threat District, (b) maps of the High Fire-Threat District, and (c) any new fire-safety regulations developed pursuant to Items 1 - 3.

The scope and schedule for R.15-05-006 was divided into two parallel tracks. One track focused on the development and adoption of a statewide fire-threat map. The second track focused on the identification, evaluation, and adoption of fire-safety regulations. Each track is summarized below.

1.1. The Commission's Fire-Threat Map

A multi-step process has been used to develop the statewide fire-threat map. The first step was to develop Fire Map 1 ("FM 1"), which depicts areas of California where there is an elevated hazard for the ignition and rapid spread of power-line fires due to strong winds, abundant dry vegetation, and other

environmental conditions. These are the environmental conditions associated with the catastrophic power-line fires that burned 334 square miles of Southern California in October 2007.

The Commission adopted FM 1 in Decision ("D.") 16-05-036. FM 1 was developed by the California Department of Forestry and Fire Protection ("CAL FIRE") in collaboration with the Commission's Safety and Enforcement Division ("SED") and the many parties in this proceeding.

The second step is to develop a statewide map of the new High Fire-Threat District where stricter fire-safety regulations apply. Importantly, the High Fire-Threat District Map will incorporate the fire hazards associated with historical power-line fires besides the October 2007 power-line wildfires in Southern California. These other power-line fires include the Butte Fire that burned 71,000 acres in Amador and Calaveras Counties in September 2015. The Commission adopted a work plan for the development of the High Fire-Threat District Map in D.17-01-009, as modified by D.17-06-024.

The High Fire-Threat District Map will be a combination of two maps. These are (1) the United States Forest Service ("USFS") and CAL FIRE's joint map of Tree Mortality High Hazard Zones ("HHZs"); and (2) the California Public Utilities Commission ("CPUC" or "Commission") Fire-Threat Map. The USFS-CAL FIRE joint map of Tree Mortality HHZs is an off-the-shelf product. The CPUC Fire-Threat Map is currently in an advanced stage of development. It will be based on FM 1, several other fire-threat maps identified in D.17-01-009, and input from electric utilities and other stakeholders.

The primary responsibility for the development of the CPUC Fire-Threat Map lies with a small group of utility personnel and consultants, known as the Peer Development Panel ("PDP"), who have expertise in the development of

fire-threat maps. A separate group of independent experts, known as the Independent Review Team ("IRT"), is responsible for reviewing and approving the CPUC Fire-Threat Map developed by the PDP. CAL FIRE selected the members of the IRT and oversees the work of the IRT.

The High Fire-Threat District Map will have three fire-threat areas. **Zone 1** will consist of Tier 1 HHZs on the USFS-CAL FIRE joint map of Tree Mortality HHZs. Tier 1 HHZs are in direct proximity to communities, roads, and utility lines, and are a direct threat to public safety.

Tier 2 will consist of areas on the CPUC Fire-Threat Map where there is an elevated risk (including likelihood and potential impacts on people and property) from wildfires associated with overhead utility power lines or overhead utility power-line facilities also supporting communication facilities.

Tier 3 will consist of areas on the CPUC Fire-Threat Map where there is an extreme risk (including likelihood and potential impacts on people and property) from wildfires associated with overhead utility power lines or overhead utility power-line facilities also supporting communication facilities. Tier 3 is distinguished from Tier 2 by having the highest likelihood of utility-associated fire initiation and growth that would impact people or property, and where the most restrictive utility regulations are necessary to reduce utility fire risk.[6]

On July 31, 2017, the PDP served (but did not file) a draft statewide CPUC Fire-Threat Map that delineates the PDP's proposed boundaries for Tier 2 and Tier 3 fire-threat areas. On October 2, 2017, the PDP filed and served the Initial

[6] The High Fire-Threat District Map will consist of two independent maps. These are (i) Tier 1 HHZs on the USFS-CAL FIRE joint map of Tree Mortality HHZs, and (ii) the CPUC Fire-Threat Map. (D.17-01-009 at 48.)

CPUC Fire-Threat Map that reflects the IRT's review and recommended revisions through September 25, 2017. On October 5, 2017, the PDP filed and served a document that provided summary information regarding the geographic areas covered by the Initial CPUC Fire-Threat Map. On November 17, 2017, the PDP filed and served the IRT-approved CPUC Fire-Threat Map. On November 20, 2017, the PDP filed and served a document that provided the following summary information regarding the geographic areas covered by the IRT-approved CPUC Fire-Threat Map:

Table 1
Geographic Area Covered by the IRT-approved CPUC Fire-Threat Map
Square Miles

Region	Tier 2 Elevated	Tier 3 Extreme	Tier 2 + Tier 3
Southern California	6,352	6,070	12,421
Northern California	51,476	6,408	57,884
Total for Tier	57,827	12,478	70,305
Percent of California Land Area			
Region	**Tier 2 Elevated**	**Tier 3 Extreme**	**Tier 2 + Tier 3**
Southern California	13.9%	13.2%	27.1%
Northern California	45.7%	5.6%	51.3%
Total for Tier	36.5%	7.8%	44.3%

Source: *Response of the Peer Development Panel to Administrative Law Judges' October 6, 2017 Ruling – Additional Shape B Map Information* filed on November 20, 2017, at Appendix A, page A-10.

The above table shows that the total land area covered by Tier 2 and Tier 3 on the IRT-approved CPUC Fire-Threat Map is 70,305 square miles. For comparison, the total land area covered by the Interim Fire-Threat Maps is 31,022 square miles.[7]

At the time of today's Decision, it is anticipated that the Commission will adopt a final IRT-approved CPUC Fire-Threat Map in early 2018.

A draft of the High Fire-Threat District Map is contained in Appendix D of today's Decision. The draft map is composed of (1) Tier 1 HHZs on the USFS-CAL FIRE joint map of Tree Mortality HHZs; and (2) Tier 2 and Tier 3 fire-threat areas on the IRT-approved CPUC Fire-Threat Map filed on November 17, 2017.

1.2. Proposed Fire-Safety Regulations for the High Fire-Threat District and the Workshop Report

The scope and schedule for R.15-05-006 includes a process for parties to identify, evaluate, and submit proposed fire-safety regulations for the High Fire-Threat District (consisting of Zone 1, Tier 2, and Tier 3 described previously in today's Decision). This process has been led by an ad hoc group known as the Fire Safety Technical Panel ("FSTP"). The FSTP is co-chaired by SED and Southern California Edison Company, and is open to all parties.

The FSTP held 12 days of workshops during the five-month period of February - June 2017. On July 10, 2017, Comcast Phone of California, LLC ("Comcast"), Cox Communications California, LLC ("Cox"), and Crown Castle NG West, Inc. ("Crown Castle") filed and served the *Joint Parties Workshop Report*

[7] *Response of San Diego Gas & Electric Company (U 902-E) to Administrative Law Judge's August 1 Ruling* filed on August 14, 2017.

on Fire Safety Regulations (hereafter, "the Workshop Report") on behalf of themselves and the following parties:

- AT&T California & New Cingular Wireless PCS, LLC ("AT&T").
- Bear Valley Electric Service, a division of Golden State Water Company ("Bear Valley").
- California Cable & Telecommunications Association ("CCTA").
- California Farm Bureau Federation ("CFBF").
- California Municipal Utilities Association ("CMUA").
- The Commission's Safety and Enforcement Division ("SED").
- The City of Laguna Beach ("Laguna Beach").
- Consolidated Communications of California Company ("Consolidated Communications").
- CTIA-The Wireless Association ("CTIA").
- Citizens Telecommunications Company of California Inc. d/b/a Frontier Communications of California (U 1024 C), Frontier Communications of the Southwest Inc. (U 1026 C), and Frontier California Inc. (U 1002 C) (collectively, "Frontier").
- Liberty Utilities (CalPeco Electric) LLC ("Liberty Utilities").
- International Brotherhood of Electrical Workers Local 1245 ("IBEW 1245").
- County of Los Angeles Fire Department ("LACFD").
- Los Angeles Department of Water and Power ("LADWP").
- Mussey Grade Road Alliance ("MGRA").
- PacifiCorp d/b/a Pacific Power ("PacifiCorp").
- Pacific Gas and Electric Company ("PG&E").
- San Diego Gas & Electric Company ("SDG&E").
- Southern California Edison Company ("SCE").
- The Small Local Exchange Carriers ("Small LECs").
- Sacramento Municipal Utility District ("SMUD").
- The Utility Reform Network ("TURN").

The Workshop Report contains 31 proposed fire-safety regulations for the High Fire-Threat District. On July 31, 2017, the following parties filed opening comments regarding the Workshop Report: A coalition of communication infrastructure providers (the "CIP Coalition")[8]; Laguna Beach; CFBF; Liberty Utilities; MGRA; PacifiCorp; PG&E; a coalition of publicly owned electric utilities consisting of CMUA, LADWP, and SMUD (the "Joint POUs"); SCE; SDG&E; SED; and TURN. On August 11, 2017, the following parties filed reply comments: The CIP Coalition,[9] Laguna Beach, Liberty Utilities, MGRA, PacifiCorp, PG&E, the Joint POUs, SCE, SDG&E, SED, and TURN.

Pursuant to D.17-01-009, as modified by the co-assigned Administrative Law Judges' ("ALJs") ruling on July 7, 2017, the parties had an opportunity to file motions for an evidentiary hearing on the proposed fire-safety regulations. No party filed a motion for an evidentiary hearing and none was held.

2. Commission Jurisdiction

The purpose of this rulemaking proceeding is to consider and adopt regulations to reduce the fire hazards associated with (1) overhead power-line facilities, and (2) aerial communication facilities located in close proximity to overhead power lines. The California Constitution and the Public Utilities Code ("Pub. Util. Code") provide the Commission with broad jurisdiction to adopt

[8] The CIP Coalition is comprised of AT&T, CCTA, Comcast, Consolidated Communications, Cox, Crown Castle, CTIA, Frontier, the Small LECs, and T-Mobile West, LLC d/b/a T-Mobile.

[9] The CIP Coalition's reply comments included Time Warner Cable Information Services (California), LLC.

regulations regarding the safety of utility facilities and operations.[10] Utilities are required by Pub. Util. Code § 702 to "obey and comply" with such requirements.[11]

In addition to the Commission's broad jurisdiction to regulate IOUs, Pub. Util. Code §§ 8002, 8037, and 8056 provide the Commission with authority to adopt and enforce rules governing electric transmission and distribution facilities of publicly owned utilities for the limited purpose of protecting the safety of employees and the general public.

The Commission's comprehensive jurisdiction over matters of public safety associated with utility facilities extends to attachments to utility poles by CIPs. Specifically, 47 U.S.C. § 224 provides that the Federal Communications Commission ("FCC") does not have "jurisdiction [under 47 U.S.C. § 224] with respect to rates, terms, and conditions, or access to poles, ducts, conduits, and rights-of-way as provided in subsection (f) for pole attachments in any case where such matters are regulated by a State." The Commission has certified to the FCC that the Commission regulates such matters in conformance with 47 U.S.C. §§ 224(c)(2) and (3).[12] Further, under 47 U.S.C. § 253(b) the Commission may adopt regulations to protect public safety and welfare.

Likewise, the Cable Communications Policy Act of 1984 specifically grants states jurisdiction over cable service in safety matters. (47 U.S.C. § 556(a).) The California Legislature asserted such jurisdiction in Pub. Util. Code § 768.5, which

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[10] Cal. Constitution, Art. XII, §§ 3 and 6, and Pub. Util. Code §§ 216, 701, 761, 768, 770, 1001, 8037, and 8056. See also *SDG&E v. Cal. Super.* (1996) 13 Cal.4th 893, 923-924.

[11] See also Pub. Util. Code §§ 761, 762, 767.5, 768, 770.

[12] D.98-10-058, 82 CPUC2d 510, 531, as modified by D.00-04-061, 6 CPUC3d 1, 5.

gives the Commission authority to regulate cable companies with respect to the safe operation, maintenance, and construction of their facilities.

The Commission has enacted an extensive set of safety regulations governing utility facilities and operations, including GO 95. A major goal of GO 95 is to minimize fire hazards.

3. Criteria for the Adoption of New Fire-Safety Regulations

The primary standard we will use to decide whether to adopt the proposed fire-safety regulations in the Workshop Report is whether the proposals are likely to reduce fire hazards in the High Fire-Threat District at a reasonable cost. This is consistent with Pub. Util. Code § 451, which states, in relevant part, as follows:

> All charges demanded or received by any public utility… shall be just and reasonable… Every public utility shall furnish and maintain such adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities, including telephone facilities… as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public.

Because this is a quasi-legislative rulemaking proceeding, today's Decision may rely on legislative facts[13] obtained from written submissions in this proceeding, such as the Workshop Report and written comments. We may also

[13] A quasi-legislative proceeding establishes policies or rules affecting a class of regulated utilities. (Rule 1.3(d) of the Commission's Rules of Practice and Procedure.) Legislative facts are general facts that help the Commission to decide questions of law and policy and discretion. (Rule 13.3(c) of the Commission's Rules of Practice and Procedure.)

draw on evidence from past proceedings, our experience and expertise in regulating utilities, our current policies, and common sense.[14]

Pub. Util. Code § 1708.5(f) provides that "the commission may conduct any proceeding to adopt, amend, or repeal a regulation using notice and comment rulemaking procedures, without an evidentiary hearing, except with respect to a regulation being amended or repealed that was adopted after an evidentiary hearing, in which case the parties to the original proceeding shall retain any right to an evidentiary hearing accorded by Section 1708." The Commission provided notice of Order Instituting Rulemaking ("OIR") 15-05-006 to all potential parties, including regulated electric corporations, municipal electric utilities, and CIPs operating in California.[15] The Commission provided parties with an opportunity to request an evidentiary hearing regarding the matters that are addressed in today's Decision in accordance with the procedure and schedule set forth in D.17-01-009, as modified by the ALJs' ruling issued on July 7, 2017. No party requested an evidentiary hearing and none was held.

4. Proposed Regulations

The Workshop Report contains 31 proposed regulations ("PRs") to revise GO 95, GO 165, GO 166, and Electric Tariff Rule 11. There are two consensus PRs and 29 contested PRs. Below, we first address the two consensus PRs, followed by the 29 contested PRs.

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[14] D.06-06-071 at 26; D.06-12-029 at 13 – 14; D.04-03-041 at 11; and D.99-07-047, 1 CPUC3d 627, 634 – 636.

[15] OIR 15-05-006 at 19-20 and Ordering Paragraph 23.

4.1. Consensus Proposed Regulations

4.1.1. Proposed Regulation 4 re: GO 95, Rule 18

4.1.1.1 Summary of Proposal

Rule 18 of GO 95 establishes requirements regarding the prioritization and correction of safety hazards discovered by utilities. Several provisions in Rule 18 pertain to fire hazards that are discovered in high fire-threat areas of Southern California on the Interim Fire-Threat Maps adopted in R.08-11-005.

In D.17-01-009, the Commission provided the following instructions to transfer existing fire-safety regulations that rely on the Interim Fire-Threat Maps to the High Fire-Threat District:

- The existing fire-safety regulations that apply to high fire-threat areas in Southern California on the Interim Fire-Threat Maps shall transfer to Tier 3 areas in Southern California of the High Fire-Threat District.
- The existing fire-safety regulations that apply to high fire-threat areas in Northern California on the Interim Fire-Threat Maps shall transfer to Tier 3 areas in Northern California of the High Fire-Threat District.
- The transition of existing fire-safety regulations shall be completed no later than September 1, 2018, in time for the autumn fire season in Southern California.[16]

In PR 4, the FSTP proposes to replace the provisions in Rule 18 that pertain specifically to high fire-threat areas in Southern California on the Interim Fire-Threat Maps with provisions that refer to Tier 3 fire-threat areas in Southern California of the High Fire-Threat District.

[16] D.17-01-009 at 51-52 and Ordering Paragraph 10.

The text of the FSTP's proposed revisions to Rule 18 is set forth in Appendix A of today's Decision. The FSTP recommends that the revised Rule 18 take effect upon the Commission's adoption of its statewide High Fire-Threat District Map. The FSTP did not perform a cost-benefit analysis of its proposed revisions to Rule 18 because the revisions are mandated by D.17-01-009.

4.1.1.2 Positions of the Parties

PR 4 is supported by most parties, including IBEW 1245, a majority of the CIP parties, and most of the electric utility parties. The position of the supporters is encapsulated by Liberty Utilities' statement that PR 4 is not cost prohibitive and protects safety in the most fire-prone areas of the State.

The following parties take a neutral position on PR 4: SED, Laguna Beach, LACFD, MGRA, SDG&E, SMUD, and TURN. There is no opposition to PR 4.

4.1.1.3 Discussion

The issue before us is whether to adopt PR 4. Our standard for deciding this issue is whether PR 4 will enhance fire safety in the High Fire-Threat District at a reasonable cost.

The utility-associated wildfires that devastated Southern California in October 2007 demonstrate the need for stricter fire-safety regulations in high fire-threat areas of California. We affirm our determination in D.17-01-009 that in order to protect public safety, the stricter fire-safety regulations that currently apply only to specified high fire-threat areas on the Interim Fire-Threat Maps shall transfer to the corresponding Tier 3 areas of the High Fire-Threat District.[17] PR 4 implements our determination with respect to Rule 18. No party suggests,

[17] Tier 3 fire-threat areas have extreme risk for utility-associated wildfires.

and we do not find, that the costs incurred by utilities to implement PR 4's revisions to Rule 18 are unreasonable.

For the preceding reasons, we will adopt PR 4, but with one modification. PR 4 includes the following proposed revision to Rule 18:

> **Proposed Revision with Redline**
>
> ….located in ~~an Extreme or Very High Fire Threat Zone in~~ Southern California, and within Tier 3 of the High Fire-Threat District…. (Deletion shown with strikeout. Addition shown with underline.)
>
> **Proposed Revised Text without Redline**
>
> ….located in Southern California, and within Tier 3 of the High Fire-Threat District….

We believe the above proposed revision to Rule 18 could be misinterpreted to mean that Rule 18, as revised, applies to both Southern California and Tier 3 statewide. This is not the intent of PR 4. To avoid misinterpretation, we will adopt the following revision:

> **Adopted Revision with Redline**
>
> ….located in ~~an Extreme or Very High Fire Threat Zone in~~ Tier 3 of the High Fire-Threat District in Southern California…. (Deletion shown with strikeout. Addition shown with underline.)
>
> **Adopted Revised Text without Redline**
>
> ….located in Tier 3 of the High Fire-Threat District in Southern California….

The amended text of Rule 18 is set forth in Appendix B of today's Decision. We note that the amended Rule 18 adopted by today's Decision may be supplanted by revisions to Rule 18 that are the subject of R.16-12-001.[18]

4.1.2. Proposed Regulation 23 re: GO 95, Rule 21.2

4.1.2.1 Summary of Proposal

Rule 21.2 of GO 95 currently lists and defines three "districts" where certain rules apply. These are the "Urban District" (Rule 21.2-A), the "Rural District" (Rule 21.2-B), and the "Loading District" (Rule 21.2-C). These three districts are listed in GO 95's Section II, List of Defined Terms and GO 95's Index.

In PR 23, SCE proposes to amend Rule 21.2 to include a fourth district called the "High Fire Threat District." The High Fire Threat District ("HFTD") would be added as Rule 21.2-D. SCE's proposed Rule 21.2-D would describe the HFTD as consisting of the following three subparts identified in D.17-01-009:

(1) **Tree Mortality (TM) Zone** is Tier 1 of the latest version of the United States Forest Service (USFS) and CAL FIRE's joint map of Tree Mortality High Hazard Zones (HHZs). (Note: Tree Mortality HHZs Map may be revised regularly by the USFS and CAL FIRE.)

(2) **Tier 2** is Tier 2 of the CPUC Fire Threat Map.

(3) **Tier 3** is Tier 3 of the CPUC Fire Threat Map.

PR 23 includes ancillary revisions to GO 95's List of Defined Terms and GO 95's Index to incorporate the HFTD.

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[18] The scope of R.16-12-001 is to consider whether to eliminate Rule 18 or, alternatively, consider specified amendments to Rule 18, including whether to eliminate utilities' authority under Rule 18 to defer the correction of overhead utility facilities that pose a risk to safety and/or reliability. (OIR 16-12-001 at 2.)

The text of SCE's proposed revisions to GO 95 is contained in Appendix A of today's Decision. SCE recommends that PR 23 take effect upon the publication of the revised GO 95. SCE indicates that PR 23 will not, in and of itself, result in any additional costs for utilities.

4.1.2.2 Positions of the Parties

All parties who expressed a position regarding PR 23 either support the proposal or take a neutral position. There is no opposition to PR 23.

4.1.2.3 Discussion

PR 23 consists of ministerial revisions to Rule 21.2 that implement the requirement adopted by D.17-01-009 to incorporate the High Fire-Threat District and associated maps into GO 95.[19] Therefore, we adopt these revisions, but with two modifications. First, we replace the term "Tree Mortality (TM) Zone" with the term "Zone 1" in order to provide a more concise term. Second, we insert a hyphen in the terms "High Fire-Threat District" and "CPUC Fire-Threat Map." Our adopted revisions to Rule 21.2, and our ancillary revisions to GO 95's List of Defined Terms and Index, are set forth in Appendix B of today's Decision.

4.2. Contested Proposed Regulations

4.2.1. Proposed Regulation 1 re: GO 95, Rule 17

4.2.1.1 Summary of Proposal

Rule 17 of GO 95 requires each owner or operator of utility power lines to establish procedures to investigate major accidents and failures for the purpose of determining the causes and minimizing the possibility of recurrence. Rule 17 defines "major accidents and failures" as:

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[19] D.17-01-009 at 56, Conclusion of Law 59, and Ordering Paragraph 11.

(a) Incidents associated with utility facilities which cause property damage estimated at or about the time of the incident to be more than $50,000.

(b) Incidents resulting from electrical contact which cause personal injury which require hospitalization overnight, or result in death.

Importantly, incidents caused by motor vehicles are explicitly exempted from the scope of Rule 17.

In PR 1, Laguna Beach proposes to amend Rule 17 to require each owner or operator of utility power lines to establish procedures to investigate major accidents and failures that result from motor vehicle collisions with utility facilities in Tier 2 and Tier 3 of the High Fire-Threat District that cause property damage estimated at more than $50,000, excluding damage to a motor vehicle. PR 1 would also require owners and operators of utility power lines to make these procedures available to the city or county having jurisdiction where the incident occurs.

The text of Laguna Beach's proposed revisions to Rule 17 is contained in Appendix A of today's Decision. Laguna Beach did not provide estimated costs for its proposed amendments to Rule 17, but Laguna Beach believes the costs are likely to be minimal and outweighed by the fire-safety benefits.

4.2.1.2 Positions of the Parties

Laguna Beach states that vehicle collisions with utility poles are a major fire hazard. Such collisions can topple utility poles, ignite wildfires, block ingress and egress routes for the public and emergency responders, and delay firefighting efforts to prevent a wildfire from spreading out of control. Laguna Beach reports that since 2007, there have been 58 vehicle-pole collisions on Laguna Canyon Road, and that Calabasas experienced a major wildfire due to a vehicle-pole collision in 2016.

Laguna Beach submits that PR 1, by requiring the investigation of significant vehicle-pole collisions in high fire-threat areas, will facilitate identification, understanding, and correction of a major fire risk.

No party supports PR 1 other than Laguna Beach. IBEW 1245 and MGRA take a neutral position. Most parties oppose PR 1, including all electric utility parties, most CIP parties, SED, and TURN. In general, the opponents are concerned that utilities are not the appropriate entity to investigate vehicle-pole collisions. PG&E asserts that the responsibility for road safety lies with cities and counties. PG&E emphasizes that pole location is just one of many factors that influence the likelihood of vehicle-pole collisions, and many of these other factors are within the purview of cities and counties.

4.2.1.3 Discussion

The issue before us is whether to adopt PR 1, which would require electric utilities to investigate vehicle-pole collisions in Tiers 2 and 3 of the High Fire-Threat District that cause estimated property damage greater than $50,000, excluding damage to the motor vehicle. Our standard for deciding this issue is whether PR 1 will enhance fire safety in the High Fire-Threat District at a reasonable cost.

We agree with Laguna Beach that vehicle-pole collisions can ignite dangerous wildfires and, because of this, should be identified, tracked, and analyzed for the purpose of reducing utility-associated wildfire risks. To this end, the Commission in D.14-02-015 adopted the Fire Incident Data Collection Plan ("FIDCP") to enable SED to identify systemic fire-safety risks and develop measures to mitigate those risks. The adopted FIDCP requires PG&E, SCE, and SDG&E to (1) collect specified information regarding every known fire, down to one linear meter in size, associated with their overhead power-line facilities, and

(2) provide this data to SED in an annual report. The FIDCP report template includes a field for reporting fires ignited by vehicle-pole collisions.[20]

D.14-02-015 requires PG&E, SCE, and SDG&E to submit FIDCP annual reports by April 1st each year beginning in 2015.[21] The FIDCP states that SED intends to use these reports to identify and assess systemic fire-safety risks. If SED identifies systemic fire-safety risks, the FIDCP states that SED may conduct root cause analysis, formulate cost-effective measures to reduce such risks, and take other actions to address such risks. The FIDCP also calls for SED to meet with PG&E, SCE, SDG&E, and other stakeholders to discuss the results, costs, benefits, and refinements of the FIDCP nine months after the fifth year of submitting data.[22]

In light of the existing FIDCP, we are not convinced that PR 1 will provide a meaningful and cost-effective improvement to fire safety in the High Fire-Threat District. Therefore, we decline to adopt PR 1 at this time.

4.2.2. Proposed Regulation 2 re: GO 95, New Rule "X"

4.2.2.1 Summary of Proposal

PR 2, sponsored by Laguna Beach, would add a new, to-be-numbered "Rule X" to GO 95 that requires each Electric IOU to develop a plan for identifying and correcting fire-safety hazards that fall within the Electric IOU's service territory designated as Tier 2 or Tier 3 of the High Fire-Threat District. The plan would have to:

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[20] D.14-02-015 at 82 and 83, Ordering Paragraphs 7-10, and Appendix C.

[21] D.14-02-015 at Ordering Paragraph 9.

[22] D.14-02-015, Appendix C, at C-1 and C-2.

A. Include outreach to cities and counties to (i) prioritize each project that requires corrective action, and (ii) jointly agree with the affected cities and counties on the corrective actions.

B. Prioritize projects that address access roads that serve as primary routes for evacuation and for ingress and egress for emergency responders.

C. Include as a potential corrective action the hardening or undergrounding of the electric system or related utility infrastructure that is along or adjacent to such access roads.

PR 2 would require each Electric IOU to submit its first plan to Commission staff for review. Commission Staff would be required to refer for mediation any disputes that arise between the utility and the affected locality. Each Electric IOU that files a general rate case (GRC) would have to provide an updated plan for review and approval in each GRC cycle.

The text of Laguna Beach's proposed "Rule X" is contained in Appendix A of today's Decision. Laguna Beach acknowledges that PR 2 will create additional costs for Electric IOUs, but Laguna Beach does not provide an estimate of costs.

4.2.2.2 Positions of the Parties

Laguna Beach posits that its proposed Rule X will improve fire safety by requiring each Electric IOU, in collaboration with affected local communities, to develop a plan that identifies and implements measures to remediate fire risks in high fire-threat areas.

No party supports PR 2 other than Laguna Beach. IBEW 1245 and MGRA take a neutral position. Most parties oppose PR 2, including all electric utility parties, most CIP parties, SED, and TURN.

Several opponents contend that PR 2 is unnecessary because GO 166 requires electric utilities to submit annually to the Commission an updated Emergency Response Plan that includes a Fire Prevention Plan. In addition, Pub.

Util. Code § 768.6 requires every Electric IOU to provide copies of its emergency and disaster preparedness plan every two years to every local point-of-contact designated by each city and county. Liberty Utilities, PG&E, and SDG&E comply with this statutory requirement by distributing their GO 166 annual report to local communities. Section 768.6 also requires every Electric IOU to hold public meetings with designated local officials to solicit comments on the utility's emergency and disaster preparedness plan. PG&E and SDG&E suggest that this provision in § 768.6 provides a reasonable opportunity for local communities to provide input on utility fire-prevention measures.

Laguna Beach responds that PR 2 does not duplicate the Fire Prevention Plan required by GO 166. Rather, PR 2 would require Electric IOUs to develop fire-prevention plans that incorporate input from local communities. In contrast, GO 166 and § 768.6 only require Electric IOUs to invite and consider local input.

4.2.2.3 Discussion

The issue before us is whether to adopt PR 2. Our standard for deciding this issue is whether PR 2 will enhance fire safety in the High Fire-Threat District at a reasonable cost.

We agree in principle with Laguna Beach that requiring Electric IOUs to prepare fire-prevention plans is a cost-effective tool for enhancing fire safety. To this end, Electric IOUs are required by GO 166 and the recently enacted Pub. Util. Code § 8386(b) to prepare and submit fire-prevention plans annually to the Commission. Specifically, GO 166 requires electric utilities to submit annually a fire-prevention plan that describes the "measures the utility intends to implement, both in the short run and in the long run, to mitigate the threat of

power-line fires generally and in the specific situation where" severe fire-weather conditions may occur.[23] Pub. Util. Code § 8386(b) requires every electric corporation to prepare and submit annually a wildfire-mitigation plan to the Commission for review. Among other things, the wildfire-mitigation plan must describe the electric corporation's strategies and programs to reduce the risk of its electrical lines and equipment causing catastrophic wildfires. Pub. Util. Code § 8386(c) requires the Commission to expeditiously review and comment on the electrical corporation's wildfire-mitigation plan, and Pub. Util. Code § 8386(d) provides the electrical corporation with 30 days to amend its wildfire-mitigation plan in response to Commission comments. Pub. Util. Code § 8386(e) requires the Commission to conduct or contract for audits to determine if an electrical corporation is satisfactorily complying with its wildfire-mitigation plan.[24]

We recognize that the fire-prevention plan proposed by Laguna Beach in PR 2 differs in some respects from the fire-prevention plan required by GO 166 and the wildfire-mitigation plan required by Pub. Util. Code § 8386(b). In particular, unlike GO 166 and § 8386(b), PR 2 would require each Electric IOU to conduct outreach to every city and county in Tier 2 or Tier 3 fire-threat areas of the utility's service territory for the purpose of identifying and prioritizing corrective actions. We are persuaded by PG&E that it is not reasonable to expect PG&E—whose service territory encompasses all or parts of 48 counties and

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[23] The specific fire-weather conditions are (i) the force of 3-second wind gusts exceeds the structural or mechanical design standards for the affected overhead power-line facilities, (ii) these 3-second gusts occur during a period of high fire danger, and (iii) the affected facilities are located in a high fire-threat area.

[24] Pub. Util. Code §§ 8385-8387 was added by Stats. 2016, Ch. 598, Sec. 1 (SB 1028) and is effective January 1, 2017.

hundreds of incorporated cities—to conduct the one-on-one outreach contemplated by Laguna Beach.[25]

We are also concerned about the proposed requirement in PR 2 for Commission Staff to "refer for mediation any possible disputes that arise between the utility and the affected locality." PR 2 does not spell out the particulars of the "mediation," such as who would mediate the dispute (Commission Staff or third parties), pay for the mediation, etc. To the extent Laguna Beach anticipates that Commission Staff would serve as the mediators, we do not have the Staff and budget for more than a handful of disputes.

PR 2 would also require the fire-prevention plans submitted by utilities to "prioritize projects that address primary access roads that are utilized as evacuation routes in the event of wildfire, or access roads that serve as primary points of ingress and egress for emergency responders." We are not persuaded that this one-size-fits-all approach to prioritizing fire-safety measures is in the public interest. Furthermore, introducing such rigidity could increase the potential for disputes (and requests for mediation) with cities and counties where the prescribed prioritization is not optimal for that particular area.

For the preceding reasons, we are not convinced that requiring utilities to submit the fire-prevention plan contemplated by Laguna Beach in PR 2, in addition to the fire-prevention plan required by GO 166 and the wildfire-mitigation plan required by Pub. Util. Code § 8386(b), will enhance fire safety at a reasonable cost. Therefore, we decline to adopt PR 2 at this time.

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[25] Workshop Report at B-11.

4.2.3. Proposed Regulation 3 and Alternative Proposed Regulation 4/AP-1 re: GO 95, Rule 18

4.2.3.1 Summary of Proposals

Rule 18 of GO 95 establishes requirements regarding the prioritization and correction of safety hazards discovered by utilities. Several provisions in Rule 18 pertain to fire hazards that are discovered in high fire-threat areas of Southern California on the Interim Fire-Threat Maps adopted in R.08-11-005.

Previously in today's Decision, we adopted PR 4, a consensus proposal to replace the provisions in Rule 18 that pertain to high fire-threat areas in Southern California on the Interim Fire-Threat Maps with provisions that refer to Tier 3 fire-threat areas of the High Fire-Threat District in Southern California. Here, we address two additional proposals to amend Rule 18. One of these proposals was submitted by SDG&E (PR 3), and the second by the CIP Coalition (PR 4, Alternative Proposal 1 ("PR 4/AP-1")). Our consideration of these two proposals is limited to proposed revisions to Rule 18 that were not adopted previously in today's Decision as part of PR 4.

Rule 18-A(2)(a), as modified previously in today's Decision, requires utilities to prioritize corrective actions based, in part, on whether a fire risk is located in Tier 3 fire-threat areas of Southern California. Rule 18-A(2)(a)(ii), as modified previously in today's Decision, requires utilities to correct within 12 months a fire risk that is (i) located in Tier 3 fire-threat areas of Southern California, and (ii) assigned Priority Level 2.[26] The following table summarizes how these provisions in Rule 18 would be amended by PR 3 and PR 4/AP-1:

[26] Rule 18-A(2)(a)(ii) defines "Priority Level 2" as "[v]ariable (non-immediate high to low) safety and/or reliability risk."

Table 2 Proposed Amendments to GO 95, Rule 18		
Rule 18 (As modified previously in Today's Decision)	**PR 3 (SDG&E)**	**PR 4/AP-1 (CIP Coalition)**
Rule 18-A(2)(a): Utilities must prioritize corrective action based, in part, on whether the safety hazard is located in Tier 3 of the High Fire-Threat District in Southern California.	Prioritize corrective action based, in part, on whether the safety hazard is located in Tier 2 or Tier 3 of the High Fire-Threat District statewide.	Prioritize corrective action based, in part, on whether the safety hazard is located in Zone 1, Tier 2, or Tier 3 of the High Fire-Threat District statewide.
Rule 18-A(2)(a)(ii): Correct Priority Level 2 fire risks within 12 months if located in Tier 3 of the High Fire-Threat District in Southern Calif. and within 59 months in all other areas.	Correct Priority Level 2 fire risks within 6 months if located in Tier 2 or Tier 3 of the High Fire-Threat District statewide.	Correct Priority Level 2 fire risks within 6 months if located in Tier 3 of the High Fire-Threat District statewide.

The text of SDG&E's and the CIP Coalition's proposed revisions to Rule 18 is contained in Appendix A of today's Decision. SDG&E expects that PR 3 will not increase costs for utilities. SDG&E recommends that PR 3 take effect 12 months after the Commission adopts the High Fire-Threat District Map.

The CIP Coalition did not provide a cost estimate for PR 4/AP-1. The CIP Coalition recommends that PR 4/AP-1 take effect 18 months after the Commission adopts the High Fire-Threat District Map.

4.2.3.2 Positions of the Parties

PR 3 (SDG&E)

SDG&E posits that its PR 3 will enhance fire safety by requiring Priority Level 2 fire risks in Tier 2 and Tier 3 fire-threat areas to be corrected sooner.

IBEW 1245 is the only party that supports PR 3 other than SDG&E. IBEW 1245 anticipates that the expedited repair timeframe required by PR 3 will decrease fires associated with overhead utility facilities.

Laguna Beach, LACFD, MGRA, and SED take a neutral position. Most parties oppose PR 3, including a majority of the CIP parties, all of the electric utility parties other than SDG&E, and TURN. Many of the opponents take issue with the six-month timeframe that PR 3 would mandate for correcting Priority Level 2 fire risks in both Tiers 2 and 3. These opponents assert that because Tier 2 is an area with an elevated wildfire threat, and Tier 3 is an area with an extreme wildfire threat, it is not reasonable to apply the same six-month timeframe to both Tier 2 and Tier 3. PacifiCorp believes that a six-month timeframe for corrective action is not cost-effective for either Tier 2 or Tier 3.

TURN disputes SDG&E's claim that although PR 3 will not increase costs. TURN states that reducing the timeframe for corrective actions could require more overtime and/or more personnel. TURN submits that depending on the number of corrective actions, costs could increase significantly.

PR 4/AP-1 (CIP Coalition)

The CIP Coalition avers that PR 4/AP-1 will enhance fire safety by (1) shortening the period for correcting fire risks from 12 months to 6 months in Tier 3 fire-threat areas in Southern California, and (2) extending the shorter correction interval to Tier 3 fire-threat areas statewide.

PR 4/AP-1 is supported by most of the CIP parties. The following parties take a neutral position: The Joint POUs, Laguna Beach, LACFD, Liberty Utilities, MGRA, and SED. PR 4/AP-1 is opposed by the IBEW 1245, Bear Valley, PacifiCorp, PG&E, SCE, SDG&E, and TURN.

PacifiCorp states that because its fire season occurs during the months of June through August, a six-month correction period for fire risks discovered during inspection cycles that start in mid-March would not result in any fire-risk mitigation until the following fire season. PacifiCorp is also concerned that the six-month deadline could force repairs to take place during winter months.

PG&E opposes PR 4/AP-1 because it could result in resource gaps and increased costs to complete work in the six-month timeframe given the varied terrain in PG&E's service territory. TURN opposes PR 4/AP-1 because the proponent did not provide a cost estimate for the proposal.

4.2.3.3 Discussion

The issue before us is whether to adopt PR 3 or PR 4/AP-1. Our standard for deciding this issue is whether PR 3, PR 4/AP-1, or some combination thereof will enhance fire safety at a reasonable cost.

4.2.3.3.1 Rule 18-A(2)(a)

Rule 18-A(2)(a), as modified previously in today's Decision, requires utilities to prioritize the correction of safety hazards based on six factors, including whether the safety hazard is located in a Tier 3 fire-threat area in Southern California. In PR 3, SDG&E proposes to modify Rule 18-A(2)(a) so that it applies to safety hazards located in Tier 2 and Tier 3 fire-threat areas anywhere in the State. In PR 4/AP-1, the CIP Coalition proposes to modify Rule 18-A(2)(a) so that it applies to safety hazards located in Zone 1, Tier 2, and Tier 3 fire-threat areas statewide (i.e., located in the High Fire-Threat District statewide).

We conclude that it is reasonable to adopt the CIP Coalition's PR 4/AP-1. The High Fire-Threat District consists of areas where there is an elevated or extreme risk for utility-associated wildfires. The precepts of common sense and public safety dictate that when utilities discover facilities that pose a fire hazard,

they should consider if the fire hazard is in Zone 1, Tier 2, or Tier 3 of the High Fire-Threat District when prioritizing the correction of the fire hazard. Indeed, we believe it would be reckless and contrary to Pub. Util. Code § 451 if utilities were to ignore the location of a fire hazard with respect to the High Fire-Threat District when prioritizing the correction of the fire hazard.

Although the CIP Coalition did not provide a cost estimate for PR 4/AP-1, we conclude that it is unlikely the costs will be significant. The adopted amendment to Rule 18-A(2)(a) requires utilities to do nothing more than consider where a fire hazard is located with respect to the High Fire-Threat District when prioritizing the correction of the fire hazard. While utilities may incur some costs to implement procedures for carrying out this prioritization, we conclude that such costs are exceeded by the public-safety benefits.

We decline to adopt SDG&E's PR 3 to the extent that SDG&E's proposal omits Zone 1 fire-threat areas from Rule 18-A(2)(a). SDG&E did not explain why it omitted Zone 1. We conclude that it is reasonable to include Zone 1 fire-threat areas in Rule 18-A(2)(a) for the previously stated reasons.

We disagree with TURN that there is insufficient information to properly assess the cost-effectiveness of our adopted amendments to Rule 18-A(2)(a). We find that there are substantial public-safety benefits, as well as public policy considerations,[27] to justify our adopted amendments to Rule 18-A(2)(a).

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[27] The *Safety Policy Statement of the California Public Utilities Commission*, dated July 10, 2014, states at 1 that it is the Commission's policy to continually reduce the safety risks posed by the utilities regulated by the Commission. The *Safety Policy Statement* is at: http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Safety/VisionZero4Final621014_5_2.pdf.

Our adopted amendments to Rule 18-A(2)(a) are set forth in Appendix B of today's Decision. We also correct a non-substantive typographical error in Rule 18-A(1)(b) noted by the CIP Coalition.[28]

4.2.3.3.2 Rule 18-A(2)(a)(ii)

Rule 18-A(2)(a)(ii), as modified previously in today's Decision, requires utilities to correct within 12 months a Priority Level 2 fire risk that is located in Tier 3 of the High Fire-Threat District in Southern California.[29] All other Priority Level 2 fire risks must be corrected within 59 months. These are maximum allowed timeframes for correcting fire risks. Rule 18 requires a Priority Level 2 fire risk to be corrected in less than 12 months or 59 months if doing so is necessary to protect public safety.

In PR 3, SDG&E proposes to amend Rule 18-A(2)(a)(ii) to require Priority Level 2 fire risks to be corrected within six months if they are located in Tier 2 or Tier 3 of the High Fire-Threat District anywhere in the State. In PR 4/AP-1, the CIP Coalition proposes to require Priority Level 2 fire risks to be corrected within 6 months if they are located in Tier 3 statewide, and within 59 months if they are located in Tier 2 statewide.

For the reasons set forth below, we conclude that it is reasonable to adopt PR 3 and PR 4/AP-1 to the extent these proposals seek to amend Rule 18-A(2)(a)(ii) to require Priority Level 2 fire risks to be corrected within 6 months if they are located in a Tier 3 fire-threat area anywhere in the State, and

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[28] Workshop Report at B-28.

[29] Rule 18-A(2)(a)(ii) defines "Priority Level 2" as "[v]ariable (non-immediate high to low) safety and/or reliability risk."

within 12 months if they are located in a Tier 2 fire-threat area anywhere in the State. We decline to adopt all other aspects of these proposals.

Tier 3 fire-threat areas pose an extreme risk for utility-associated wildfires. Given the severity of the wildfire risk, we conclude that public safety requires that we amend Rule 18-A(2)(a)(ii) to provide a maximum of six months to correct Priority Level 2 fire risks in Tier 3 fire-threat areas. Similarly, Tier 2 fire-threat areas pose an elevated risk for utility-associated wildfires. Given the elevated wildfire risk, we conclude that public safety requires that we amend Rule 18-A(2)(a)(ii) to provide a maximum of 12 months to correct Priority Level 2 fire risks in Tier 2 fire-threat areas. We emphasize that 6 months is the maximum time allowed to correct Priority Level 2 fire risks in Tier 3 fire-threat areas, and 12 months in Tier 2 fire-threat areas. Utilities have a duty under Rule 18,[30] Rule 31.1,[31] and Pub. Util. Code § 451[32] to correct Priority Level 2 fire risks sooner if doing so is necessary to protect public safety.

We decline to adopt at this time a six-month correction timeframe for Priority Level 2 fire risks in Tier 2 as recommended by SDG&E. The land area covered by Tier 2 on the IRT-approved CPUC Fire-Threat Map is 57,827 square

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[30] Rule 18-A(1)(a) requires each utility to take appropriate action to remedy safety hazards posed by its facilities.

[31] Rule 31.1 states that a "if an intended use or known local conditions require a higher standard than the particulars specified in in [GO 95] to enable the furnishing of safe, proper, and adequate service, the company shall follow the higher standard."

[32] Pub. Util. Code § 451 requires every public utility to "furnish and maintain… service, instrumentalities, equipment, and facilities… as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public."

miles, or approximately 37 percent of the land area of California.[33] Because of the large area covered by Tier 2, and given that Priority Level 2 includes non-immediate, low fire risks, we are not convinced that a six-month deadline for correcting every Priority Level 2 fire risk in Tier 2 is cost-effective or necessary to protect public safety.

We realize that there may be situations where a utility cannot meet the correction timeframes adopted by today's Decision for Priority Level 2 fire risks in Tier 2 and Tier 3 fire-threat areas because of circumstances beyond the utility's control. In these situations, Rule 18-A(2)(b) allows correction times to be extended for good cause, such as third-party refusal to provide access, severe weather, and system emergencies.

We do not expect the correction timeframes adopted by today's Decision for Priority Level 2 fire risks will increase costs significantly for utilities in the long run. Rule 18 has always required utilities to correct Priority Level 2 fire risks. While today's Decision requires utilities to correct fire risks sooner if they are located in Tier 2 or Tier 3, today's Decision does not affect the total number of Priority Level 2 fire risks that must be corrected over time.

We disagree with TURN's position that there is insufficient information in the record of this proceeding to assess the reasonableness and cost-effectiveness of the shortened correction timeframes adopted by today's Decision. Fire risks in Tier 2 and Tier 3 fire-threat areas are a major threat to public safety. To the extent a utility incurs significant costs to comply with Rule 18-A(2)(a)(ii) because of today's Decision, we conclude that the costs are offset by the substantial

[33] *Response of the Peer Development Panel to Administrative Law Judges' October 6, 2017 Ruling – Additional Shape B Map Information* filed on November 20, 2017, at Appendix A, page A-10.

public-safety benefits of reducing the risk of utility-associated wildfires occurring in Tier 2 (elevated) and Tier 3 (extreme) fire-threat areas.

The text of 18-A(2)(a)(ii), as amended by today's Decision, is set forth in Appendix B of today's Decision. We note that the amendments to Rule 18 adopted by today's Decision may be supplemented and/or superseded by revisions to Rule 18 that are the subject of R.16-12-001.[34]

4.2.3.3.3 Further Consideration of Reduced Timeframe for Correcting Priority Level 2 Fire Risks

We intend to further consider the efficacy of reducing the timeframe for correcting Priority Level 2 fire risks in Tier 2 from 12 months to 6 months as recommended by SDG&E. To this end, we will instruct the Director of the Commission's SED or the Director's designee to confer with CAL FIRE, within the context of the Interagency Fire Safety Working Group established by the CPUC-CAL FIRE Memorandum of Understanding ("MOU"), as to whether it would be cost-effective to adopt a six-month correction timeframe (or other reduced timeframe) for Priority Level 2 fire risks in Tier 2 fire-threat areas. We discuss this matter further in Section 7 of today's Decision.

4.2.4. Proposed Regulation 5 re: GO 95, Rule 31.1

PR 5, proposed by SDG&E, is essentially identical to SDG&E's PR 3 that we addressed previously in Section 4.2.3.3.2 of today's Decision. Both PR 5 and PR 3 would allow a maximum of six months to correct "[a]ny equipment conditions or facilities that pose an elevated fire-ignition risk in Tiers 2 and 3 of

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[34] The scope of R.16-12-001 is to consider whether to eliminate Rule 18 or, alternatively, consider specified amendments to Rule 18, including whether to eliminate utilities' authority under Rule 18 to defer the correction of overhead utility facilities that pose a risk to safety and/or reliability. (OIR 16-12-001 at 2.)

the High Fire-Threat District.[35]" The main difference between PR 5 and PR 3 is the specific rule within GO 95 that would be amended. PR 5 would amend Rule 31.1 and PR 3 would amend Rule 18.

We decline to adopt PR 5 to the extent it seeks the same amendments to Rule 31.1 that we adopt for Rule 18-A(2)(a)(ii) in Section 4.2.3.3.2 of today's Decision. We find that it would be redundant for Rule 31.1 to contain the same text as Rule 18-A(2)(a)(ii). We reject the remainder of PR 5 for the same reasons we reject the corresponding parts of PR 3 in Section 4.2.3.3.2 of today's Decision.

4.2.5. Proposed Regulation 6 re: GO 95, Rule 31.5

4.2.5.1 Summary of Proposal

Rule 31.5 of GO 95 requires utilities to consider the joint use of poles when constructing or reconstructing overhead facilities. Rule 31.5 further states that "[n]othing herein shall be construed as... granting authority for the use of any poles without the owner's consent (see Rule 32.2 and Section IX)."[36]

In PR 6, SDG&E proposes to amend Rule 31.5 to state that all pole attachments in Tiers 2 and 3 of the High Fire-Threat District "must have the consent of a pole owner or granting authority prior to any construction," and that any attachment without such consent may be reported to the Commission.

The text of SDG&E's proposed revisions to Rule 31.5 is contained in Appendix A of today's Decision. SDG&E recommends that its proposed

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[35] Workshop Report at B-39.

[36] For reference, Rule 32.2 concerns the arrangement of circuits with different voltage classifications and states "[i]t is recommended that lines be arranged by mutual agreement of those concerned...." Section IX provides special rules for all classes of lines on joint poles, and contains the same statement as Rule 31.5: "[n]othing herein shall be construed as... granting authority for the use of any poles without the owner's consent."

revisions take effect upon the Commission's adoption of PR 6. SDG&E opines that PR 6 should not result in increased costs.

4.2.5.2 Positions of the Parties

In support of its PR 6, SDG&E asserts there have been incidents—notably the Malibu Canyon Fire in October 2007—in which poles failed because, in part, unauthorized attachments overloaded the poles. SDG&E posits that obtaining the pole owner's permission for an attachment will help ensure that poles are not overloaded and thereby reduce the risk of catastrophic power-line wildfires.

IBEW 1245 and the Joint POUs support PR 6. IBEW 1245 states that because the electrical utility is responsible for the physical integrity of the pole, the utility should have authority over other parties' pole attachments in Tier 2 and Tier 3 of the High Fire-Threat District. The Joint POUs recommend that if PR 6 is adopted, it must be clear that the amended Rule 31.5 does not supersede existing laws and regulations that require prior consent for all pole attachments.

The following parties take a neutral position: Bear Valley, Laguna Beach, LACFD, Liberty Utilities, MGRA, PacifiCorp, SED, and TURN.

The CIP Coalition, PG&E, and SCE oppose PR 6 because rules prohibiting unauthorized attachments already exist in contracts between parties, the Commission's Right-of-Way Rules ("ROW Rules"), the Northern California Joint Pole Association Routine Handbook, and the Southern California Joint Pole Committee Routine Handbook. The CIP Coalition contends that it is unclear how making an unauthorized pole attachment a GO 95 violation will provide the utilities with more protection than they have today. The CIP Coalition adds that because the purpose of GO 95 is to establish rules regarding the design, construction, and maintenance of overhead lines, PR 6 is an inapposite amendment to GO 95 given the General Order's purpose.

4.2.5.3 Discussion

The issue before us is whether to adopt PR 6. Our standard for deciding this issue is whether PR 6 will enhance fire safety in the High Fire-Threat District at a reasonable cost.

We agree with the intent of PR 6, namely, that all pole attachments in Tiers 2 and 3 of the High Fire-Threat District should have the consent of the pole owner(s) or granting authority. To this end, the ROW Rules adopted by D.98-10-058 prohibit unauthorized pole attachments, establish a fine for unauthorized attachments, and provide notice that the Commission may impose additional sanctions.[37] In addition, Rules 31.5, 34, and 91.1 of GO 95 provide that pole attachments must be authorized by the pole owner(s).

For the foregoing reasons, we find that PR 6 will not materially enhance fire safety in the High Fire-Threat District. Therefore, we decline to adopt PR 6.

Today's Decision does not affect other current and future proceedings where the Commission may adopt new regulations regarding pole attachments. These other proceedings include the combined Investigation 17-06-027 and Rulemaking 17-06-028 where the Commission is considering, among other

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[37] D.98-10-058, Appendix A, Section VI.D (Unauthorized Attachments) provides as follows:

1. No telecommunications carrier or cable TV company may attach to the… support structure of another utility without the express written authorization from the utility.
2. For every violation of the duty to obtain approval before attaching, the owner or operator of the unauthorized attachment shall pay to the utility a penalty of $500 for each violation. This fee is in addition to all other costs which are part of the attacher's responsibility. Each unauthorized pole attachment shall count as a separate violation for assessing the penalty.
3. Any violation of the duty to obtain permission before attaching shall be cause for imposition of sanctions as, in the Commissioner's judgment, are necessary to deter the party from in the future breaching its duty to obtain permission before attaching. Any Commission order imposing such sanctions will be accompanied by findings of fact that permit the pole owner to seek further remedies in a civil action.

things, strategies for increased non-discriminatory access to utility poles by competitive communications providers, the impact of such increased access on safety, and how to ensure the integrity of the affected communications and electric supply infrastructure.[38]

4.2.6. Proposed Regulation 7, Alternative Proposal 1, and Alternative Proposal 2 re: GO 95, Rule 35, Table 1, Case 14

4.2.6.1 Summary of Proposals

GO 95, Rule 35, Table 1, Case 14 ("Case 14") specifies minimum radial clearances between bare line conductors and vegetation in the high fire-threat areas of Southern California on the Interim Fire-Threat Maps. Case 13 specifies the minimum vegetation clearances everywhere else in California. The following table lists the minimum vegetation clearances for Case 14 and Case 13:

[38] Combined Order Instituting Investigation 17-06-027 and Order Instituting Rulemaking 17-06-028 at 1.

Table 3a **GO 95, Rule 35, Table 1, Case 14** **Minimum Radial Clearance Between Power Lines and Vegetation in High Fire-Threat Areas of Southern California** **Kilovolts (kV)**				
0.75 – 2.4 kV	**2.4 – 72 kV**	**72 – 110 kV**	**110 – 500 kV**	**>500 kV**
18 inches	48 inches	72 inches	120 inches	120 inches + 0.4 inch for each kV >500

Table 3b **GO 95, Rule 35, Table 1, Case 13** **Minimum Radial Clearance Between Power Lines and Vegetation in all other parts of California**	
0.75 – 300 kV	**>300 kV**
18 – 37.5 inches, depending on voltage	75 inches + 0.2 inch for each kV >300
All Clearances in Tables 3a and 3b for Normal Annual Weather Variations.	

In PR 7, the FSTP proposes to replace the provisions in Case 14 that pertain specifically to high fire-threat areas in Southern California on the Interim Fire-Threat Maps with provisions that refer to Tier 3 of the High Fire-Threat District in Southern California.

In PR 7/AP-1, SED proposes to amend Case 14 so that the minimum vegetation clearances in Case 14 apply to the entire High Fire-Threat District (Zone 1, Tier 2, and Tier 3) statewide. In PR 7/AP-2, PG&E proposes to amend Case 14 so that the minimum vegetation clearances in Case 14 apply to Tier 3 of the High Fire-Threat District statewide. The following table summarizes the geographic area where Case 14 would apply under each proposal:

Table 4 Geographic Area Subject to Case 14			
Current	**PR 7**	**PR 7/AP-1**	**PR 7/AP-2**
• Southern Calif. • High Fire-Threat Areas on the Interim Fire-Threat Maps	• Southern Calif. • Tier 3 of the High Fire-Threat District	• Statewide • Entire High Fire-Threat District (Zone 1, Tier 2, and Tier 3)	• Statewide • Tier 3 of the High Fire-Threat District

The text of the FSTP's, SED's, and PG&E's proposed revisions to Case 14 is contained in Appendix A of today's Decision.

The FSTP and PG&E each recommend that its proposed revisions to Case 14 take effect 12 months after the Commission's adoption of the High Fire-Threat District Map. SED recommends that its proposed revisions take effect 36 months after the adoption of the High Fire-Threat District Map.

None of the proponents provided a cost estimate for its proposal, although PG&E states that the additional costs of maintaining increased vegetation clearances in Tier 3 fire-threat areas statewide should be mitigated because California Public Resources Code Section 4293 ("Cal. Pub. Res. Code § 4293") already requires 48 inches of radial clearance between bare line conductors and vegetation in State Responsibility Areas ("SRAs").

4.2.6.2 Positions of the Parties

PR 7 (FSTP)

PR 7 is supported by IBEW 1245, Liberty Utilities, PacifiCorp, PG&E, and SCE. The position of the supporters is encapsulated by Liberty Utilities' statement that it supports PR 7 because it is not cost prohibitive and protects safety in the most fire-prone areas of the State.

Most parties take a neutral position with respect to PR 7, including the majority of the CIP parties, Laguna Beach, MGRA, the Joint POUs, and SDG&E.

LACFD, SED, and TURN oppose PR 7. SED opposes PR 7 because it is limited to Tier 3 fire-threat areas in Southern California. SED contends that Case 14 should apply to the entire High Fire-Threat District statewide as recommended by SED in PR 7/AP-1. TURN opposes PR 7 on the basis of insufficient information regarding its cost-effectiveness.

PR 7/AP-1 (SED)

SED submits that PR 7/AP-1 is in the public interest because, in SED's view, the Commission's vegetation-related fire-safety regulations should apply throughout the High Fire-Threat District. SED's PR 7/AP-1 achieves this objective while the alternatives (PR 7 and PR 7/AP-2) do not.

PR 7/AP-1 is supported by IBEW 1245, LACFD, and SDG&E. IBEW 1245 states that the fire-safety benefits of PR 7/AP-1 are presumptively cost-effective. IBEW 1245 contends that the Commission should not reject PR 7/AP-1 because of the inability to measure how many fires will avoided by adopting PR 7/AP-1.

Most parties take a neutral position on PR 7/AP-1, including a majority of the CIPs, Bear Valley, Laguna Beach, and MGRA.

PR 7/AP-1 is opposed by the Joint POUs, Liberty Utilities, PacifiCorp, PG&E, SCE, and TURN. Liberty Utilities and PG&E contend that PR 7/AP-1 does not mitigate the fire hazard of trees falling onto power lines.
Liberty Utilities adds that the map for Zone 1 of the High Fire-Threat District will be updated every two years, making it difficult to plan for tree trimming.

PG&E asserts that SED offered no evidence that trees growing into power lines are a major source of wildfires. Thus, PG&E argues, extending the Case 14

vegetation clearances to the High Fire-Threat District statewide would needlessly expand the scope of Case 14.

PacifiCorp contends that PR 7/AP-1 is not cost-effective, operationally practical, or necessary. PacifiCorp further contends that it is inappropriate to require the same vegetation clearances for both Tiers 2 and 3 of the High Fire-Threat District because each tier has a different fire-risk level.

TURN opposes PR 7/AP-1 on the basis of insufficient information regarding its cost-effectiveness.

PR 7/AP-2 (PG&E)

PG&E submits that its PR 7/AP-2 is in the public interest because, in part, Cal. Pub. Res. Code § 4293 already requires four feet of clearance between bare line conductors and vegetation in SRAs during fire season. Extending this 4-foot clearance to a year-round requirement will not add much cost for utility ratepayers and will eliminate the yo-yo effect where the clearance requirement changes from 4 feet to 18 inches depending on the season.

Bear Valley, the Joint POUs, IBEW 1245, and PacifiCorp support PR 7/AP-2. Most of the CIP parties, Laguna Beach, Liberty Utilities, MGRA, SCE, and SDG&E take a neutral position with respect to PR 7/AP-2.

LACFD, SED, and TURN oppose PR 7/AP-2. SED's opposition rests primarily on PR 7/AP-2's exclusion of Zone 1 and Tier 2 fire-threat areas from the scope of Case 14. TURN opposes PR 7/AP-2 on the basis of insufficient information regarding its cost-effectiveness.

4.2.6.3 Discussion

The issue before us is whether to adopt PR 7, PR 7/AP-1, or PR 7/AP-2, or some combination thereof. Our standard for deciding this issue is whether each PR, or some combination thereof, will enhance fire safety in the High Fire-Threat

District at a reasonable cost. We address each of these proposed regulations in the following order: PR 7, PR 7/AP-2, and PR 7/AP-1.

4.2.6.3.1 PR 7

Case 14 requires increased radial clearances between bare line conductors and vegetation in the high fire-threat areas of Southern California on the Interim Fire-Threat Maps. In D.17-01-009, the Commission determined that all existing fire-safety regulations that apply only to high fire-threat areas in Southern California on the Interim Fire-Threat Maps shall transfer to Tier 3 fire-threat areas of the High Fire-Threat District in Southern California. The Commission further held that parties could present recommendations in the current proceeding for adjusting the areas of the High Fire-Threat District where the transferred regulations should apply.[39]

PR 7 modifies Case 14 to conform to D.17-01-009. Therefore, we will adopt PR 7 to the extent the proposal implements the Commission's directive in D.17-01-009 to transfer Case 14 to Tier 3 fire-threat areas of the High Fire-Threat District in Southern California. We decline to adopt PR 7 to the extent the intent of this proposal is to confine the application of Case 14 to Tier 3 fire-threat areas in Southern California. As discussed below in the context of SED's PR 7/AP-1, we conclude that in order to protect public safety, Case 14's vegetation clearances should apply to all of the High Fire-Threat District statewide.

We decline to consider TURN's position that there is insufficient information to assess the cost-effectiveness of PR 7. We previously determined in D.17-01-009 that existing fire-safety regulations that apply only to high

[39] D.17-01-009 at 52 and 56, and Ordering Paragraph 10.

fire-threat areas in Southern California on the Interim Fire-Threat Maps should transfer to Tier 3 fire-threat areas of the High Fire-Threat District in Southern California. PR 7 implements the Commission's determination in D.17-01-009 with respect to Case 14. We will not revisit our determination here.

4.2.6.3.2 PR 7/AP-2

PG&E's PR 7/AP-2 seeks to amend Case 14 so that it applies to Tier 3 fire-threat areas statewide. With one condition, we will adopt PR 7/AP-2 for the reasons set forth below. The one condition is that our adoption of PR 7/AP-2 does not preclude our considering and adopting SED's PR 7/AP-1 that is addressed in Section 4.2.6.3.3 below.

A general principle that we employ in today's Decision is that an existing GO 95 fire-safety regulation that applies only to high fire-threat areas in Southern California on the Interim Fire-Threat Maps should be amended to apply to Tier 3 fire-threat areas of the High Fire-Threat District statewide. The Commission recognized in R.08-11-005 that parts of Southern California faced extreme utility-associated wildfire risks, as demonstrated by the catastrophic wildfires in October 2007. To address this extreme wildfire risk, the Commission in R.08-11-005 amended GO 95 to include several new fire-safety regulations that applied only to high fire-threat areas in Southern California on the Interim Fire-Threat Maps adopted in that proceeding.[40] The High Fire-Threat District Map that is nearing completion in the current proceeding will substantially improve the Commission's ability to identify areas where there are extreme

[40] The Commission in R.08-11-005 also adopted significant new inspection requirements for specified CIP facilities located in high fire-threat areas throughout California, not just in Southern California.

utility-associated wildfire risks throughout the State. Such areas are designated as Tier 3 fire-threat areas on the High Fire-Threat District Map.

We conclude that existing fire-safety regulations that apply only to high fire-threat areas in Southern California on the Interim Fire-Threat Maps should apply to Tier 3 fire-threat areas of the High Fire-Threat District statewide. These fire-safety regulations were adopted for the specific purpose of addressing extreme utility-associated wildfire risks. We find that in order to protect public safety, it is vital that these fire-safety regulations, including Case 14 at issue here, should apply to Tier 3 extreme fire-threat areas throughout California.

PG&E did not provide a cost estimate for extending the geographic scope of Case 14 from high fire-threat areas in Southern California to Tier 3 statewide. However, the record for this proceeding indicates that the costs will not be excessive. The following table compares the geographic area covered by Tier 3 statewide to the high fire-threat areas in Southern California on the Interim Fire-Threat Maps:

Table 5 **Size of Geographic Area Where Case 14 Vegetation Clearances Apply**	
Geographic Area	**Size of Area (Square Miles)**
Southern California. High Fire-Threat Areas on the Interim Fire-Threat Maps [1]	9,629 [2]
Statewide. Tier 3 extreme fire-threat areas of the High Fire-Threat District (based on the IRT-approved CPUC Fire-Threat Map filed on November 17, 2017)	Tier 3 in South. Calif.: 6,070 Tier 3 in North. Calif: 6,408 Tier 3 in All Calif.: 12,478 [3]
Note 1: The Interim Fire-Threat Maps in this Table are (1) the SDG&E Fire-Threat Map, and (2) the FRAP Map for the remainder of Southern California. **Note 2**: Source of the listed square miles is the *Response of San Diego Gas & Electric Company (U 902-E) to Administrative Law Judge's August 1 Ruling*, filed on August 14, 2017, at Attachment A, page 5. **Note 3**: Source of the listed square miles is the *Response of the Peer Development Panel to Administrative Law Judges' October 6, 2017 Ruling – Additional Shape B Information*, filed on November 20, 2017, at Attachment A, page A-10.	

The above table shows that Case 14 applies to 9,629 square miles of high fire-threat areas in Southern California on the Interim Fire-Threat Maps, compared to 12,478 square miles in Tier 3 fire-threat areas statewide on the IRT-approved CPUC Fire-Threat Map. To the extent a utility incurs a significant increase in costs to comply with Case 14 because of today's Decision, we conclude that the costs are offset by the substantial public-safety benefits that will result from the mitigation of vegetation-related fire risks in Tier 3 fire-threat areas. The efficacy of such mitigation will be enhanced by the much greater precision the CPUC Fire-Threat Map will provide in identifying areas where

there is an extreme utility-associated wildfire risk compared to the Interim Fire-Threat Maps.[41]

We recognize that the size of the statewide Tier 3 area listed in the above table (12,478 square miles) is from the IRT-approved CPUC Fire-Threat Map, not the final CPUC High Fire-Threat Map that the Commission will ultimately adopt.[42] Nonetheless, we conclude that the IRT-approved CPUC Fire-Threat Map provides a reasonable estimate for the size of the statewide Tier 3. We do not anticipate that the size of the statewide Tier 3 on the final CPUC Fire-Threat Map will increase to such a large degree relative to the IRT-approved CPUC Fire-Threat Map as to invalidate our previous conclusion that costs incurred by utilities to implement Case 14 in Tier 3 statewide are exceeded by the public-safety benefits.

4.2.6.3.3 PR 7/AP-1

We previously determined that the increased vegetation clearances required by Case 14 should apply to Tier 3 fire-threat areas statewide. Here, we consider if the Case 14 vegetation clearances should apply to Zone 1 and Tier 2 fire-threat areas statewide as recommended by SED in PR 7/AP-1.

Power lines must be kept clear of vegetation at all times to prevent wildfires and outages. Wildfires ignited by vegetation contact with power lines can potentially grow to great size and cause enormous destruction in Zone 1 and Tier 2 fire-threat areas. This fact is illustrated by the following map that shows

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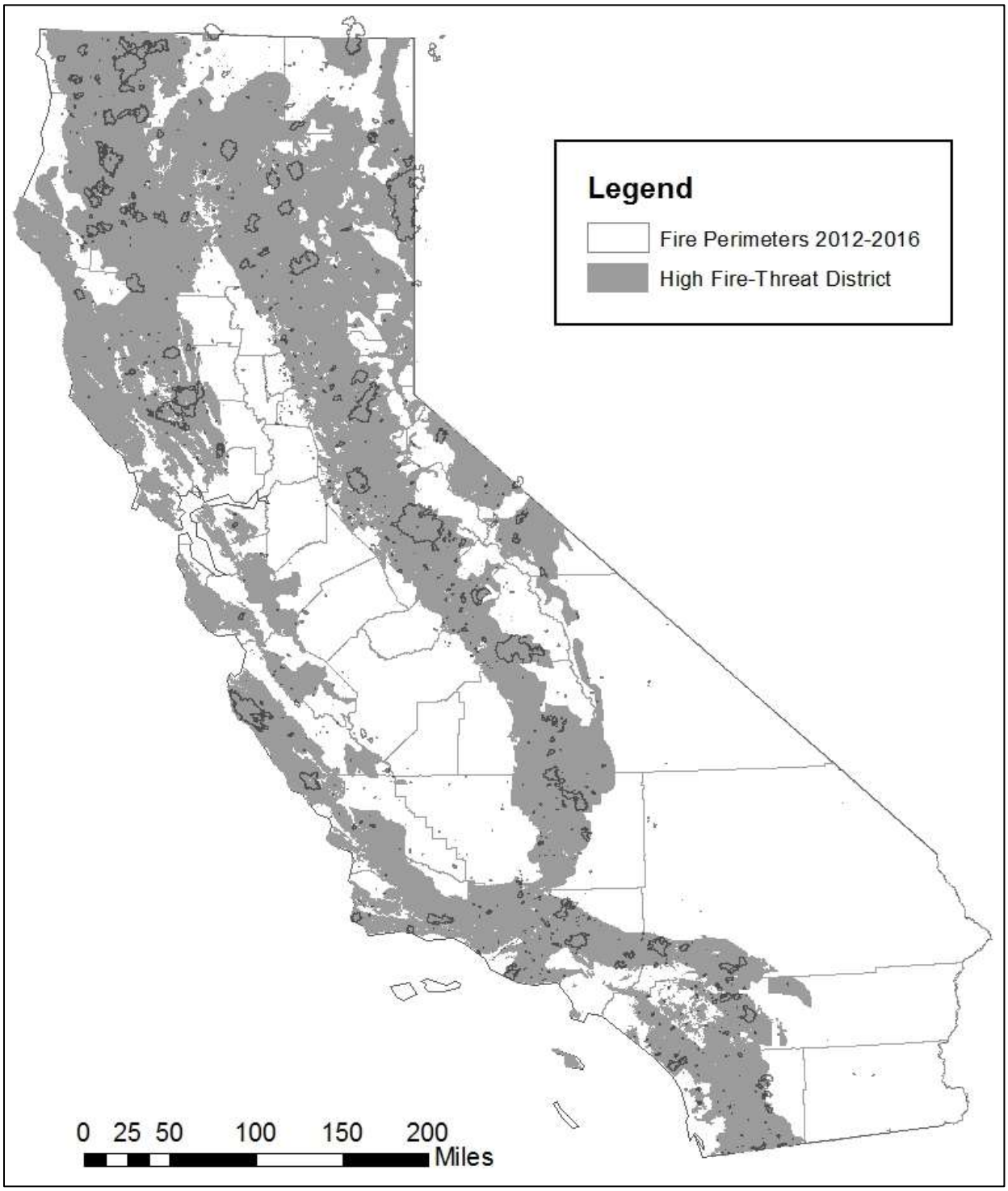
[41] The CPUC Fire-Threat Map is designed to identify areas throughout the State where there is an elevated or extreme utility-associated wildfire risk, whereas the Interim Fire-Threat Maps are not well suited for this purpose. (D.12-01-032 at Findings of Fact 17–20.)

[42] The CPUC Fire-Threat Map will be one of the two maps that comprise the High Fire-Threat District Map.

the footprint of large wildfires (from all causes) during 2012-2016 overlaid on the draft map of the High Fire-Threat District (i.e., Zone 1, Tier 2, and Tier 3):

Figure 1

Draft High Fire-Threat District Map and 2012-2016 Wildfire Perimeters



The above map does not reflect the many large wildfires that occurred in the footprint for the High Fire-Threat District before 2012 or after 2016, such as the catastrophic wildfires in Southern California in October 2007 and in Northern California in October 2017.

For the preceding reasons, we conclude that it is in the public interest to adopt SED's PR 7/AP-1 and thereby apply the increased vegetation clearance requirements of Case 14 to Zone 1 and Tier 2 fire-threat areas statewide. We recognize that today's Decision significantly increases the geographic area where Case 14 applies. Prior to today's Decision, Case 14 applied to high fire-threat areas in Southern California depicted on the Interim Fire-Threat Maps. Today's Decision amends Case 14 so that it applies to the High Fire-Threat District (i.e., Zone 1, Tier 2, and Tier 3 fire-threat areas) statewide. The following table lists the geographic areas covered by Case 14 before and after today's Decision:

Table 6
Geographic Area Covered by Case 14
(Square Miles)

	Southern Calif.	Northern Calif.	Total Calif.
Before Today's Decision [1]	9,629	0	9,629
After Today's Decision [2]	12,421	57,884	70,305
Difference	2,792	57,884	60,676

Note 1: Interim Fire-Threat Maps.
Note 2: IRT-approved CPUC Fire-Threat Map filed on November 17, 2017.

The above table shows that today's Decision increases the area covered by Case 14 by 60,676 square miles for all of California.[43] Although SED did not provide an estimate of the costs that utilities would incur, we find that the costs will not be unduly burdensome. This is because, in large part, the following preexisting programs and statutes already require electric utilities to maintain increased vegetation clearances in much of the High Fire-Threat District.

Tree Mortality High Hazard Zone (HHZ)

Zone 1 of the High Fire-Threat District consists of the Tier 1 HHZ on the USFS - CAL FIRE joint map of Tree Mortality HHZs. The Tier 1 HHZ is in direct proximity to communities, roads, and utility lines. As such, it represents a direct threat to public safety.[44]

A great deal of tree removal has already occurred, and continues to occur, to reduce the fire risk posed by dead and diseased trees in Zone 1 pursuant to the Governor's October 30, 2015 Emergency Proclamation.[45] Specifically, the Emergency Proclamation ordered state agencies, utilities, and local governments "to remove dead or dying trees in [Tree Mortality HHZs] that threaten powerlines, roads, other evacuation corridors and other existing structures." As part of this work, CAL FIRE identified ten High Priority Counties most in need of addressing tree mortality issues, all of which are located partially or wholly

[43] Most of the Zone 1 fire-threat area overlaps with Tiers 2 and 3 fire-threat areas.

[44] Almost all of Zone 1 overlaps with Tier 3, Tier 2, and/or SRAs. In fact, approximately 21,616 acres (34 square miles), representing less than three percent of the current Zone 1, is located outside of Tier 3, Tier 2, and SRAs.

[45] On September 1, 2017, by Executive Order B-42-17, the Governor continued the orders and provisions in his October 30, 2015 Emergency Proclamation.

within PG&E's service territory.[46] In 2016, PG&E removed approximately 236,000 dead or dying trees. PG&E estimates that it will remove 158,000 trees in 2017.[47]

State Responsibility Areas

The increased vegetation clearances mandated by Case 14 are identical to the vegetation clearances established by Cal. Pub. Res. Code § 4293 for power lines with voltages in the range of 2.4 kV – 500 kV in SRAs. As a result, electric utilities should incur little or no additional costs to implement Case 14 for power lines in areas where SRAs overlap the High Fire-Threat District. The following map shows this overlap:[48]

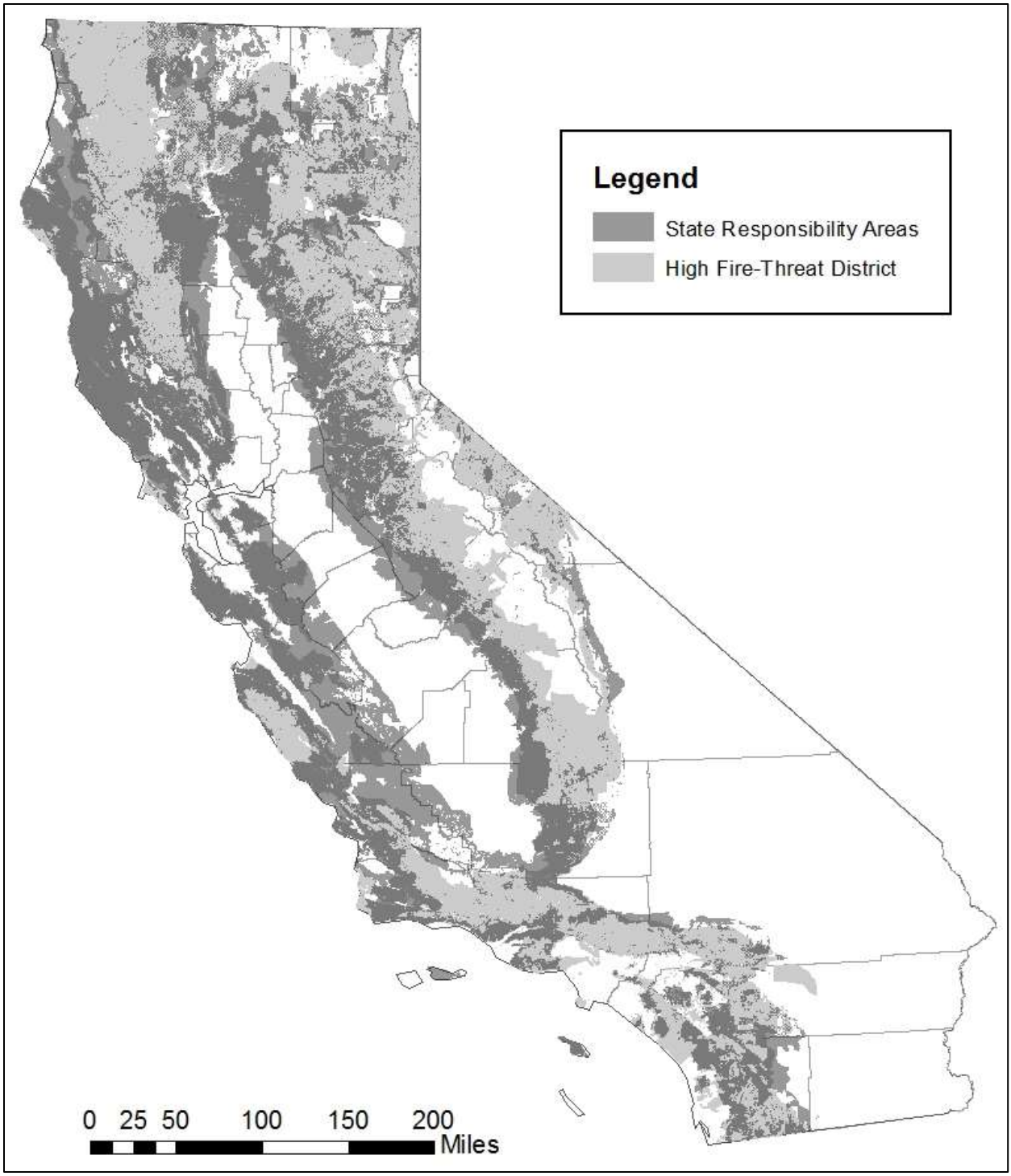
[46] The ten Counties are Amador, Calaveras, El Dorado, Fresno, Kern, Madera, Mariposa, Placer, Tulare and Tuolumne.

[47] Tree Mortality Task Force Meeting Minutes, September 11, 2017, http://www.fire.ca.gov/treetaskforce/downloads/Monthly_MeetingMaterials/TMTF_%20Minutes_9-11-17.pdf. (Accessed October 13, 2017).

[48] The map shows an overlay of SRAs on the draft High Fire-Threat District Map in Appendix D of today's Decision.

Figure 2

Overlay of SRAs on the Draft High Fire-Threat District Map



Although Case 14 incorporates the vegetation clearances established by Pub. Res. Code § 4293 for SRAs, Case 14 is stricter than Pub. Res. Code § 4293 in the following respects:

- Pub. Res. Code § 4293 does not establish a clearance requirement for power lines with voltages in the range of 0.75-2.4 kV. In contrast, Case 14 requires a minimum vegetation clearance of 18 inches for such power lines.
- Pub. Res. Code § 4293 establishes a minimum vegetation clearance of 10 feet for power lines with voltages greater than 500 kV. In contrast, Case 14 requires a minimum clearance of 10 feet plus 0.40 inches for every kV in excess of 500 kV.
- The vegetation clearances established by Pub. Res. Code § 4293 apply only during the fire season declared by CAL FIRE for each county. In contrast, Case 14 applies year-round.
- Pub. Res. Code § 4293 applies to power lines in SRAs that are located on mountainous land, forest-covered land, brush-covered land, or grassland. In contrast, Case 14 applies to power lines everywhere in the high fire-threat areas designated by the Commission.

We disagree with TURN that Case 14 vegetation clearances should not be extended to any part of the High Fire-Threat District at this time due to insufficient information to assess the costs and benefits. If TURN were to have its way, Case 14 would continue to apply only to high fire-threat areas in Southern California on the Interim Fire-Threat Maps, including areas that are not in the High Fire-Threat District. We believe it is imprudent to require electric utilities to spend money and effort to maintain Case 14 vegetation clearances in areas outside the High Fire-Threat District.

Moreover, it would be reckless to exempt the entire High Fire-Threat District from the Case 14 vegetation clearances. Power-line fires can cause enormous destruction as demonstrated by the catastrophic power-line fires in

Southern California in October 2007[49] and the devastating Butte Fire in Amador and Calaveras Counties in September 2015.[50] The catastrophic wildfires in Northern California in October 2017 further demonstrate the enormous destruction and loss of life that wildfires can cause.[51] In our judgement, the Case 14 vegetation clearances are a reasonable measure for preventing catastrophic power-line fires in the High Fire-Threat District, as demonstrated by the fact that such clearances have been in effect for many years in SRAs.[52]

We disagree with PacifiCorp that extending Case 14 vegetation clearances to the High Fire-Threat District statewide is not cost-effective, practical, or necessary. The previous maps show that (1) the region where PacifiCorp's service territory is located is prone to large wildfires in the High Fire-Threat District, and (2) PacifiCorp's service territory includes SRAs where PacifiCorp is already required to maintain Case 14 vegetation clearances for much of the year.

4.2.7. Proposed Regulation 8 re: GO 95, Rule 38

4.2.7.1 Summary of Proposal

Rule 38 of GO 95 specifies minimum radial clearances between wires. Currently, Rule 38 allows a 10 percent reduction of the minimum clearances in certain circumstances.

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[49] The October 2007 power-line wildfires in Southern California burned more than 334 square miles.

[50] The Butte Fire of September 2015, located within Tier 2, burned more than 70,000 acres (106 square miles), destroyed an estimated 921 structures, and resulted in two fatalities.

[51] The Northern California wildfires are cited for the sole purposes of demonstrating the enormous destructive potential of wildfires. The cause of the Northern California wildfires is currently under investigation.

[52] We do not believe it is in the public interest for the wildfire prevention afforded by the Case 14 vegetation clearances to apply to SRAs, but not to the High Fire-Threat District where there is an elevated or extreme risk for utility-associated wildfires.

PR 8, proposed by SDG&E, would modify Rule 38 to state that mid-span clearances between wires may be less than the specified minimum by no more than five percent in Tier 3 of the High Fire-Threat District. To facilitate implementation of this requirement, PR 8 would further specify that electric supply and/or communication companies "shall cooperate and provide relevant information for sag calculations for their facilities, upon request." The overall effect of PR 8 would be to impose a more stringent clearance requirement between wires at mid-span in Tier 3 fire-threat areas.

The text of SDG&E's proposed revisions to Rule 38 is contained in Appendix A of today's Decision. SDG&E recommends that PR 8 take effect 12 months after the Commission's adoption of the High Fire-Threat District Map. SDG&E did not provide a cost estimate for PR 8, but anticipates that any cost impacts will be negligible.

4.2.7.2 Positions of the Parties

SDG&E submits that PR 8 is in the public interest because it will draw attention to the need for utilities to apply rigorous analysis to properly assess the adequacy of clearances at mid-span where the wires are free to move relative to one another and thus the risk of wire-to-wire contact is the greatest.

Most parties support PR 7, including a majority of the CIP parties, the Joint POUs, IBEW 1245, PacifiCorp, and PG&E. The position of most supporters is encapsulated by PG&E's statement that PR 8 will increase awareness of maintaining wire-to-wire clearances at mid-span in Tier 3 fire-threat areas.

Although the Joint POUs voted to support PR 8, they question whether an additional five percent clearance between conductors at mid-span would enhance fire safety. They state that for an actual fire-causing event, the sag has to exceed the current allowable 10 percent sag by an additional 70 to 90 percent.

Thus, reducing the allowable sag to five percent will probably not make an appreciable difference in fire safety. Moreover, for situations in which the minimum wire-to-wire clearance is 72 inches, the Joint POUs assert that the difference between the 10 percent and the 5 percent allowable sag - approximately 3.6 inches - is outside of the accuracy of visual observance and would be challenging to measure with the tools available to field personnel.

The following parties express a neutral position with respect to PR 8: Several CIP parties, Laguna Beach, LACFD, MGRA, SED, and TURN.

PR 8 is opposed by Bear Valley, Frontier, Liberty Utilities, and SCE. Bear Valley is concerned that PR 8 will be difficult to implement. Liberty Utilities withholds support until it has received and reviewed the final Tier 3 map boundary. SCE believes that existing requirements are adequate.

4.2.7.3 Discussion

The issue before us is whether to adopt PR 8. Our standard for deciding this issue is whether PR 8 will enhance fire safety in the High Fire-Threat District at a reasonable cost.

PR 8 satisfies the first criterion of enhancing fire safety in the High Fire-Threat District. Rule 38 prescribes minimum clearances between wires, which may be reduced by 10 percent due to sag and certain other specified reasons. PR 8 would limit the allowable reduction to five percent in Tier 3 fire-threat areas. The effect of PR 8 is to increase the required wire-to-wire clearances at mid-span, thereby reducing the chance of wires touching and igniting a wildfire in Tier 3 fire-threat areas.

With respect to cost-effectiveness, the fact that PR 8 applies only to new and reconstructed facilities in Tier 3 fire-threat areas,[53] and not to existing facilities, provides a reasonable basis to expect that the ongoing costs to implement PR 8 will be limited to the proper design of new and reconstructed facilities in Tier 3 fire-threat areas.[54] PR 8 will also require some initial implementation and training efforts, but such efforts are a one-time cost in contrast to the fire-safety benefits (i.e., reduced likelihood of wires touching) that will accrue over the service lives of the wires.

For the preceding reasons, we conclude that it is reasonable to adopt PR 8. The text of the amended Rule 38 is contained in Appendix B of today's Decision.

4.2.8. Proposed Regulation 9 re: GO 95, Rule 40

4.2.8.1 Summary of Proposal

Rule 40 of GO 95 addresses the mechanical strength requirements for each class of line.[55] In PR 9, SDG&E proposes to amend Rule 40 to require all entities seeking to attach to a line in the High Fire-Threat District to comply with the line owner's condition-based mechanical strength requirements that are more stringent than those provided in GO 95.

The text of SDG&E's proposed amendment to Rule 40 is contained in Appendix A of today's Decision. SDG&E recommends that its proposed amendments take effect 12 months after the Commission's adoption of the High

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[53] Workshop Report at B-86.

[54] For most utilities, Tier 3 fire-threat areas comprise only a small part of their service territories.

[55] Rule 22.1 defines the term "lines" as "conductors together with their supporting poles or structures and appurtenances which are located outside of buildings."

Fire-Threat District Map. SDG&E does not provide a cost estimate for PR 9, but expects PR 9 will have negligible cost impacts on utilities.

4.2.8.2 Positions of the Parties

SDG&E submits that PR 9 is in the public interest because consistent application of mechanical strength requirements is critical to maintaining structural reliability and, ultimately, fire safety. SDG&E also envisions that PR 9 will steadily improve mitigation of wildfire-ignition risks as new information is applied from ongoing data collection and analysis efforts.

IBEW 1245 and PG&E support PR 9. IBEW 1245 states that the electric utility should be able to dictate more rigorous mechanical strength requirements to mitigate the risk of structural failures in the High Fire-Threat District. PG&E agrees that pole attachers should comply with more stringent requirements established by a pole owner based on known local conditions.

The following parties express a neutral position with respect to PR 9: Bear Valley, Laguna Beach, LACFD, Liberty Utilities, MGRA, SED, and TURN.

The CIP Coalition and SCE oppose PR 9, noting that the existing pole attachment process enables pole owners to (1) adopt more stringent requirements based on known local conditions, and (2) enforce those requirements on pole attachments. The CIP Coalition is also concerned that PR 9 would give pole owners unfettered discretion to adopt additional mechanical strength rules beyond those that would mitigate fire risk.

4.2.8.3 Discussion

The issue before us is whether to adopt PR 9. Our standard for deciding this issue is whether PR 9 will enhance fire safety in the High Fire-Threat District at a reasonable cost.

We agree with the goal of PR 9, namely, that pole owners should be able to impose mechanical strength requirements for pole attachments that are more stringent than those provided in GO 95 if the more stringent requirements are necessary to protect public safety. However, we also agree with the CIP Coalition and SCE that the existing pole-attachment process enables pole owners to impose more stringent requirements on pole attachers based on known local conditions.[56] The record of this proceeding shows that pole owners have adopted more stringent requirements based on local conditions, which they enforce through the pole-attachment process.[57]

For the preceding reasons, we decline to adopt PR 9 because it does not enhance fire safety over the status quo. Although we do not adopt PR 9, today's Decision does not relieve pole owners and pole attachers of their duty under Pub. Util. Code § 451 and Rule 31.1 to use stricter standards than required by GO 95 for pole attachments when doing so is necessary to protect public safety.

4.2.9. Proposed Regulation 10 re: GO 95, Rule 43.2-A

4.2.9.1 Summary of Proposal

Rule 43.2-A of GO 95 specifies wind-load standards for overhead utility facilities in the Light Loading District. The Light Loading District is defined as areas with an elevation of 3,000 feet or less. Rule 43.2-A directs utilities to use a wind load of 8 pounds per square feet ("psf") to determine the required strength of structures with cylindrical surfaces (e.g., utility poles) and 13 psf for flat surfaces. PR 10, proposed by SDG&E, would amend Rule 43.2-A to increase the

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[56] Workshop Report at B-91 and B-92; and SCE Comments (July 31, 2017) at 7.

[57] Workshop Report at B-92.

wind-load standard by 10 percent for structures in Tier 2 and Tier 3 fire-threat areas of the Light Loading District.

The text of SDG&E's proposal is contained in Appendix A of today's Decision. SDG&E recommends that its proposed amendments to Rule 43.2-A take effect 12 months after the Commission's adoption of the High Fire-Threat District Map. SDG&E does not provide a cost estimate for PR 10, but anticipates that its own costs would be "low to moderate" because SDG&E has already strengthened many of its poles.

4.2.9.2 Positions of the Parties

SDG&E submits that PR 10 is in the public interest because it would harden lines and reduce the risk of pole failures in areas with elevated fire risks.

IBEW 1245 supports PR 10, stating that the 10 percent increase in the wind-load standard in Tiers 2 and 3 will help prevent utility-associated wildfires.

Bear Valley, Laguna Beach, and Liberty Utilities take a neutral position with respect to PR 10.

Most parties oppose PR 10, including a majority of the CIP parties, MGRA, all electric utility parties other than SDG&E, SED, and TURN. Many of the opponents take issue with the proposed uniform wind-load standard for both Tier 2 and Tier 3, suggesting there should be some differentiation in the wind-load standard that applies to Tier 2 versus Tier 3. Another common theme among the opponents is that SDG&E has not demonstrated that its proposed wind-load standard is either necessary throughout Tier 2 and Tier 3 fire-threat areas of the Light Loading District or sufficient throughout these areas. For example, PG&E states there is no technical justification for applying the same wind-load standard throughout Tiers 2 and 3 of the Light Loading District, as wind conditions vary considerably across the State.

PacifiCorp asserts that SDG&E's proposed 10 percent increase in the wind-load standard is not supported by evidence of pole failures caused by wind loading. SCE notes that GO 95 already allows utilities to design and build overhead lines with safety factors that exceed minimum requirements. The CIP Coalition is concerned that PR 10 could cost billions of dollars to implement.

SED's opposition to PR 10 is based on the interdependence among several GO 95 rules involving strength requirements. SED contends that PR 10 and SDG&E's PR 13 (re: Rule 48 of GO 95) together would constitute a significant decrease in public safety.

TURN opposes PR 10 on the basis of insufficient information in the record regarding the costs and benefits of the proposal. TURN also challenges SDG&E's assertion that the costs would be minimal.

4.2.9.3 Discussion

The issue before us is whether to adopt PR 10. Our standard for deciding this issue is whether PR 10 will enhance fire safety in the High Fire-Threat District at a reasonable cost.

In proposing PR 10, SDG&E states "[t]his rule revision is contingent on the adoption of SDG&E's proposed revision to Rule 48" in PR 13, which we discuss later in today's Decision. Here, we address PR 10 on its own merits.

We decline to adopt PR 10 because the apparent intent of the proposal is to establish a statewide wind-load standard of 8 psf for utility poles in the Light Loading District and 8.8 psf (i.e., 8 psf plus 10 percent) for utility poles in Tier 2 and Tier 3 fire-threat areas of the Light Loading District. A wind-load standard of 8 psf translates to a wind speed of 56 miles per hour ("mph") and 8.8 psf

translates to 59 mph.[58] In our judgement, these baseline wind-load standards are not sufficient to adequately protect public safety and system reliability throughout the Light Loading District.

We agree in principle with SDG&E that fire safety could be enhanced with stricter wind-load standards for overhead utility facilities in Tier 2 and Tier 3 fire-threat areas. However, we do not have at this time a map that identifies with reasonable confidence the frequency and severity of fire-weather winds at every location. Consequently, it is unknown whether stricter wind-load standards are needed everywhere in Tier 2 and Tier 3 or the parameters of the stricter standard.[59]

Despite this uncertainty, we could nonetheless adopt a stricter wind-load standard throughout Tiers 2 and 3. We decline to adopt this approach for the following reasons. First, Tier 2 and Tier 3 comprise 44 percent of the land area in California. A blanket increase in the wind-load standard everywhere in Tier 2 and Tier 3 would be very costly, potentially reaching several billion dollars.[60] Given the significant costs, it is incumbent upon the Commission to carefully apply a stricter wind-load standard only where expected fire-wind conditions

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[58] Workshop Report at B-98, MGRA comments in opposition.

[59] SDG&E provided no information regarding the severity of fire winds in Tier 2 and Tier 3 areas. It is conceivable that SDG&E's proposed wind-load standard of 8.8 psf is not sufficient in many high fire-threat areas. If this is the case, adopting SDG&E's proposed regulation could result in significant additional costs without a commensurate improvement in fire safety.

[60] CIP Coalition Comments (August 1, 2017) at 26.

justify the increased costs. It makes no sense to require an increased wind-load standard, and incur the attendant costs, where the standard is not needed.[61]

Second, it is not clear that SDG&E's proposed amendment to GO 95 is needed. Rule 31.1 of GO 95 already requires utilities to design and maintain their facilities based on known local conditions. By now, fire weather (e.g., Santa Ana winds in Southern California) is a well-known local condition. Going forward, utilities must design, build, and maintain their overhead facilities to withstand foreseeable fire-wind conditions in their service territories. In this regard, SDG&E is a model for other utilities. Since the catastrophic power-line fires of October 2007, SDG&E has deployed a network of weather stations, developed a high resolution wind map, and adopted more stringent wind-load standards where warranted in its service territory.[62]

Although today's Decision does not adopt PR 10, this does not relieve utilities of their duty under Pub. Util. Code § 451 and Rule 31.1 to design, build, and maintain facilities based on known local wind conditions.

Today's Decision does not end our consideration of wind-load standards for high fire-threat areas. As discussed in Section 4.2.10.3 of today's Decision, we will instruct the Director of SED to confer with CAL FIRE regarding the merits and feasibility of developing a statewide fire-wind map. The fire-wind map, if it is developed, would provide the foundation for stricter, targeted, and cost-effective wind-load standards in the High Fire-Threat District.

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[61] SDG&E states that that the "rate of pole failure caused solely by wind loading is already very low." (SDG&E Comments (July 31, 2017) at 5.)

[62] Workshop Report at B-98, B-107, and B-108; and SDG&E Comments (July 31, 2017) at 12.

4.2.10. Proposed Regulation 11 re: GO 95, New Rule 43.3

4.2.10.1 Summary of Proposal

Rule 43 of GO 95 specifies certain minimum wind, ice, and temperature loading conditions that utilities must use to determine the required strength of overhead utility facilities in the Heavy Loading District (i.e., areas where elevation exceeds 3,000 feet above sea level) and the Light Loading District (i.e., areas where elevation above sea level is 3,000 feet or less).

PR 11, proposed by MGRA, would add a new Rule 43.3 that specifies the wind, ice, and temperature loading conditions in a proposed Fire-Threat Loading District. The proposed Rule 43.3 would require the development and adoption of a statewide Fire Weather Wind Loading Map. With respect to cylindrical utility poles, MGRA's proposed Rule 43.3-A would establish the following "wind load condition" for the Fire-Threat Loading District:

> Horizontal wind pressures for cylindrical surfaces [in] fire-threat zones shall be determined from the statewide Fire Weather Wind Loading Map as applied in Tier 2 and Tier 3. Wind loading values specified in Rule 43.2-A [of 8 psf] shall be multiplied by [the] wind load factor specified in the statewide Fire Weather Wind Loading Map. (Workshop Report at B-103.)

The text of MGRA's proposed new Rule 43.3 is contained in Appendix A of today's Decision. MGRA recommends that PR 11 take effect six months after the Commission's adoption of a new Fire Weather Wind Loading Map. MGRA estimates that it would cost $1.7 billion for SDG&E to implement PR 11. MGRA did not provide a cost estimate for other utilities.

4.2.10.2 Positions of the Parties

MGRA submits that PR 11 would enhance safety by (1) identifying areas subject to elevated and severe fire winds, and (2) establishing a fire-wind-loading

standard. MGRA notes that the Commission previously held that the creation of a new fire-wind-loading standard should be one of the outcomes for this proceeding. MGRA recognizes, however, that a fire-wind map needs to be developed in order to adopt new fire-wind-loading standards. MGRA states that the Commission will need to sponsor the development of a fire-wind-loading map, which may require a dedicated subsequent proceeding.

MGRA believes that CAL FIRE has sufficient information and expertise to develop a statewide fire-wind map with adequate resolution for wind-load standards. MGRA notes that during the workshops, a Wildland Fire Scientist employed by CAL FIRE stated that preliminary data to develop a fire-wind map is available, but would require further work on bias correction, wind and gust modeling, application of estimators and confidence of those estimates (i.e., statistical modeling), and attendant quality assurance and quality control processes. With respect to how the development of a fire-wind map might be accomplished, the CAL FIRE scientist stated that CAL FIRE prefers "an independent science team approach whereby the team develops wind data for scoping wind related rules. This team would be selected based on the… nature of the work and include coverage of climate science and modeling, meteorologists, mechanical/utility engineers, fire scientists and statisticians, to make sure the product meets the… needs of scoping wind rules."[63]

LACFD supports PR 11. AT&T, Frontier, Consolidated, and the Small ILECs express conditional support. They recommend deferring proposed

[63] MGRA quoting the Workshop Report, Appendix E.

fire-wind-load standards to a venue where the parties and the Commission may consider these standards alongside the proposed statewide fire-wind map.

Laguna Beach and IBEW 1245 take a neutral position with respect to PR 11. SED, though taking a neutral position, expresses general agreement with CAL FIRE's statements summarized above.

Most parties oppose PR 11, including all of the electric utility parties, most of the CIP parties, and TURN. The position of most opponents is encapsulated by Liberty Utilities' statement that there is no fire-wind-load map at this time so it is not possible to assess the merits and implications of PR 11.[64] SCE and SDG&E assert that any new fire-wind-loading standards must include a comprehensive reform of all existing GO 95 wind-load standards.

PacifiCorp asserts there is no need to develop a new fire-wind map, pointing instead to the structural loading requirements and associated wind maps developed by the American Society of Civil Engineers ("ASCE").

TURN is concerned that MGRA's proposal could be staggeringly expensive, noting that MGRA itself provided a cost estimate of $1.7 billion for just SDG&E's service territory.

In response to PacifiCorp, MGRA asserts that the ASCE wind maps do not adequately meet the need for cost-effective fire-wind-loading regulations because the ASCE wind maps do not identify areas with strong fire winds; do not differentiate between fire-wind conditions and wet storms; and except for one band east of Los Angeles and one band along the Sierra Nevada crest, the ASCE wind maps apply one wind-load standard to the entire state. In response

[64] Workshop Report at B-116; and Liberty Utilities opening comments (July 31, 2017) at 6-7.

to TURN's concern about costs, MGRA states that its proposal is designed to minimize the cost of fire-safety enhancements.

4.2.10.3 Discussion

We agree in principle with MGRA that fire safety would be enhanced by the adoption of a statewide fire-wind map to (1) identify areas subject to elevated and severe fire winds, and (2) establish fire-wind-loading standards and/or other fire-safety regulations tied to fire winds. However, there is no fire-wind map at this time,[65] and the Commission lacks the expertise to develop a fire-wind map. The record of this proceeding indicates that CAL FIRE has sufficient expertise to develop (or oversee the development) of a fire-wind map.[66]

We will instruct the Director of SED or the Director's designee (together, "Director") to confer with CAL FIRE regarding the merits and feasibility of (1) CAL FIRE developing (or overseeing the development of) a statewide fire-wind map, and (2) the merits and feasibility of establishing fire-wind-loading standards and possibly other fire-safety regulations that are tied to the fire-wind map. If the Director and CAL FIRE jointly determine that the development of a statewide fire-wind map and associated fire-safety regulations has merit and is feasible, the Director shall also confer with CAL FIRE regarding the process and funding mechanism for the development of the fire-wind map.

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[65] The CPUC Fire-Threat Map that is in an advance stage of development uses wind data (in addition to other data and factors) to identify areas where there is an increased hazard for the ignition and rapid spread of power-line fires. However, the CPUC Fire-Threat Map does not incorporate wind data of sufficient robustness and granularity to establish with reasonable confidence the frequency and severity of fire-wind conditions that can be expected at every location in the High Fire-Threat District. (*Mapping Environmental Influences on Utility Fire Threat, Final Report, 2/16/2016*, filed on February 16, 2016, at Sections 9-11.)

[66] Workshop Report, Appendix E.

The Director shall confer with CAL FIRE via the Interagency Fire Safety Working Group that is established pursuant to the CPUC-CAL FIRE MOU contained in Appendix C of today's Decision. We discuss this matter further in Section 7 of today's Decision. Today's Decision does not decide whether it is reasonable and cost-effective to develop a fire-wind map or adopt associated fire-safety regulations. We will address these matters, as appropriate, after the Director confers with CAL FIRE.

Finally, returning to MGRA's PR 11, we adopt the proposal to the extent it is consistent with our previous discussion of PR 11. The proposal is denied in all other respects.

4.2.11. Proposed Regulation 12 re: GO 95, Rule 44.3

4.2.11.1 Summary of Proposal

Rule 44.3 of GO 95 requires newly installed wood poles, with all attachments at the time of installation, to have a safety factor of 4.0 for Grade A wood poles and 3.0 for Grade B wood poles. Rule 44.3 also requires wood poles to be replaced or reinforced before safety factors are reduced to less than 2.67 for Grade A wood poles and 2.0 for Grade B wood poles.

PR 12, proposed by SDG&E, would amend Rule 44.3 for wood poles supporting electric supply lines in Tier 3 of the High Fire-Threat District. Grade A and Grade B wood poles support electric supply lines. Under SDG&E's proposal, the allowed reduction of the safety factor for Grade A and Grade B wood poles in Tier 3 fire-threat areas to less than 4.0 and 3.0, respectively, would be limited to deterioration and in-kind replacement of equipment (excluding conductors, cables, messengers and span wires interconnecting multiple poles).

The text of SDG&E's proposed revisions to Rule 44.3 is contained in Appendix A of today's Decision. SDG&E recommends that its proposed

revisions take effect 12 months after the Commission's adoption of the High Fire-Threat District Map. SDG&E did not provide a cost estimate for PR 12, but anticipates that its own costs will be low to moderate.

For the sake of brevity, today's Decision will focus on the aspects of PR 12 that apply to Grade A wood poles.

4.2.11.2 Positions of the Parties

SDG&E submits that PR 12 will enhance fire safety by limiting the allowable causes for safety factor reductions for wood poles in Tier 3 fire-threat areas, which will reduce the risk of wood poles failing and igniting fires. SDG&E states that certain utilities are finding a significant percentage of their wood poles are overloaded due to new attachments. SDG&E also represents that PR 12 is consistent with the National Electric Safety Code.

PR 12 is supported by IBEW 1245 and all of the electric utility parties except SCE. Liberty Utilities cautions that because the final boundaries of Tier 3 are unknown, it is impossible to determine how costly or feasible the implementation of PR 12 will be in Liberty Utilities' service territory.

Laguna Beach and MGRA take a neutral position with respect to PR 12.

Most CIPs, LACFD, SED, SCE, and TURN oppose PR 12. The CIP Coalition adamantly opposes PR 12, asserting it would require a 50 percent increase in pole strength vs. the present level (i.e., 4.0/2.67 = 1.50). The CIP Coalition contends that SDG&E has not justified such a drastic increase in required pole strength. The CIP Coalition contends that if a safety factor of less than 4.0 is deemed unsafe for adding a communications attachment to an existing Grade A wood pole, there is no legitimate reason why power lines should be allowed on Grade A wood poles that have a safety factor of less than 4.0. The CIP Coalition argues that the real motivation for PR 12 is not safety, but

to prevent attachments by CIPs and/or require CIPs to pay for new poles as a condition for new attachments.

SCE states that SDG&E has not demonstrated a compelling need for PR 12. SCE posits that existing rules regarding allowable reductions to safety factors for wood poles are adequate.

TURN argues that PR 12 should be rejected because there is insufficient information in the record to determine the reasonableness and cost-effectiveness of the proposed regulation.

4.2.11.3 Discussion

The issue before us is whether to adopt PR 12. Our standard for deciding this issue is whether PR 12 will enhance fire safety in the High Fire-Threat District at a reasonable cost.

Currently, Rule 44.3 requires a Grade A wood pole to be replaced or reinforced before the pole's safety factor drops below 2.67. New attachments may be added to an existing Grade A wood pole if the safety factor for the pole, with the new attachment, is 2.67 or higher.

PR 12 would amend Rule 44.3 to prohibit new attachments (other than in-kind replacements of existing attachments) to an existing Grade A wood pole in Tier 3 fire-threat areas if the safety factor for the pole, with the new attachment, is less than 4.0. On the other hand, as long as no new attachments are added to the pole, PR 12 would allow existing attachments on a Grade A wood pole to remain until the pole's safety factor falls below 2.67, at which time the pole would have to be replaced or reinforced.

We agree with the CIP Coalition that it does not make sense that a Grade A wood pole with its existing attachments must have a minimum pole safety factor of 4.0 if a new attachment is added to the pole, but the same pole may have a

minimum pole safety factor of 2.67 as long as no new attachment is added. Logically, if a Grade A wood pole with a safety factor of less than 4.0 is unsafe for adding a new attachment, it follows that the same pole with a safety factor of less than 4.0 is unsafe with its existing attachments. Tellingly, SDG&E does not assert that the latter is unsafe.

We are not persuaded by SDG&E that PR 12 is needed because "certain utilities" are finding that a significant percentage of their poles are overloaded due to new attachments.[67] This is a troubling allegation for which SDG&E provided no evidence. Overloaded poles pose a serious risk to public safety and system reliability, and are strictly prohibited by GO 95 and Pub. Util. Code § 451. In any event, the alleged lack of compliance with existing pole safety factor requirements does not demonstrate that existing requirements are inadequate. Rather, it suggests that compliance and enforcement are inadequate.[68]

We recognize that PR 12 would increase safety to the extent it requires existing wood poles with new attachments to be stronger than they otherwise would be under the current Rule 44.3. However, the cost for the additional safety provided by PR 12 is unknown but potentially significant. Among other things, PR 12 would require Grade A wood poles to be replaced sooner than they otherwise would be under the current Rule 44.3.

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[67] SDG&E Reply Comments (August 11, 2017) at 6.

[68] If a utility pole owner discovers an overloaded pole caused by a new pole attachment, the utility must immediately remedy the overloaded pole. The utility should document the unsafe condition and notify the Commission's Safety and Enforcement Division so that appropriate enforcement actions may be taken.

For the previous reasons, we decline to adopt PR 12 because there is insufficient information in the record to determine either the reasonableness or cost-effectiveness of the proposed regulation.

4.2.12. Proposed Regulation 13 re: GO 95, Rule 48

4.2.12.1 Summary or Proposal

Rule 48 of GO 95 specifies the required strength of overhead utility structures and parts thereof. The current text of Rule 48 is shown below.

> Structural members and their connection shall be designed and constructed so that the structures and parts thereof **will not fail** or be seriously distorted at any load less than their maximum working loads (developed under the current construction arrangements with loadings as specified in Rule 43) ***multiplied by the safety factor specified in Rule 44***. (Emphasis added.)

SDG&E's PR 13 would eliminate the "multiply by" provision in Rule 48 that is shown above with the italicized text.

The text of SDG&E's proposed revisions to Rule 48 is shown in Appendix A of this Decision. SDG&E recommends that its proposed revisions take effect immediately. SDG&E does not expect PR 13 will increase costs for any affected entity.

4.2.12.2 Positions of the Parties

SDG&E states that the purpose of its PR 13 is to correct a major error in Rule 48. SDG&E posits that the intent of Rule 48 with respect to Grade A wood poles is to establish a statewide wind-load standard of 8 psf/56 mph in the Light Loading District. SDG&E asserts that the "will not fail" provision and the "multiply by" in Rule 48 are being misinterpreted by SED as establishing a statewide wind-load standard of 32 psf/112 mph for new Grade A wood poles in the Light Loading District, which may degrade to 21.4 psf/92 mph. SDG&E

submits that PR 13, by eliminating the "multiply by" provision in Rule 48, will clarify that the GO 95 wind-load standard is 8 psf/56 mph for Grade A wood poles in the Light Loading District. SDG&E argues that failure to adopt PR 13 will have a chilling effect on electric utilities' and CIPs' willingness to pursue other fire-safety enhancements related to mechanical strength requirements.

Most parties support PR 13. Laguna Beach and TURN take a neutral position. LACFD, MGRA, and SED oppose PR 13. MGRA and SED argue that PR 13 is outside the scope of this proceeding because the proposal does not enhance fire safety. SED cautions that it is important to understand that PR 13 would decrease substantially the compliance threshold at which the "will not fail" provision in Rule 48 is currently enforced.

4.2.12.3 Discussion

We decline to consider PR 13 because the proposal is outside the scope of this proceeding. Pursuant to OIR 15-05-006, the Scoping Memo, and D.17-01-009, the geographic scope of the proposed fire-safety regulations that may be considered in this proceeding is limited to the High Fire-Threat District.[69] PR 13 seeks to amend Rule 48 to establish a wind-load standard that applies to Grade A wood poles throughout the Light Loading District, which includes large geographic areas that are not within the High Fire-Threat District. As a result, PR 13 is outside the scope of this proceeding.[70]

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[69] OIR 15-05-006 at 6-7; *Assigned Commissioner's Scoping Memo and Ruling* dated July 15, 2016, at 3-4; and D.17-01-009 at 59.

[70] None of the comments on the Proposed Decision dispute our finding that PR 13 is outside the scope of this proceeding. (*See*, e.g., CIP Coalition Comments on Proposed Decision, at 6-8; SCE Comments on Proposed Decision, at 4; and SDG&E Comments on Proposed Decision, at 1 – 2.

In response to comments on the Proposed Decision, we have revised today's Decision to remove text that provides a substantive interpretation of Rule 48. We agree with the CIP Coalition and SDG&E that it is unnecessary to interpret Rule 48 in the context of PR 13 given that PR 13 is outside the scope of this proceeding.[71]

4.2.13. Proposed Regulation 14 re: GO 95, New Rule 53.5

4.2.13.1 Summary of Proposal

PR 14, proposed by PG&E, would add a new Rule 53.5 that requires "precautions" to be taken to guard against leakage currents burning wood support structures for circuits of more than 7,500 volts in Tier 3 of the High Fire-Threat District.

The text of PG&E's proposed new Rule 53.5 is contained in Appendix A of today's Decision. PG&E recommends that its proposed new Rule 53.5 take effect 12 months after the Commission's adoption of the High Fire-Threat District Map. PG&E provides limited information regarding the costs of PR 14, stating "[f]or a replacement pole job costing approximately $15,000, the added cost to install leakage prevention hardware would be less than $100."[72]

4.2.13.2 Positions of the Parties

PG&E submits that PR 14 will enhance fire safety by reducing the risk that leakage currents will ignite wildfires by burning wood crossarms and/or poles.

PR 14 is supported by the Joint POUs, IBEW 1245, PacifiCorp, SCE, and SDG&E. In general, the supporters agree that PR 14 is reasonable.

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[71] CIP Coalition Comments on Proposed Decision, at 7. SDG&E Comments on the Proposed Decision, at 1 – 2. *See* also SCE Comments on the Proposed Decision, at 6.

[72] Workshop Report at B-145.

The following parties take a neutral position: Most CIP parties, Bear Valley, Laguna Beach, Liberty Utilities, and MGRA.

PR 14 is opposed by LACFD, SED, and TURN. SED states that while PR 14 is well intentioned, the text of the proposed Rule 53.5 is vague and unenforceable. The only thing required by PR 14 is that a utility must "take precautions" to guard against leakage currents, but PR 14 does not specify what is intended by "take precautions." Without such specification, SED states that it cannot establish an enforcement standard for issuing citations. SED is also concerned that the proposed Rule 53.5 applies only to circuits of more than 7,500 volts in Tier 3 fire-threat areas, which could be interpreted to mean that precautions need not be taken elsewhere or for lower-voltage circuits. SED further argues that Rule 53.5 is not needed because the existing Rule 31.1 requires utilities to take precautionary measures against leakage currents burning wood poles and crossarms as a matter of good practice, regardless of whether a pole is located in the High Fire-Threat District.

TURN contends there is insufficient information in the record to determine if PR 14 is reasonable and cost-effective.

4.2.13.3 Discussion

We decline to adopt PR 14. Consistent with SED's position, we conclude that electric utilities are already required by Pub. Util. Code § 451 and Rule 31.1 to guard against leakage currents burning wood support structures for circuits of all voltages throughout the High Fire-Threat District.[73] Today's Decision

[73] Rule 31.1 states in relevant part that for "all particulars not specified in [GO 95], a supply or communications company is in compliance with this rule if it designs, constructs and maintains a facility in accordance with accepted good practice for the intended use and

Footnote continued on next page

includes a Conclusion of Law affirming electric utilities' obligation to take such precautions.

4.2.14. Proposed Regulation 15, Proposed Regulation 16, Alternative Proposed Regulation 16/AP-1, and Alternative Proposed Regulation 16/AP-2 re: GO 95, Rule 80.1-A

4.2.14.1 Summary of Proposals

Rule 80.1-A of GO 95 establishes minimum cycles for patrol and detailed inspections in high fire-threat areas for (i) communication lines located on joint use poles with power lines, and (ii) communication lines attached to a pole that is within three spans of a joint use pole with power lines. Rule 80.1-A(3) defines "patrol inspection" as "a simple visual inspection, of applicable communications facilities equipment and structures that is designed to identify obvious structural problems and hazards." Rule 80.1-A(3) defines "detailed inspection" as "a careful visual inspection of communication facilities and structures using inspection tools such as binoculars and measuring devices, as appropriate." Both types of inspections may be carried out in the course of other business.

The following table shows the current minimum cycles for patrol and detailed inspections specified by Rule 80.1-A(1):[74]

known local conditions." We consider the act of taking precautions to guard against leakage currents burning wood support structures in high fire-threat areas to be an "accepted good practice for the intended used and known local conditions."

[74] As used here, the term "minimum" refers to the period of time between inspections. The period of time between inspections cannot exceed the "minimum" frequency or cycle.

Table 8 Rule 80.1-A Inspection Cycles for Communication Lines High Fire-Threat Areas on Interim Maps		
Inspection	**Northern California**	**Southern California**
Patrol	2 Years	1 Year
Detailed	10 Years	5 Years

Rule 80.1-A(1) also requires inspection to be conducted more frequently than shown in the above table, if necessary, based on the following factors listed in Rule 80.1-A(2): Fire threat, proximity to overhead power lines, terrain, accessibility, and location.

There are four proposals to modify Rule 80.1-A. These are PR 15, PR 16, PR 16/AP-1, and PR 16/AP-2. Each proposal is summarized below.

PR 15 (SDG&E)

PR 15, proposed by SDG&E, would make several changes to Rule 80.1-A. First, PR 15 would replace references to high fire-threat areas on the Interim Fire-Threat Maps with references to Tiers 2 and 3 of the High Fire-Threat District. Thus, PR 15 would apply the minimum inspection cycles for communication lines to areas according to their designation as either Tier 2 or Tier 3.

Second, PR 15 would remove reference to Northern California and Southern California, so that minimum inspection cycles would not vary based on whether an area is located in Northern California or Southern California. Instead, PR 15 would apply the current inspection cycle for Northern California to Tier 2 fire-threat areas statewide, and apply the current inspection cycle for Southern California to Tier 3 fire-threat areas statewide.

Finally, PR 15 would reduce the minimum cycle for detailed inspections for Tier 2 from 10 years to 8 years.

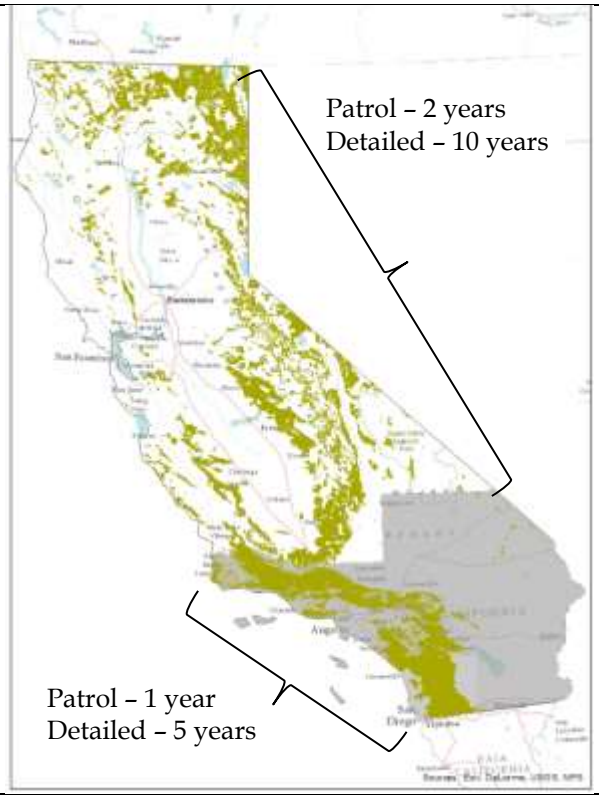
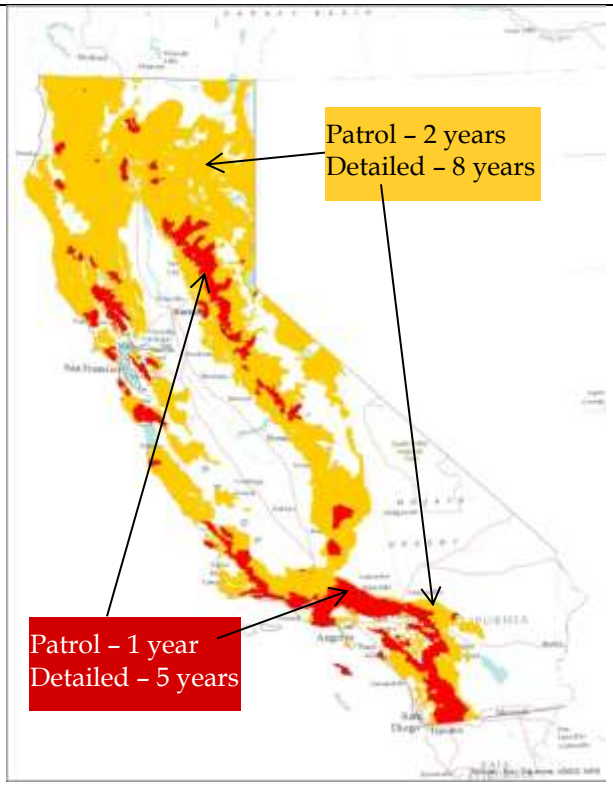
The following table compares the current Rule 80.1-A inspection cycles with the revised inspection cycles proposed by SDG&E in PR 15:

Table 9 **Rule 80.1-A Inspection Cycles for Communications Lines**		
Current: High Fire-Threat Areas on Interim Maps		
Inspection	**Northern California**	**Southern California**
Patrol	2 Years	1 Year
Detailed	10 Years	5 Years
SDG&E's PR 15		
Inspection	**Tier 2 Statewide**	**Tier 3 Statewide**
Patrol	2 Years	1 Year
Detailed	8 Years	5 Years

The following maps compare the areas where the inspection cycles in Rule 80.1-A currently apply versus the areas where PR 15's inspection cycles would apply:

Figure 3

Geographic Areas of Rule 80.1-A Inspections for Communications Lines

Current Rule 80.1-A	SDG&E PR 15
	
Current minimum inspection cycles for high fire-areas on the Interim Fire-Threat Maps (green) in Southern California (in gray) and Northern California.	Proposed minimum inspection cycles for Tier 2 (orange) and Tier 3 (red) on the IRT-approved CPUC Fire-Threat Map, statewide.

The text of SDG&E's proposed revisions to Rule 80.1-A is contained in Appendix A of today's Decision. SDG&E recommends that its proposed revisions take effect 12 months after the Commission's adoption of a High Fire-Threat District Map. SDG&E does not provide an estimate of the costs that would be incurred by CIPs to implement PR 15, but SDG&E anticipates that the cost would be approximately $3.00 per facility.

PR 16 (FSTP)

In PR 16, the FSTP proposes to replace the provisions in Rule 80.1-A that pertain specifically to high fire-threat areas on the Interim Fire-Threat Maps with provisions that refer to Tier 3 fire-threat areas of the High Fire-Threat District. PR 16 does not eliminate the current distinction between Northern California and Southern California. PR 16 would also remove redundant text in Rule 80.1-A.

The following table compares the current Rule 80.1-A inspection cycles with the revised inspection cycles proposed by the FSTP in PR 16:

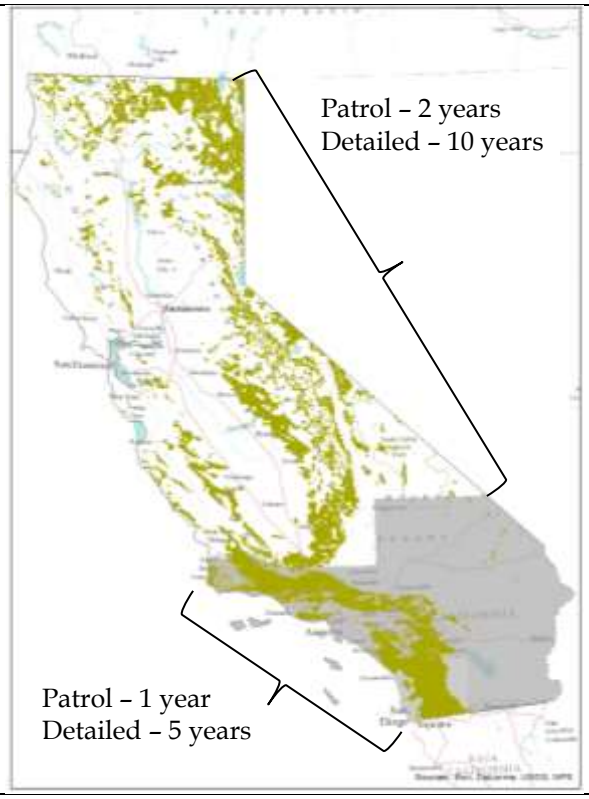
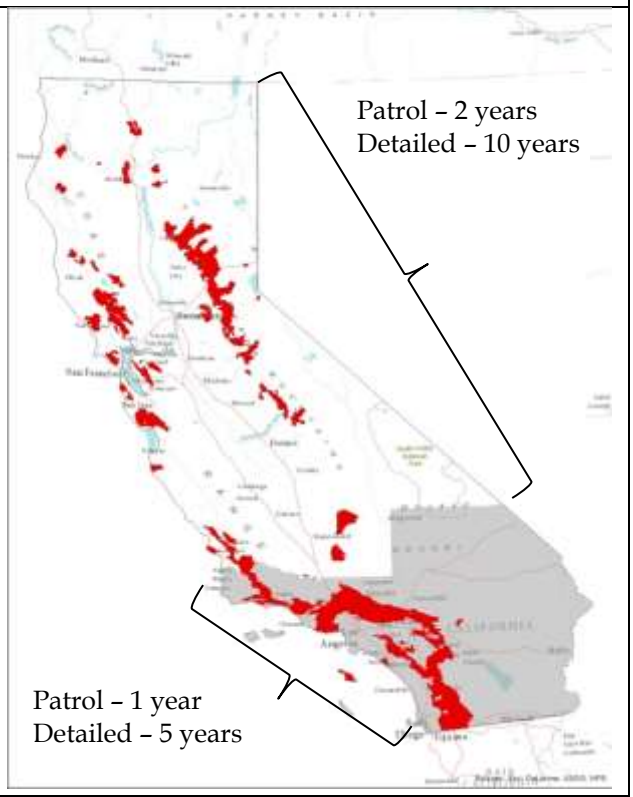
Table 10
Rule 80.1-A Inspection Cycles for Communications Lines

Current: High Fire-Threat Areas on Interim Maps		
Inspection	**Northern California**	**Southern California**
Patrol	2 Years	1 Year
Detailed	10 Years	5 Years
FSTP's PR 16		
Inspection	**Tier 3 Northern California**	**Tier 3 Southern California**
Patrol	2 Years	1 Year
Detailed	10 Years	5 Years

The following maps compare the areas where the inspection cycles in Rule 80.1-A currently apply versus the areas where PR 16's inspection cycles would apply:

Figure 4

Geographic Areas of Rule 80.1-A Inspections for Communications Lines

Rule 80.1-A	FSTP PR 16
	
Current minimum inspection cycles for fire-areas on the Interim Fire-Threat Maps (green) in Southern California (in gray) and Northern California.	Proposed minimum inspection cycles for Tier 3 of the IRT-approved CPUC Fire-Threat Map (red) in Southern California (in gray) and Northern California.

The text of the FSTP's proposed revisions to Rule 80.1-A is in Appendix A of today's Decision. The FSTP recommends that its proposed revisions take effect 12 months after the Commission's adoption of a High Fire-Threat District Map. The FSTP did not provide a cost estimate for PR 16.

PR 16/AP-1 (CIP Coalition)

The CIP Coalition's PR 16/AP-1 would replace references to the Interim Fire-Threat Maps with references to Tier 3 of the High Fire-Threat District. The

effect of PR 16/AP-1 would be to apply the current inspection cycles for Southern California high fire-threat areas to Tier 3 fire-threat areas statewide.

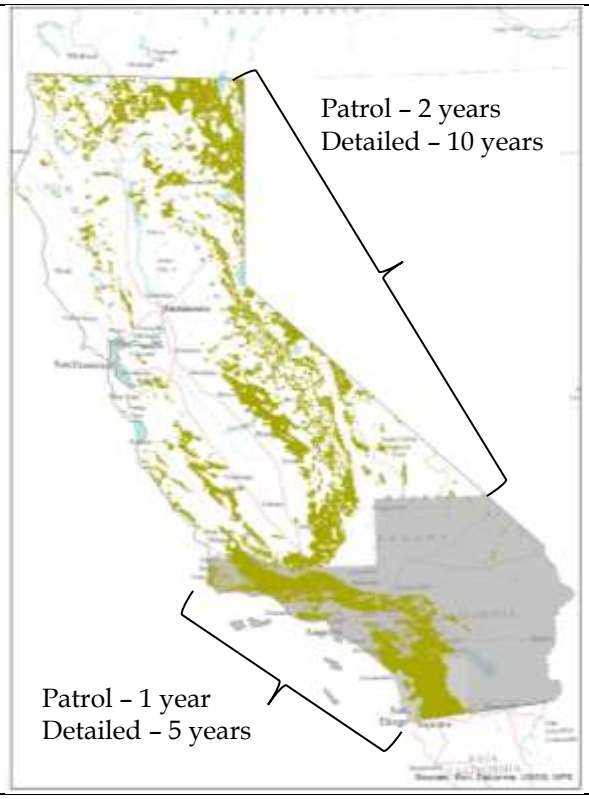
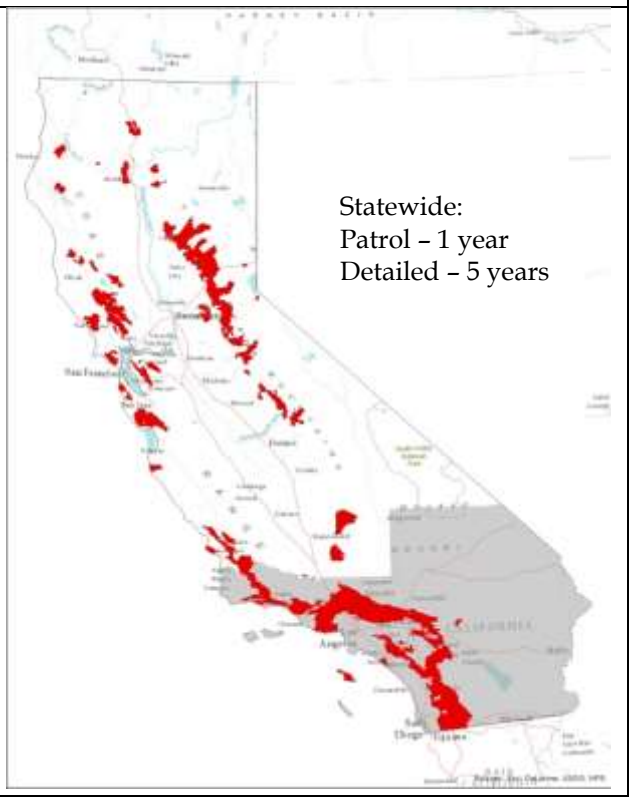
The following table compares the current Rule 80.1-A inspection cycles with the revised inspection cycles proposed by the CIP Coalition in PR 16/AP-1:

Table 11 **Rule 80.1-A Inspection Cycles for Communications Lines**		
Current: High Fire-Threat Areas on Interim Maps		
Inspection	**Northern California**	**Southern California**
Patrol	2 Years	1 Year
Detailed	10 Years	5 Years
CIP Coalition's PR 16/AP-1		
Inspection	**Tier 3 North. Cal.**	**Tier 3 South. Cal**
Patrol	1 Years	1 Year
Detailed	5 Years	5 Years

The following maps compare the areas where the inspection cycles in Rule 80.1-A currently apply versus the areas where PR 16/AP-1's inspection cycles would apply:

Figure 5

Geographic Areas of Rule 80.1-A Inspections for Communications Lines

Rule 80.1-A	CIP Coalition PR 16/AP-1
	
Current minimum inspection cycles for high fire-areas on the Interim Fire-Threat Maps (green) in Southern California (in gray) and Northern California.	Proposed minimum inspection cycles for Tier 3 of the IRT-approved CPUC Fire-Threat Map (red), statewide.

PR 16/AP-1 would also specify that the type, frequency, and thoroughness of statewide inspections should be based on "[l]ocation, including whether the Communications Lines are located in the High Fire-Threat District" (new language underlined).

The text of the CIP Coalition's proposed revisions to Rule 80.1-A is in Appendix A of today's Decision. The CIP Coalition proposes an effective date of 18 months after the Commission adopts the High Fire-Threat District Map. The

CIP Coalition did not provide a cost estimate or other measure of PR 16/AP-1's cost-effectiveness.

PR 16/AP-2 (PG&E)

PG&E's PR 16/AP-2 is similar to SDG&E's PR 15 in that it would establish minimum inspection cycles for Tier 2 and Tier 3 statewide. The following table compares the current Rule 80.1-A inspection cycles with the revised inspection cycles proposed by PG&E in PR 16/AP-2:

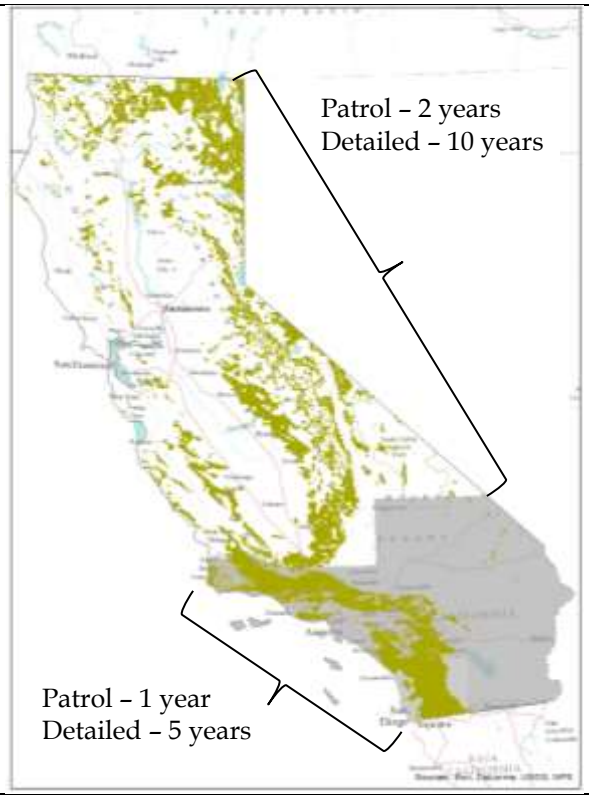
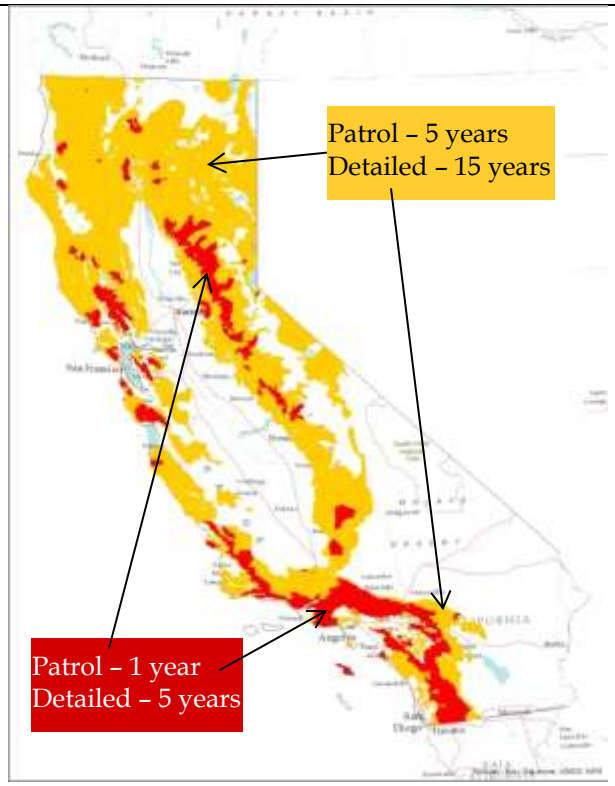
Table 12
Rule 80.1-A Inspection Cycles for Communications Lines

Current: High Fire-Threat Areas on Interim Maps		
Inspection	**Northern California**	**Southern California**
Patrol	2 Years	1 Year
Detailed	10 Years	5 Years
PG&E's PR 16/AP2		
Inspection	**Tier 2 Statewide**	**Tier 3 Statewide**
Patrol	5 Years	1 Year
Detailed	15 Years	5 Years

The following maps compare the areas where the inspection cycles in Rule 80.1-A currently apply versus the areas where PR 16/AP-2's inspection cycles would apply:

Figure 6

Geographic Areas of Rule 80.1-A Inspections for Communications Lines

Rule 80.1-A	PG&E PR 16/AP-2
	
Current minimum inspection cycles for high fire-areas on the Interim Fire-Threat Maps (green) in Southern California (in gray) and Northern California.	Proposed minimum inspection cycles for Tier 2 (orange) and Tier 3 (red) of the IRT-approved CPUC Fire-Threat Map, statewide.

PG&E recommends that its proposed revisions to Rule 80.1-A take effect 18 months after the Commission's adoption of a High Fire-Threat District Map. PG&E did not provide a cost estimate for PR 16/AP-2.

Summary of Current and Proposed Changes to Minimum Inspection Cycles

The table below compares the current patrol and detailed inspection intervals in Rule 80.1-A and the proposed changes in PR 15, PR 16, PR 16/AP-1, and PR 16/AP-2:

Table 13 Summary of Current and Proposed Minimum Inspection Cycles for Communications Lines in High Fire-Threat Areas										
	Current Rule 80.1-A		PR 15		PR 16		PR 16/ AP-1		PR 16/ AP-2	
Inspection	Nor. Cal.	So. Cal.			Nor. Cal.	So. Cal.				
			Tier 2	Tier 3	Tier 3		Tier 3		Tier 2	Tier 3
Patrol	2 years	1 year	2 years	1 year	2 years	1 year	1 year		5 years	1 year
Detailed	10 years	5 years	8 years	5 years	10 years	5 years	5 years		15 years	5 years

All four PRs would make one editorial revision, i.e., delete conflicting definitions of the term "year" in Rule 80.1-A. The Rule first defines "year" as "12 consecutive calendar months starting the first full calendar month after an inspection is performed, plus three full calendar months, not to exceed the end of the calendar year in which the next inspection is due." Subsequently, Rule 80.1-A defines "year" as "12 consecutive calendar months starting the first full calendar month after an inspection is performed, plus or minus two full calendar months, not to exceed the end of the calendar year in which the next inspection is due." All four PRs would delete the second definition.

4.2.14.2 Positions of the Parties

PR 15 (SDG&E)

In support of its proposed PR 15, SDG&E asserts that more stringent inspection cycles will help to identify fire risks sooner and thereby minimize the risk of another catastrophic fire event.

Bear Valley, IBEW 1245, LACFD, MGRA, SED, and SMUD support PR 15. These parties' support is encapsulated in the comments of IBEW 1245, which states that "increased inspection activity in Tier 2 and Tier 3 of the [High

Fire-Threat District] will identify potential problems and help reduce or eliminate fires caused by overhead utility facilities."[75]

Laguna Beach, CMUA, Liberty Utilities, and SCE take a neutral position with respect to PR 15. Liberty Utilities states that while it generally supports PR 15, the proposal maintains existing text in Rule 80.1-A that gives CIPs discretion to adjust the boundaries of the High Fire-Threat District Map, which Liberty Utilities does not support.

Most CIP parties, LADWP, PacifiCorp, PG&E, and TURN oppose PR 15. The CIP Coalition asserts that PR 15 is flawed because it will require the same inspection cycle over the very large, statewide Tier 2 fire-threat area, despite the markedly variable fire risks in Tier 2. The CIP Coalition is also concerned that PR 15 would increase inspection costs by an estimated 272 percent. This large increase in inspection costs is due mostly to PR 15's proposed inspection cycle for Tier 2 fire-threat areas. The CIP Coalition contends there is no evidence that frequent inspections in areas with minimal fire risk will enhance safety. Rather it will lead to a significant and unnecessary diversion of resources.

TURN opposes PR 15 on the basis that there is insufficient information in the record to assess the reasonableness and cost-effectiveness of the proposal.

PR 16 (FSTP)

The FSTP's PR 16 is supported by most CIP parties, IBEW 1245, SCE, and SDG&E. The following parties take a neutral position: Bear Valley, Laguna Beach, Liberty Utilities, and MGRA.

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[75] Workshop Report at B-158.

PR 16 is opposed by the Joint POUs, LACFD, PacifiCorp, PG&E, SED, and TURN. SED opposes PR 16 because it omits inspection cycles for Tier 2 fire-threat areas, and has different inspection cycles in Tier 3 for Northern California vs. Southern California. SED asserts that all of Tier 3 should have the same inspection cycle. TURN contends there is insufficient information to assess the reasonableness and cost-effectiveness of the proposal.

PR 16/AP-1 (CIP Coalition)

In support of its proposed PR 16/AP-1, the CIP Coalition asserts that a uniform inspection cycle is inappropriate for Tier 2 because of great variability of fire risk within Tier 2. The CIP Coalition also contends that it is unnecessary to specify any inspection cycle for Tier 2 because Rule 80.1-A(2) currently requires CIPs to inspect all of their facilities based on local conditions, which includes fire risk and proximity to overhead power lines.

Most CIP parties voted to support PR 16/AP-1. The Joint POUs expressed support in their Joint Comments on the Workshop Report. Bear Valley and Laguna Beach take a neutral position.

The following parties oppose PR 16/AP-1: IBEW 1245, LACFD, most of the Electric IOUs, MGRA, SED, and TURN. IBEW 1245 and SED oppose PR 16/AP-1 because it does not require a minimum inspection cycle for Tier 2 fire-threat areas. TURN contends there is insufficient information to assess the reasonableness and cost-effectiveness of the proposal.

PR 16/AP-2 (PG&E)

PG&E, in support of its proposed PR 16/AP-2, states that documented issues with CIP facilities supports an increase in CIP patrol and detailed inspection cycles generally, but particularly in areas designated Tiers 2 and 3.

The following parties support PR 16/AP-2: CCTA, Charter Communications, Cox Communications, Crown Castle, CTIA, Liberty Utilities, PacifiCorp, PG&E, and Frontier Communications. PacifiCorp states that PR 16/AP-2 is the appropriate middle ground among the four proposals for revising Rule 80.1-A. Liberty Utilities is particularly supportive of PR 16/AP-2's removal of existing text in Rule 80.1-A that provides CIPs with discretion to adjust the boundaries of the fire-threat map. Liberty Utilities also raises a concern with PR 16/AP-2's proposed 15-year cycle for detailed inspections given that the CPUC Fire-Threat Map will be updated every ten years.

The following parties take a neutral position on PR 16/AP-2: AT&T, Bear Valley, Laguna Beach, Comcast, Consolidated Communications, MGRA, SCE, the Small LECs, and T-Mobile. Speaking for many of the CIP parties, the CIP Coalition does not oppose PR 16/AP-2, which it estimates would increase CIP inspection costs by 119 percent. The CIP Coalition recommends, however, that if the Commission is inclined to adopt PR 16/AP-2, the Commission should consider the cost ramifications of the proposed regulation with respect to Tier 2.

PR 16/AP-2 is opposed by IBEW 1245, LACFD, the Joint POUs, SED, SDG&E, and TURN. IBEW 1245 states that a 15-year cycle for detailed inspections in Tier 2 is not prudent. TURN opposes PR 16/AP-2 on the basis that there is insufficient information to assess the reasonableness and cost-effectiveness of the proposal.

4.2.14.3 Discussion

The issue before us is whether to adopt PR 15, PR 16, PR 16/AP-1, or PR 16/AP-2, or any combination thereof. Our objective is to select the option that best enhances fire safety in the High Fire-Threat District at a reasonable cost.

4.2.14.3.1 Tier 3 Inspection Cycles

In Section 4.2.6.3.2 of today's Decision, we adopt PR 7/AP-2 based on our determination that the stricter GO 95 fire-safety regulations that currently apply only to high fire-threat areas in Southern California should apply to Tier 3 of the High Fire-Threat District statewide. For the same reasons stated in Section 4.2.6.3.2, we will apply the stricter inspection cycles of Rule 80.1-A that currently apply only to high fire-threat areas in Southern California to Tier 3 statewide. The effect of today's Decision is to adopt a minimum one-year patrol inspection cycle and a five-year detailed inspection cycle for specified overhead CIP facilities in Tier 3 fire-threat areas statewide.

4.2.14.3.2 Tier 2 Inspection Cycles

The next issue we consider is whether to adopt minimum inspection cycles for Tier 2 of the High Fire-Threat District. A major factor in our deliberation of this issue is that Tier 2 consists of areas that pose an elevated risk for utility-associated wildfires.

We conclude that it is reasonable to amend Rule 80.1-A so that the Rule's minimum frequency for patrol inspections (two years) and detailed inspections (ten years) that currently apply to high fire-threat areas in Northern California shall apply henceforth to Tier 2 fire-threat areas statewide. This will enhance fire safety in two respects. First, an effective way to mitigate utility-related fire risks is to inspect utility facilities regularly and to correct any fire risks that are found. Our adopted amendments to Rule 80.1-A accomplish this objective by establishing a minimum schedule for inspecting specified overhead CIP facilities in Tier 2 fire-threat areas. Any fire risks that are found by such inspections must be prioritized and corrected in accordance with Rule 18.

Second, our adopted amendments to Rule 80.1-A establish a minimum inspection frequency of 2 years (patrol)/10 years (detailed) for Tier 2 fire-threat areas statewide, which covers approximately 57,827 square miles of California. This is more than triple the size of the geographic area where the 2 year/10 year inspection cycle applied prior to today's Decision.[76] The expanded geographic area will increase the number of inspections in the High Fire-Threat District relative to the status quo and thereby enhance fire safety.

We emphasize that the amended CIP inspection requirements adopted by today's Decision are minimum requirements. CIPs have a statutory duty under Pub. Util. Code § 451 to maintain their facilities in a safe condition at all times. CIPs must inspect their facilities more often than required by today's Decision if doing so is necessary to protect public safety.

We decline to adopt the CIP Coalition's PR 16/AP-1 to the extent this proposal does not require minimum inspection cycles for Tier 2 fire-threat areas. We conclude that minimum inspection cycles are required to protect public safety in Tier 2 fire-threat areas, which represent areas where there is an elevated risk for utility-associated wildfires.

We acknowledge the CIP Coalition's concern that the minimum inspection cycles adopted by today's Decision will increase inspection costs relative to the status quo. We must keep in mind, however, that CIP facilities located in close proximity to power lines are a latent fire hazard. CIP facilities include bare metal

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[76] *Response of San Diego Gas & Electric Company (U 902-E) to Administrative Law Judge's August 1 Ruling* filed on August 14, 2017, at Attachment A, pages 4-5; *Response of the Peer Development Panel to Administrative Law Judges' October 6, 2017 Ruling – Additional Shape B Map Information* filed on November 20, 2017, at Appendix A, page A-10.

components such as messenger wires, lashing wires, and pole-top antennas. If not installed and maintained properly, CIP facilities could contact power lines and ignite a wildfire. CIP-only poles can also fail, causing a cascade that topples nearby joint-use poles with power lines attached, resulting in wildfires.[77]

In light of this latent fire hazard, we find that aerial CIP facilities located in close proximity to overhead power lines in Tier 2 fire-threat areas must be inspected regularly to protect public safety. This objective is achieved by the minimum inspection cycles adopted by today's Decision. We further conclude that the costs of such inspections are offset by the substantial public-safety benefits provided by such inspections in the form of reducing the risk of utility-associated wildfires occurring.

We decline to adopt PG&E's PR 16/AP-2 to the extent this proposal recommends a 15-year cycle for detailed inspections in Tier 2. The proposed 15-year cycle exceeds the current 10-year cycle for detailed inspections in high fire-threat areas of Northern California on the Interim Fire-Threat Maps. We do not find it prudent to adopt a longer inspection cycle, as it would increase the probability that fire hazards will persist undetected and ignite a wildfire.

4.2.14.3.3 Other Adopted Amendments to Rule 80.1-A

We adopt four additional amendments to Rule 80.1-A. First, we adopt the proposal in PR 16 and PR 16/AP-2 to remove text in Rule 80.1-A that provides CIPs with discretion to "adjust the boundaries of the map." Such discretion may have been warranted for the Interim Fire-Threat Maps, but it is inappropriate and potentially unsafe for the High Fire-Threat District Map.

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[77] D.12-01-032 at 71.

Second, we adopt the proposal in PR 16 to remove redundant text in Rule 80.1-A regarding required elements of utilities' inspection and maintenance programs. The redundant text appears in both section (1) and section (2) of Rule 80.1-A. We will remove the redundant text from section (1).

Third, we adopt the proposal in PR 16/AP-1 to specify that the type, frequency, and thoroughness of statewide inspection requirements should be based on "[l]ocation, including whether the Communications Lines are located in the High Fire-Threat District" (new language underlined).

Finally, we adopt the proposal in all four PRs to delete the definition of the term "year" in Rule 80.1-A that was modified by D.13-06-011.[78] The unmodified definition of the term "year" is deleted. The modified definition adopted by D.13-06-011 remains.

4.2.15. Proposed Regulation 17 re: GO 95, Rule 80.1-B

4.2.15.1 Summary of Proposal

Rule 80.1-B of GO 95 requires wood poles in high fire-threat areas that support only communication lines to be intrusively inspected in accordance with the schedule established in GO 165 if such poles are:

- Interset between joint-use poles supporting supply lines in the high fire-threat areas of Southern California.
- Within three spans of a joint-use pole supporting supply lines in the high fire-threat areas of Southern California.
- Within one span of a joint-use pole supporting supply lines in the high fire-threat areas of Northern California.

[78] D.13-06-011 at Ordering Paragraph 1.

D.17-01-009 requires existing fire-safety regulations that apply only to high fire-threat areas on the Interim Fire-Threat Maps to transfer to Tier 3 fire-threat areas of the High Fire-Threat District. To implement this transfer, the FSTP in PR 17 proposes to replace the provisions in Rule 80.1-B that pertain to high fire-threat areas on the Interim Fire-Threat Maps with provisions that refer to Tier 3 fire-threat areas of the High Fire-Threat District.

The text of the FSTP's proposed revisions to Rule 80.1-B is set forth in Appendix A of today's Decision. The FSTP recommends that its proposed revisions to Rule 80.1-B take effect 12 months after the Commission's adoption of the High Fire-Threat District Map. The FSTP did not perform a cost-benefit analysis of its proposed revisions to Rule 80.1-B because the revisions are mandated by D.17-01-009.

4.2.15.2 Positions of the Parties

With the exception of TURN, all of the parties who expressed a position on PR 17 either support the proposal or are neutral with respect to the proposal. TURN opposes PR 17 on the basis that there is insufficient information in the record to assess the cost-effectiveness or reasonableness of the proposal.

4.2.15.3 Discussion

In D.17-01-009, the Commission determined that all existing fire-safety regulations that apply only to specified high fire-threat areas on the Interim Fire-Threat Maps shall transfer to corresponding Tier 3 areas of the High Fire-Threat District.[79] We will adopt PR 17 because the proposal implements the Commission's directive in D.17-01-009 with respect to Rule 80.1-B.

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[79] D.17-01-009 at Ordering Paragraph 10.

We also adopt one additional amendment to Rule 80.1-B that is not proposed by PR 17. In particular, PR 17 leaves undisturbed a provision in Rule 80.1-B that authorizes CIPs to use their own judgement to determine if local conditions require them to adjust the boundaries of the High Fire-Threat District Map. We eliminated an identical provision in Rule 80.1-A in Section 4.2.14.3.3 of today's Decision. In order to maintain internal consistency in GO 95, we will eliminate the same provision in Rule 80.1-B. The text of Rule 80.1-B, as amended by today's Decision, is contained in Appendix B of today's Decision.

We decline to consider TURN's position that there is insufficient information to assess the reasonableness or cost-effectiveness of PR 17. As stated previously, PR 17 implements the Commission's determination in D.17-01-009 regarding the transfer of existing fire-safety regulations to Tier 3 of the High Fire-Threat District.[80] We will not revisit our determination here.

4.2.16. Proposed Regulation 18 re: GO 95, Rule 91.1

Rule 91.1 of GO 95 contains provisions regarding the joint use of utility poles. SDG&E's PR 18 proposes to add the following provision to Rule 91.1:

> In Tiers 2 and 3 of the High Fire Threat District, all attachments must have the consent of a pole owner or granting authority prior to any construction. Any attachment without consent can be reported to the Commission.

SDG&E's PR 6 proposes an identical amendment to Rule 31.5, which we decline to adopt in Section 4.2.5.3 of today's Decision. Here, we decline to adopt SDG&E's identical amendment to Rule 91.1 for the reasons stated in Section 4.2.5.3 of today's Decision.

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[80] D.17-01-009 at Ordering Paragraph 10.

4.2.17. Proposed Regulation 19 re: GO 95, Appendix E

4.2.17.1 Summary of Proposal

In Section 4.2.6 of today's Decision, we amend GO 95, Rule 35, Table 1, Case 14 to specify minimum radial clearances between bare line conductors and vegetation throughout the High Fire-Threat District.

Appendix E of GO 95 ("Appendix E") specifies recommended clearances to be obtained between bare line conductors and vegetation at the time vegetation is trimmed ("time-of-trim clearances"). One purpose of Appendix E's recommended time-of-trim clearances is to ensure that there is no breach of the minimum clearances required by Case 14 during the period between trims.

SDG&E's PR 19 proposes to amend Appendix E to increase the recommended time-of-trim clearances applicable to Case 14. The following table lists the current and proposed recommended time-of-trim clearances:

Table 14
GO 95, Appendix E
Recommended Time-of-Trim Clearance for GO 95, Rule 35, Table 1, Case 14
High Fire-Threat District

Voltage of Line	Current	Proposed by PR 19
Radial clearances for any conductor of a line operating at 2,400 or more volts, but less than 72,000 volts	6.5 feet	12 feet
Radial clearances for any conductor of a line operating at 72,000 or more volts, but less than 110,000 volts	10 feet	20 feet
Radial clearances for any conductor of a line operating at 110,000 or more volts, but less than 300,000 volts	20 feet	30 feet
Radial clearances for any conductor of a line operating at 300,000 or more volts	20 feet	30 feet

The text of SDG&E's proposed revisions to Appendix E of GO 95 is set forth in Appendix A of today's Decision. SDG&E recommends that PR 19 take

effect 12 months after the Commission's adoption of a High Fire-Threat District Map. SDG&E did not provide a cost estimate for PR 19, but expects that any cost impacts on CIPs and electric utilities will be negligible.

4.2.17.2 Positions of the Parties

SDG&E submits that PR 19 will enhance safety by increasing the distance between trees and power lines at the time-of-trim. It will also reduce the time and money needed to maintain the vegetation clearances of Case 14, since utilities would not need to trim trees as frequently.

IBEW 1245, PG&E, and SCE support PR 19 because they believe it will enable utilities to obtain a greater safety margin for conductor-vegetation clearances in the High Fire-Threat District.

Most parties are neutral with respect to PR 19, including a majority of the CIP parties, Bear Valley, Laguna Beach, LACFD, Liberty Utilities, MGRA, PacifiCorp, and SED.

The Joint POUs and TURN oppose PR 19, arguing that SDG&E's claim that the costs of PR 19 will be negligible is not supported by facts in the record. The Joint POUs raise an additional concern that a one-size-fits-all approach to increasing vegetation clearances throughout the High Fire-Threat District creates a standard that may be impossible to meet, particularly in situations where the utility lacks sufficient property rights to expand its vegetation clearing.

4.2.17.3 Discussion

The issue before us is whether to adopt PR 19. Our standard for deciding this issue is whether PR 19 will enhance fire safety in the High Fire-Threat District at a reasonable cost.

We agree with SDG&E that adopting PR 19 will help electric utilities to maintain safe clearances between vegetation and power lines in the High Fire-

Threat District. We do not anticipate that adopting PR 19 will increase tree maintenance costs substantially. As SDG&E suggests, PR 19 could reduce the frequency of trimming that is necessary to comply with the Case 14 minimum clearances and thereby reduce vegetation management costs. But to the extent that costs do increase, we conclude that such costs are offset by the substantial public-safety benefits of keeping bare line conductors clear of vegetation in the High Fire-Threat District, which our adoption of PR 19 will help to facilitate.

For the preceding reasons, we conclude that it is in the public interest to adopt PR 19. We acknowledge the Joint POUs' concern that the increased recommended time-of-trim clearances adopted by today's Decision for the High Fire-Threat District may be impossible to meet in some cases. We note that Appendix E does not require electric utilities to achieve compliance when it is impossible to do so. Rather, it states that recommended clearances "**should be established**, at time of trimming, between the vegetation and the energized conductors and associated live parts **where practicable**." (Emphasis added.)

4.2.18. Proposed Regulation 20, Alternative Proposed Regulation 20/AP-1, and Alternative Proposed Regulation 20/AP-2 re: GO 165, Table 1

4.2.18.1 Summary of Proposals

Table 1 of GO 165 ("GO 165") requires electric utilities to conduct a patrol inspection of their overhead electric utility distribution facilities every two years in rural areas,[81] and every year in rural areas of Southern California that are also

[81] GO 165 defines "rural" as "those areas with a population of less than 1,000 persons per square mile as determined by the United States Bureau of the Census."

high fire-threat areas on the Interim Fire-Threat Maps. There are three proposals to revise GO 165. Each proposal is summarized below.

PR 20 (FSTP)

The FSTP's PR 20 would amend GO 165 to replace references to the Interim Fire-Threat Maps with references to Tier 3 of the High Fire-Threat District. The effect of PR 20 is to require an annual patrol inspection of overhead electric utility distribution facilities in rural areas in Southern California that are also Tier 3 fire-threat areas of the High Fire-Threat District.

The text of the FSTP's proposed amendments to GO 165 is contained in Appendix A of today's Decision. The FSTP recommends that PR 20 take effect 12 months after the Commission's adoption of the High Fire-Threat District Map. The FSTP did not provide a cost estimate for implementing PR 20 because the High Fire-Threat District Map is not yet complete.

PR 20/AP-1 (SED)

SED's PR 20/AP-1 would amend GO 165 to require an annual patrol inspection of overhead electric utility distribution facilities located in rural areas of Tier 2 and Tier 3 of the High Fire-Threat District statewide.

The text of SED's proposed amendments to GO 165 is contained in Appendix A of today's Decision. SED recommends that PR 20/AP-1 take effect 12 months after the Commission's adoption of the High Fire-Threat District Map. SED did not provide an estimate of the costs that electric utilities would incur to implement PR 20/AP-1. Nonetheless, SED believes that the costs would be far outweighed by the public-safety benefits of reducing the risk of catastrophic utility-associated wildfires in areas where there is an elevated risk (Tier 2) or extreme risk (Tier 3) for such wildfires.

PR 20/AP-2 (PacifiCorp)

PacifiCorp's PR 20/AP-2 would amend GO 165 to require an annual patrol inspection of overhead electric utility distribution facilities located in rural areas of Tier 3 of the High Fire-Threat District statewide (but not Tier 2 statewide).

The text of PacifiCorp's proposed amendments to GO 165 is contained in Appendix A of today's Decision. PacifiCorp recommends PR 20/AP-2 take effect on January 1 of the next full calendar year after the rule is adopted. PacifiCorp estimates that for its own service territory, PR 20/AP-2 would increase its inspection costs by approximately $16,000 to $20,000 per year. PacifiCorp did not provide a cost estimate for other service territories.

4.2.18.2 Positions of the Parties

PR 20

The FSTP submitted PR 20 to implement the requirement established by D.17-01-009 to transfer existing fire-safety regulations that apply only to high fire-threat areas on the Interim Fire-Threat Maps to corresponding Tier 3 fire-threat areas of the High Fire-Threat District. The FSTP adds that PR 20 is in the public interest because it will continue the requirement to conduct an annual patrol inspection of overhead electric utility distribution facilities in rural high fire-threat areas of Southern California.

PR 20 is supported by Bear Valley, IBEW 1245, Liberty Utilities, PacifiCorp, PG&E, and SCE. Most supporters have little to say about PR 20. Liberty Utilities, the most loquacious of the supporters, states that PR 20 is not cost-prohibitive and protects fire safety in the most fire-prone areas of the State.

The following parties take a neutral position regarding PR 20: Most of the CIP parties, the Joint POUs, Laguna Beach, MGRA, and SDG&E.

PR 20 is opposed by LACFD, SED, and TURN. LACFD did not submit written comments. SED states that PR 20 does not adequately protect public safety because the proposed regulation applies only to Tier 3 fire-threat areas in Southern California. SED recommends much broader geographic coverage in SED's PR 20/AP-1.

TURN argues there is insufficient information to assess whether the costs that utilities will incur to implement PR 20 are reasonable. TURN states that under California law, all utility spending must be justified under Pub. Util. Code § 454(a) and meet the just and reasonable standard of § 451. TURN claims that PR 20 does not meet these statutory requirements because the FSTP did not provide a cost estimate or cost-benefit analysis for PR 20.

PR 20/AP-1

SED submits that PR 20/AP-1 will enhance fire safety because the proposed rule will ensure that overhead electric utility distribution facilities located in rural areas where there is elevated risk (Tier 2) or extreme risk (Tier 3) for utility-related wildfires are inspected annually.

PR 20/AP-1 is supported by LACFD and IBEW 1245. LACFD did not submit written comments. IBEW 1245 opines that SED's justification for increased patrol inspections is compelling.[82]

The following parties take a neutral position regarding PR 20/AP-1: Most of the CIP parties, the Joint POUs, Laguna Beach, MGRA, and SDG&E.

The following parties oppose PR 20/AP-1: Bear Valley, Liberty Utilities, PG&E, PacifiCorp, SCE, and TURN. The Electric IOU opponents note that

[82] The Workshop Report mistakenly placed IBEW 1245's comments in support of SED's PR 20/AP-1 in the section of the Report that contains comments in support of the PR 20.

GO 165 currently requires biennial patrol inspections of overhead electric utility distribution facilities in rural areas statewide. They contend that requiring annual patrol inspections in Tier 2 fire-threat areas statewide, as recommend by SED in PR 20/AP-1, would increase their inspection costs significantly with little benefit to public safety. On the other hand, these same opponents do not object to annual patrol inspections in rural Tier 3 fire-threat areas statewide as recommend by PacifiCorp in PR 20/AP-2.

TURN contends that utility expenditures for fire safety must be supported by the record, justified, and reasonable pursuant to Pub. Util. Code §§ 451 and 454(a). TURN notes that the proponent of PR 20/AP-1, SED, did not provide a cost-benefit analysis for this proposed regulation.

TURN believes that PR 20/AP-1 could significantly increase costs for ratepayers because the proposed rule would vastly expand the geographic area where annual patrol inspections are required. TURN recommends that because of the potentially significant costs, and the lack of a cost-benefit analysis, the Commission should not adopt PR 20/AP-1 at this time.

PR 20/AP-2

PacifiCorp avers that although its PR 20/AP-2 may increase costs for ratepayers, the cost-benefit outcome is favorable. PacifiCorp states that PR 20/AP-2 will enable ratepayer funds to be used efficiently to target fire-safety efforts in the geographic areas of the State most at risk for utility-caused fire damage, *i.e.*, in Tier 3 fire-threat areas. PacifiCorp adds that PR 20/AP-2 balances the public interest in reducing fire hazards in the areas of greatest risk without unduly burdening ratepayers with the cost of deploying additional patrol inspections more widely across the State.

PR 20/AP-2 is supported by Bear Valley, PG&E, and SCE. In general, the supporters agree with PacifiCorp that it is reasonable to focus patrol inspections on Tier 3 fire-threat areas.

The following parties take a neutral position regarding PR 20/AP-2: Most of the CIP parties, the Joint POUs, IBEW 1245, Laguna Beach, Liberty Utilities, MGRA, and SDG&E. Liberty Utilities, the only neutral party to offer comments on PR 20/AP-2, states that although it generally supports the proposed regulation, it is not possible to determine how costly or feasible the regulation will be in Liberty Utilities' service territory until the map for Tier 3 is finalized. Until then, Liberty Utilities withholds its support.

PR 20/AP-2 is opposed by LACFD, SED, and TURN. LACFD did not comment on this matter. SED comments that although expanding the annual patrol inspection requirement to rural Tier 3 areas statewide is a necessary step, it is not sufficient. SED asserts that the annual patrol inspection requirement should apply to rural Tier 2 areas statewide, too, as recommended by SED in PR 20/AP-1. TURN asserts that there is insufficient information to determine if PR 20/AP-2 is cost-effective or reasonable.

4.2.18.3 Discussion

The issue before us is whether to adopt PR 20, PR 20/AP-1, or PR 20/AP-2, or some combination thereof. Our objective is to select the option that best enhances fire safety in the High Fire-Threat District at a reasonable cost.

For the reasons set forth below, we conclude that it is in the public interest to adopt SED's PR 20/AP-1. This has the effect of amending GO 165 to require electric utilities to conduct an annual patrol inspection of their overhead electric utility distribution facilities in rural Tier 2 and Tier 3 fire-threat areas statewide.

Overhead electric utility distributions facilities pose an ever-present hazard for ignitions. It is essential that such facilities be maintained in good condition to mitigate the risk of utility-associated wildfires.[83] Extra vigilance in the form of annual patrol inspections is warranted in rural Tier 2 and Tier 3 fire-threat areas, where there is an elevated or extreme risk for utility-associated wildfires, to ensure that overhead electric utility distribution facilities in such areas are maintained in good condition.

We recognize that today's Decision significantly expands the geographic area that is subject to GO 165's annual patrol inspection requirement, which will undoubtedly increase inspection costs for electric utilities. However, we conclude the costs will not be unduly burdensome for the following reasons. First, the scope of a patrol inspection is limited. GO 165 defines a patrol inspection as:

> **"Patrol inspection"** shall be defined as a simple visual inspection, of applicable utility equipment and structures, that is designed to identify obvious structural problems and hazards. Patrol inspections may be carried out in the course of other company business. (Bold highlight in GO 165.)

Because of the limited scope of patrol inspections, the cost of conducting a patrol inspection is modest. SDG&E estimates the cost is approximately $3.00 per facility, including labor time, salary of the employee, and vehicle/fuel costs.[84]

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[83] *See*, e.g., SDG&E Comments (July 31, 2017) at 2: "Fire ignition risk can be reduced by adequately maintaining overhead facilities in the High Fire-Threat District. Equipment failures and consequent risks of ignition sources) may be avoided by timely inspection, and appropriate maintenance cycles/methods."

[84] Workshop Report at B-156.

Second, California has an estimated 4.2 million utility poles,[85] which suggests that the incremental statewide cost of the patrol inspection cycle adopted by today's Decision will be in the range of $12.6 million annually ($3.00 per pole x 4.2 million). However, GO 165 already requires an annual patrol inspection of overhead electric utility distribution facilities located in urban areas[86] where the majority of overhead electric utility distribution infrastructure is concentrated.[87] This suggests that the statewide incremental cost of the patrol inspection requirement adopted by today's Decision (which applies to rural areas in Tier 2 and Tier 3) may be less than $12.6 million annually.

Third, Electric IOUs currently recover in rates the just and reasonable costs they incur to conduct annual patrol inspections of overhead electric utility distribution facilities in urban areas mandated by GO 165. We conclude that the costs of annual patrol inspections in rural Tier 2 and Tier 3 fire-threat areas is equally just and reasonable (following Commission review and approval).

Finally, we find that the cost of the annual patrol inspection requirement adopted by today's Decision is offset by the substantial public-safety benefits[88] that the annual inspections provide by reducing the risk of utility-associated wildfires occurring in Tier 2 (elevated) and Tier 3 (extreme) fire-threat areas, such

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[85] Combined Order Instituting Investigation 17-06-027 and Order Instituting Rulemaking 17-06-028 at 2. ("OII 17-06-027/OIR 17-06-028").

[86] GO 165 defines "urban" as "those areas with a population of more than 1,000 persons per square mile as determined by the United States Bureau of the Census."

[87] Prior to today's Decision, GO 165 required an annual patrol inspection of overhead electric distribution facilities in rural high fire-threat areas of Southern California on the Interim Fire-Threat Maps. Today's Decision should cause little or no increase in the cost of patrol inspections for most or all facilities.

[88] OII 17-06-027/OIR 17-06-028 at 8-12 discusses pole safety.

as the catastrophic power-line fires of October 2007. The Commission and ratepayers are still dealing with the cost of these wildfires today.[89]

The provisions of GO 165 that are amended by today's Decision are set forth in Appendix B of today's Decision.

4.2.19. Proposed Regulation 21 and Alternative Proposed Regulation 21/AP-1 re: GO 166, Standard 1, Part E

4.2.19.1 Summary of Proposals

GO 166, Standard 1, Part E, requires those Electric IOUs identified below to prepare a fire-prevention plan that:

> A. Lists and describes the measures the electric utility intends to implement, both in the short run and in the long run, to mitigate the threat of power-line fires generally and in the specific situation where all three of the following conditions occur simultaneously: (i) The force of 3-second wind gusts exceeds the structural or mechanical design standards for the affected overhead power-line facilities, (ii) these 3-second gusts occur during a period of high fire danger, and (iii) the affected facilities are located in a high fire-threat area. A utility's fire-prevention plan may address other situations than required by this GO 166, but not in lieu of GO 166.
>
> B. Identifies the specific parts of the electric utility's service territory where all three of the fire-weather conditions listed in Item A, above, may occur simultaneously. In making this determination, the utility shall use a minimum probability of 3% over a 50-year period that 3-second wind gusts which exceed

[89] *See*, for example, Application 15-09-010 wherein SDG&E seeks authority to recover from its ratepayers $379 million of uninsured costs stemming from the October 2007 wildfires. The $379 million represents a fraction of the $2.4 billion in total costs and legal fees incurred by SDG&E to resolve third-party damage claims arising from the October 2007 wildfires.

> the design standards for the affected facilities will occur during a Red Flag Warning in a high fire-threat area on the Interim Fire-Threat Maps.

The GO 166 requirement to prepare a fire-prevention plan applies to: (1) Electric IOUs in Imperial, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura counties; and (2) Electric IOUs in all other counties with overhead electric facilities located in areas of high fire risk as determined by such utilities in accordance with D.12-01-032.

There are two proposals to revise GO 166, Standard 1, Part E ("GO 166"). Each proposal is summarized below.

PR 21 (FSTP)

The FSTP's PR 21 proposes two amendments to GO 166. First, PR 21 would replace the provisions in GO 166 that reference the Interim Fire-Threat Maps with references to Tier 3 of the High Fire-Threat District. Second, GO 166 currently requires Electric IOUs in Northern California[90] to prepare a fire-prevention plan if certain conditions are met. PR 21 would instead require Electric IOUs in Northern California to prepare a fire-prevention plan if they have overhead electric facilities in Tier 3 of the High Fire-Threat District.

The text of the FSTP's proposed amendments to GO 166 is contained in Appendix A of today's Decision. The FSTP recommends that its proposed amendments take effect 12 months after the Commission's adoption of the High Fire-Threat District Map. The FSTP did not provide a cost estimate for PR 21 because the High Fire-Threat District Map is not yet complete.

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[90] The term "Northern California" used in today's Decision refers to all counties in California except the following eight counties in Southern California: Imperial, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura counties.

PR 21/AP-1 (SED)

SED's PR 21/AP-1 would amend GO 166 so that the requirement to prepare the GO 166 fire-prevention plan applies to every Electric IOU that has overhead facilities in the High Fire-Threat District (Zone 1, Tier 2, and Tier 3).

The text of SED's proposed amendments to GO 166 is contained in Appendix A of today's Decision. SED recommends that its proposed amendments take effect 12 months after the Commission's adoption of the High Fire-Threat District Map. SED did not provide a cost estimate for PR 21/AP-1, but SED does not believe the costs would be significant because most electric utilities already submit fire-prevention plans pursuant to GO 166.

4.2.19.2 Positions of the Parties

PR 21

The FSTP submits that PR 21 is in the public interest because it continues the requirement to prepare a fire-prevention plan established in R.08-11-005 and extends this requirement to Electric IOUs in Northern California. PR 21 also implements the Commission's determination in D.17-01-009 that existing fire-safety regulations that apply only to specified high fire-threat areas on the Interim Fire-Threat Maps shall transfer to specified Tier 3 fire-threat areas of the High Fire-Threat District.

PR 21 is supported by Bear Valley, Liberty Utilities, PacifiCorp, PG&E, SCE, and SDG&E. In general, the supporters believe that PR 21's proposed amendments to GO 166 will protect public safety at a reasonable cost.

The following parties take a neutral position: Most of the CIP parties, CCTA, Laguna Beach, IBEW 1245, LADWP, MGRA, SMUD, and TURN.

PR 21 is opposed by LACFD and SED. SED's thesis is that the existing regulations that apply only to the high fire-threat areas on the Interim

Fire-Threat Maps should apply automatically to all Tier 2 and Tier 3 fire-threat areas of the High Fire-Threat District.

PR 21/AP-1

SED states that PR 21/AP-1 is in the public interest because it would require all Electric IOUs with overhead electric facilities in the High Fire-Threat District to prepare a fire-prevention plan for said facilities.

PR 21/AP-1 is supported by IBEW 1245, LACFD, and SDG&E. IBEW 1245 opines that SED's argument regarding the public interest makes sense.[91]

The following parties take a neutral position: Most of the CIP parties, Bear Valley, CCTA, Laguna Beach, LADWP, MGRA, and SMUD.

PR 21/AP-1 is opposed by Liberty Utilities, PacifiCorp, PG&E, SCE, and TURN. Liberty Utilities asserts that requiring it to prepare a fire-prevention plan that covers nearly all of its service territory would drastically increase costs. PG&E, SCE, and TURN assert that SED has not demonstrated that PR 21/AP-1 will yield tangible benefits.

4.2.19.3 Discussion

We first discuss the FSTP's PR 21 followed by SED's PR 21/AP-1. Our standard for deciding whether to adopt these proposed regulations is whether they will enhance fire safety in the High Fire-Threat District at a reasonable cost.

4.2.19.3.1 PR 21

In D.17-01-009, the Commission determined that all existing fire-safety regulations that apply only to specified high fire-threat areas on the Interim Fire-Threat Maps shall transfer to specified Tier 3 areas of the High Fire-Threat

[91] The Workshop Report erroneously places IBEW 1245's comments supporting SED's PR 21/AP-1 in a section devoted to comments supporting the FSTP's PR 21.

District. The Commission further held that parties could present recommendations in the current proceeding for refining the areas of the High Fire-Threat District where the transferred regulations should apply.[92]

We will adopt PR 21 because it implements the Commission's directive in D.17-01-009 with respect to GO 166. Our adoption of PR 21 does not preclude our considering SED's PR 21/AP-1, which we address next.

4.2.19.3.2 PR 21/AP-1

We conclude that it is in the public interest to adopt SED's recommendation in PR 21/AP-1 to amend GO 166 to:

1. Require every Electric IOU with overhead electric facilities in the High Fire-Threat District to prepare a fire-prevention plan that lists and describes the measures the electric utility intends to implement, both in the short run and in the long run, to mitigate the threat of power-line fires generally.
2. Require the fire-prevention plan to address the specific situation where all three of the following conditions occur simultaneously: (i) The force of 3-second wind gusts exceeds the structural or mechanical design standards for the affected overhead power-line facilities, (ii) these 3-second gusts occur during a period of high fire danger, and (iii) the affected facilities are located in the High Fire-Threat District.

California has a history of catastrophic utility-associated wildfires, some of which have occurred in Northern California. Statistics maintained by CAL FIRE show that power lines ignited 4 of the 20 most destructive fires in California history (i.e., the Witch, Butte, City of Berkeley, and Laguna fires).[93] Two of these

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[92] D.17-01-009 at 52 and 56, and Ordering Paragraph 10.

[93] The cited statistics do not reflect the Northern California wildfires in October 2017 or the Southern California wildfires in December 2017.

fires occurred in Northern California (i.e., the Butte Fire in Amador and Calaveras Counties, and the City of Berkeley Fire in Alameda County). CAL FIRE's statistics further show that two of the largest fires in California history were ignited by power lines (i.e., the Witch Fire and Campbell Complex Fire). One of these fires occurred in Northern California (i.e., the Campbell Complex Fire in Tehama County). Finally, CAL FIRE's statistics show that 2 of the 20 most deadly wildfires in California history were ignited by power lines (i.e., the Laguna Fire and Clampitt Fire). Both of these fires were in Southern California.[94]

In order to prevent utility-associated wildfires going forward, it is essential to (1) identify areas where there is a heightened risk for such wildfires, and (2) prepare and implement a plan to prevent such wildfires. This objective is achieved by the amendments to GO 166 adopted by today's Decision, which require each Electric IOU to prepare and implement a plan to prevent utility-associated fires in the portion of its service territory that is in the High Fire-Threat District.

We expect that any incremental costs incurred by Electric IOUs to prepare the fire-prevention plan required by GO 166, as amended by today's Decision, will be modest. This is because Electric IOUs are already required to prepare a fire-prevention plan pursuant to GO 166 and/or Pub. Util. Code § 8386(b). More

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[94] The cited CAL FIRE statistics are available at http://cdfdata.fire.ca.gov/incidents/incidents_statsevents. We take official notice of these statistics as a legislative fact (i.e., a general fact that helps the tribunal decide questions of law, policy, and discretion) pursuant to Rule 13.9 of the Commission's Rules of Practice and Procedure and Cal. Evidence Code § 451(f). The Commission may also take official notice of the documents of another agency as the basis for predictive, judgmental facts. (D.00-07-017 at 199, Footnote 91.)

specifically, prior to today's Decision, GO 166 required every Electric IOU in Southern California to file a fire-prevention plan annually, and required Electric IOUs in Northern California to file a fire-prevention plan annually if certain conditions were met. Two Electric IOUs in Northern California - Liberty Utilities and PG&E - have each filed a fire-prevention plan annually pursuant to GO 166 since 2013.[95]

The cost impacts of the adopted amendments are further mitigated by the fact that the geographic scope of the GO 166 fire-prevention plan is reduced by today's Decision. Prior to today's Decision, the GO 166 fire-prevention plan applied to the Electric IOU's entire service territory.[96] In contrast, GO 166 as amended by today's Decision, limits the geographic scope of the GO 166 fire-prevention plan to the High Fire-Threat District. This suggests that the costs incurred by Electric IOUs to comply with GO 166 could decrease because of the amendments adopted by today's Decision.

Complementing GO 166 is Pub. Util. Code § 8386 that became effective on January 1, 2017. Section 8386(b) requires every Electric IOU to "annually prepare and submit [to the Commission] a wildfire mitigation plan… [that includes a] description of preventive strategies and programs to be adopted by the electrical corporation to minimize the risk of its electrical lines and equipment causing catastrophic wildfires." Sections 8386(c) – (d) require the Commission to review

[95] Resolution E-4576, dated May 23, 2013.

[96] Resolution E-4576, dated May 23, 2013, at 2 and 16, Finding 2, and Ordering Paragraph 3.

the submitted wildfire-mitigation plans and to audit compliance with the wildfire-mitigation plans.[97]

We conclude that the modest incremental costs, if any, that are incurred by Electric IOUs to prepare and implement the fire-prevention plan required by GO 166, as amended by today's Decision, are offset by the substantial public-safety benefits associated with the fire-prevention plan. The provisions of GO 166 that are amended by today's Decision are set forth in Appendix B of today's Decision. Our adopted amendments include the retention of the phrase "high fire-threat areas are areas designated as….," which SED appears to have deleted inadvertently in its proposed amendments to GO 166.

4.2.20. Proposed Regulation 22 re: Electric Tariff Rule 11

4.2.20.1 Summary of Proposal

Electric Tariff Rule 11 ("Tariff Rule 11") specifies the conditions pursuant to which an Electric IOU may disconnect service to a customer or property owner who obstructs the Electric IOU's access to overhead power lines for vegetation management activities. PR 22, proposed by PG&E, would make several modifications to Tariff Rule 11. First, Tariff Rule 11 currently allows Electric IOUs to disconnect service only when there is a breach of the minimum vegetation clearances required by Rule 35, Table 1, Cases 13 and 14 (hereafter, "Rule 35"). PR 22 would also allow Electric IOUs to disconnect service when:

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[97] GO 166, as amended by today's Decision, and § 8386(b) are complementary because (i) the GO 166 fire-prevention plan is limited to the High Fire-Threat District while the § 8386(b) wildfire-mitigation plan applies to the entire service territory; and (ii) the GO 166 fire-prevention plan applies to all utility-associated fires, with a focus on the prevention of catastrophic power-line wildfires, while the § 8386(b) wildfire-mitigation plan is focused specifically on catastrophic wildfires.

- There is "an imminent threat of a breach" of the minimum vegetation clearances required by Rule 35.
- There are dead, rotten, or diseased trees or dead, rotten or diseased portions of otherwise healthy trees that overhang or lean toward and may contact or fall onto a span of supply or communications lines.
- During fire season in State Responsibility Areas ("SRAs"), there is a breach or imminent threat of breach of the minimum vegetation clearances required Cal. Pub. Res. Code §§ 4292[98] and 4293.[99]

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[98] Cal. Pub. Res. Code §4292 states in part: "Except as otherwise provided in Section 4296, any person that owns, controls, operates, or maintains any electrical transmission or distribution line upon any mountainous land, or forest-covered land, brush-covered land, or grass-covered land shall, during such times and in such areas as are determined to be necessary by the director or the agency which has primary responsibility for fire protection of such areas, maintain around and adjacent to any pole or tower which supports a switch, fuse, transformer, lightning arrester, line junction, or dead end or corner pole, a firebreak which consists of a clearing of not less than 10 feet in each direction from the outer circumference of such pole or tower. This section does not, however, apply to any line which is used exclusively as telephone, telegraph, telephone or telegraph messenger call, fire or alarm line, or other line… classed as a communication circuit by the Public Utilities Commission."

[99] Cal. Pub. Res. Code § 4293 states in part: "Except as otherwise provided in Sections 4294 to 4296, inclusive, any person that owns, controls, operates, or maintains any electrical transmission or distribution line upon any mountainous land, or in forest-covered land, brush-covered land, or grass-covered land shall, during such times and in such areas as are determined to be necessary by the director or the agency which has primary responsibility for the fire protection of such areas, maintain a clearance of the respective distances which are specified in this section in all directions between all vegetation and all conductors which are carrying electric current:

(a) For any line which is operating at 2,400 or more volts, but less than 72,000 volts, four feet.

(b) For any line which is operating at 72,000 or more volts, but less than 110,000 volts, six feet.

(c) For any line which is operating at 110,000 or more volts, 10 feet...

Dead trees, old decadent or rotten trees, trees weakened by decay or disease and trees or portions thereof that are leaning toward the line which may contact the line from the side or may fall on the line shall be felled, cut, or trimmed so as to remove such hazard."

Second, Tariff Rule 11 currently allows an Electric IOU to disconnect service throughout its service territory (when specified conditions are met). PR 22 would limit the Electric IOU's authority to disconnect service to Tier 2 and Tier 3 of the High Fire-Threat District.

Finally, PR 22 would modify Tariff Rule 11's notice requirements to replace the reference to "the then current procedures and notice requirements applicable to discontinuance of service for non-payment" with a new process that is focused on the circumstances applicable to disconnection for refusal to provide access for vegetation management activities.

The text of PG&E's proposed amendments to Tariff Rule 11 is contained in Appendix A of today's Decision. PG&E did not provide a cost estimate for PR 22, but opines that the public-safety benefits outweigh the costs incurred by Electric IOUs. To implement PR 22, PG&E recommends that Electric IOUs submit a Tier 1 advice letter no later than 90 days after the Commission issues a decision adopting PR 22.

4.2.20.2 Positions of the Parties

PG&E asserts that it is in the public interest to adopt PR 22 because of the difficulty that Electric IOUs experience in complying with the vegetation clearances mandated by Rule 35. PG&E explains that in order to comply with Rule 35, PG&E has to trim or remove 1.5 - 2.0 million trees per year, which equates to thousands of trees per day. PG&E represents that it is not uncommon for customers to refuse access to their property or otherwise prevent PG&E from trimming and removing trees. This problem is not addressed adequately by the current Tariff Rule 11, according to PG&E, because Tariff Rule 11 does not allow Electric IOUs to disconnect service until there is a breach of minimum vegetation

clearances mandated by Rule 35, by which time the utility will be in violation of Rule 35, public safety will be in jeopardy, and system reliability will be at risk.

Another defect in Tariff Rule 11, PG&E contends, is that it does not provide Electric IOUs with authority to disconnect service when customers refuse to provide access for the purpose of (1) removing all or parts of dead, rotten, and diseased trees that overhang or lean towards an overhead power line or communication line, or (2) maintaining minimum vegetation clearances in SRAs mandated by Cal. Pub. Res. Code §§ 4292 and 4293. PR 22 would amend Tariff Rule 11 to provide such authority.

An additional defect in Tariff Rule 11, according to PG&E, is that it requires Electric IOUs, prior to disconnecting service, to provide notice of the forthcoming disconnection using the procedures applicable to discontinuance of service for non-payment. PG&E contends that the notice requirements associated with disconnection for non-payment are not applicable to disconnection for refusal to provide access for vegetation maintenance, as the former must include information that is irrelevant to customers who refuse to provide access. Such irrelevant information includes the past due amount, the date by which payment must be made, and information about financial assistance. PG&E states that PR 22 would focus the required customer notice on matters that are related to vegetation management.

PR 22 is supported by all electric utility parties and IBEW 1245, though most of these parties said little in support of PR 22. Liberty Utilities is concerned that PR 22 would modify Tariff Rule 11 so that it no longer applies statewide, but only to Tier 2 and Tier 3 of the High Fire-Threat District. Therefore, Liberty Utilities requests that it be allowed to retain its existing Tariff Rule 11 and add PR 22 to Tariff Rule 11 as a new section. SDG&E echoes PG&E's position

that PR 22 is needed because Electric IOUs are frequently denied access to customers' properties for the purpose of trimming and removing trees.

The following parties take a neutral position with respect to PR 22: Most of the CIP parties, Laguna Beach, and MGRA.

PR 22 is opposed by CFBF, LACFD, SED, and TURN. Each opponent objects to PR 22 for one or more of the following reasons. First, Tariff Rule 11 currently allows an Electric IOU to disconnect service only when there is a breach of the Rule 35 minimum vegetation clearances. The opponents are troubled that PR 22 would allow service to be disconnected when there is an "imminent threat of breach." This is a vague and subjective standard, the opponents argue. SED adds that this provision in PR 22 would hold customers to a stricter vegetation clearance standard than required of utilities by Rule 35.

Second, the opponents contend that PR 22 is outside the scope of this proceeding because it would change the applicability of Tariff Rule 11 with respect to the vegetation clearances mandated by Rule 35, Table 1, Case 13. These vegetation clearances apply to areas outside the High Fire-Threat District.

Finally, the opponents are concerned that PR 22 would replace the requirement in Tariff Rule 11 that Electric IOUs must provide notice of an impending service disconnection in accordance with the notice requirements applicable to discontinuance of service for non-payment. TURN argues that:

> [PR 22] essentially sidesteps all requirements in other sections of Electric Rule 11 as well as the notice requirements set forth in Electric Rule 8 that were drafted to protect customers in the event of a disconnection. [PR 22] would obviate the utilities of the need to follow existing rules such as prohibitions against disconnections on weekends and holidays; the requirement that the utilities make an in-person site visit to customers identified as medical baseline, life support, or self-certified as having a serious illness or condition that could become life

> threatening if service is disconnected prior to actually disconnecting service; the requirement to physically post notice at master-metered, multi-family residences; and the requirement that notices be provided in the five most common languages... This PR may cause significant harm to customers and, in the worst-case scenario, may cause a seriously life-threatening situation for customers on medical baseline or life support. (TURN Reply Comments (August 11, 2017) at pages 3 – 4. Footnotes omitted.)

4.2.20.3 Discussion

Overhead power lines must be kept clear of vegetation at all times to prevent fires and outages. To this end, Tariff Rule 11 allows Electric IOUs to disconnect service to customers and property owners who obstruct access to overhead power lines for vegetation management activities, subject to the following conditions:

1. The authority to disconnect service is limited to situations where there is a breach of the minimum vegetation clearances required for power lines in GO 95, Rule 35, Table 1, Cases 13 and 14.
2. Prior to disconnecting service, the Electric IOU must follow the procedures and notice requirements applicable to discontinuance of service for non-payment, including the requirements applicable for sensitive customers, customers who are not proficient in English, multifamily accommodations, and other customer groups, except as set forth in Item 3 below. To the extent practical, the applicable procedures and notice requirements must be completed prior to a breach of the minimum vegetation clearances required by GO 95, Rule 35, Table 1, Cases 13 and 14.
3. For vegetation hazards that pose an immediate threat to public safety, the Electric IOU may disconnect service to the obstructing property owner's residence or primary place of business at any time without prior notice, except when the customer receives service under a medical baseline allowance. If service is disconnected without prior notice, the Electric IOU shall attempt to contact the property owner for five consecutive business days

by daily visits to the property owner's residence or primary place of business, in addition to sending a written notice to inform the property owner why service has been disconnected and how to restore service. If the Electric IOU determines that it is necessary to disconnect service to a medical baseline customer, the Electric IOU shall attempt to notify the customer by telephone prior to the service disconnection.

4. The customer's service will not be restored until appropriate vegetation management has been achieved or the vegetation hazard has been mitigated, and payment for all applicable restoration of service charges has been received.

Shutting off power to a customer is a harsh remedy. The above-cited provisions of Tariff Rule 11 reflect a careful balancing of (1) the public's interest in maintaining safe vegetation clearances around power lines, and (2) customers' need for continual access to vital electric utility service.

We find that PG&E and the other supporters of PR 22 have not shown good cause to upset the careful balancing of interests embedded in Tariff Rule 11. Therefore, we decline to adopt PR 22 to the extent it seeks to alter the substantive terms and conditions of Tariff Rule 11 regarding the disconnection of electric service to customers who obstruct access to overhead power lines for the purpose of maintaining the vegetation clearances mandated by Rule 35.

On the other hand, we agree with PG&E that Tariff Rule 11 should be amended to apply to customers who obstruct access to overhead power lines for the purpose of maintaining the vegetation clearances mandated by Cal. Pub. Res. Code §§ 4292 and 4293 for SRAs. These vegetation clearances are similar to, and serve the same purpose as, the vegetation clearances mandated by Rule 35, Table 1, Case 14. Consequently, a breach of the vegetation clearances mandated by Cal. Pub. Res. Code §§ 4292 and 4293 poses essentially the same threat to public safety as a breach of the minimum vegetation clearances mandated by

Rule 35. Because the threat to public safety is the same, Tariff Rule 11 should apply equally to breaches of the vegetation clearances mandated by Rule 35 and Cal. Pub. Res. Code §§ 4292 and 4293.

We generally agree with PG&E that Tariff Rule 11 should be modified to apply to situations where a customer obstructs access to overhead power lines for the purpose of carrying out the following vegetation management activities mandated by Rule 35:

> When a supply or communication company has actual knowledge, obtained either through normal operating practices or notification to the company, that dead, rotten or diseased trees or dead, rotten or diseased portions of otherwise healthy trees overhang or lean toward and may fall into a span of supply or communication lines, said trees or portions thereof should be removed.

Dead, rotten, diseased, overhanging, and leaning trees (together, "defective trees") in close proximity to power lines are a significant threat to public safety and system reliability, and such trees (or portions thereof) must be trimmed or removed.[100] It is therefore reasonable to provide Electric IOUs with authority under Tariff Rule 11 to disconnect service to customers who obstruct access to defective trees that need to be trimmed or removed pursuant to Rule 35.

In many situations involving defective trees, it is unlikely the defective tree will breach Rule 35's minimum vegetation clearance requirements until the moment the defective tree (or part of the tree) falls onto a power line. As a result,

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[100] Cal. Pub. Res. Code § 4292 contains the following provision that is analogous to Rule 35: "Dead trees, old decadent or rotten trees, trees weakened by decay or disease and trees or portions thereof that are leaning toward the line which may contact the line from the side or may fall on the line shall be felled, cut, or trimmed so as to remove such hazard."

the existing provisions in Tariff Rule 11 that allow an Electric IOU to disconnect service only when there is a breach of Rule 35's minimum vegetation clearances do not effectively address the situation where a customer prevents a utility from trimming or removing defective trees that may fall onto a power line.

The existing provisions of Tariff Rule 11 also provide a readily observable and objective standard for when it is reasonable to disconnect a customer's service, i.e., when there is a breach of Rule 35's minimum vegetation clearances. However, it is not possible to establish an easily observable and objective standard with respect to defective trees because there is no way to know with certainty when a defective tree (or part thereof) will fall onto a power line. Therefore, in modifying Tariff Rule 11 to apply to defective trees, it will be necessary to rely on Electric IOUs' professional and good faith judgement regarding when the threat to public safety from a particular defective tree has reached a critical point that necessitates disconnection of service to the customer who obstructs access to the defective tree.

With the foregoing in mind, we conclude that it is in the public interest to amend Tariff Rule 11 to include the following provisions regarding the disconnection of service to customers who obstruct the removal of defective trees (or parts thereof). First, Electric IOUs must have good faith basis to believe that a defective tree (or part thereof) poses an imminent or immediate risk for falling onto a power line. Said basis shall be obtained in writing from an arborist who possesses dual certification from the International Society of Agriculture as a

Certified Master Arborist and a Certified Utility Specialist.[101] The arborist's written statement shall provide one or more photographs of the defective tree and explain why the defective tree (or parts thereof) is an imminent or immediate risk for falling onto a power line. Today's Decision defines "imminent risk" as a risk that will, in the arborist's professional judgement, very likely be realized at any moment. An "immediate risk" is a risk that will, in the arborist's professional judgement, certainly be realized at any moment.[102]

Second, the Electric IOU shall send written notice to the customer prior to disconnecting service. The notice shall comply with the requirements applicable to discontinuance of service for non-payment, including the requirements applicable to sensitive customers, customers who are not proficient in English, multifamily accommodations, and other customer groups. The notice shall also include the arborist's written determination and photographs provided to the Electric IOU. An Electric IOU must provide notice to the customer prior to disconnecting service for an imminent risk.

Finally, consistent with existing provisions in Tariff Rule 11, the Electric IOU may disconnect service without prior notice to the customer when the Electric IOU has a high degree of confidence that the defective tree poses an immediate and critical risk to public safety. The Electric IOU shall fully

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[101] Electric utilities employ and/or hire professional tree inspectors. For example, PG&E reports that it employs a staff of trained and highly qualified tree inspectors to walk every mile of every distribution and transmission line every year. (PG&E Comments filed on July 31, 2017, at 17.)

[102] The Proposed Decision limited Electric IOUs' authority to shut off power to situations where there is an "immediate risk." Today's Decision incorporates PG&E's Comments on the Proposed Decision that Electric IOUs should be authorized to disconnect service when there is an "immediate risk" or an "imminent risk."

document the basis for its determination. And as required by Tariff Rule 11, if an Electric IOU determines that it is necessary to disconnect service to a medical baseline customer, the Electric IOU shall attempt to notify the customer by telephone prior to the service disconnection.

The text of the relevant parts of the pro forma Tariff Rule 11 in the Workshop Report, as amended by today's Decision, is set forth in Appendix B of today's Decision. Significantly, because the scope of this proceeding is limited to regulations that apply only to the High Fire-Threat District, our adopted amendments to Tariff Rule 11 apply only to the High Fire-Threat District.

To implement today's Decision, each Electric IOU shall file and serve a Tier 3 advice letter to revise its tariffs to incorporate our adopted amendments to the pro forma Tariff Rule 11 no later than 90 days from the issuance date of today's Decision.

5. Cost Recovery

The parties did not provide firm estimates of utility costs and savings associated with the amendments to GO 95, GO 165, and GO 166 that are adopted by today's Decision. We conclude that a net increase in costs, if any, will be more than offset by the substantial public-safety benefits from the adopted revisions.

Cost-of-service utilities are entitled to recover the reasonable costs they incur to comply with the regulations that are adopted by today's Decision after the reasonableness of such costs has been verified by the Commission.

We find there is no need to establish a cost-recovery mechanism for utilities with deregulated rates. Any utility with deregulated rates or rate flexibility that places a line-item charge on its customer bills to recover costs that are incurred as a result of this proceeding must not state or imply that such charge is mandated or approved by the Commission.

5.1. Cost Recovery for Electric IOUs

The Electric IOUs shall track and record their costs to implement the regulations adopted by today's Decision in the Fire Hazard Prevention Memorandum Accounts (FHPMAs) they have established pursuant Commission decisions issued in R.08-11-005.[103] Each Electric IOU may file one or more applications to recover the costs recorded in its FHPMA. The number and timing of such applications will be at the discretion of each utility.[104] We will verify and assess the reasonableness of recorded costs in application proceedings.

The Electric IOUs shall record in their FHPMAs only those costs that are not already being recovered in rates (e.g., costs that were previously booked to an Electric IOU's FHPMA and subsequently recovered in rates in a previous GRC proceeding). Each Electric IOU may continue to record authorized costs in its FHPMA until the first GRC that occurs after the close of this proceeding, at which time the FHPMA shall be closed. The IOU may then use the GRC mechanism to request recovery of the costs it incurs from that point forward to comply with the regulations adopted by today's Decision. The Electric IOU may seek to recover the ending balance in its FHPMA, if any, by filing an application.

5.2. Cost Recovery for the Small ILECs

The Small Incumbent Local Exchange Carriers ("Small ILECs") may use their annual California High Cost Fund-A ("CHCF-A") Tier 3 advice letters to

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[103] *See*, for example, D.09-08-029 at 43 – 44, and D.12-01-032 at 152 and Conclusion of Law 21.

[104] In lieu of filing applications, an Electric IOU may seek to recover the costs recorded in its FHPMA in its next scheduled general rate case application.

request recovery of the costs recorded in their FHPMAs.[105] We will verify and assess the reasonableness of the costs recorded in each Small ILEC's FHPMA as part of our review of the Small ILEC's annual CHCF-A advice letters, to be addressed in the CHCF-A advice letter resolution or by separate resolution addressing the FHPMA request only.

The Small ILECs may only seek to recover costs via their CHCF-A advice letters that are (1) recorded in their FHPMAs, (2) directly related to the implementation of the regulations adopted in this proceeding, and (3) not recovered elsewhere. The Small ILECs shall provide work papers, documents, and/or other information requested by Commission staff to analyze and verify the claimed costs. The fact that Small ILECs may request recovery of costs does not ensure recovery. The Small ILECs may only recover those costs that are verified and found reasonable by staff and approved by the Commission.

Each Small ILEC may continue to use the CHCF-A advice letter process until the first GRC that occurs after the close of this proceeding. At that time, the Small ILEC shall close its FHPMA and thereafter use the GRC mechanism to request recovery of the costs it incurs to comply with the regulations adopted by today's Decision. The Small ILEC may seek to recover the ending balance in its FHPMA, if any, in its annual CHCF-A advice letter filing.

We note that there is no requirement for Small ILECs to file GRCs. However, if a Small ILEC does not file a GRC, it will eventually lose all of its financial support from the CHCF-A through the waterfall process. Under this process, a Small ILEC will receive 100 percent of its authorized financial support

[105] D.12-01-032 at 154 – 156.

from the CHCF-A for three years following the GRC test year. Financial support then falls to 80 percent of the authorized amount in the fourth year after the GRC, 50 percent in the fifth year, and zero percent in the sixth year.[106] Thus, a Small ILEC's ability to recover the costs recorded in its FHPMA through annual CHCF-A advice letters will decline and eventually end if it does not file a GRC.

We will require each Small ILEC to close its FHPMA when its authority to seek financial support from the CHCF-A reaches zero percent. The company's authority to seek recovery of the costs recorded in its FHPMA shall expire upon the closure of its FHPMA.

We note that several Small ILECs have opted out of the CHCF-A, and there is no requirement for these companies to file a GRC.[107] These companies may seek to recover the costs recorded in their FHPMA in their next GRC filing, if any. Their authority to seek recovery of such costs will end when the window to file their next GRC has closed, at which time their FHPMAs shall be terminated.

6. Implementation of Fire-Safety Regulations

6.1. High Fire-Threat District Map

Decision 17-01-009 specifies that the High Fire-Threat District Map will become effective upon the Commission's adoption of the CPUC Fire-Threat Map. The process for the Commission's review and adoption of the CPUC Fire-Threat Map is set forth in D.17-01-009[108] as modified by D.17-06-024.[109] The timeframe

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[106] D.91-09-042, 41 CPUC2d 326, 332.

[107] These companies are Happy Valley Telephone Company, Hornitos Telephone Company, Winterhaven Telephone Company, and Verizon West Coast (now owned by Frontier).

[108] D.17-01-009 at 35-36, 42-47, and Ordering Paragraph 1.nn.

for the Commission's review and adoption is set forth in a ruling issued on October 6, 2017. At the time of today's Decision, we anticipate the CPUC Fire-Threat Map will be approved by the Commission in February 2018.

6.2. Fire Prevention Plan

Each Electric IOU shall file an annual report beginning October 31, 2018, pursuant to GO 166, Standard 11, that contains a fire-prevention plan for the Electric IOU's overhead electric facilities in the High Fire-Threat District. The fire-prevention plan shall contain the information specified in GO 166, Standard 1, Part E, to the extent applicable to the Electric IOU's service territory.

6.3. New and Amended Fire-Safety Regulations in Zone 1, Tier 2, and Tier 3 of the High Fire-Threat District

Today's Decision adopts new and amended fire-safety regulations that apply to Zone 1, Tier 2, and/or Tier 3 of the High Fire-Threat District. With the exception of the filing date for the fire-prevention plan addressed in Section 6.2 in today's Decision and recommended time-of-trim clearances, these regulations shall be fully implemented in Tier 3 statewide by September 1, 2018, including full compliance with requirements pertaining to the frequency of inspections, vegetation clearances, correction timeframes, etc. For example, by September 1, 2018, an annual patrol inspection shall have been completed within the previous 12 months for all overhead electric utility distribution facilities in rural Tier 3 areas pursuant to GO 165. Likewise, by September 1, 2018, all power lines in Tier 3 areas shall comply with the minimum vegetation clearances set forth in GO 95, Rule 35, Table 1, Case 14. Similarly, by September 1, 2018, there shall be

[109] D.17-06-024 at 20-22 and Ordering Paragraphs 1 and 2.

no uncorrected Priority Level 2 fire risks in Tier 3 areas that have been outstanding for more than six months.[110] Full compliance shall be achieved in Zone 1 and Tier 2 statewide by no later than June 30, 2019.

The deadlines adopted by today's Decision prioritize compliance in Tier 3. The adopted deadlines for Zone 1 and Tier 2 reflect our recognition that the hundreds of electric utilities and CIPs responsible for implementing the new and amended regulations across large geographic areas will need sufficient time to develop and implement new policies, procedures, documentation, records, databases, personnel training, budgets, etc., to achieve full compliance.

Today's Decision incorporates the following revisions in response to parties' comments on the Proposed Decision. First, we clarify that the increased time-of-trim guidelines in Appendix E of GO 95, as amended by today's Decision, apply to vegetation trims starting no later than September 1, 2018, in Tier 3 and starting no later than June 30, 2019, in Zone 1 and Tier 2.[111] We reiterate that all power lines shall comply with the minimum vegetation clearances set forth in GO 95, Rule 35, Table 1, Case 14, by no later than September 1, 2018 in Tier 3, and by June 30, 2019, in Zone 1 and Tier 2.

Second, with one exception, if and when the fire-threat map for Zone 1 (i.e., the USFS – CAL FIRE joint map of Tree Mortality HHZs) is updated,[112] utilities shall achieve full compliance with the fire-safety regulations that apply

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[110] Rule 18-A(2)(b) allows the six-month correction timeframe for Priority Level 2 fire risk in Tier 3 fire-threat areas to be extended under reasonable circumstances.

[111] Joint POUs' Comments on the Proposed Decision, at 3-4.

[112] Joint POUs' Comments on the Proposed Decision, at 5-6. CIP Coalition's Reply Comments on the Proposed Decision, at 3.

to any areas that are newly added to the High Fire-Threat District no later than 18 months after an updated map that includes the newly added areas is posted on the Tree Mortality Task Force's website.[113] The one exception is that compliance with the time-of-trim clearance guidelines in Appendix E of GO 95, as amended by today's Decision, shall start no later than 18 months after an updated map of Zone 1 is posted on the Tree Mortality Task Force's website. It will be the responsibility of each utility to monitor this website for updated maps of Zone 1. Separately, SED is required by D.17-01-009 to post and maintain on the Commission's website a download link to the current version of the Zone 1 map.[114] CAL FIRE has agreed to notify SED within 30 days of an updated Zone 1 map being posted to the Tree Mortality Task Force's website so that SED can post a link to the updated map on the Commission's website.[115]

Third, we note that many areas mapped as Zone 1 fire-threat areas overlap Tier 2 or Tier 3 fire-threat areas. Where such overlap occurs, and the particular fire-safety regulations applicable to Zone 1 are different than the fire-safety regulations applicable to Tier 2 or Tier 3, the strictest fire-safety regulations for the overlapping areas shall apply. For example, in an area mapped as both

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[113] The URL for the Tree Mortality Task Force's webpage for the USFS – CAL FIRE joint map on Tree Mortality HHZs is http://www.fire.ca.gov/treetaskforce/reports#Maps-Data. Updates to the joint map should be accessible from this webpage. At the time of today's Decision, the USFS – CAL FIRE joint map on Tree Mortality HHZs was current as of January 2017.

[114] D.17-01-009 at Conclusion of Law 55 and Ordering Paragraph 7.b.

[115] Today's Decision does not alter Ordering Paragraph 9 of D.17-01-009, which states as follows: "[SED] shall periodically check [CAL FIRE's] website for revisions to the map of Tree Mortality High Hazard Zones. If and when there are revisions to the map, SED shall update the link to the map that SED has posted on the Commission's website in accordance with Section 5 of [D.17-09-001].

Zone 1 and Tier 2, utilities must correct a Priority Level 2 fire risk within 12 months (Tier 2) of identifying the fire risk, and not 59 months (Zone 1).

Finally, if electric utilities and CIPs cannot meet the deadlines for implementing the fire-safety regulations adopted by today's Decision because of extenuating circumstances,[116] they may request an extension of time in accordance with Rule 16.6 of the Commission's Rules of Practice and Procedure.

6.4. Updating the General Orders

SED shall revise GO 95, GO 165, and GO 166 to incorporate (1) the adopted amendments shown in Appendix B of today's Decision, and (2) ancillary ministerial amendments that are not shown in Appendix B. These ministerial revisions include updating GO 95's chronology of new and amended rules, and adding a note under each GO 95 rule adopted or amended by today's Decision that identifies the decision number and date of today's Decision. SED shall publish the revised General Orders on the Commission's website within 60 days from the date this Decision is issued (as shown on the first page of this Decision).

6.5. Electric Tariff Rule 11

Each Electric IOU shall file a Tier 3 advice letter, 90 days from the issuance date of today's Decision, to revise its tariffs to incorporate our adopted amendments to the pro forma Tariff Rule 11 in Appendix B of today's Decision.

7. The CPUC-CAL FIRE MOU

In August 2017, representatives for the Commission ("CPUC") and CAL FIRE signed a memorandum of understanding (hereafter, the

[116] Joint POUs' Comments on the Proposed Decision, at 2 and 4.

"CPUC-CAL FIRE MOU" or "MOU") that lists several shared priorities, including:

- Working together to develop consistent approaches to wildfire prevention and public safety.
- Assisting one another in preparing for, responding to, and mitigating the effects of wildfires.
- Creating an Interagency Fire Safety Working Group to vet ideas and develop programmatic solutions to shared goals in the interest of fire safety and resource protection.

The MOU identifies several immediate goals, including the following:

- Developing a shared understanding of the use of fire mapping, including enhanced enforcement of GO 95.
- Identifying any mitigation measures that the utilities need to take in response to the tree mortality crisis.
- Working together to (1) identify the requirements of the wildfire prevention plans required by Pub. Util. Code §§ 8386 – 8387 and communication of these requirements to the utilities, and (2) developing a process to review the wildfire prevention plans.
- Providing complementary resources in the areas of risk mitigation and risk management.

The MOU states that CAL FIRE will perform specified activities and functions to carry out the intent of the MOU, including the following:

- Upon request, review wildfire-mitigation plans in accordance with Pub. Util. Code §§ 8385 – 8387, and assist the CPUC in developing criteria and standards to be used in wildfire-mitigation plans.
- Identify and develop contracting requirements necessary to complete the High Fire-Threat District Map and establish the CPUC Wildfire Mitigation Section in accordance with Pub. Util. Code §§ 8386 - 8387. This includes:
    - Participate in the Independent Review Team as defined in D.17-01-009.

  - Assess, evaluate, and provide formal feedback via public comments or reports on future party-submitted mapping proposals regarding physical mapping changes and challenges and/or adjustments to existing mapping methodologies.
  - Assess, evaluate, and provide formal feedback via public comments on wildfire-mitigation plans prepared by utilities in accordance with Pub. Util. Code §§ 8386 - 8387 and utility vegetation management plans.
- Provide subject matter expertise in mechanical engineering, utility design and testing, and wildland fire risk analysis to the CPUC to advise on wildfire-mitigation program management, audit schedule, mitigation plan details, and enforcement. In addition, liaise with CPUC staff to assist with technical fire science/behavior assessment and allocation of resources.
- Participate in identifying best practices of design and operation of utility systems for the purpose of fire mitigations.

A copy of the CPUC-CAL FIRE MOU is contained in Appendix C of today's Decision.

Today's Decision instructs the Director of the Commission's Safety and Enforcement Division or the Director's designee (together, "Director") to confer with CAL FIRE, via the Interagency Fire Working Group established by the CPUC-CAL FIRE MOU and/or other channels of communication deemed appropriate by the Director, regarding the following matters:

1. The development of a statewide fire-wind map by CAL FIRE (or under CAL FIRE's oversight) for the purpose of establishing fire-wind-load standards and possibly other fire-safety regulations tied to the map. If the Director and CAL FIRE determine that the development of a statewide fire-wind map and associated fire-safety regulations has merit and is feasible, the Director shall also confer with CAL FIRE regarding each agency's roles and responsibilities with respect to the development, funding,

and implementation of the fire-wind map and fire-safety regulations tied to the map.

2. Adoption of a six-month maximum timeframe for correcting Priority Level 2 fire safety risks[117] in Tier 2 of the High Fire-Threat District.

CAL FIRE has agreed to confer with the Director regarding the above matters. After conferring with CAL FIRE, the Director shall submit a written report to the Commission and the Commission's Executive Director within six months from the issuance date of today's Decision.[118] The report shall provide the Director's recommendations regarding whether and how to proceed with (1) the development and adoption of a statewide fire-wind map, (2) the development and adoption of fire-wind-load standards and possibly other fire-safety regulations tied to the fire-wind map, and (3) the adoption of a six-month timeframe for correcting Priority Level 2 fire risks in Tier 2 fire-threat areas. The Director shall concurrently post a copy of the report (or a link to the report) on SED's section of the Commission's website.

8. California Environmental Quality Act

The California Environmental Quality Act (CEQA)[119] applies to any project that has a potential for resulting in a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment unless the project is exempt from CEQA by statute or regulation.[120] The Workshop

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[117] Rule 18-A(2)(a)(ii) defines "Priority Level 2" as "[v]ariable (non-immediate high to low) safety and/or reliability risk."

[118] The issuance date is on page 1 of today's Decision at the upper right corner.

[119] CEQA is codified in Cal. Pub. Res. Code § 21000 et seq.

[120] 14 Cal. Code Regs., Section 15378. The CEQA guidelines are set forth in 14 Cal. Code Regs., Section 15000 et seq.

Report states that every regulation adopted by today's Decision is exempt from CEQA because it is not a "project" under CEQA and will not have significant impacts on the environment. No party disagrees with this assessment.

The Commission is the lead agency under CEQA with respect to the regulations adopted by this Decision. We find that all of the adopted regulations are exempt from CEQA pursuant to one or more of the following statutory exemptions or categorical exemptions in the CEQA guidelines:

- The adopted regulations will not have a potentially significant impact on the environment and are therefore not a "project" as defined by Pub. Res. Code § 21065 and 14 Cal. Code Regs., Section 15061(a)(3).
- The adopted regulations continue provisions that were adopted in D.09-08-029, D.12-01-032, and/or D.14-02-015 wherein it was determined that CEQA did not apply to the adopted measures. (D.09-08-029 at 7; D.12-01-032 at 156-158; and D.14-02-015 at 89-91.)
- The adopted regulations involve operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination. (14 Cal. Code Regs., Section 15301 (b) & (f).)
- The adopted regulations involve fuel management activities within 30 feet of structures to reduce the volume of flammable vegetation, provided that the activities will not result in the taking of endangered, rare, or threatened plant or animal species or significant erosion and sedimentation of surface waters. This exemption shall apply to fuel management activities within 100 feet of a structure if the public agency having fire protection responsibility for the area has determined that 100 feet of fuel clearance is required due to extra hazardous fire conditions. (14 Cal. Code Regs., Section 15304(i).)

9. Need for Hearing

In OIR 15-05-006, the Commission preliminarily determined that hearings are not needed in this proceeding. Parties were provided an opportunity by the Scoping Memo to request evidentiary hearings with respect to the matters that are decided by today's Decision. No such requests were submitted. Today's Decision affirms that there is no need for evidentiary hearings regarding the matters decided by today's Decision.

10. Comments on the Proposed Decision

The Proposed Decision of Commissioner Picker was mailed to the parties in accordance with Pub. Util. Code § 311, and comments were allowed in accordance with Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on November 28, 2017, by the CIP Coalition, Laguna Beach, Liberty Utilities, MGRA, the Joint POUs, PG&E, SCE, SDG&E, and TURN. Reply comments were filed on December 4, 2017, by the CIP Coalition, the Joint POUs, SCE, SDG&E, SED, and TURN.

Today's Decision incorporates the following updates and revisions in response to the parties' comments on the Proposed Decision:

- Several typographical errors and other errors are corrected.
- Figures 1 and 2 have been revised to more clearly depict the geographic information conveyed.
- All references and information associated with the Initial CPUC Fire-Threat Map filed on October 2, 2017 are replaced with references and information associated with the IRT-approved CPUC Fire-Threat Map filed on November 17, 2017.
- A footnote is added to Section 1.1 of today's Decision to clarify that the High Fire-Threat District Map will consist of two separate and independent maps (i.e., the map of Tree Mortality HHZs and the CPUC Fire-Threat Map).

- A footnote in Section 4.2.6.3.3 of today's Decision is revised to state that the cause of the Northern California wildfires is currently under investigation.
- Section 4.2.12 and Finding of Fact 22 of today's Decision are revised to delete text that provided a substantive interpretation of Rule 48 of GO 95.
- Section 4.2.20.3 of today's Decision is revised to authorize Electric IOUs to disconnect service when there is an "imminent risk" of a defective tree or part thereof falling onto a power line (and the other criteria specified in Section 4.2.20.3 are met).
- Section 6.3 of today's Decision is revised to clarify that where Zone 1 fire-threat areas overlap Tier 2 or Tier 3 fire-threat areas, and the fire-safety regulations applicable to Zone 1 are different than the fire-safety regulations applicable to Tier 2 or Tier 3, the strictest fire-safety regulations for the overlapping areas shall apply.
- Section 6.3 of today's Decision is revised to clarify that increased time-of-trim guidelines in Appendix E of GO 95, as amended by today's Decision, apply to vegetation trims starting no later than September 1, 2018, in Tier 3 and starting no later than June 30, 2019, in Zone 1 and Tier 2.
- Section 6.3 of today's Decision is revised to include a requirement that, with one exception, if and when the fire-threat map for Zone 1 (i.e., the USFS – CAL FIRE joint map of Tree Mortality HHZs) is updated, and the updated map includes areas that are newly added to the High Fire-Threat District, utilities shall achieve full compliance with fire-safety regulations that apply specifically to the High Fire-Threat District in the newly added areas no later than 18 months after an updated map that includes the newly added areas is posted on the Tree Mortality Task Force's website. The one exception is that compliance with the time-of-trim clearance guidelines in Appendix E of GO 95, as amended by today's Decision, shall start no later than 18 months after an updated map of Zone 1 is posted on the Tree Mortality Task Force's website. It will be the

responsibility of each utility to monitor this website for updated maps of Zone 1.

- Section 6.3 of today's Decision is revised to include a statement that (1) SED is required by D.17-01-009 to post and maintain on the Commission's website a download link to the current version of the Zone 1 map, and (2) CAL FIRE has agreed to notify SED within 30 days of an updated Zone 1 map being posted to the Tree Mortality Task Force's website so that SED can post a link to the updated map on the Commission's website.

We disagree with TURN's position that the Proposed Decision commits factual error by finding that the costs of the adopted fire-safety regulations are offset by the associated public-safety benefits. TURN asserts that this finding is not supported by the record, which contains little quantitative information or analysis regarding the costs and benefits of the adopted fire-safety regulations.[121]

This is a quasi-legislative rulemaking proceeding. As such, we may rely on legislative facts[122] obtained from written submissions in this proceeding, such as the Workshop Report and written comments. We may also draw on evidence from past proceedings, our experience and expertise in regulating utilities, our current policies, and common sense.[123] In the Proposed Decision (and today's Decision) we rely heavily on our policy imperative of protecting public safety.[124]

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[121] TURN Comments on the Proposed Decision, at 7-8.

[122] A quasi-legislative proceeding establishes policies or rules affecting a class of regulated utilities. (Rule 1.3(d) of the Commission's Rules of Practice and Procedure.) Legislative facts are general facts that help the Commission to decide questions of law and policy and discretion. (Rule 13.3(c) of the Commission's Rules of Practice and Procedure.)

[123] D.06-06-071 at 26; D.06-12-029 at 13 – 14; D.04-03-041 at 11; and D.99-07-047, 1 CPUC3d 627, 634 – 636.

[124] The *Safety Policy Statement of the California Public Utilities Commission*, dated July 10, 2014, states at page 1 that it is the Commission's policy to continually reduce the safety risks posed

Footnote continued on next page

The record of this proceeding demonstrates that every adopted fire-safety regulation will enhance public safety.

We acknowledge throughout the Proposed Decision that, for the most part, the proponents of the adopted fire-safety regulations did not provide cost estimates or cost-benefit analyses for the adopted fire-safety regulations. At the same time, we repeatedly recognize in the Proposed Decision (and today's Decision) that utility-associated wildfires can cause enormous destruction and loss of life, as demonstrated by the catastrophic power-line wildfires in October 2007 and the Butte Fire in October 2015. It is our judgement that the costs of the adopted fire-safety regulations are more than offset by the public-safety benefits of avoided wildfires.

In addition to our policy imperative of protecting public safety, we use common sense, our experience regulating utilities, and other factors to reach the conclusion that the costs of the fire-safety regulations adopted by the Proposed Decision will not be unduly burdensome. For example, in Section 4.2.3.3.2 of the Proposed Decision (and today's Decision), we find that certain adopted amendments to Rule 18 of GO 95, which reduce the allowed timeframes for correcting fire-safety risks discovered by utilities, should not increase utility costs significantly because:

> We do not expect the correction timeframes adopted by today's Decision for Priority Level 2 fire risks will increase costs significantly for utilities in the long run. Rule 18 has always required utilities to correct Priority Level 2 fire risks.

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by the utilities regulated by the Commission. The *Safety Policy Statement* is at: http://www.cpuc.ca.gov/uploadedFiles/CPUC_Public_Website/Content/Safety/VisionZero4Final621014_5_2.pdf.

> While today's Decision requires utilities to correct fire risks sooner if they are located in Tier 2 or Tier 3, today's Decision does not affect the total number of Priority Level 2 fire risks that must be corrected over time.

Similarly, in Section 4.2.7.3 of the Proposed Decision (and today's Decision), we find that an adopted amendment to Rule 38 of GO 95, which increases the required clearances between power lines for new and reconstructed facilities in Tier 3 fire-threat areas, is cost effective because:

> With respect to cost-effectiveness, the fact that PR 8 applies only to new and reconstructed facilities in Tier 3 fire-threat areas, and not to existing facilities, provides a reasonable basis to expect that the ongoing costs to implement PR 8 will be limited to the proper design of new and reconstructed facilities in Tier 3 fire-threat areas. PR 8 will also require some initial implementation and training efforts, but such efforts are a one-time cost in contrast to the fire-safety benefits (i.e., reduced likelihood of wires touching) that will accrue over the service lives of the wires. (Footnotes omitted.)

Likewise, Section 4.2.6.3 of the Proposed Decision (and today's Decision) adopts SED's proposal to amend Rule 35, Table 1, Case 14 so that Case 14's increased vegetation clearances apply to the entire High Fire-Threat District. One effect of the adopted amendment to Case 14 is to increase the minimum vegetation clearance from 37.5 inches to 10 feet for power lines in the High Fire-Threat District that are operating at voltages in the range of 110 - 300 kV.[125]

[125] Case 14, Footnotes (fff) and (ggg), requires a minimum vegetation clearance of 120 inches for conductors operating at voltages in the range 110 – 500 kV. Footnote (ggg) requires the clearance to be increased by 0.40 inch per kV in excess of 500 kV. Case 13 requires a minimum vegetation clearance of 18 to 37.5 inches for conductors operating in the range of 0.75 kV and 300 kV, depending on voltage.

The Proposed Decision explains in Section 4.2.6.3.3 that the adopted amendment to Case 14 is reasonable, in part, because:

> We disagree with TURN that Case 14 vegetation clearances should not be extended to any part of the High Fire-Threat District at this time due to insufficient information to assess the costs and benefits. If TURN were to have its way, Case 14 would continue to apply only to high fire-threat areas in Southern California on the Interim Fire-Threat Maps, including areas that are not in the High Fire-Threat District. We believe it is imprudent to require electric utilities to spend money and effort to maintain Case 14 vegetation clearances in areas outside the High Fire-Threat District.
>
> Moreover, it would be reckless to exempt the entire High Fire-Threat District from the Case 14 vegetation clearances. Power-line fires can cause enormous destruction as demonstrated by the catastrophic power-line fires in Southern California in October 2007 and the devastating Butte Fire in Amador and Calaveras Counties in September 2015. The catastrophic wildfires in Northern California in October 2017 further demonstrate the enormous destruction and loss of life that wildfires can cause. In our judgement, the Case 14 vegetation clearances are a reasonable measure for preventing catastrophic power-line fires in the High Fire-Threat District, as demonstrated by the fact that such clearances have been in effect for many years in [State Responsibility Areas]. (Footnotes omitted.)

Subsequent to the mailing of the Proposed Decision for comment, massive wildfires driven by strong Santa Ana winds struck Southern California, resulting in large scale evacuations and enormous destruction.[126] These wildfires reinforce

[126] The Southern California wildfires are cited for the sole purposes of demonstrating the enormous destructive potential of wildfires. The cause(s) of the Southern California wildfires is not known at the time of today's Decision.

our conclusion in the Proposed Decision (and today's Decision) that it is reasonable and in the public interest to increase the minimum vegetation clearance for high voltage power lines in the High Fire-Threat District from 37.5 inches to 10 feet.

We disagree with TURN's position that the Proposed Decision commits legal error by not adhering to a directive in the Scoping Memo that the extension of new fire-safety regulations to existing facilities would depend on cost estimates and cost-benefit considerations.[127] TURN overlooks D.17-01-009 where we determined that we would consider and possibly adopt proposed fire-safety regulations without quantitative information and analysis regarding the proposed regulations' costs and benefits, provided that the record otherwise shows the proposed fire-safety regulations are reasonable and should be adopted.[128]

11. Assignment of the Proceeding

Michael Picker is the assigned Commissioner for this proceeding, and Timothy Kenney and Valerie U. Kao are the co-assigned ALJs.

Findings of Fact

1. The High Fire-Threat District will consist of three fire-threat areas. **Zone 1** will consist of Tier 1 HHZs on the USFS - CAL FIRE joint map of Tree Mortality HHZs. Tier 1 HHZs are in direct proximity to communities, roads, and utility lines. As such, they represent a direct threat to public safety. **Tier 2** will consist

[127] TURN Comments on the Proposed Decision, at 8.

[128] D.17-01-009 at 58-59, responding to SED's statement that it would be "nearly impossible" to conduct a quantitative cost-benefit analysis of proposed fire-safety regulations. (SED Comments on the Assigned Commissioner's Proposed Decision Adopting a Work Plan for the Development of Fire Map 2, filed January 5, 2017, at 4-5.)

of areas on the CPUC Fire-Threat Map that have an elevated risk (including likelihood and potential impacts on people and property) from wildfires associated with overhead utility power lines or overhead utility power-line facilities also supporting communication facilities. **Tier 3** will consist of areas on the CPUC Fire-Threat Map that have an extreme risk (including likelihood and potential impacts on people and property) from wildfires associated with overhead utility power lines or overhead utility power lines also supporting communication facilities. Tier 3 is distinguished from Tier 2 by having the highest likelihood of utility-associated fire initiation and growth that would impact people or property, and where the most restrictive utility regulations are necessary to reduce utility fire risk.

2. The CPUC Fire-Threat Map is currently in an advanced stage of development. The IRT-approved CPUC Fire-Threat Map filed on November 17, 2017, provides a reasonable estimate for the size of the statewide Tier 2 and Tier 3.

3. D.17-01-009 requires that (i) existing fire-safety regulations that apply to high fire-threat areas in Southern California on the Interim Fire-Threat Maps be transferred to Tier 3 fire-threat areas in Southern California on the statewide High Fire-Threat District Map; (ii) existing fire-safety regulations that apply to high fire-threat areas in Northern California on the Interim Fire-Threat Maps be transferred to Tier 3 fire-threat areas in Northern California on the statewide High Fire-Threat District Map; and (iii) the transfer of existing fire-safety regulations be completed no later than September 1, 2018.

4. The Workshop Report filed on July 10, 2017, contains 31 proposed fire-safety regulations for the High Fire-Threat District.

5. The regulations adopted by today's Decision will improve the fire safety of overhead power-line facilities and aerial CIP facilities in close proximity to overhead power lines. Any additional costs these new regulations impose on utilities are offset by substantial public-safety benefits.

6. The proposed regulations that are not adopted by today's Decision have one or more of the following defects: (i) the proposed regulation provides less public safety relative to existing regulations; (ii) the proposed regulation is not within the scope of this proceeding; (iii) the proposed regulation is contrary to the fire-safety goals of this proceeding; (iv) there is no demonstrated need for the proposed regulation; (v) the costs and burdens of the proposed regulation are not adequately known at this time; and/or (vi) existing regulations are sufficient.

7. D.14-02-015 adopted a FIDCP to enable SED to identify systemic fire-safety risks and develop measures to mitigate these risks. The FIDCP requires PG&E, SCE, and SDG&E to collect specified information regarding every known fire associated with their overhead power-line facilities down to one linear meter in size, and to provide this data to SED in an annual report. The FIDCP's report template includes a field for reporting fires ignited by vehicle-pole collisions.

8. In order to prevent utility-associated wildfires going forward, it is essential to (i) identify areas where there is heightened risk for such wildfires, and (ii) prepare and implement a plan for preventing such wildfires.

9. GO 166 requires most Electric IOUs to file a fire-prevention plan annually. Pub. Util. Code § 8386(b) requires electric corporations to file a wildfire-mitigation plan annually.

10. It would be redundant and confusing for Rule 31.1 to contain the same text as Rule 18-A(2)(a)(ii).

11. The Right-of-Way Rules adopted by D.98-10-058 prohibit unauthorized pole attachments, establish a per-attachment fine for unauthorized attachments, and provide notice that the Commission may impose additional sanctions for unauthorized attachments.

12. Rule 34 of GO 95 requires that permanent pole attachments must be authorized by the pole owner(s).

13. Overhead power lines must be kept clear of vegetation at all times to prevent fires and outages.

14. Wildfires ignited by vegetation contact with power lines in the High Fire-Threat District can grow to great size and cause enormous destruction.

15. The Governor's October 30, 2015 Emergency Proclamation ordered state agencies, utilities, and local governments to remove dead or dying trees that threaten power lines, roads, other evacuation corridors and other existing structures in Tree Mortality High Hazard Zones.

16. The ten High Priority Counties identified by CAL FIRE, under the auspices of the Tree Mortality Task Force, are located entirely or partially in PG&E's service territory. PG&E removed approximately 236,000 dead or dying trees in 2016, and estimates it will remove 158,000 in 2017.

17. Vegetation clearances specified in Cal. Pub. Res. Code §§ 4292 and 4293 are similar to, and serve the same purpose as, the vegetation clearances mandated by GO 95, Rule 35, Table 1, Case 14.

18. The vegetation clearances mandated by Case 14 are identical to the vegetation clearances established by Cal. Pub. Res. Code § 4293 for power lines with voltages in the range of 2.4 kV – 500 kV in SRAs.

19. Increasing minimum wire-to-wire clearances at mid-span in Tier 3 fire-threat areas reduces the likelihood of wires touching, which poses a serious fire-ignition risk.

20. Pole owners are responsible for the safety of their poles and have authority under Pub. Util. Code § 451 and Rule 31.1 of GO 95 to require stricter standards for pole attachments based on known local conditions. The existing pole attachment application process enables pole owners to impose and enforce more stringent requirements based on known local conditions.

21. The High Fire-Threat District Map is not sufficiently robust and granular to establish wind-load standards in Tier 2 and Tier 3 fire-threat areas.

22. PR 13, which proposes to remove the "multiply by" provision in Rule 48, is outside the scope of this proceeding.

23. The risk for utility-associated wildfires in Tier 2 fire-threat areas, where there is an elevated risk for such wildfires, can be reduced by amending GO 95 to require patrol and detailed inspections, at specified minimum cycles, of overhead communication lines in such areas.

24. Reducing the frequency of patrol and/or detailed inspection cycles increases the probability that fire risks will persist undetected, and either cause or contribute to the ignition of a utility-associated wildfire.

25. The risk for utility-associated wildfires in Tier 3 fire-threat areas, where there is an extreme risk for utility-associated wildfires, can be reduced by amending GO 95 to require intrusive inspections, at specified minimum cycles, of communication lines in such areas.

26. Increasing the recommended time-of-trim vegetation clearances for overhead power lines reduces the likelihood of vegetation contacting power lines, which poses a serious fire-ignition risk.

27. The risk for utility-associated wildfires in rural Tier 2 and Tier 3 fire-threat areas, where there is an elevated or extreme risk for such wildfires, can be reduced by amending GO 165 to require annual patrol inspections of electric utility overhead distribution facilities in such areas.

28. Dead, rotten, diseased, overhanging, and leaning trees in close proximity to power lines are a significant threat to public safety and system reliability.

29. The existing provisions in Tariff Rule 11 that allow an Electric IOU to disconnect service only when there is a breach of Rule 35's minimum vegetation clearances do not effectively address the situation where a customer prevents an Electric IOU from removing defective trees (or parts thereof) that pose an imminent or immediate risk for falling onto power lines.

30. Many parts of Zone 1 overlap with either Tier 2 or Tier 3.

31. There were no requests for an evidentiary hearing regarding the matters decided by this Decision.

Conclusions of Law

1. It is in the public interest to adopt the amendments to GO 95, GO 165, GO 166, and Tariff Rule 11 that are contained in Appendix B of this Decision for the reasons set forth in the body of this Decision, the Findings of Fact, and Conclusions of Law.

2. The fire-safety regulations adopted by this Decision are just, reasonable, and in the public interest pursuant to Pub. Util. Code §§ 451 and 454(a).

3. In order to protect public safety, those fire-safety regulations that currently apply only to specified high fire-threat areas in Southern California on the Interim Fire-Threat Maps adopted in R.08-11-005 should apply to Tier 3 fire-threat areas of the High Fire-Threat District statewide.

4. Pole attachments must be authorized by the pole owner(s) or other granting authority pursuant to the ROW Rules adopted by D.98-10-058 and GO 95 Rules 31.5, 34, and 91.1.

5. Electric utilities are required by Rule 31.1 of GO 95 and Pub. Util. Code § 451 to guard against leakage currents burning wood support structures for circuits of all voltages throughout the High Fire-Threat District.

6. It is reasonable to provide Electric IOUs with authority under Tariff Rule 11 to disconnect service to customers who obstruct access to defective trees that pose an imminent or immediate threat to public safety and need to be trimmed or removed pursuant to Rule 35.

7. SED should amend GO 95, GO 165, and GO 166 to incorporate the revisions in Appendix B of this Decision and publish the amended GOs on the Commission's website within 60 days from the date this Decision is issued. SED should make any additional ministerial revisions to GO 95, GO 165, and GO 166 that may be necessary to incorporate the amendments to these General Orders in Appendix B of this Decision.

8. Cost-of-service utilities are entitled to recover the reasonable costs they incur to implement the regulations that are adopted by today's Decision after the reasonableness of such costs has been reviewed, and cost recovery authorized, by the Commission.

9. There is no need to establish a cost-recovery mechanism for those utilities and CIPs whose rates are not regulated by the Commission.

10. The High Fire-Threat District Map will become effective upon the Commission's adoption of the CPUC Fire-Threat Map pursuant to D.17-01-009, Ordering Paragraph 1.nn.

11. Each Electric IOU should file an annual report beginning October 31, 2018, pursuant to GO 166, Standard 11, that contains a fire-prevention plan for the Electric IOU's overhead electric facilities in the High Fire-Threat District. The fire-prevention plan should contain the information specified in GO 166, Standard 1, Part E, to the extent applicable to the Electric IOU's service territory.

12. Electric Utilities should follow the increased time-of-trim guidelines in Appendix E of GO 95, as amended by today's Decision, starting no later than September 1, 2018, in Tier 3 and starting no later than June 30, 2019, in Zone 1 and Tier 2.

13. With the exception of the implementation instructions set forth in the two previous Conclusions of Law, the regulations adopted in this Decision should be fully implemented in Tier 3 statewide by September 1, 2018, including full compliance with requirements pertaining to frequency of inspections, minimum vegetation clearances in Case 14, etc. Full compliance should be achieved in Zone 1 and Tier 2 statewide by no later than June 30, 2019.

14. Where Zone 1 fire-threat areas overlap with Tier 2 or Tier 3 fire-threat areas, and the fire-safety regulations that apply to Zone 1 are different than the fire-safety regulations that apply to Tier 2 or Tier 3, the strictest fire-safety regulations for the overlapping areas should apply.

15. With one exception, if and when the fire-threat map for Zone 1 (i.e., the USFS – CAL FIRE joint map of Tree Mortality HHZs) is updated, and the updated map includes areas that are newly added to the High Fire-Threat District, utilities should achieve full compliance with the fire-safety regulations that apply specifically to the High Fire-Threat District in the newly added areas no later than 18 months after an updated map is posted on the Tree Mortality Task Force's website. The one exception is that compliance with the time-of-trim

clearance guidelines in Appendix E of GO 95, as amended by today's Decision, should start no later than 18 months after an updated map of Zone 1 is posted on the Tree Mortality Task Force's website. It should be the responsibility of each utility to monitor this website for updated maps of Zone 1.

16. The Director of SED should confer with CAL FIRE, via the Interagency Fire Safety Working Group established by the CPUC-CAL FIRE MOU and/or other channels of communication deemed appropriate by the Director, regarding the matters specified in Section 7 of today's Decision. After conferring with CAL FIRE, the Director should submit a written report to the Commission and the Commission's Executive Director, within six months from the issuance date of today's Decision, that provides the Director's recommendations regarding the matters specified in Section 7 of today's Decision. The Director should concurrently post a copy of the report (or a link to the report) on SED's section of the Commission's website.

17. The Commission is the lead agency under CEQA with respect to the regulations adopted by this Decision.

18. The regulations adopted by this Decision are exempt from CEQA pursuant to one or more of the statutory exemptions or categorical exemptions identified in the body of this Decision.

19. There is no need for an evidentiary hearing regarding the matters decided by this Decision.

20. The following order should be effective immediately so that the adopted revisions to GO 95, GO 165, GO 166, and Tariff Rule 11 may be implemented expeditiously.

O R D E R

IT IS ORDERED that:

1. General Order ("GO") 95, GO 165, and GO 166 are revised to include the new and amended rules in Appendix B of this Decision. The Commission's Safety and Enforcement Division ("SED") shall revise GOs 95, 165, and 166 to incorporate the new and amended rules in Appendix B and publish the revised General Orders on the Commission's website within 60 days from the issuance date shown on the first page of this Decision. SED shall make any ministerial revisions to GO 95, GO 165, and GO 166 that may be necessary to incorporate the new and amended rules in Appendix B of this Decision.

2. Each electric investor-owned utility ("Electric IOU") shall file an annual report beginning October 31, 2018, pursuant to General Order ("GO") 166, Standard 11, that contains a fire-prevention plan for the Electric IOU's overhead electric facilities in the High Fire-Threat District. The fire-prevention plan shall contain the information specified in GO 166, Standard 1, Part E, to the extent applicable to the Electric IOU's service territory.

3. The increased time-of-trim guidelines in Appendix E of General Order 95, as amended by today's Decision, apply to vegetation trims starting no later than September 1, 2018, in Tier 3 and starting no later than June 30, 2019, in Zone 1 and Tier 2 of the High Fire-Threat District.

4. With the exception of the implementation instructions set forth in Ordering Paragraphs 2 and 3, the new and amended regulations adopted by today's Decision that apply to Zone 1, Tier 2, and/or Tier 3 of the High Fire-Threat District shall be:

i. Fully implemented in Tier 3 statewide by September 1, 2018, including full compliance with requirements pertaining to frequency of inspections and Case 14 vegetation clearances.

ii. Fully implemented in Zone 1 and Tier 2 statewide by June 30, 2019, including full compliance with requirements pertaining to frequency of inspections and Case 14 vegetation clearances.

5. Where Zone 1 fire-threat areas overlap with Tier 2 or Tier 3 fire-threat areas, and the fire-safety regulations that apply to Zone 1 are different than the fire-safety regulations that apply to Tier 2 or Tier 3, the strictest fire-safety regulations for the overlapping areas shall apply.

6. With one exception, if and when the fire-threat map for Zone 1 (i.e., the Unites States Forest Service – CAL FIRE joint map of Tree Mortality High Hazard Zones) is updated, and the updated map includes areas that are newly added to the High Fire-Threat District, utilities shall achieve full compliance with fire-safety regulations that apply specifically to the High Fire-Threat District in the newly added areas no later than 18 months after an updated map is posted on the Tree Mortality Task Force's website. The one exception is that compliance with the time-of-trim clearance guidelines in Appendix E of General Order 95, as amended by today's Decision, shall start no later than 18 months after an updated map of Zone 1 is posted on the Tree Mortality Task Force's website. It will be the responsibility of each utility to monitor this website for updated maps of Zone 1.

7. Electric investor-owned utilities ("Electric IOUs") shall file and serve a Tier 3 advice letter to revise Electric Tariff Rule 11 to conform to the pro forma Electric Tariff Rule 11 in Appendix B of this Decision. Electric IOUs shall file and serve the Tier 3 advice letter no later than 90 days from the issuance date of this Decision that is stated on page 1 of this Decision, at the upper right corner.

8. Any utility with deregulated rates or rate flexibility that seeks to place a line-item charge on its customer bills to recover costs that are incurred as a result of this proceeding must not state or imply that the line-item charge is mandated or approved by the Commission.

9. The electric investor-owned utilities ("Electric IOUs") and Small Incumbent Local Exchange Carriers ("Small ILECs") shall use the following procedures to request the recovery of the costs they incur to implement the regulations adopted by this Decision:

i. The Electric IOUs and Small ILECs may only seek to recover costs that are recorded in the Fire Hazard Prevention Memorandum Accounts (FHPMAs) they have established pursuant to decisions issued in Rulemaking 08-11-005. Companies shall record in their FHPMAs only those costs that are not being recovered elsewhere. For the purpose of this Decision, the term "IOUs" includes Southern California Gas Company to the extent it operates overhead power-line facilities that are subject to the Commission's jurisdiction.

ii. Each Electric IOU may file one or more applications to request the recovery of the costs recorded in its FHPMA. The number and timing of applications will be at the discretion of the Electric IOU. Each Electric IOU may continue to use this procedure until the first general rate case (GRC) that occurs after the close of this proceeding. At that time, the Electric IOU shall close its FHPMA and thereafter use the GRC mechanism to request recovery of the costs it incurs to comply with the regulations adopted by this Decision. The Electric IOU may seek to recover the ending balance in its FHPMA, if any, by filing an application.

iii. Each Small ILEC may use its annual California High Cost Fund-A (CHCF-A) Tier 3 advice letter to request the recovery of costs recorded in its FHPMA. Each Small ILEC may continue to use this procedure until the first GRC that occurs after the close of this proceeding. At that time, the Small ILEC shall close its FHPMA and thereafter use the GRC mechanism

to request recovery of the costs it incurs to comply with the regulations adopted by this Decision. The Small ILEC may seek to recover the ending balance in its FHPMA, if any, in its annual CHCF-A advice letter.

iv. A Small ILEC shall close its FHPMA when its authority to seek financial support from the CHCF-A reaches zero percent (0.0%). The company's authority to seek recovery of any costs remaining in its FHPMA will expire upon the closure of its FHPMA.

v. The Small ILECs that have opted out of the CHCF-A may seek to recover the costs recorded in their FHPMAs in their next GRC filing, if any. Their authority to seek recovery of such costs will end when the window to file their next GRC has closed, at which time their FHPMAs shall be terminated.

10. The Director of the Commission's Safety and Enforcement Division or the Director's designee (together, "Director") shall consult with the California Department of Forestry and Fire Protection ("CAL FIRE"), via the Interagency Fire Safety Working Group established by the CPUC-CAL FIRE Memorandum of Understanding and/or other channels of communication deemed appropriate by the Director, regarding the following fire-safety measures:

i. The development of a statewide fire-wind map by CAL FIRE (or under CAL FIRE's oversight) for the purpose of establishing fire-wind-load standards and possibly other fire-safety regulations tied to the map. If the Director and CAL FIRE determine that the development of a statewide fire-wind map and associated fire-safety regulations has merit and is feasible, the Director shall also confer with CAL FIRE regarding each agency's roles and responsibilities with respect to the development, funding, and implementation of the fire-wind map and fire-safety regulations tied to the map.

ii. Adoption of a six-month maximum timeframe for correcting Priority Level 2 fire-safety risks in Tier 2 of the High Fire-Threat District.

11. After conferring with the California Department of Forestry and Fire Protection pursuant to the previous Ordering paragraph, the Director of the Commission's Safety and Enforcement Division or the Director's designee (together, "Director") shall submit a written report to the Commission and the Commission's Executive Director, within six months from the issuance date of this Decision, that provides the Director's recommendations regarding whether and how to proceed with (a) the development and adoption of a statewide fire-wind map, (b) the development and adoption of fire-wind-load standards and possibly other fire-safety regulations tied to the fire-wind map, and (c) the adoption of a six-month timeframe for correcting Priority Level 2 fire risks in Tier 2 fire-threat areas. The Director shall concurrently post a copy of the report (or a link to the report) on SED's section of the Commission's website.

12. This proceeding remains open to complete the Commission's review and adoption of the High Fire-Threat District Map.

This order is effective today.

Dated December 14, 2017, at San Francisco, California.

MICHAEL PICKER
President
CARLA J. PETERMAN
LIANE M. RANDOLPH
MARTHA GUZMAN ACEVES
CLIFFORD RECHTSCHAFFEN
Commissioners

Appendix A: Proposed Regulations

Appendix A shows the proposed revisions to General Orders 95, 165, and 166, and Electric Tariff Rule 11 with strikeout and underline.

Consensus Proposed Regulation 4 re: GO 95, Rule 18-A (FSTP)

Proposed Revisions to Rule 18-A Shown with Strikeout and Underline

18 Reporting and Resolution of Safety Hazards Discovered by Utilities

For purposes of this rule, "Safety Hazard" means a condition that poses a significant threat to human life or property.

"Southern California" is defined as the following: Imperial, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura Counties.

~~"Extreme and Very High Fire Threat Zones" are defined on the Fire and Resource Assessment Program (FRAP) Map prepared by the California Department of Forestry and Fire Protection or the modified FRAP Map prepared by San Diego Gas & Electric Company (SDG&E) and adopted by Decision 12-02-032 in Phase 2 of Rulemaking 08-11-005. All entities subject to Rule 18 shall use the FRAP Map to implement Rule 18, except that SDG&E may use its modified FRAP Map to implement Rule 18.~~

A. Resolution of Safety Hazards and General Order Nonconformances

(1)(a) Each company (including utilities and CIPs) is responsible for taking appropriate corrective action to remedy Safety Hazards and GO 95 nonconformances posed by its facilities.

(b) Upon completion of the corrective action, the company's records shall show, with sufficient detail, the nature of the work, the date, and the identity of persons performing the work. These records shall be preserved by the company for at least ten (10) years and shall be made available to Commission staff upon 30 days notice.

(c) Where a communications company's or an electric utility' actions result in GO nonconformances for another entity, that entity's remedial action will be to transmit a single documented notice of identified nonconformances to the communications company or electric utility for compliance.

(2)(a) All companies shall establish an auditable maintenance program for their facilities and lines. All companies must include a timeline for corrective actions to be taken following the identification of a Safety Hazard or nonconformances with General Order 95 on the company's facilities. The auditable maintenance program shall prioritize corrective actions consistent with the priority levels set forth below and based on the following factors, as appropriate:

- Safety and reliability as specified in the priority levels below;
- Type of facility or equipment;
- Location, including whether the Safety Hazard or

nonconformance is located in ~~an Extreme or Very High Fire Threat Zone in~~ Southern California and within Tier 3 of the High Fire-Threat District;

- Accessibility;
- Climate;
- Direct or potential impact on operations, customers, electrical company

There shall be 3 priority levels.

(i) Level 1:

- Immediate safety and/or reliability risk with high probability for significant impact.
- Take action immediately, either by fully repairing the condition, or by temporarily repairing and reclassifying the condition to a lower priority.

(ii) Level 2:

- Variable (non-immediate high to low) safety and/or reliability risk.
- Take action to correct within specified time period (fully repair, or by temporarily repairing and reclassifying the condition to a lower priority). Time period for correction to be determined at the time of identification by a qualified company representative, but not to exceed: (1) 12 months for nonconformances that compromise worker safety, (2) 12 months for nonconformances that create a fire risk, are located in ~~an Extreme or Very High Fire Threat Zone~~ in Southern California, and within Tier 3 of the High Fire-Threat District, and (3) 59 months for all other Level 2 nonconformances.

(iii) Level 3:

- Acceptable safety and/or reliability risk.
- Take action (re-inspect, re-evaluate, or repair) as appropriate.

(b) Correction times may be extended under reasonable circumstances, such as:

- Third party refusal
- Customer issue
- No access
- Permits required
- System emergencies (e.g. fires, severe weather conditions)

(3) Companies that have existing General Order 165 auditable inspection and maintenance programs that are consistent with the purpose of Rule 18A shall continue to follow their General Order 165 programs.

Consensus Proposed Regulation 23 re: GO 95, Rule 21.2 (SCE)

Proposed Revisions to Rule 21.2 Consists of New Rule 21.2-D and Is Shown with Underline

21.2 Districts mean areas as defined in the following:

A. **Urban Districts** mean thickly settled areas (whether in cities or suburbs) or where congested traffic often occurs. Highways on which traffic is often very heavy or locations such as picnic grounds, summer resorts, etc., where people congregate seasonally, are considered as urban.

B. **Rural Districts** mean all areas not urban, usually in the country but in some cases within city limits.

C. **Loading Districts** mean those areas in which the specified loadings of Rule 43 apply and are known as "Heavy" and "Light" loading districts.

D. **High Fire Threat District** means those areas comprised of the following:

(1) **Tree Mortality (TM) Zone** is Tier 1 of the latest version of the United States Forest Service (USFS) and CAL FIRE's joint map of Tree Mortality High Hazard Zones (HHZs). (Note: The Tree Mortality HHZs Map may be revised regularly by the USFS and CAL FIRE.)

(2) **Tier 2** is Tier 2 of the CPUC Fire Threat Map.

(3) **Tier 3** is Tier 3 of the CPUC Fire Threat Map.

Note: There are ancillary proposed changes to GO 95 at: Section II List of Definitions at pages II-1 through II-4; and Index at pages Index-12 and Index-17. See the FSTP Workshop Report at pages A-17 through A-22.

Contested Proposed Regulation 1 re: GO 95, Rule 17 (Laguna Beach)

Proposed Revisions to Rule 17 Consists of New Rule 17(2) and Is Shown with Underline

17 Investigation of Accidents

A. Each owner or operator of utility power lines shall establish procedures for the Investigation of major accidents and failures for the purpose of determining the causes and minimizing the possibility of recurrence. Nothing in this rule is intended to extend, waive, or limit any claim of attorney client privilege and/or attorney work product privilege.

(1) Definition of major accidents and failures:

(a) Incidents associated with utility facilities which cause property damage estimated at or about the time of the incident to be more than $50,000.

(b) Incidents resulting from electrical contact which cause personal injury which require hospitalization overnight, or result in death.

EXCEPTION: Does not apply to motor vehicle caused incidents.

(2) Each owner or operator of utility power lines shall be required to establish procedures for the Investigation of major accidents and failures that occur within service territory areas designated as Tier 2 or Tier 3 of the High Fire-Threat District, which shall include incidents that result from motor vehicle collisions with utility facilities that cause property damage estimated at or about the time of the incident to be more than $50,000, excluding the cost of damage to a motor vehicle in the course of the incident. These procedures shall be made available to the city or county having jurisdiction where the incident occurs.

Contested Proposed Regulation 2 re: GO 95, New Rule "X" (Laguna Beach)

The Proposed New Rule "X" Is Shown with Underline

X. Plan to Address Safety Hazards and Establish Preventative Measures

A. Each investor-owned electric utility shall be required to develop a Plan for identifying and correcting fire safety hazards that fall within service areas designated as Tiers 2 or 3 its service territory. This Plan shall include an outreach program to cities and counties for specific projects. In collaboration with the affected city or county, the company plan will (i) identify the specific areas affected, (ii) establish the priority for each project that will require taking corrective action, and (iii) agree on the corrective methods by which such safety issues shall be addressed.

B. Each Plan to take corrective action as to fire safety hazards within any city or county shall prioritize projects that address primary access roads that are utilized as evacuation routes in the event of wildfire, or access roads that serve as primary points of ingress and egress for emergency responders. Each Plan shall include as a potential corrective action the hardening or undergrounding of the electric system or related utility infrastructure that is along or adjacent to such access roads.

C. Each investor-owned electric utility shall have one (1) year from the effective date of this regulation to develop its initial Plan and submit the Plan to the Commission and serve the Plan to affected communities. Commission staff will review and refer for mediation any possible disputes that arise between the utility and the affected locality. Each company that is required to file a General Rate Case (GRC) shall include an updated Plan for review and approval in each GRC cycle.

Contested Proposed Regulation 3 re: GO 95, Rule 18-A (SDG&E)

Proposed Revisions to Rule 18-A Are Shown with Strikeout and Underline

18 Reporting and Resolution of Safety Hazards Discovered by Utilities

For purposes of this rule, "Safety Hazard" means a condition that poses a significant threat to human life or property.

~~"Southern California" is defined as the following: Imperial, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura Counties.~~

~~"Extreme and Very High Fire Threat Zones" are defined on the Fire and Resource Assessment Program (FRAP) Map prepared by the California Department of Forestry and Fire Protection or the modified FRAP Map prepared by San Diego Gas & Electric Company (SDG&E) and adopted by Decision 12-02-032 in Phase 2 of Rulemaking 08-11-005. All entities subject to Rule 18 shall use the FRAP Map to implement Rule 18, except that SDG&E may use its modified FRAP Map to implement Rule 18.~~

A. Resolution of Safety Hazards and General Order 95 Non-conformances

(1)(a) Each company (including utilities and CIPs) is responsible for taking appropriate corrective action to remedy Safety Hazards and GO 95 non-conformances posed by its facilities.

(b) Upon completion of the corrective action, the company's records shall show, with sufficient detail, the nature of the work, the date, and the identity of persons performing the work. These records shall be preserved by the company for at least ten (10) years and shall be made available to Commission staff upon 30-day notice.

(c) Where a communications company's or an electric utility' actions result in GO non-conformances for another entity, that entity's remedial action will be to transmit a single documented notice of identified non-conformances to the communications company or electric utility for compliance.

(2)(a) All companies shall establish an auditable maintenance program for their facilities and lines. All companies must

include a timeline for corrective actions to be taken following the identification of a Safety Hazard or non-conformances with General Order 95 on the company's facilities. The auditable maintenance program shall prioritize corrective actions consistent with the priority levels set forth below and based on the following factors, as appropriate:

- Safety and reliability as specified in the priority levels below;
- Type of facility or equipment;
- Location, including whether the Safety Hazard or nonconformance is ~~located in an Extreme or Very High Fire Threat Zone~~ in ~~Southern California~~ Tier 2 or Tier 3 of the High Fire-Threat District;
- Accessibility;
- Climate;
- Direct or potential impact on operations, customers, electrical company workers, communications workers, and the general public.

There shall be 3 priority levels.

(i) Level 1:

- Immediate safety and/or reliability risk with high probability for significant impact.
- Take action immediately, either by fully repairing the condition, or by temporarily repairing and reclassifying the condition to a lower priority.

(ii) Level 2:

- Variable (non-immediate high to low) safety and/or reliability risk.
- Take action to correct within specified time period (fully repair, or by temporarily repairing and reclassifying the condition to a lower priority). Time period for correction to be determined at the time of identification by a qualified company representative, but not to exceed: (1) 12 months for non-conformances that compromise worker safety~~, (2) 12 months for non-~~

~~conformances that create a fire risk and are located in an Extreme or Very High Fire Threat Zone in Southern California~~, and ~~(3)~~(2) 59 months for all other Level 2 non-conformances.

(iii) Level 3:

- Acceptable safety and/or reliability risk.
- Take action (re-inspect, re-evaluate, or repair) as appropriate.

(b) Any equipment conditions or facilities that pose an elevated fire ignition risk within Tiers 2 and 3 of the High Fire-Threat District shall be resolved by the responsible party within 6 months of discovery unless a quicker resolution is otherwise required.

(c)~~(b)~~ Correction times may be extended under reasonable circumstances, such as:

- Third party refusal
- Customer issue
- No access
- Permits required
- System emergencies (e.g. fires, severe weather conditions)

(3) Companies that have existing General Order 165 auditable inspection and maintenance programs that are consistent with the purpose of Rule 18A shall continue to follow their General Order 165 programs.

Contested Proposed Regulation 4, Alternate Proposal 1 re: GO 95, Rule 18-A (CIP Coalition)

Proposed Revisions to Rule 18-A Are Shown with Strikeout and Underline

18 Reporting and Resolution of Safety Hazards Discovered by Utilities

For purposes of this rule, "Safety Hazard" means a condition that poses a significant threat to human life or property.

~~"Southern California" is defined as the following: Imperial, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura Counties.~~

~~"Extreme and Very High Fire Threat Zones" are defined on the Fire and Resource Assessment Program (FRAP) Map prepared by the California Department of Forestry and Fire Protection or the modified FRAP Map prepared by San Diego Gas & Electric Company (SDG&E) and adopted by Decision 12-02-032 in Phase 2 of Rulemaking 08-11-005. All entities subject to Rule 18 shall use the FRAP Map to implement Rule 18, except that SDG&E may use its modified FRAP Map to implement Rule 18.~~

A. Resolution of Safety Hazards and General Order 95 Non-conformances

(1)(a) Each company (including utilities and CIPs) is responsible for taking appropriate corrective action to remedy Safety Hazards and GO 95 non-conformances posed by its facilities.

(b) Upon completion of the corrective action, the company's records shall show, with sufficient detail, the nature of the work, the date, and the identity of persons performing the work. These records shall be preserved by the company for at least ten (10) years and shall be made available to Commission staff upon 30-days' notice.

(c) Where a communications company's or an electric utility's actions result in GO non-conformances for another entity, that entity's remedial action will be to transmit a single documented notice of identified non-conformances to the communications company or electric utility for compliance.

(2)(a) All companies shall establish an auditable maintenance

program for their facilities and lines. All companies must include a timeline for corrective actions to be taken following the identification of a Safety Hazard or non-conformances with General Order 95 on the company's facilities. The auditable maintenance program shall prioritize corrective actions consistent with the priority levels set forth below and based on the following factors, as appropriate:

- Safety and reliability as specified in the priority levels below;
- Type of facility or equipment;
- Location, including whether the Safety Hazard or nonconformance is located in ~~an Extreme or Very High Fire Threat Zone in Southern California~~ the High Fire-Threat District;
- Accessibility;
- Climate;
- Direct or potential impact on operations, customers, electrical company workers, communications workers, and the general public.

There shall be 3 priority levels.

(i) Level 1:

- Immediate safety and/or reliability risk with high probability for significant impact.
- Take action immediately, either by fully repairing the condition, or by temporarily repairing and reclassifying the condition to a lower priority.

(ii) Level 2:

- Variable (non-immediate high to low) safety and/or reliability risk.
- Take action to correct within specified time period (fully repair, or by temporarily repairing and reclassifying the condition to a lower priority). Time period for correction to be determined at the time of identification by a qualified company representative, but not to exceed: Time period for correction to be

determined at the time of identification by a qualified company representative, but not to exceed: (1) 6 ~~12~~ months for nonconformances that create a fire risk and are located in ~~an Extreme or Very High Fire Threat Zone in Southern California~~ Tier 3 of the High Fire-Threat District, (2) 12 months for non-conformances that compromise worker safety, and (3) 59 months for all other Level 2 non-conformances.

(iii) Level 3:

- Acceptable safety and/or reliability risk.
- Take action (re-inspect, re-evaluate, or repair) as appropriate.

(b) Correction times may be extended under reasonable circumstances, such as:

- Third party refusal
- Customer issue
- No access
- Permits required
- System emergencies (e.g. fires, severe weather conditions)

(3) Companies that have existing General Order 165 auditable inspection and maintenance programs that are consistent with the purpose of Rule 18A shall continue to follow their General Order 165 programs.

Contested Proposed Regulation 5 re: GO 95, Rule 31.1 (SDG&E)

Proposed Revisions to Rule 31.1 Are Shown with Underline

31.1 Design, Construction and Maintenance

Electrical supply and communication systems shall be designed, constructed, and maintained for their intended use, regard being given to the conditions under which they are to be operated, to enable the furnishing of safe, proper, and adequate service.

For all particulars not specified in these rules, design, construction, and maintenance should be done in accordance with accepted good practice for the given local conditions known at the time by those responsible for the design, construction, or maintenance of communication or supply lines and equipment.

A supply or communications company is in compliance with this rule if it designs, constructs, and maintains a facility in accordance with the particulars specified in General Order 95, except that if an intended use or known local conditions require a higher standard than the particulars specified in General Order 95 to enable the furnishing of safe, proper, and adequate service, the company shall follow the higher standard.

For all particulars not specified in General Order 95, a supply or communications company is in compliance with this rule if it designs, constructs and maintains a facility in accordance with accepted good practice for the intended use and known local conditions.

All work performed on public streets and highways shall be done in such a manner that the operations of other utilities and the convenience of the public will be interfered with as little as possible and no conditions unusually dangerous to workmen, pedestrians or others shall be established at any time.

Any equipment conditions or facilities that pose an elevated fire ignition risk within Tiers 2 and 3 of the High Fire-Threat District shall be resolved by the responsible party within 6 months of discovery unless a quicker resolution is otherwise required as per Rule 18 Section A.

Note: The standard of accepted good practice should be applied on a case by case basis. For example, the application of "accepted good practice" may be aided by reference to any of the practices, methods, and acts engaged in or approved by a significant portion of the relevant industry, or which may be expected to accomplish the desired result with regard to safety and reliability at a reasonable cost.

Contested Proposed Regulation 6 re: GO 95, Rule 31.5 (SDG&E)

Proposed Revisions to Rule 31.5 Are Shown with Underline

31.5 Joint Use of Poles

Joint use of poles shall be given consideration by all interested parties where construction or reconstruction is involved and where used it shall be subject to the appropriate grade of construction as specified in Section IV. Nothing herein shall be construed as requiring joint use of the same poles, or as granting authority for the use of any poles without the owner's consent (see Rule 32.2 and Section IX).

In Tiers 2 and 3 of the High Fire-Threat District, all attachments must have the consent of a pole owner or granting authority prior to any construction. Any attachment without consent can be reported to the Commission.

Each party should definitely designate its space requirements on joint poles, which space shall not be occupied without consent, by equipment of any other party.

Non–climbable poles in partial underground distribution systems (see Rules 22.6-D and 22.5) shall not be jointly used.

Contested Proposed Regulation 7 re: GO 95, Rule 35, Table 1, Case 14 and Reference (hhh) (FSTP)

Proposed Revisions to Rule 35, Table 1 Are Shown with Strikeout and Underline

Case No.	Nature of Clearance	Wire or Conductor Concerned: A Span Wires (Other than Trolley Span Wires) Overhead Guys and Messengers	B Communication Conductors (Including Open Wire, Cables and Service Drops), Supply Service Drops of 0 - 750 Volts	C Trolley Contact, Feeder and Span Wires, 0 - 5,000 Volts	D Supply Conductors of 0 - 750 Volts and Supply Cables Treated as in Rule 57.8	E Supply Conductors and Supply Cables, 750 - 22,500 Volts	F Supply Conductors and Supply Cables, 22.5 - 300 kV	G Supply Conductors and Supply Cables, 300 - 550 kV (mm)
14	Radial clearance of bare line conductors from vegetation in ~~Extreme and Very High Fire Threat Zones in~~ Southern California and Tier 3 of the High Fire-Threat District (aaa) (ddd) (hhh)(jjj)			18 inches (bbb)		48 inches (bbb) (iii)	48 inches (fff)	120 inches (ggg)

References to Rules Modifying Minimum Clearances in Table 1

(hhh) ~~Extreme and Very High Fire Threat Zones are defined by California Department of Forestry and Fire Protection's Fire and Resource Assessment Program (FRAP) Fire Threat Map. The FRAP Fire Threat Map is to be used to establish approximate boundaries for purposes of this rule. The boundaries of the map are to be broadly construed, and utilities should use their own expertise and judgment to determine if local conditions require them to adjust the boundaries of the map.~~ Southern California is defined as the following: Imperial, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura Counties.

Contested Proposed Regulation 7, Alternate Proposal 1 re: GO 95, Rule 35, Table 1, Case 14 and Reference (hhh) (SED)

Proposed Revisions to Rule 35, Table 1 Are Shown with Strikeout and Underline

Case No.	Nature of Clearance	Wire or Conductor Concerned						
		A Span Wires (Other than Trolley Span Wires) Overhead Guys and Messengers	B Communication Conductors (Including Open Wire, Cables and Service Drops), Supply Service Drops of 0 - 750 Volts	C Trolley Contact, Feeder and Span Wires, 0 - 5,000 Volts	D Supply Conductors of 0 - 750 Volts and Supply Cables Treated as in Rule 57.8	E Supply Conductors and Supply Cables, 750 - 22,500 Volts	F Supply Conductors and Supply Cables, 22.5 - 300 kV	G Supply Conductors and Supply Cables, 300 - 550 kV (mm)
14	Radial clearance of bare line conductors from vegetation in ~~Extreme and Very High Fire Threat Zones in Southern California~~ the High Fire-Threat District (aaa) (ddd) (hhh)(jjj)			18 inches (bbb)		48 inches (bbb) (iii)	48 inches (fff)	120 inches (ggg)

References to Rules Modifying Minimum Clearances in Table 1

(hhh) ~~Extreme and Very High Fire Threat Zones are defined by California Department of Forestry and Fire Protection's Fire and Resource Assessment Program (FRAP) Fire Threat Map. The FRAP Fire Threat Map is to be used to establish approximate boundaries for purposes of this rule. The boundaries of the map are to be broadly construed, and utilities should use their own expertise and judgment to determine if local conditions require them to adjust the boundaries of the map. Southern California is defined as the following: Imperial, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura Counties~~. The High Fire-Threat District is defined in GO 95, Rule 21.2-D.

Contested Proposed Regulation 7, Alternate Proposal 2 re: GO 95, Rule 35, Table 1, Case 14 and Reference (hhh) (PG&E)

Proposed Revisions to Rule 35, Table 1 Are Shown with Strikeout and Underline

Case No.	Nature of Clearance	Wire or Conductor Concerned						
		A Span Wires (Other than Trolley Span Wires) Overhead Guys and Messengers	B Communication Conductors (Including Open Wire, Cables and Service Drops), Supply Service Drops of 0 - 750 Volts	C Trolley Contact, Feeder and Span Wires, 0 - 5,000 Volts	D Supply Conductors of 0 - 750 Volts and Supply Cables Treated as in Rule 57.8	E Supply Conductors and Supply Cables, 750 - 22,500 Volts	F Supply Conductors and Supply Cables, 22.5 - 300 kV	G Supply Conductors and Supply Cables, 300 - 550 kV (mm)
14	Radial clearance of bare line conductors from vegetation in ~~Extreme and Very High Fire Threat Zones in Southern California~~ Tier 3 of the High Fire-Threat District (aaa) (ddd) ~~(hhh)~~(jjj)			18 inches (bbb)		48 inches (bbb) (iii)	48 inches (fff)	120 inches (ggg)

References to Rules Modifying Minimum Clearances in Table 1

~~(hhh) Extreme and Very High Fire Threat Zones are defined by California Department of Forestry and Fire Protection's Fire and Resource Assessment Program (FRAP) Fire Threat Map. The FRAP Fire Threat Map is to be used to establish approximate boundaries for purposes of this rule. The boundaries of the map are to be broadly construed, and utilities should use their own expertise and judgment to determine if local conditions require them to adjust the boundaries of the map. Southern California is defined as the following: Imperial, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura Counties~~.

Contested Proposed Regulation 8 re: GO 95, Rule 38 (SDG&E)

Proposed Revisions to Rule 38 Are Shown with Underline

38 Minimum Clearances of Wires from Other Wires

The minimum vertical, horizontal or radial clearances of wires from other wires shall not be less than the values given in Table 2 and are based on a temperature of 60° F. and no wind. Conductors may be deadended at the crossarm or have reduced clearances at points of transposition, and shall not be held in violation of Table 2, Cases 8–15, inclusive.

The clearances in Table 2 shall in no case be reduced more than 10 percent, except mid-span in Tier 3 of the High Fire-Threat District where they shall be reduced by no more than 5 percent, because of temperature and loading as specified in Rule 43 or because of a difference in size or design of the supporting pins, hardware or insulators. All clearances of less than 5 inches shall be applied between surfaces, and clearances of 5 inches or more shall be applied to the center lines of such items. The utilities of interest (including electric supply and/or communication companies) shall cooperate and provide relevant information for sag calculations for their facilities, upon request.

Contested Proposed Regulation 9 re: GO 95, Rule 40 (SDG&E)

Proposed Revisions to Rule 40 Are Shown with Underline

40 General

The following rules cover mechanical strength requirements for each class of line (see Rule 20.6), either alone or involved in crossings, conflicts or joint use of poles. The rules of this section are supplemented in many instances by provisions in other sections. If an owner of a line has established condition-based mechanical strength requirements for areas within the High Fire-Threat District that are more stringent than those set forth in the following rules, then all parties seeking to attach to such lines shall comply with the more stringent requirements.

Contested Proposed Regulation 10 re: GO 95, New Rule 43.2-A(2) (SDG&E)

Proposed Revisions to Rule 43.2-A Are Shown with Underline

43.2 Light Loading

Light loading shall apply in all parts of the State of California where the elevation above sea level is 3000 feet or less (see Appendix A for map). This loading shall be taken as the resultant of wind pressure and deadweight under the following conditions:

A. Wind

(1). Wind Load: A horizontal wind pressure of 8 pounds per square foot of projected area on cylindrical surfaces, and 13 pounds per square foot on flat surfaces shall be assumed. Where latticed structures are used, the actual exposed area of one lateral face shall be increased by 50% to allow for pressure on the opposite face, provided this computation does not indicate a greater pressure than would occur on a solid structure of the same outside dimensions, under which conditions the latter shall be taken.

(2). Wind Load Factor: For lines located within Tiers 2 and/or 3 of the High Fire-Threat District the wind loads of Rule 43.2.A.1 shall be multiplied by a wind load factor of 1.1.

Contested Proposed Regulation 11 re: GO 95, New Rule 43.3 (MGRA)

Proposed New Rule 43.3 Is Shown with Underline

43.3 Fire-Threat Loading

Fire threat loading shall apply in all parts of the State of California designated as Tier 2 or Tier 3 of the High Fire-Threat District. This loading shall be taken as the resultant of wind pressure and deadweight under the following conditions:

A. Wind

Horizontal wind pressures for cylindrical surfaces fire threat zones shall be determined from the statewide Fire Weather Wind Loading map as applied in Tier 2 and Tier 3. Wind loading values specified in Rule 43.2.A shall be multiplied by wind load factor specified in the statewide Fire Weather Wind Loading Map.

Horizontal wind pressures on flat surfaces shall be 1.625 times the value for cylindrical surfaces. Where latticed structures are used, the actual exposed area of one lateral face shall be increased by 50% to allow for pressure on the opposite face, provided this computation does not indicate a greater pressure than would occur on a solid structure of the same outside dimensions, under which conditions the latter shall be taken.

B. Ice

No ice loading is to be considered.

C. Temperature

Conductor temperature shall be assumed to be 25°F at the time of maximum loading. A conductor temperature of at least 130°F shall also be assumed for computing sag and its effect on structural loads due to weight span.

Contested Proposed Regulation 12 re: GO 95, Rule 44.3 (SDG&E)

Proposed Revisions to Rule 44.3 Are Shown with Underline.

Note: Proposed Text Incorporates the Editorial Revisions Set Forth in SDG&E's Comments Filed on July 31, 2017, at pages 7-8.

44.3 Replacement

Lines or parts thereof shall be replaced or reinforced before safety factors have been reduced (due to factors such as deterioration and/or installation of additional facilities) in Grades "A" and "B" construction to less than two-thirds of the safety factors specified in Rule 44.1 and in Grade "C" construction to less than one-half of the safety factors specified in Rule 44.1. Poles in Grade "C" construction that only support communication lines shall also conform to the requirements of Rule 81.3–A. In no case shall the application of this rule be held to permit the use of structures or any member of any structure with a safety factor less than one.

For wood poles supporting supply lines in Tier 3 of the High Fire-Threat District the factors contributing to the allowed reductions to the safety factors specified in Rule 44.1 shall be limited to deterioration and/or in kind replacement of equipment (excluding conductors, cables, messengers and span wires interconnecting multiple poles) on an individual pole. However, in no case shall the addition of new facilities decrease the safety factors below the values prescribed in Table 4.

Note: Allowed reductions specified in this rule are modified by Table 4, Footnotes.

Note: Revised January 13, 2005 by Decision No. 0501030, January 12, 2012 by Decision No. 12-01-032 and February 5, 2014 by Decision No. 14-02-015.

Contested Proposed Regulation 13 re: GO 95, Rule 48 (SDG&E)

Proposed Revisions to Rule 48 Are Shown with Strikeout.

48 Strength of Materials

Structural members and their connection shall be designed and constructed so that the structures and parts thereof will not fail or be seriously distorted at any load less than their maximum working loads (developed under the current construction arrangements with loadings as specified in Rule 43) ~~multiplied by the safety factors in Rule 44~~.

Values used for the strength of material shall comply with the safety factors specified in Rule 44.

Note: Revised February 5, 2014 by Decision No. 14-02-015.

Contested Proposed Regulation 14 re: GO 95, New Rule 53.5 (PG&E)

Proposed New Rule 53.5 Is Shown with Underline.

Note: PG&E's Proposed Text for Ancillary Amendments to GO 95's Index and Table of Content for Section V Is Not Reproduced Below.

43.5 Burning of Supports – Circuits of More than 7,500 Volts

In Tier 3 of the High Fire-Threat District, precautions shall be taken to guard against leakage current burning wood parts of the supporting structure.

Contested Proposed Regulation 15 re: GO 95, Rule 80.1-A(1) (SDG&E)

Proposed Revisions to Rule 80.1-A(1) Are Shown with Strikeout and Underline.

80.1 Inspection Requirements for Communication Lines:

A. patrol and detailed inspections

(1) Inspection Requirements for Joint-Use Poles in High Fire-Threat District ~~Areas~~

In ~~high~~ Tiers 2 and 3 ~~fire-threat areas~~, the inspection intervals for (i) Communication Lines located on Joint Use Poles (See Rule 21.8) that contain Supply Circuits (See Rule 20.6-D), and (ii) Communication Lines attached to a pole that is within three spans of a Joint Use Pole with Supply Circuits, shall not exceed the time specified in the following Table.

Inspection	~~Northern California~~ Tier 2	~~Southern California~~ Tier 3
patrol	2 Years	1 Year
Detailed	~~10~~ 8 Years	5 Years

Inspection intervals ~~and~~ shall be conducted more frequently than shown in the above table, if necessary, based on the five factors listed in Rule 80.1-A2, below.

For the purpose of implementing the patrol and detailed inspection intervals in the above Table ~~in the high fire-threat areas of the state~~, the term "year" is defined as 12 consecutive calendar months starting the first full calendar month after an inspection is performed, plus three full calendar months, not to exceed the end of the calendar year in which the next inspection is due. A required inspection may be completed any time before the expiration of the associated inspection interval using this definition of "year," but not after. The completion of an inspection starts a new inspection interval that must be completed within the prescribed timeframe using this definition of "year." However, inspection intervals may be extended by up to six months in areas where the Governor of California or the President of the United States has declared an emergency or a disaster following a major earthquake or other catastrophe using the procedure set forth in Decision 13-06-011 issued in Rulemaking 08-11-005. The extension shall not exceed six months from the date that an emergency is declared or the date that a disaster is declared, whichever is earlier.

For the purpose of the above Table, the high fire-threat areas in ~~Northern~~ California are areas designated as Tiers 2 and 3 of the High Fire-Threat District. ~~Threat Classes 3 and 4 on the Reax Map adopted by Decision 12-01-~~

~~032 issued in Phase 2 of Rulemaking 08-11-005.~~

~~For the purpose of implementing the patrol and detailed inspection intervals in the above Table in the high fire-threat areas of the state, the term "year" is defined as 12 consecutive calendar months starting the first full calendar month after an inspection is performed, plus or minus two full calendar months, not to exceed the end of the calendar year in which the next inspection is due.~~

~~The FRAP Map and Reax Map are to be used to establish approximate boundaries.~~ Communications Infrastructure Providers should use their own expertise and judgment to determine if local conditions require them to adjust the boundaries of the map.

Inspections ~~in high fire-threat areas~~ shall be planned and conducted in accordance with the statewide inspection requirements and procedures described in Rule 80.1-A2, below.

Each company's procedures shall describe (i) the methodology used to ensure that all Communication Lines are subject to the required inspections, and (ii) the procedures used for specifying what problems should be identified by the inspections. The procedures used for specifying what problems should be identified by the inspections shall include a checklist for patrol inspections.

Contested Proposed Regulation 16 re: GO 95, Rule 80.1-A(1) (FSTP)

Proposed Revisions to Rule 80.1-A(1) Are Shown with Strikeout and Underline.

80.1 Inspection Requirements for Communication Lines:

A. Patrol and Detailed Inspections

(1) Inspection Requirements for Joint-Use Poles in the High Fire-Threat District ~~Areas~~

In ~~high~~ Tier 3 ~~fire-threat areas~~, the inspection intervals for (i) Communication Lines located on Joint Use Poles (See Rule 21.8) that contain Supply Circuits (See Rule 20.6-D), and (ii) Communication Lines attached to a pole that is within three spans of a Joint Use Pole with Supply Circuits, shall not exceed the time specified in the following Table.

Inspection	Northern California	Southern California
Patrol	2 Years	1 Year
Detailed	10 Years	5 Years

Inspections ~~intervals and~~ shall be conducted more frequently than shown in the above table, if necessary, based on the five factors listed in Rule 80.1-A2, below.

For the purpose of implementing the patrol and detailed inspection intervals in the above Table ~~in the high fire-threat areas of the state~~, the term "year" is defined as 12 consecutive calendar months starting the first full calendar month after an inspection is performed, plus three full calendar months, not to exceed the end of the calendar year in which the next inspection is due. A required inspection may be completed any time before the expiration of the associated inspection interval using this definition of "year," but not after. The completion of an inspection starts a new inspection interval that must be completed within the prescribed timeframe using this definition of "year." However, inspection intervals may be extended by up to six months in areas where the Governor of California or the President of the United States has declared an emergency or a disaster following a major earthquake or other catastrophe using the procedure set forth in Decision 13-06-011 issued in Rulemaking 08-11-005. The extension shall not exceed six months from the date that an emergency is declared or the date that a disaster is declared, whichever is earlier.

For the purpose of the above Table, ~~the high fire-threat areas in Northern California are areas designated as Threat Classes 3 and 4 on the Reax Map adopted by Decision 12-01-032 issued in Phase 2 of Rulemaking 08-11-005.~~ "Southern California" is defined as the following: Imperial, Los Angeles,

Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura Counties. "Northern California" is defined as all other counties in California.

~~For the purpose of implementing the patrol and detailed inspection intervals in the above Table in the high fire-threat areas of the state, the term "year" is defined as 12 consecutive calendar months starting the first full calendar month after an inspection is performed, plus or minus two full calendar months, not to exceed the end of the calendar year in which the next inspection is due.~~

~~The FRAP Map and Reax Map are to be used to establish approximate boundaries. Communications Infrastructure Providers should use their own expertise and judgment to determine if local conditions require them to adjust the boundaries of the map.~~

Inspections in ~~high~~ Tier 3 ~~fire-threat areas~~ shall be planned and conducted in accordance with the statewide inspection requirements and procedures described in Rule 80.1-A2, below.

~~Each company's procedures shall describe (i) the methodology used to ensure that all Communication Lines are subject to the required inspections, and (ii) the procedures used for specifying what problems should be identified by the inspections. The procedures used for specifying what problems should be identified by the inspections shall include a checklist for patrol inspections.~~

Contested Proposed Regulation 16, Alternate Proposal 1
re: GO 95, Rule 80.1-A(1) (CIP Coalition)

Proposed Revisions to Rule 80.1-A(1) Are Shown with Strikeout and Underline.

80.1 Inspection Requirements for Communication Lines:

A. Patrol and Detailed Inspections

(1) Inspection Requirements for Joint-Use Poles in High Fire-Threat District ~~Areas~~

In ~~high~~ Tier 3 ~~fire-threat areas~~, the inspection intervals for (i) Communication Lines located on Joint Use Poles (See Rule 21.8) that contain Supply Circuits (See Rule 20.6-D), and (ii) Communication Lines attached to a pole that is within three spans of a Joint Use Pole with Supply Circuits, shall not exceed the time specified in the following Table.

Inspection	~~Northern California~~	~~Southern California~~ Interval
Patrol	~~2 Years~~	1 Year
Detailed	~~10 Years~~	5 Years

Inspections ~~intervals and~~ shall be conducted more frequently than shown in the above table, if necessary, based on the five factors listed in Rule 80.1-A2, below.

For the purpose of implementing the patrol and detailed inspection intervals in the above Table Tier 3~~in the high fire-threat areas of the state~~, the term "year" is defined as 12 consecutive calendar months starting the first full calendar month after an inspection is performed, plus three full calendar months, not to exceed the end of the calendar year in which the next inspection is due. A required inspection may be completed any time before the expiration of the associated inspection interval using this definition of "year," but not after. The completion of an inspection starts a new inspection interval that must be completed within the prescribed timeframe using this definition of "year." However, inspection intervals may be extended by up to six months in areas where the Governor of California or the President of the United States has declared an emergency or a disaster following a major earthquake or other catastrophe using the procedure set forth in Decision 13-06-011 issued in Rulemaking 08-11-005. The extension shall not exceed six months from the date that an emergency is declared or the date that a disaster is declared, whichever is earlier.

For the purpose of the above Table, the high fire-threat areas in Northern California are areas designated as Threat Classes 3 and 4 on the Reax Map

adopted by Decision 12- 01-032 issued in Phase 2 of Rulemaking 08-11-005.

~~For the purpose of implementing the patrol and detailed inspection intervals in the above Table in the high fire-threat areas of the state, the term "year" is defined as 12 consecutive calendar months starting the first full calendar month after an inspection is performed, plus or minus two full calendar months, not to exceed the end of the calendar year in which the next inspection is due.~~

~~The FRAP Map and Reax Map are to be used to establish approximate boundaries.~~ Communications Infrastructure Providers should use their own expertise and judgment to determine if local conditions require them to adjust the boundaries of the map.

Inspections in ~~high fire-threat areas~~ the High Fire-Threat District shall be planned and conducted in accordance with the statewide inspection requirements and procedures described in Rule 80.1-A2, below.

Each company's procedures shall describe (i) the methodology used to ensure that all Communication Lines are subject to the required inspections, and (ii) the procedures used for specifying what problems should be identified by the inspections. The procedures used for specifying what problems should be identified by the inspections shall include a checklist for patrol inspections.

(2) Statewide Inspection Requirements

Each company shall prepare, follow, and modify as necessary, procedures for conducting patrol or detailed inspections for all of its Communication Lines throughout the State. Consistent with Rule 31.2, the type, frequency and thoroughness of inspections shall be based upon the following factors:

- Fire threat
- Proximity to overhead power line facilities
- Terrain
- Accessibility
- Location, including whether the Communications Lines are located in the High Fire-Threat District

Contested Proposed Regulation 16, Alternate Proposal 2
re: GO 95, Rule 80.1-A(1) (PG&E)

Proposed Revisions to Rule 80.1-A(1) Are Shown with Strikeout and Underline.

80.1 Inspection Requirements for Communication Lines:

A. Patrol and Detailed Inspections

(1) Inspection Requirements for Joint-Use Poles in High Fire-Threat District ~~Areas~~

In the ~~high fire-threat areas~~, High Fire-Threat District, the inspection intervals for (i) Communication Lines located on Joint Use Poles (See Rule 21.8) that contain Supply Circuits (See Rule 20.6-D), and (ii) Communication Lines attached to a pole that is within three spans of a Joint Use Pole with Supply Circuits, shall not exceed the time specified in the following Table.

Inspection	~~Northern California~~ Tier 2	~~Southern California~~ Tier 3
Patrol	~~2~~ 5 Years	1 Year
Detailed	~~10~~ 15 Years	5 Years

Inspections ~~intervals and~~ shall be conducted more frequently than shown in the above table, if necessary, based on the five factors listed in Rule 80.1-A2, below.

For the purpose of implementing the patrol and detailed inspection intervals in the above Table ~~in the high fire-threat areas of the state~~, the term "year" is defined as 12 consecutive calendar months starting the first full calendar month after an inspection is performed, plus three full calendar months, not to exceed the end of the calendar year in which the next inspection is due. A required inspection may be completed any time before the expiration of the associated inspection interval using this definition of "year," but not after. The completion of an inspection starts a new inspection interval that must be completed within the prescribed timeframe using this definition of "year." However, inspection intervals may be extended by up to six months in areas where the Governor of California or the President of the United States has declared an emergency or a disaster following a major earthquake or other catastrophe using the procedure set forth in Decision 13-06-011 issued in Rulemaking 08-11-005. The extension shall not exceed six months from the date that an emergency is declared or the date that a disaster is declared, whichever is earlier.

~~For the purpose of the above Table, the high fire-threat areas in Northern California are areas designated as Threat Classes 3 and 4 on the Reax Map~~

~~adopted by Decision 12- 01-032 issued in Phase 2 of Rulemaking 08-11-005.~~

~~For the purpose of implementing the patrol and detailed inspection intervals in the above Table in the high fire-threat areas of the state, the term "year" is defined as 12 consecutive calendar months starting the first full calendar month after an inspection is performed, plus or minus two full calendar months, not to exceed the end of the calendar year in which the next inspection is due.~~

~~The FRAP Map and Reax Map are to be used to establish approximate boundaries. Communications Infrastructure Providers should use their own expertise and judgment to determine if local conditions require them to adjust the boundaries of the map.~~

Inspections in ~~high fire-threat areas~~ the High Fire-Threat District shall be planned and conducted in accordance with the statewide inspection requirements and procedures described in Rule 80.1-A2, below.

Each company's procedures shall describe (i) the methodology used to ensure that all Communication Lines are subject to the required inspections, and (ii) the procedures used for specifying what problems should be identified by the inspections. The procedures used for specifying what problems should be identified by the inspections shall include a checklist for patrol inspections.

Contested Proposed Regulation 17 re: GO 95, Rule 80.1-B (FSTP)

Proposed Revisions to Rule 80.1-A(1) Are Shown with Strikeout and Underline.

80.1 Inspection Requirements for Communication Lines:

B. Intrusive Inspections in the High Fire-Threat District

Wood poles in ~~high~~ Tier 3 ~~fire-threat areas~~ that support only Communication Lines or equipment shall be intrusively inspected in accordance with the schedule established in General Order 165 if they are:

- Interset between joint-use poles supporting supply lines in ~~the high fire-threat areas of~~ Southern California.
- Within three spans of a joint-use pole supporting supply lines in ~~the high fire-threat areas of~~ Southern California.
- Within one span of a joint-use pole supporting supply lines in ~~the high fire-threat areas of~~ Northern California.

For the purpose of this rule, ~~the high fire-threat areas in Southern California are Extreme and Very High Fire Threat Zones in the following counties: Imperial, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura. Extreme and Very High Fire Threat Zones are defined by California Department of Forestry and Fire Protection's Fire and Resource Assessment Program (FRAP) Fire Threat Map~~ "Southern California" is defined as the following: Imperial, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura Counties. "Northern California" is defined as all other counties in California.

~~The high fire threat areas in Northern California are areas designated as Threat Classes 3 and 4 on the Reax Map adopted in Decision 12-01-032 issued in Phase 2 of Rulemaking 08-11-005. The FRAP Fire Threat Map and Reax Map are to be used to establish approximate boundaries.~~ Communications Infrastructure Providers (CIPs) should use their own expertise and judgment to determine if local conditions require them to adjust the boundaries of the map.

For wood pole intrusive inspections, the term "year" is defined as a calendar year.

CIPs shall maintain records for the life of the pole that provide the following information for each wood pole subject to this rule: The location of the pole, the date of each intrusive inspection, the results of each inspection, the personnel who performed each intrusive inspections, the date and description of each corrective action, and the personnel who performed each correction action. Commission staff may inspect records consistent with Public Utilities Code Section 314(a).

Contested Proposed Regulation 18 re: GO 95, Rule 91.1 (SDG&E)

Proposed Revisions to Rule 91.1 Are Shown with Underline

91 Poles, Towers and Structures

91.1 Joint Use

Joint use of poles shall be given consideration by all interested parties where construction or reconstruction is involved and where used it shall be subject to the appropriate grade of construction as specified in Section IV.

Nothing herein shall be construed as requiring utilities to use poles jointly, or as granting authority for the use of any poles without the owner's consent.

In Tiers 2 and 3 of the High Fire-Threat District, all attachments must have the consent of a pole owner or granting authority prior to any construction. Any attachment without consent can be reported to the Commission.

Each utility should definitely designate its space requirements on joint poles, which space shall not be occupied without consent, by equipment of any other utility.

Non–climbable metal poles in partial underground construction (see Rules 22.6–D and 22.5) shall not be jointly used.

Contested Proposed Regulation 19 re: GO 95, Appendix E (SDG&E)

Proposed Revisions to Appendix E Are Shown with Strikeout and Underline

Appendix E – Guidelines to Rule 35

The following are guidelines to Rule 35.

The radial clearances shown below are recommended minimum clearances that should be established, at time of trimming, between the vegetation and the energized conductors and associated live parts where practicable. Reasonable vegetation management practices may make it advantageous for the purposes of public safety or service reliability to obtain greater clearances than those listed below to ensure compliance until the next scheduled maintenance. Each utility may determine and apply additional appropriate clearances beyond clearances listed below, which take into consideration various factors, including: line operating voltage, length of span, line sag, planned maintenance cycles, location of vegetation within the span, species type, experience with particular species, vegetation growth rate and characteristics, vegetation management standards and best practices, local climate, elevation, fire risk, and vegetation trimming requirements that are applicable to State Responsibility Area lands pursuant to Public Resource Code Sections 4102 and 4293.

Voltage of Lines	Case 13 of Table 1	Case 14 of Table 1
Radial clearances for any conductor of a line operating at 2,400 or more volts, but less than 72,000 volt	4 feet	~~6.5~~ 12 feet
Radial clearances for any conductor of a line operating at 72,000 or more volts, but less than 110,000 volts	6 feet	~~10~~ 20 feet
Radial clearances for any conductor of a line operating at 110,000 or more volts but less than 300,000 volts	10 feet	~~20~~ 30 feet
Radial clearance for any conductor of a line operating at 300,000 or more volts	15 feet	~~20~~ 30-feet

Note: Added November 6, 1992, by Resolution SU-15 and revised September 20, 1996, by Decision No. 96-09-097, August 20, 2009 by Decision No. 09-08-029 and January 12, 2012 by Decision No. 12-01-032.

Contested Proposed Regulation 20 re: GO 165, Table 1, Footnote 1 (FSTP)

Proposed Revisions to GO 165, Table 1, Footnote 1 Are Shown with Strikeout and Underline.

Table 1 Distribution Inspection Cycles (Maximum Intervals in Years)

	Patrol		Detailed		Intrusive	
	Urban	Rural	Urban	Rural	Urban	Rural
Transformers						
Overhead	1	2[1]	5	5	---	---
Underground	1	2	3	3	---	---
Padmounted	1	2	5	5	---	---
Switching/Protective Devices						
Overhead	1	2[1]	5	5	---	---
Underground	1	2	3	3	---	---
Padmounted	1	2	5	5	---	---
Regulators/Capacitors						
Overhead	1	2[1]	5	5	---	---
Underground	1	2	3	3	---	---
Padmounted	1	2	5	5	---	---
Overhead Conductor and Cables	1	2[1]	5	5	---	---
Streetlighting	1	2	x	x	---	---
Wood Poles under 15 years	1	2	x	x	---	---
Wood Poles over 15 years which have not been subject to intrusive inspection	1	2	x	x	10	10
Wood poles which passed intrusive inspection	---	---	---	---	20	20

(1) patrol inspections in rural areas shall be increased to once per year in ~~Extreme and Very High Fire Threat Zones~~ Tier 3 of the High Fire-Threat District (See GO 95 Rule 21.2-D) for Southern California. ~~in the following counties Imperial, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura. Extreme and Very High Fire Threat Zones are designated on the Fire and Resource Assessment Program (FRAP) Map prepared by the California Department of Forestry and Fire Protection or the modified FRAP Map prepared by San Diego Gas & Electric Company (SDG&E) and adopted by Decision 12-01-032 in Phase 2 of Rulemaking 08-11-005. The fire-threat map is to be used to establish approximate boundaries and Utilities should use their own expertise and judgment to determine if local conditions require them to adjust the boundaries of the map~~. Southern California is defined as the following: Imperial, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura Counties.

Contested Proposed Regulation 20, Alternate Proposal 1
re: GO 165, Table 1, Footnote 1 (SED)

Proposed Revisions to GO 165 Are Shown with Strikeout and Underline.

Table 1 Distribution Inspection Cycles (Maximum Intervals in Years)

	Patrol		Detailed		Intrusive	
	Urban	Rural	Urban	Rural	Urban	Rural
Transformers						
Overhead	1	2[1]	5	5	---	---
Underground	1	2	3	3	---	---
Padmounted	1	2	5	5	---	---
Switching/Protective Devices						
Overhead	1	2[1]	5	5	---	---
Underground	1	2	3	3	---	---
Padmounted	1	2	5	5	---	---
Regulators/Capacitors						
Overhead	1	2[1]	5	5	---	---
Underground	1	2	3	3	---	---
Padmounted	1	2	5	5	---	---
Overhead Conductor and Cables	1	2[1]	5	5	---	---
Streetlighting	1	2	x	x	---	---
Wood Poles under 15 years	1	2	x	x	---	---
Wood Poles over 15 years which have not been subject to intrusive inspection	1	2	x	x	10	10
Wood poles which passed intrusive inspection	---	---	---	---	20	20

(1) patrol inspections in rural areas shall be increased to once per year in ~~Extreme and Very High Fire Threat Zones~~ Tier 2 and Tier 3 of the High Fire-Threat District (See GO 95, Rule 21.2-D).~~in the following counties Imperial, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura. Extreme and Very High Fire Threat Zones are designated on the Fire and Resource Assessment Program (FRAP) Map prepared by the California Department of Forestry and Fire Protection or the modified FRAP Map prepared by San Diego Gas & Electric Company (SDG&E) and adopted by Decision 12-01-032 in Phase 2 of Rulemaking 08-11-005. The fire-threat map is to be used to establish approximate boundaries and Utilities should use their own expertise and judgment to determine if local conditions require them to adjust the boundaries of the map.~~

Contested Proposed Regulation 20, Alternate Proposal 2
re: GO 165, Table 1, Footnote 1 (PacifiCorp)

Proposed Revisions to GO 165 Are Shown with Strikeout and Underline.

Table 1 Distribution Inspection Cycles (Maximum Intervals in Years)

	Patrol		Detailed		Intrusive	
	Urban	Rural	Urban	Rural	Urban	Rural
Transformers						
Overhead	1	2[1]	5	5	---	---
Underground	1	2	3	3	---	---
Padmounted	1	2	5	5	---	---
Switching/Protective Devices						
Overhead	1	2[1]	5	5	---	---
Underground	1	2	3	3	---	---
Padmounted	1	2	5	5	---	---
Regulators/Capacitors						
Overhead	1	2[1]	5	5	---	---
Underground	1	2	3	3	---	---
Padmounted	1	2	5	5	---	---
Overhead Conductor and Cables	1	2[1]	5	5	---	---
Streetlighting	1	2	x	x	---	---
Wood Poles under 15 years	1	2	x	x	---	---
Wood Poles over 15 years which have not been subject to intrusive inspection	1	2	x	x	10	10
Wood poles which passed intrusive inspection	---	---	---	---	20	20

(1) patrol inspections in rural areas shall be increased to once per year in ~~Extreme and Very High Fire Threat Zones~~ Tier 3 of the High Fire-Threat District (See GO 95, Rule 21.2-D). ~~in the following counties Imperial, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura. Extreme and Very High Fire Threat Zones are designated on the Fire and Resource Assessment Program (FRAP) Map prepared by the California Department of Forestry and Fire Protection or the modified FRAP Map prepared by San Diego Gas & Electric Company (SDG&E) and adopted by Decision 12-01-032 in Phase 2 of Rulemaking 08-11-005. The fire-threat map is to be used to establish approximate boundaries and Utilities should use their own expertise and judgment to determine if local conditions require them to adjust the boundaries of the map.~~

Contested Proposed Regulation 21 re: GO 166, Standard 1, Part E, Subpart D (FSTP)

Proposed Revisions to GO 166 Are Shown with Underline and Strikeout

GO 166 Standards for Operation, Reliability, and Safety During Emergencies and Disasters

Standard 1 Emergency Response Plan

E. Fire Prevention Plan

Those investor-owned electric utilities identified below shall have a Fire-Prevention Plan that:

A. Lists and describes the measures the electric utility intends to implement, both in the short run and in the long run, to mitigate the threat of power-line fires generally and in the specific situation where all three of the following conditions occur simultaneously: (i) The force of 3-second wind gusts exceeds the structural or mechanical design standards for the affected overhead power-line facilities, (ii) these 3-second gusts occur during a period of high fire danger, and (iii) the affected facilities are located in a high fire-threat area. A utility's fire-prevention plan may address other situations than required by this General Order, but not in lieu of this General Order.

B. Identifies the specific parts of the electric utility's service territory where all three of the fire-weather conditions listed in Item A, above, may occur simultaneously. In making this determination, the utility shall use a minimum probability of 3% over a 50-year period that 3-second wind gusts which exceed the design standards for the affected facilities will occur during a Red Flag Warning in a high fire-threat area.

C. Lists the other fire-threat indicators that the electric utility elects to use, in addition to those required by Item A, above, to timely identify and/or forecast elevated fire-weather conditions that increase the risk of fire associated with overhead power-line facilities.

D. For the purpose of this Standard, the following definitions apply: (i) Structural and mechanical design standards are the maximum working stresses set forth in General Order 95, Section IV, for installed overhead electric facilities; (ii) period of high fire danger is the period covered by a Red Flag Warning issued by the United States National Weather Service; and (iii) ~~high fire-threat areas are areas designated as the first or second highest fire-threat areas on the fire-threat maps adopted by Decision 12-01-032~~ the High Fire-Threat District as defined in GO 95, Rule 21.2-D.

The requirement to prepare a fire-prevention plan applies to~~:~~

~~(1) Investor-owned electric utilities in Imperial, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura counties; and (2)~~ ~~i~~nvestor-owned electric utilities ~~in all other counties~~ with overhead electric facilities located in ~~areas of high fire risk~~ ~~Tier 3 as designated on the CPUC's Fire Threat Map~~ the High Fire-Threat District. ~~as determined by such utilities in accordance with Decision 12-01-032 issued Rulemaking 08-11-005.~~

Contested Proposed Regulation 21, Alternate Proposal 1 re: GO 166, Standard 1, Part E, Subpart D (SED)

Proposed Revisions to GO 166 Are Shown with Underline and Strikeout

GO 166 Standards for Operation, Reliability, and Safety During Emergencies and Disasters

Standard 1 Emergency Response Plan

E. Fire Prevention Plan

Those investor-owned electric utilities identified below shall have a Fire-Prevention Plan that:

A. Lists and describes the measures the electric utility intends to implement, both in the short run and in the long run, to mitigate the threat of power-line fires generally and in the specific situation where all three of the following conditions occur simultaneously: (i) The force of 3-second wind gusts exceeds the structural or mechanical design standards for the affected overhead power-line facilities, (ii) these 3-second gusts occur during a period of high fire danger, and (iii) the affected facilities are located in a high fire-threat area. A utility's fire-prevention plan may address other situations than required by this General Order, but not in lieu of this General Order.

B. Identifies the specific parts of the electric utility's service territory where all three of the fire-weather conditions listed in Item A, above, may occur simultaneously. In making this determination, the utility shall use a minimum probability of 3% over a 50-year period that 3-second wind gusts which exceed the design standards for the affected facilities will occur during a Red Flag Warning in a high fire-threat area.

C. Lists the other fire-threat indicators that the electric utility elects to use, in addition to those required by Item A, above, to timely identify and/or forecast elevated fire-weather conditions that increase the risk of fire associated with overhead power-line facilities.

D. For the purpose of this Standard, the following definitions apply: (i) Structural and mechanical design standards are the maximum working stresses set forth in General Order 95, Section IV, for installed overhead electric facilities; (ii) period of high fire danger is the period covered by a Red Flag Warning issued by the United States National Weather Service; and (iii) ~~high fire-threat areas are areas designated as the first or second highest fire-threat areas on the fire-threat maps adopted by Decision 12-01-032~~ the High Fire-Threat District as defined in GO 95, Rule 21.2-D.

The requirement to prepare a fire-prevention plan applies to~~:~~

~~(1) Investor-owned electric utilities in Imperial, Los Angeles, Orange, Riverside,~~

~~Santa Barbara, San Bernardino, San Diego, and Ventura counties; and (2)~~ ~~i~~
Investor-owned electric utilities ~~in all other counties~~ with overhead electric facilities located in ~~areas of high fire risk~~ ~~Tier 3 as designated on the CPUC's Fire Threat Map~~ the High Fire-Threat District. ~~as determined by such utilities in accordance with Decision 12-01-032 issued Rulemaking 08-11-005.~~

Contested Proposed Regulation 22 re: Electric Tariff Rule 11 (PG&E)

Proposed Revisions to Tariff Rule 11 Are Shown with Underline and Strikeout

PG&E Electric Tariff Rule No. 11 – Discontinuance and Restoration of Service

N. VEGETATION MANAGEMENT IN THE HIGH FIRE THREAT DISTRICT

[ELECTRIC UTILITY] may disconnect service to a customer or property owner who obstructs access to overhead power-line facilities for vegetation management activities, subject to the following conditions:

1. The authority to disconnect service to a customer is limited to ~~situations where there is breach of the minimum vegetation clearances required for power lines in General Order (GO) 95, Rule 35, Table 1, Cases 13 and 14 under the provisions in effect at the time the breach is discovered~~ Tier 2 and Tier 3 of the High Fire-Threat District, as designated in General Order (GO) 95, where one of the following has occurred:
   a. there is a breach or imminent threat of breach of the minimum vegetation clearances required for power lines in GO 95, Rule 35, Table 1, Cases 13 or 14 under the provisions in effect at the time the breach is discovered, or
   b. there are dead, rotten, or diseased trees or dead, rotten or diseased portions of otherwise healthy trees that overhang or lean toward and may fall into a span of supply or communications lines, or
   c. during fire season in State Responsibility Areas, there is a breach or imminent threat of breach of the minimum vegetation clearances required in California Public Resources Code Section 4293, or
   d. there are dead trees, old decadent or rotten trees, trees weakened by decay or disease and trees or portions thereof that overhang or lean toward and may contact the line from the side or fall into the line, or
   e. during fire season in State Responsibility Areas, there is a breach or imminent threat of breach of the minimum vegetation clearances required in California Public Resources Code Section 4292.
2. The authority to disconnect service to a customer who obstructs vegetation management activities does not extend to customers that are state and local governments and agencies.
3. The authority to disconnect service to a customer is limited to one meter serving the property owner's primary residence, or if the property owner is a business entity, the entity's primary place of business. This one meter is in addition to disconnecting service, if necessary for public safety, at the location of the vegetation-related fire hazard.
4. Prior to disconnecting service, [ELECTRIC UTILITY] shall ~~follow the then current~~

~~procedures and notice requirements applicable to discontinuance of service for non-payment, including the requirements applicable for sensitive customers, customers who not proficient in English, multifamily accommodations, and other customer groups, except as set forth in section 5 below~~ first give notice of impending service termination at least 10 days prior to the proposed termination by means of a notice mailed, postage prepaid, to the customer to whom the service is billed, and the 10-day period shall not commence until five-days after the mailing of the notice. During this 10-day period, [ELECTRIC UTILITY] shall make at least two attempts to contact the customer by telephone or personal contact. Where the residential customer has established a third-party notification authorization, [ELECTRIC UTILITY] shall notify the third-party of the impending termination. Where [ELECTRIC UTILITY] determines that the customer is a tenant, [ELECTRIC UTILITY] may notify the record property owner as set forth in section 3 above. [ELECTRIC UTILITY] shall make reasonable efforts to provide notice in appropriate language for customers who are not proficient in English, except as set forth in section 5 below. To the extent practical, the ~~applicable procedures and~~ notice requirements shall be completed prior to a breach of the minimum vegetation clearances ~~required by GO 95, Rule 35, Table 1, Cases 13 and 14~~ or other hazardous conditions identified in section 1 above.

5. For vegetation hazards that pose an immediate threat to public safety, [ELECTRIC UTILITY] may disconnect service to the obstructing property owner's residence or primary place of business at any time without prior notice, except when the customer receives service under a medical baseline allowance. If service is disconnected without prior notice, [ELECTRIC UTILITY] shall attempt to contact the property owner for five consecutive business days by daily visits to the property owner's residence or primary place of business, in addition to sending a written notice, to inform the property owner why service has been disconnected and how to restore service. If [ELECTRIC UTILITY] determines that it is necessary to disconnect service to a medical baseline customer, [ELECTRIC UTILITY] shall attempt to notify the customer by telephone prior to the service disconnection.

6. SERVICE RESTORATION

   a. When a customer's service has been terminated because access to overhead electric facilities for vegetation management purposes has been obstructed, the customer's service will not be restored until appropriate vegetation management has been achieved or the vegetation hazard has been mitigated, and payment for all applicable restoration of service charges as provided in Electric Rule 11, Section M, Charges for Termination and/or Restoration of Service have been received.

(END OF APPENDIX A)

Appendix B: Adopted Revisions to General Orders 95, 165, and 166, and Electric Tariff Rule 11

Appendix B shows the revised parts of General Orders 95, 165, and 166, and Electric Tariff Rule 11 adopted by this Decision.

General Order 95, Rule 18
Adopted Rule in Final Form

18 Reporting and Resolution of Safety Hazards Discovered by Utilities

For purposes of this rule, "Safety Hazard" means a condition that poses a significant threat to human life or property.

A. Resolution of Safety Hazards and General Order Nonconformances

(1)(a) Each company (including utilities and CIPs) is responsible for taking appropriate corrective action to remedy Safety Hazards and GO 95 nonconformances posed by its facilities.

(b) Upon completion of the corrective action, the company's records shall show, with sufficient detail, the nature of the work, the date, and the identity of persons performing the work. These records shall be preserved by the company for at least ten (10) years and shall be made available to Commission staff upon 30 days' notice.

(c) Where a communications company's or an electric utility' actions result in GO nonconformances for another entity, that entity's remedial action will be to transmit a single documented notice of identified nonconformances to the communications company or electric utility for compliance.

(2)(a) All companies shall establish an auditable maintenance program for their facilities and lines. All companies must include a timeline for corrective actions to be taken following the identification of a Safety Hazard or nonconformances with General Order 95 on the company's facilities. The auditable maintenance program shall prioritize corrective actions consistent with the priority levels set forth below and based on the following factors, as appropriate:

- Safety and reliability as specified in the priority levels below;
- Type of facility or equipment;
- Location, including whether the Safety Hazard or nonconformance is located in the High Fire-Threat District;
- Accessibility;
- Climate;
- Direct or potential impact on operations, customers, electrical company

There shall be 3 priority levels.

(i) Level 1:
- Immediate safety and/or reliability risk with high probability for significant impact.
- Take action immediately, either by fully repairing the condition, or by temporarily repairing and reclassifying the condition to a lower priority.

(ii) Level 2:
- Variable (non-immediate high to low) safety and/or reliability risk.
- Take action to correct within specified time period (fully repair, or by temporarily repairing and reclassifying the condition to a lower priority). Time period for correction to be determined at the time of identification by a qualified company representative, but not to exceed: (1) six months for nonconformances that create a fire risk located in Tier 3 of the High Fire-Threat District; (2) 12 months for nonconformances that create a fire risk located in Tier 2 of the High Fire-Threat District; (3) 12 months for nonconformances that compromise worker safety; and (4) 59 months for all other Level 2 nonconformances.

(iii) Level 3:
- Acceptable safety and/or reliability risk.
- Take action (re-inspect, re-evaluate, or repair) as appropriate.

(b) Correction times may be extended under reasonable circumstances, such as:
- Third party refusal
- Customer issue
- No access
- Permits required
- System emergencies (e.g. fires, severe weather conditions)

(3) Companies that have existing General Order 165 auditable inspection and maintenance programs that are consistent with the purpose of Rule 18A shall continue to follow their General Order 165 programs.

General Order 95, Rule 21.2-D and Associated Entries in GO 95's Section II List of Definitions and GO 95's Index

Adopted Rule in Final Form

21.2 Districts means areas defined as the following:

D. **High Fire-Threat District** means those areas comprised of the following:

(1) **Zone 1** is Tier 1 of the latest version of the United States Forest Service (USFS) and CAL FIRE's joint map of Tree Mortality High Hazard Zones (HHZs). (Note: The Tree Mortality HHZs Map may be revised regularly by the USFS and CAL FIRE.)

(2) **Tier 2** is Tier 2 of the CPUC Fire-Threat Map.

(3) **Tier 3** is Tier 3 of the CPUC Fire-Threat Map.

Section II, Definition of Terms as Used in the Rules of This Order, Page II-2

21.2 Districts	II-10
A. Urban	II-11
B. Rural	II-11
C. Loading	II-11
D. High Fire Threat	II-11

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Topic	Rule
Disconnects (See Switches)	
District, High Fire-Threat	21.2-D, 18-A, 37, 80.1-A, 80.1-B
Districts, Loading	21.2-C, 43.1, 43.2, 49.4-C, Appendix A

Note: The Index entries immediately before and after "District, High Fire-Threat" are provided to show where this new entry belongs in the Index.

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Topic	Rule
Height of Guy	Figure 86 (Appendix G)
High Fire-Threat District	18-A, 21.2-D, 37, 80.1-A, 80.1-B
High Voltage Signs (See Marking)	

Note: The Index entries immediately before and after "High Fire-Threat District" are provided to show where this new entry belongs in the Index"

General Order 95, Rule 35, Table 1, Case 14 and Reference (hhh)

Adopted Rule in Final Form

Case No.	Nature of Clearance	Table 1 Wire or Conductor Concerned						
		A Span Wires (Other than Trolley Span Wires) Overhead Guys and Messengers	B Communication Conductors (Including Open Wire, Cables and Service Drops), Supply Service Drops of 0 - 750 Volts	C Trolley Contact, Feeder and Span Wires, 0 - 5,000 Volts	D Supply Conductors of 0 - 750 Volts and Supply Cables Treated as in Rule 57.8	E Supply Conductors and Supply Cables, 750 - 22,500 Volts	F Supply Conductors and Supply Cables, 22.5 - 300 kV	G Supply Conductors and Supply Cables, 300 - 550 kV (mm)
14	Radial clearance of bare line conductors from vegetation in the High Fire-Threat District (hhh) (aaa) (ddd) (jjj)			18 inches (bbb)		48 inches (bbb) (iii)	48 inches (fff)	120 inches (ggg)

References to Rules Modifying Minimum Clearances in Table 1

(hhh) The High Fire-Threat District is defined in GO 95, Rule 21.2-D.

General Order 95, Rule 38

Adopted Rule in Final Form

38 Minimum Clearances of Wires from Other Wires

The minimum vertical, horizontal or radial clearances of wires from other wires shall not be less than the values given in Table 2 and are based on a temperature of 60° F. and no wind. Conductors may be deadended at the crossarm or have reduced clearances at points of transposition, and shall not be held in violation of Table 2, Cases 8–15, inclusive.

The clearances in Table 2 shall in no case be reduced more than 10 percent, except mid-span in Tier 3 of the High Fire-Threat District where they shall be reduced by no more than 5 percent, because of temperature and loading as specified in Rule 43 or because of a difference in size or design of the supporting pins, hardware or insulators. All clearances of less than 5 inches shall be applied between surfaces, and clearances of 5 inches or more shall be applied to the center lines of such items. The utilities of interest (including electric supply and/or communication companies) shall cooperate and provide relevant information for sag calculations for their facilities, upon request.

General Order 95, Rule 80.1-A(1)

Adopted Rule in Final Form

80.1 Inspection Requirements for Communication Lines:

A. Patrol and Detailed Inspections

(1) Inspection Requirements for Joint-Use Poles in the High Fire-Threat District

In Tiers 2 and 3 of the High Fire-Threat District, the inspection intervals for (i) Communication Lines located on Joint Use Poles (See Rule 21.8) that contain Supply Circuits (See Rule 20.6-D), and (ii) Communication Lines attached to a pole that is within three spans of a Joint Use Pole with Supply Circuits, shall not exceed the time specified in the following Table.

Inspection	Tier 2	Tier 3
Patrol	2 Years	1 Year
Detailed	10 Years	5 Years

Inspections shall be conducted more frequently than shown in the above table, if necessary, based on the five factors listed in Rule 80.1-A(2), below.

For the purpose of implementing the patrol and detailed inspection intervals in the above Table, the term "year" is defined as 12 consecutive calendar months starting the first full calendar month after an inspection is performed, plus three full calendar months, not to exceed the end of the calendar year in which the next inspection is due. A required inspection may be completed any time before the expiration of the associated inspection interval using this definition of "year," but not after. The completion of an inspection starts a new inspection interval that must be completed within the prescribed timeframe using this definition of "year." However, inspection intervals may be extended by up to six months in areas where the Governor of California or the President of the United States has declared an emergency or a disaster following a major earthquake or other catastrophe using the procedure set forth in Decision 13-06-011 issued in Rulemaking 08-11-005. The extension shall not exceed six months from the date that an emergency is declared or the date that a disaster is declared, whichever is earlier.

Inspections in the High Fire-Threat District shall be planned and conducted in accordance with the statewide inspection requirements and procedures described in Rule 80.1-A(2), below.

Each company's procedures shall describe (i) the methodology used to ensure that all Communication Lines are subject to the required inspections, and

(ii) the procedures used for specifying what problems should be identified by the inspections. The procedures used for specifying what problems should be identified by the inspections shall include a checklist for patrol inspections.

(2) Statewide Inspection Requirements

Each company shall prepare, follow, and modify as necessary, procedures for conducting patrol or detailed inspections for all of its Communication Lines throughout the State. Consistent with Rule 31.2, the type, frequency and thoroughness of inspections shall be based upon the following factors:

- Fire threat
- Proximity to overhead power line facilities
- Terrain
- Accessibility
- Location, including whether the Communications Lines are located in the High Fire-Threat District

General Order 95, Rule 80.1-B

Adopted Rule in Final Form

80.1 Inspection Requirements for Communication Lines:

B. Intrusive Inspections in the High Fire-Threat District

Wood poles in Tier 3 of the High Fire-Threat District that support only Communication Lines or equipment shall be intrusively inspected in accordance with the schedule established in General Order 165 if they are:

- Interset between joint-use poles supporting supply lines in Southern California.
- Within three spans of a joint-use pole supporting supply lines in Southern California.
- Within one span of a joint-use pole supporting supply lines in Northern California.

For the purpose of this rule, "Southern California" is defined as the following: Imperial, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura Counties. "Northern California" is defined as all other counties in California.

For wood pole intrusive inspections, the term "year" is defined as a calendar year.

CIPs shall maintain records for the life of the pole that provide the following information for each wood pole subject to this rule: The location of the pole, the date of each intrusive inspection, the results of each inspection, the personnel who performed each intrusive inspections, the date and description of each corrective action, and the personnel who performed each correction action. Commission staff may inspect records consistent with Public Utilities Code Section 314(a).

General Order 95, Appendix E

Adopted Rule in Final Form

Appendix E – Guidelines to Rule 35

The following are guidelines to Rule 35.

The radial clearances shown below are recommended minimum clearances that should be established, at time of trimming, between the vegetation and the energized conductors and associated live parts where practicable. Reasonable vegetation management practices may make it advantageous for the purposes of public safety or service reliability to obtain greater clearances than those listed below to ensure compliance until the next scheduled maintenance. Each utility may determine and apply additional appropriate clearances beyond clearances listed below, which take into consideration various factors, including: line operating voltage, length of span, line sag, planned maintenance cycles, location of vegetation within the span, species type, experience with particular species, vegetation growth rate and characteristics, vegetation management standards and best practices, local climate, elevation, fire risk, and vegetation trimming requirements that are applicable to State Responsibility Area lands pursuant to Public Resource Code Sections 4102 and 4293.

Voltage of Lines	Case 13 of Table 1	Case 14 of Table 1
Radial clearances for any conductor of a line operating at 2,400 or more volts, but less than 72,000 volt	4 feet	12 feet
Radial clearances for any conductor of a line operating at 72,000 or more volts, but less than 110,000 volts	6 feet	20 feet
Radial clearances for any conductor of a line operating at 110,000 or more volts but less than 300,000 volts	10 feet	30 feet
Radial clearance for any conductor of a line operating at 300,000 or more volts	15 feet	30-feet

Note: Added November 6, 1992, by Resolution SU-15 and revised September 20, 1996, by Decision No. 96-09-097, August 20, 2009 by Decision No. 09-08-029 and January 12, 2012 by Decision No. 12-01-032.

General Order 165, Table 1, Footnote 1

Adopted Amendment in Final Form

Table 1 Distribution Inspection Cycles (Maximum Intervals in Years)

	Patrol		Detailed		Intrusive	
	Urban	Rural	Urban	Rural	Urban	Rural
Transformers						
Overhead	1	2[1]	5	5	---	---
Underground	1	2	3	3	---	---
Padmounted	1	2	5	5	---	---
Switching/Protective Devices						
Overhead	1	2[1]	5	5	---	---
Underground	1	2	3	3	---	---
Padmounted	1	2	5	5	---	---
Regulators/Capacitors						
Overhead	1	2[1]	5	5	---	---
Underground	1	2	3	3	---	---
Padmounted	1	2	5	5	---	---
Overhead Conductor and Cables	1	2[1]	5	5	---	---
Streetlighting	1	2	x	x	---	---
Wood Poles under 15 years	1	2	x	x	---	---
Wood Poles over 15 years which have not been subject to intrusive inspection	1	2	x	x	10	10
Wood poles which passed intrusive inspection	---	---	---	---	20	20

(1) Patrol inspections in rural areas shall be increased to once per year in Tier 2 and Tier 3 of the High Fire-Threat District. (See GO 95, Rule 21.2-D.)

The amendments to GO 165 adopted by today's Decision do not affect several notes following the above text in Footnote 1.

General Order 166, Standard 1, Part E, Subpart D

Adopted Amendment in Final Form

GO 166 Standards for Operation, Reliability, and Safety During Emergencies and Disasters

Standard 1 Emergency Response Plan

E. Fire Prevention Plan

D. For the purpose of this Standard, the following definitions apply: (i) Structural and mechanical design standards are the maximum working stresses set forth in General Order 95, Section IV, for installed overhead electric facilities; (ii) period of high fire danger is the period covered by a Red Flag Warning issued by the United States National Weather Service; and (iii) high fire-threat areas are areas designated as the High Fire-Threat District as defined in GO 95, Rule 21.2-D.

The requirement to prepare a fire-prevention plan applies to investor-owned electric utilities with overhead electric facilities located in the High Fire-Threat District as defined in GO 95, Rule 21.2-D.

Note: The adopted amendments to GO 166 do not affect subparts A – B of GO 166, Standard 1, Part E.

Electric Tariff Rule 11
Amended Pro Forma Rule in Final Form

Electric Tariff Rule No. 11 – Discontinuance and Restoration of Service

N. VEGETATION MANAGEMENT

[ELECTRIC UTILITY] may disconnect service to a customer or property owner who obstructs access to overhead power-line facilities for vegetation management activities, subject to the following conditions:

1. The authority to disconnect service to a customer is limited to situations where:
   a. There is breach of the minimum vegetation clearances required for power lines in General Order (GO) 95, Rule 35, Table 1, Cases 13 and 14 under the provisions in effect at the time the breach is discovered.
   b. In the High Fire-Threat District, as defined by GO 95, Rule 21.2-D, there is breach of the minimum vegetation clearances required for power lines and support structures in Cal. Pub. Res. Code §§ 4292 and 4293 for State Responsibility Areas.
   c. In the High Fire-Threat District, [ELECTRIC UTILITY] has obtained from an arborist a written determination that a dead rotten, diseased, leaning, or overhanging tree (or parts thereof) poses an imminent or immediate risk for falling onto, or otherwise contacting, a power line. The written determination shall provide one or more photographs of the tree and explain the basis for the arborist's determination. The arborist shall possess dual certification from the International Society of Agriculture as a Certified Master Arborist and a Certified Utility Specialist. An "imminent risk" as a risk that will, in the arborist's professional judgement, very likely to be realized at any moment. An "immediate risk" is a risk that will, in the arborist's professional judgement, certainly be realized at any moment.
2. The authority to disconnect service to a customer who obstructs vegetation management activities does not extend to customers that are state and local governments and agencies.
3. The authority to disconnect service to a customer is limited to one meter serving the property owner's primary residence, or if the property owner is a business entity, the entity's primary place of business. This one meter

is in addition to disconnecting service, if necessary for public safety, at the location of the vegetation-related fire hazard.

4. Prior to disconnecting service, [ELECTRIC UTILITY] shall follow the then current procedures and notice requirements applicable to discontinuance of service for-non-payment, including the requirements applicable for sensitive customers, customers who not proficient in English, multifamily accommodations, and other customer groups, except as set forth in section 5 below.
   a. To the extent practical, the applicable procedures and notice requirements shall be completed prior to a breach of the minimum vegetation clearances required by (i) GO 95, Rule 35, Table 1, Cases 13 and 14, and/or (ii) Cal. Pub. Res. Code §§ 4292 and 4293.
   b. In situations that pertain to Section 1.c above, the notice shall include the arborist's written determination and photographs provided to the [ELECTRIC UTILITY].
5. For vegetation hazards in Item 1, above, that pose an immediate threat to public safety, [ELECTRIC UTILITY] may disconnect service to the obstructing property owner's residence or primary place of business at any time without prior notice, except when the customer receives service under a medical baseline allowance. If service is disconnected without prior notice, [ELECTRIC UTILITY] shall attempt to contact the property owner for five consecutive business days by daily visits to the property owner's residence or primary place of business, in addition to sending a written notice, to inform the property owner why service has been disconnected and how to restore service. If [ELECTRIC UTILITY] determines that it is necessary to disconnect service to a medical baseline customer, [ELECTRIC UTILITY] shall attempt to notify the customer by telephone prior to the service disconnection.
6. SERVICE RESTORATION

   When a customer's service has been terminated because access to overhead electric facilities for vegetation management purposes has been obstructed, the customer's service will not be restored until appropriate vegetation management has been achieved or the vegetation hazard has been mitigated, and payment for all applicable restoration of service charges as provided in Electric Rule 11, Section M, Charges for Termination and/or Restoration of Service have been received.

(END OF APPENDIX B)

Appendix C: CPUC-CAL FIRE MOU

MEMORANDUM OF UNDERSTANDING
BETWEEN THE
CALIFORNIA PUBLIC UTILITIES COMMISSION
AND THE
CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION

The California Public Utilities Commission (CPUC) and California Department of Forestry and Fire Protection (CAL FIRE) (collectively the Parties) enter into this Memorandum of Understanding (MOU) to cooperatively develop consistent approaches to forest management, safety and energy programs.

ROLES AND RESPONSIBILTIES

CAL FIRE is charged with the fire prevention, protection, and stewardship of over 31million acres of California's privately-owned wildlands. CAL FIRE answers the call to more than 350,000 emergencies each year such as fires, medical aids, hazardous material spills, search and rescue missions, train derailments, and earthquakes. CAL FIRE is responsible for fire and life safety code review of all State-owned and leased buildings, the training certification of firefighters, and the inspection of 6,500 miles of intrastate hazardous liquid pipelines. In addition, CAL FIRE provides varied emergency services to approximately 150 local cities, counties, and fire districts via cooperative contracts.

The CPUC ensures that regulated services are delivered in a safe, reliable manner. CPUC regulations are designed to protect the public from potential hazards, including fires, which may be caused from electric utility transmission or distribution lines, or communications infrastructure providers' facilities in proximity to the electric overhead transmission or distribution lines. The Commission's current General Orders 95, 128, and 165 are designed to promote the safe installation and operation of electric utility and communications infrastructure facilities, and provide the minimum safety requirements which the utilities are supposed to supplement with additional safety precautions when operations and local conditions warrant.

SHARED PRIORITIES

The following priorities are shared by the CPUC and CAL FIRE for effective communication and coordination:

1. Work together to develop consistent approaches to forest management, wildfire prevention, public safety, and energy programs.
2. Develop management alignment on key policy issues.

3. Develop a statewide biomass/bioenergy/biofuel strategy to ensure cost effective methods exists to deliver fuel to biomass/biofuel facilities.
4. Assist one another in preparing for, responding to, and mitigating the effects of wildfires.
5. Deepen awareness of the requirements and goals of each other's programs.
6. Create an Interagency Fire Safety Working Group to vet ideas and develop programmatic solutions to shared goals in the interest of fire safety and resource protection.

Immediate-Term Goals:

In order to achieve optimal results for the shared priorities, the Parties' immediate term goals are as follows:

1. Develop a shared understanding of the use of fire mapping, including enhanced enforcement of the CPUC's General Order 95.
2. Develop a shared understanding of utility deployment timelines, procedures, and operations during a wildfire event, including enhanced enforcement of CPUC General Order 166. Ensure utilities establish significant base camps and are a major presence at incident sites of major fires.
3. Enhance the Parties' communication during and following a wildfire event. The CPUC can serve as a link between CAL FIRE and utilities during an event.
4. Coordinate on a range of resource management issues, fuels treatments, tree mortality, and bark beetle infestation. Jointly identify any mitigation measures that the utilities need to take in response to the tree mortality crisis.
5. Initiate the process for utilities to develop and submit fire hazard prevention plans required by SB 1028. Work together on identifying the requirements for fire hazard prevention plans and communicating these requirements to the utilities. Develop a process for review of fire hazard prevention plans.
6. Provide complementary resources in the areas of risk mitigation, risk management, and investigative relationships between CAL FIRE and the CPUC relating to suspected utility involved fire events.
7. Share best practices related to regulation, inspection, and overall safety of hazardous liquid and gas pipeline systems.

CAL FIRE RESPONSIBILITIES

In order to achieve optimal results for the shared priorities, CAL FIRE will perform the activities and functions summarized below.

1. Upon request, review utility wildfire mitigation plans in accordance with Public Utilities Code Sections 8385 to 8387. Assist CPUC in developing criteria and standards to be used in wildfire mitigation plans.
2. Identify and develop contracting requirements necessary for the completion of Fire Map 2 and the establishment of the CPUC Wildfire Mitigation Section in accordance with SB 1028.
    a. Participate in the Technical Review Team (as defined in the CPUC's Fire Map 2 Work Plan Decision 17-01-009).
    b. Assess, evaluate, and provide formal feedback via public comments or reports on future Party-submitted mapping proposals regarding physical mapping changes and challenges and/or adjustments to existing mapping methodologies.
    c. Assess, evaluate, and provide formal feedback via public comments on utility SB 1028 wildfire mitigation plans and utility vegetation management plans.
3. Provide subject matter expertise in mechanical engineering, utility design and testing, and wildland fire risk analysis to the CPUC to advise on wildfire mitigation program management, audit schedule, mitigation plan details, and enforcement. In addition, this liaison(s) will interface with CPUC staff to assist with technical fire science/behavior assessment and allocation of resources.
4. Participate in identifying best practices of design and operation of utility systems for the purposes of fire mitigation.
5. Provide CPUC staff with CAL FIRE operations documentation, including current CAL FIRE structure, operations model, field operations, investigation procedures, and utility/local community outreach efforts/relationships and also be available for follow-up regarding briefing documentation.
6. Provide safety training to select CPUC personnel in order to enhance the CPUC's ability to coordinate with CAL FIRE and/or utilities in the vicinity of a wildfire event.

CPUC RESPONSIBILITIES

In order to achieve optimal results for the shared priorities, the CPUC will perform the activities and functions summarized below.

1. Oversee utility implementation of wildfire mitigation plans and ensure adherence to best practices identified by CAL FIRE.
2. Adopt risk-based regulations that are in alignment with Fire Map 2 through the CPUC formal process.
3. Perform compliance and enforcement activities pertaining to adopted rules related to fire mitigation and emergency response.

4. Use CPUC regulatory authority to assist CAL FIRE to resolve issues with utilities.
5. Dedicate staff to work with CAL FIRE and ensure staff participation in training.
6. Provide funding as necessary to support CAL FIRE's efforts to meet CPUC assistance requests.
7. Assist CAL FIRE in areas of CPUC expertise.
8. Track and report vegetation management clearance activities on an annual basis to CAL FIRE and the California Board of Forestry and Fire Protection.
9. Fund applied research to examine the effectiveness of vegetation clearance and other activities in wildlife mitigation plans designed to reduce wildfire risk. Fund research to refine fire models and data layers that are used to develop Fire Map 2.

PROTECTION OF CONFIDENTIAL INFORMATION

"Confidential Information" includes information obtained pursuant to California Public Utilities Code section 583, records exempt from public disclosure under the California Public Records Act (Government Code sections 6250, et seq.), or written or verbal information that is designated by the Parties to be exempt, prohibited, or privileged from disclosure by State or federal law.

The Parties shall take all necessary measures to protect Confidential Information and, consistent with the Public Records Act and any other laws requiring disclosure, treat the shared Confidential Information as confidential. The Parties shall impose all the requirements of this MOU on all of their respective officers, members, employees and agents with access to Confidential Information. Any Confidential Information obtained by the Parties shall only be used for purposes which are consistent with existing law.

All Confidential Information provided to the Parties pursuant to this MOU shall be subject to Government Code Section 6254.5, subdivision (e), which exempts from public disclosure under the California Public Records Act, confidential records that one State or local agency has provided to another State or local agency pursuant to an agreement that the latter will treat the disclosed records as confidential.

SCOPE

This MOU is made for the sole benefit of CAL FIRE and CPUC, and no other person or entity shall have any rights or remedies under or by reason of this MOU. Nothing in this MOU may be the basis of any third-party challenges or appeals. Nothing in this MOU creates any rights, remedies, or causes of action in any person or entity not party to this MOU.

CAL FIRE and CPUC each retain all rights, responsibilities, and authorities provided for by law. Nothing in this MOU delegates any rights, responsibilities, or authorities

provided by law to either Party. Nothing in this MOU delegates or otherwise prevents, compromises, or precludes each Party from exercising all rights, responsibilities, or authorities provided by law.

Both parties will meet and coordinate progress regarding the MOU on an annual basis, or as mutually agreed upon by the parties.

APPROVAL

This MOU is effective upon completion of the signatures listed below. This MOU shall not be modified except by a written agreement signed by authorized representatives of the Parties.

This MOU shall continue unless or until either Party to the MOU determines that the MOU should be terminated. Unless otherwise provided for by the written agreement of both of the Parties, unilateral termination of the MOU shall be effected no sooner than 60 days from the date either party provides written notice of its intent to terminate the MOU. Termination of this MOU shall not affect the obligation of the parties to maintain the confidentiality of information pursuant to this MOU.

CALIFORNIA PUBLIC UTILITIES COMMISSION:

Timothy J Sullivan
TIMOTHY J. SULLIVAN
Executive Director

August 18, 2017
August 18, 2017

CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION:

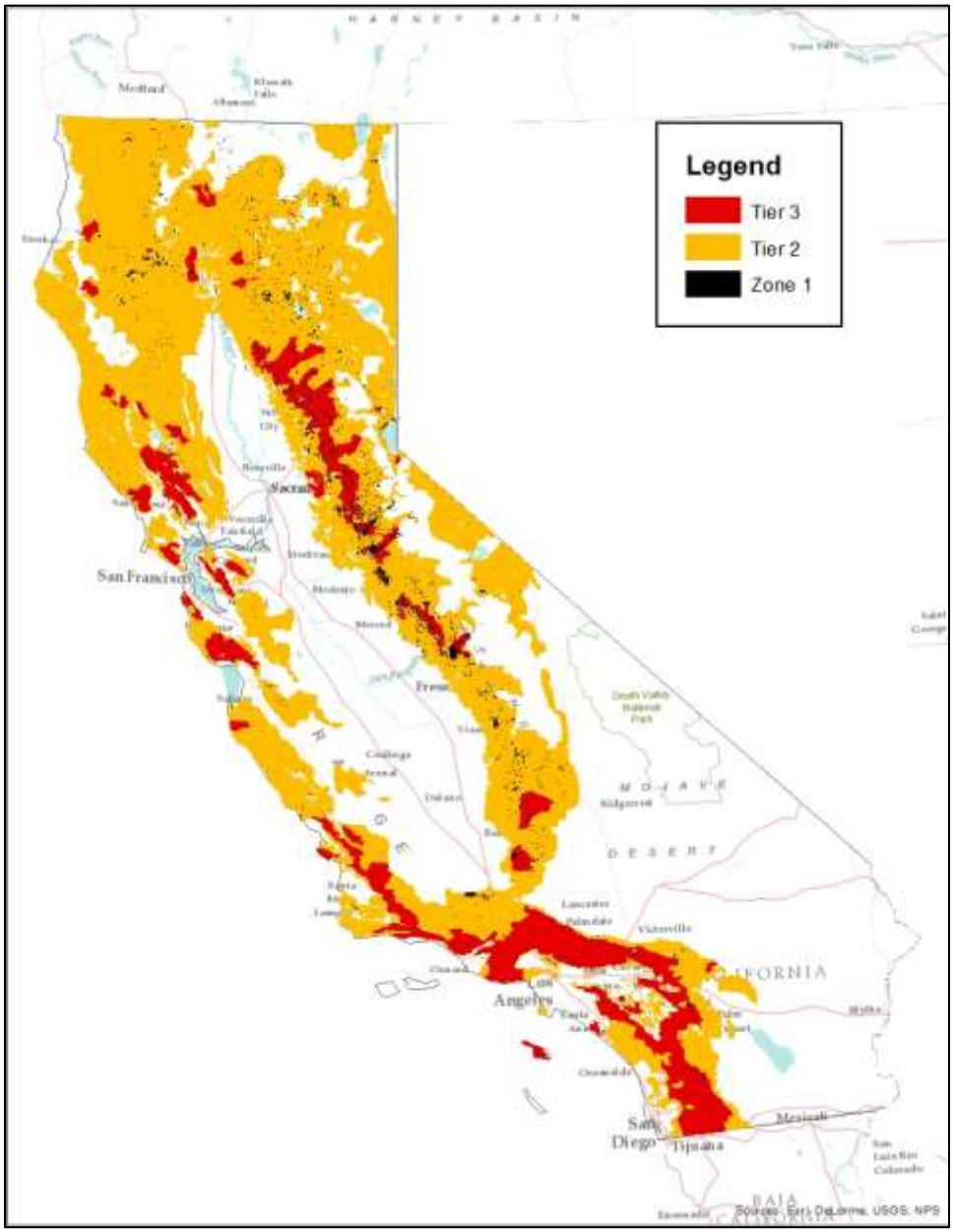
Ken Pimlott
KEN PIMLOTT
Director

August 23, 2017

(END OF APPENDIX C)

Appendix D: Draft Map of the High Fire-Threat District

The following draft map of the High Fire-Threat District is composed of the following: (1) Tier 1 High Hazard Zones on the United States Forest Service - CAL FIRE joint map of Tree Mortality HHZs (referred to as "Zone 1" on the attached map); and (2) Tier 2 and Tier 3 fire-threat areas on the IRT-approved CPUC Fire-Threat Map filed on November 17, 2017.



(END OF APPENDIX D)

ATTACHMENT 4

PG&E Advice Letter 5211-E and SDG&E Advice Letter 3172-E, Joint Filing – *Adoption of the Final California Public Utilities Commission Fire-Threat Map*

PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

January 19, 2018

Advice Letter 5211-E / 3172-E

Meredith Allen
Regulatory Affairs
Pacific Gas & Electric Company
77 Beale St. Mail Code B13U PO
Box 770000
San Francisco, CA, 94177

Megan Caulson
Regulatory Tariff Manager
San Diego Gas & Electric Company
8330 Century Park Court, CP31F San
Diego, CA 92123-1548

Subject: Joint Filing - Adoption of Final California Public Utilities Commission Fire-Threat Map

Dear Ms. Allen and Ms. Caulson,

On January 5, 2018, Pacific Gas & Electric (PG&E) submitted on behalf of itself, San Diego Gas & Electric and REAX Engineering joint Advice Letter 5211-E and 3172-E, seeking approval for statewide adoption of the CPUC Fire-Threat Map.

Given the urgency of adopting this map in order to integrate new fire prevention rules adopted in D. 17-12-024, the Safety & Enforcement Division on January 10, 2018, expedited the protest period to 10-days, with protests due January 16, 2018.

No protests were received.

Therefore, Safety and Enforcement Division approves Advice Letters 5211-E/3172-E, which are effective January 19, 2018.

Sincerely,

Elizaveta Malashenko, Director
Safety & Enforcement Division

Pacific Gas and Electric Company

Meredith Allen
Senior Director
Regulatory Relations

Pacific Gas and Electric Company
77 Beale St., Mail Code B13U
P.O. Box 770000
San Francisco, CA 94177

Fax: 415-973-3582

January 5, 2018

Advice 5211-E
(Pacific Gas and Electric Company – U 39 E)

Advice 3172-E
(San Diego Gas & Electric Company – U 902 E)

Public Utilities Commission of the State of California

Subject: **Adoption of Final California Public Utilities Commission (CPUC) Fire-Threat Map**

Purpose

Pursuant to Decision (D.) 17-01-009[1], as modified by D.17-06-024[2] and the Administrative Law Judges' ruling revising the original schedule[3], this Tier 1 Advice Letter provides the final Shape B Fire-Threat Map (CPUC Fire-Threat Map) for adoption. The map was developed by a group of utility personnel and fire safety professionals known as the Peer Development Panel (PDP)[4] under the oversight of an Independent Review Team (IRT)[5] led by California Department of Forestry and Fire Protection (CAL FIRE).

[1] Decision Adopting a Work Plan for the Development of Fire Map 2 (Jan. 19, 2017) <http://prccappiiswc002/Docs/CPUC-ElectricRegulations-Fire-ThreatMapsandFire-SafetyRegulations/Final-Decisions/CPUC/2017/CPUC-ElectricRegulations-Fire-ThreatMapsandFire-SafetyRegulations_Final-Dec_CPUC_20170119_D-17-01-009_399528.pdf>.

[2] *Decision Amending the Work Plan for the Development of Fire Map 2* (June 29, 2017) <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M191/K628/191628745.pdf>.

[3] *Administrative Law Judges' Ruling Revising the Proceeding Schedule in Response to the Joint Motion for an Extension of Time (Oct. 6, 2017)* p. 4, row 12 <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M196/K826/196826473.PDF>.

[4] The PDP roster was filed and served by PG&E on February 28, 2017 <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M179/K224/179224490.PDF>.

[5] The IRT roster was filed and served by SED on February 28, 2017 <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M179/K227/179227636.PDF>.

Pacific Gas & Electric Company (PG&E), on behalf of San Diego Gas & Electric Company (SDG&E), and Reax Engineering (REAX)[6], submits this joint Tier 1 Advice Letter for statewide adoption of the CPUC Fire-Threat Map.

According to D.17-12-024, the CPUC Fire-Threat Map, in conjunction with Tier 1 High Hazard Zones[7] (HHZs) on the map of Tree Mortality HHZs prepared jointly by the United States Forest Service (USFS) and the CAL FIRE, will constitute the High Fire Threat District (HFTD) and direct future utility and communication infrastructure provider fire-safety activity in California. The IRT has approved the final CPUC Fire-Threat areas known as Tier 2 and Tier 3 for application within a broader HFTD. The HFTD is fully defined by inputs from two separate maps. The CPUC High Fire-Threat Map identifies Tier 2 and Tier 3 of the HFTD. The second map input is Tier 1 from HHZs on the map of Tree Mortality designated as Zone 1. Together, these separate map products define the HFTD which the PDP recommends for adoption.

Background

CPUC D.17-01-009 created the process to develop the HFTD Map consisting of Tier 2, elevated fire threat areas, and Tier 3, extreme fire threat areas. The process was led by the PDP consisting of representatives from utilities, communication infrastructure providers, industry experts, fire officials, and interested stakeholders. A preliminary map, known as Shape A, was developed with significant input from SDG&E and Reax Engineering as PDP co-leads. The final Shape A was approved by CAL FIRE. Shape A was modified and refined by the PDP to create the initial iteration of Shape B. The initial Shape B was approved by the IRT and filed with the CPUC on March 20, 2017. Utilities were encouraged to designate Territory Leads to suggest changes to the PDP. The Territory Leads proposed additions and deletions to Shape B, as well as, Tier designations based on documented local knowledge and experience. The IRT was given the authority to approve or deny suggested Shape B changes subject to CPUC appeal.

The process was very robust; Territory Leads submitted more than 1,300 proposed changes through this process. Tickets were available for stakeholder review in a public-facing web-portal developed specifically for this mapping project. In some cases, these proposed changes went through several iterations with IRT rejections followed by resubmissions with boundary adjustments or new supporting data. This iterative process of expert input and review further refined the designated map areas and resulted in the CPUC Fire-Threat Map recommended for adoption here.

D.17-12-024 provides that the HFTD shall include the USFS Tree Mortality HHZ Map as Zone 1. However, since the Tree Mortality Map is not the work product of the PDP, a copy of and link to that portion of the HFTD is not provided as part of this filing.

[6] D.17-01-009, p. 66, item 6 designated PG&E, San Diego Gas & Electric Company (SDG&E), and Reax Engineering (REAX) as PDP co-leads.
[7] D.17-12-024, p. 9.

The filing would not increase any current rate or charge, cause the withdrawal of service, or conflict with any rate schedule or rule.

Map Availability

In accordance with the requirements of D.17-01-009, the Final CPUC Fire-Threat Map is available for download from the following mirrors:

https://www.dropbox.com/s/fazq2ceiwpqadxj/2017-11-17_irt_approved_shape_b.zip?dl=0

ftp://reaxengineering.com/2017-11-17_irt_approved_shape_b.zip

The .zip archive at the above links contains a high-resolution .pdf of the final CPUC Fire Threat Map as well as GIS Shapefiles that are readable in commonly available GIS software such as QGIS and Arc Map

A copy of the CPUC Fire-Threat Map is also attached as Attachment 1.

Protests

Under General Order 96-B Section 1.3, the PDP co-leads are requesting a shortened protest period of 10 days. Anyone wishing to protest this filing may do so by letter sent via U.S. mail, facsimile or E-mail, no later than January 15, 2018. Protests must be submitted to:

CPUC Energy Division
ED Tariff Unit
505 Van Ness Avenue, 4th Floor
San Francisco, California 94102

Facsimile: (415) 703-2200
E-mail: EDTariffUnit@cpuc.ca.gov

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest shall also be sent to PG&E and SDG&E either via E-mail or U.S. mail (and by facsimile, if possible) at the address shown below on the same date it is mailed or delivered to the Commission:

For PG&E:

Meredith Allen
Senior Director, Regulatory Relations
c/o Megan Lawson

Pacific Gas and Electric Company
77 Beale Street, Mail Code B13U
P.O. Box 770000
San Francisco, California 94177
Facsimile: (415) 973-3582
E-mail: PGETariffs@pge.com

For SDG&E:

Megan Caulson
Regulatory Tariff Manager
8330 Century Park Court, CP31F
San Diego, CA 92123-1548
E-mail: mcaulson@semprautilities.com

Any person (including individuals, groups, or organizations) may protest or respond to an advice letter (General Order 96-B, Section 7.4). The protest shall contain the following information: specification of the advice letter protested; grounds for the protest; supporting factual information or legal argument; name, telephone number, postal address, and (where appropriate) e-mail address of the protestant; and statement that the protest was sent to the utility no later than the day on which the protest was submitted to the reviewing Industry Division (General Order 96-B, Section 3.11).

Effective Date

PG&E requests that this Tier 1 advice filing become effective upon Commission approval.

Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and the parties on the service list for R.15-05-006. Address changes to the General Order 96-B service list should be directed to PG&E at email address PGETariffs@pge.com. For changes to any other service list, please contact the Commission's Process Office at (415) 703-2021 or at Process_Office@cpuc.ca.gov. Send all electronic approvals to PGETariffs@pge.com. Advice letter filings can also be accessed electronically at: http://www.pge.com/tariffs/.

/S/
Meredith Allen
Senior Director, Regulatory Relations

Attachments

cc: Elizaveta Malashenko, Director, Safety and Enforcement Division, CPUC
Service List R.15-05-006

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY
ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No. **Pacific Gas and Electric Company (ID U39 E)**

Utility type:	Contact Person: Kingsley Cheng
☑ ELC ☐ GAS	Phone #: (415) 973-5265
☐ PLC ☐ HEAT ☐ WATER	E-mail: k2c0@pge.com and PGETariffs@pge.com

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas
PLC = Pipeline HEAT = Heat WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: **5211-E, et al.** **Tier: 1**

Subject of AL: **Adoption of Final California Public Utilities Commission (CPUC) Fire-Threat Map**

Keywords (choose from CPUC listing): Compliance

AL filing type: ☐ Monthly ☐ Quarterly ☐ Annual ☑ One-Time ☐ Other _____

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #: D.17-06-024

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL: _____

Is AL requesting confidential treatment? If so, what information is the utility seeking confidential treatment for: No

Confidential information will be made available to those who have executed a nondisclosure agreement: N/A

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information: _____

Resolution Required? ☐Yes ☑No

Requested effective date: **Upon Commission Approval** No. of tariff sheets: N/A

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: N/A

Service affected and changes proposed: N/A

Pending advice letters that revise the same tariff sheets: N/A

Protests, dispositions, and all other correspondence regarding this AL are due no later than 10 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

California Public Utilities Commission
Energy Division
EDTariffUnit
505 Van Ness Ave., 4th Flr.
San Francisco, CA 94102
E-mail: EDTariffUnit@cpuc.ca.gov

Pacific Gas and Electric Company
Attn: Meredith Allen
Senior Director, Regulatory Relations
c/o Megan Lawson
77 Beale Street, Mail Code B13U
P.O. Box 770000
San Francisco, CA 94177
E-mail: PGETariffs@pge.com

Attachment 1

CPUC Fire-Threat Map

Tier 2
Tier 3

0 50 100 150 200 miles

CA-03-0425

PG&E Gas and Electric
Advice Filing List
General Order 96-B, Section IV

AT&T
Albion Power Company
Alcantar & Kahl LLP
Anderson & Poole
Atlas ReFuel

BART
Barkovich & Yap, Inc.
Bartle Wells Associates
Braun Blaising McLaughlin & Smith, P.C.

Braun Blaising McLaughlin, P.C.
CPUC
California Cotton Ginners & Growers Assn
California Energy Commission
California Public Utilities Commission
California State Association of Counties

Calpine
Casner, Steve
Cenergy Power
Center for Biological Diversity
City of Palo Alto

City of San Jose
Clean Power
Clean Power Research
Coast Economic Consulting
Commercial Energy
Cool Earth Solar, Inc.
County of Tehama - Department of Public Works

Crossborder Energy
Crown Road Energy, LLC
Davis Wright Tremaine LLP
Day Carter Murphy

Defense Energy Support Center
Dept of General Services

Don Pickett & Associates, Inc.
Douglass & Liddell
Downey & Brand
Ellison Schneider & Harris LLP
Evaluation + Strategy for Social Innovation

G. A. Krause & Assoc.
GenOn Energy Inc.
GenOn Energy, Inc.
Goodin, MacBride, Squeri, Schlotz & Ritchie

Green Charge Networks
Green Power Institute
Hanna & Morton
ICF
International Power Technology
Intestate Gas Services, Inc.

Kelly Group
Ken Bohn Consulting
Leviton Manufacturing Co., Inc.
Linde
Los Angeles County Integrated Waste Management Task Force

Los Angeles Dept of Water & Power
MRW & Associates
Manatt Phelps Phillips
Marin Energy Authority
McKenna Long & Aldridge LLP
McKenzie & Associates
Modesto Irrigation District

Morgan Stanley
NLine Energy, Inc.
NRG Solar
Nexant, Inc.

ORA
Office of Ratepayer Advocates
Office of Ratepayer Advocates, Electricity Planning and Policy B

OnGrid Solar
Pacific Gas and Electric Company
Praxair
Regulatory & Cogeneration Service, Inc.
SCD Energy Solutions

SCE
SDG&E and SoCalGas
SPURR
San Francisco Water Power and Sewer

Seattle City Light
Sempra Energy (Socal Gas)
Sempra Utilities
SoCalGas
Southern California Edison Company
Southern California Gas Company (SoCalGas)

Spark Energy
Sun Light & Power
Sunshine Design
Tecogen, Inc.
TerraVerde Renewable Partners

TerraVerde Renewable Partners, LLC
Tiger Natural Gas, Inc.
TransCanada
Troutman Sanders LLP
Utility Cost Management
Utility Power Solutions
Utility Specialists

Verizon
Water and Energy Consulting
Wellhead Electric Company
Western Manufactured Housing Communities Association (WMA)

YEP Energy
Yelp Energy

ATTACHMENT 5

California Public Utilities Commission,
High Fire-Threat District Map,
"Fire-Threat Maps and Fire-Safety Rulemaking."
https://www.cpuc.ca.gov/industries-and-topics/wildfires/fire-threat-maps-and-fire-safety-rulemaking

Fire-Threat Maps and Fire-Safety Rulemaking

PUC Fire Safety Rulemaking Background

In October 2007, devastating wildfires driven by strong Santa Ana winds burned hundreds of square miles in Southern California. Several of the worst wildfires were reportedly ignited by overhead utility power lines and aerial communication facilities near power lines. In response to these wildfires, we created Rulemaking (R.) 08-11-005 to consider and adopt regulations to protect the public from potential fire hazards associated with overhead powerline facilities and nearby aerial communication facilities.

In 2009, we issued several decisions in R.08-11-005 that together adopted dozens of new fire-safety regulations. Most of the adopted fire-safety regulations consisted of new or revised rules in General Order (GO) 95. Several adopted fire-safety regulations apply only to areas, referred to as "high fire-threat areas," where there is a higher risk for power line fires igniting and spreading rapidly. These high fire-threat areas are chosen by several maps that were approved on an interim basis. Each of the interim maps covers a different part of the State and uses its own method for showing high fire-threat areas, showing consistency and potential enforcement issues. To solve these issues, we started to create a single statewide fire-threat map to select areas with a higher risk for destructive power line fires and where stricter fire-safety regulations should apply.

In May 2015, we closed R.08-11-005 and began rulemaking R.15-05-006 to complete the unfinished tasks in R.08-11-005. The general scope of R.15-05-006 was to complete these unfinished tasks:

1. Create and adopt a statewide fire-threat map that outlines the boundaries of a new High Fire-Threat District (HFTD) where the previously adopted regulations will apply,
2. Figure out the need for more fire-safety regulations in the HFTD, and
3. Revise GO 95 to include a definition and maps of the HFTD, as well as any new fire-safety regulations.

The scope and schedule for R.15-05-006 was divided into two parallel tracks. One track focused on the development and adoption of a statewide fire-threat map. The second track focused on the identification, evaluation, and adoption of fire-safety regulations in the HFTD.

On December 21, 2017, we completed the second track of R.15-05-006 by issuing Decision (D.) 17-12-024 which adopted regulations to enhance fire-safety in the HFTD. On January 19, 2018 we adopted, via Safety and Enforcement Division's (SED) disposition of a Tier 1 Advice Letter, the final CPUC Fire-Threat Map. The adopted CPUC Fire-Threat Map, together with the map of Tier 1 High Hazard Zones (HHZs) in the U.S. Forest Service- California Department of Forestry and Fire Protection's (CAL FIRE) joint map of tree mortality HHZs, form the HFTD Map where stricter fire-safety regulations apply. Read more information about the Sept. 19, 2018: SED-CAL FIRE Joint Assessment and Recommendation Report on Fire-Wind Map.

Fire-Threat Maps & the High Fire-Threat District (HFTD)

Map Dissemination

Under the requirements of D.17-01-009, the Safety and Enforcement Division (SED) makes available the following maps that together make up the HFTD, which will direct future utility and communication infrastructure provider fire-safety activities in California. [Please use Internet Explorer or compatible browser to open files.]

1. CPUC Fire-Threat Map - high resolution pdf (8.5"x11")
2. CPUC Fire-Threat Map - high resolution pdf (poster size)
3. CPUC Fire-Threat Map - zip archive of native GIS files
4. USFS-CAL FIRE Joint Map of Tree Mortality HHZs - current version (NOTE: Scroll down to the "Tree Mortality Related High Hazard Zones" section on the CAL FIRE webpage. Click link to download the Tier 1_HighHazardZones which is used as CPUC HFTD Zone 1.)

In addition to the mandated map products required for posting in D.17-01-009 and provided above, supplemental map products are available below:

1. HFTD Map - high resolution pdf (8.5"x11")
2. HFTD Map - high resolution pdf (poster size)
3. HFTD Map - GIS web app viewer

The HFTD Map provides a single map representing all parts of the HFTD from both map sources (i.e. CPUC Fire-Threat Map and Tree Mortality HHZ Map).

Interim Maps

The fire-safety regulations below require a map to define "high fire-threat areas" where these regulations apply. The interim maps adopted in R.08-11-005 consisted of these three fire-threat maps below:

1. A wildland fire-threat map prepared by the California Department of Forestry and Fire Protection's (CAL FIRE) as part of its Fire Resource and Assessment Program (FRAP). This map is often referred to as the "FRAP Map."
2. A modified FRAP Map developed by San Diego Gas & Electric (SDG&E) for its own service territory. This is sometimes referred to as the "SDG&E fire-threat map."
3. A map developed by communications utilities (see page 262 of D.12-01-032) to identify areas where there is an increased risk for utility-associated wildfires. This map is oftentimes referred to as the "Reax Map."

The Reax Map outlined high fire-threat areas in Northern California where regulations applied. Except for SDG&E's service territory, the FRAP Map outlined high fire-threat areas in Southern California where the previously identified regulations applied. The SDG&E fire-threat map was used for SDG&E's service territory.

CPUC Fire-Threat Map

In 2012, we created a statewide map designed specifically to show areas where there is an increased risk for utility associated wildfires. The CPUC Fire-Threat Map, started in R.08-11-005 and continued in R.15-05-006.

We used a multistep process to develop the statewide CPUC Fire-Threat Map. The first step was to develop Fire Map 1 (FM 1), an agnostic map that shows California areas where there is a higher risk for the ignition and rapid spread of powerline fires due to strong winds, abundant dry vegetation, and other environmental conditions. These are the environmental conditions associated with the catastrophic powerline fires that burned 334 square miles of Southern California in October 2007. FM 1 was developed by CAL FIRE and adopted by us in Decision 16-05-036.

FM 1 served as the foundation for the development of the final CPUC Fire-Threat Map. The CPUC Fire-Threat Map describes the boundaries of a new HFTD where utility infrastructure and operations will have stricter fire-safety regulations. The CPUC Fire-Threat Map incorporates the fire hazards associated with past powerline wildfires besides the

October 2007 fires in Southern California (e.g., the Butte Fire that burned 71,000 acres in Amador and Calaveras Counties in September 2015) and ranks fire-threat areas based on the risks that utility-associated wildfires pose to people and property.

The main people handling the development of the CPUC Fire-Threat Map was a group of utility mapping experts known as the Peer Development Panel (PDP), with oversight from a team of independent experts known as the Independent Review Team (IRT). The members of the IRT were selected by CAL FIRE and CAL FIRE served as the Chair of the IRT. The development of CPUC Fire-Threat Map includes input from many stakeholders, including investor-owned and publicly owned electric utilities, communications infrastructure providers, public interest groups, and local public safety agencies.

The PDP served a draft statewide CPUC Fire-Threat Map on July 31, 2017, which was later reviewed by the IRT. On October 2 and October 5, 2017, the PDP filed an Initial CPUC Fire-Threat Map that reflected the results of the IRT's review through September 25, 2017. The final IRT-approved CPUC Fire-Threat Map was filed on November 17, 2017. On November 21, 2017, SED filed on behalf of the IRT a summary report detailing the production of the CPUC Fire-Threat Map (referenced at the time as Fire Map 2). Interested parties were able to submit alternate maps, written comments on the IRT-approved map and alternate maps (if any), and motions for Evidentiary Hearings. No motions for Evidentiary Hearings or alternate map proposals were received. On January 19, 2018 we adopted, via (SED) disposition of a Tier 1 Advice Letter, the final CPUC Fire-Threat Map.

You can access the GIS web viewer here: https://ia.cpuc.ca.gov/firemap/ and click on the magnifying lens icon in the upper right corner to show the search bar. From there you can enter addresses and zoom in to a fairly fine scale with street level detail.

High Fire-Threat District (HFTD)

In D.17-01-009, as changed by D.17-06-024, we adopted a work plan for the development and adoption of the CPUC Fire-Threat Map, which is one part of the HFTD. Following these decisions, the HFTD is made up of two maps:

1. Tier 1 High Hazard Zones (HHZs) on the ***U.S. Forest Service-CAL FIRE joint map of Tree Mortality HHZs ("Tree Mortality HHZ Map").***
2. Tier 2 and Tier 3 fire-threat areas on the ***CPUC Fire-Threat Map***

The Tree Mortality HHZ Map is an off-the-shelf map. Tier 1 HHZs are zones near communities, roads, and utility lines, and are a direct threat to public safety. Tier 2 fire-threat areas outline areas where there is a higher risk (including likelihood and potential impacts on people and property) from utility related wildfires. Tier 3 fire-threat areas outline areas where there is an extreme risk (including likelihood and potential impacts on people and property) from utility related wildfires.

It should be noted that:

1. Tier 2 and Tier 3 fire-threat areas on the CPUC Fire-Threat Map may overlap Tier 1 HHZs on the Tree Mortality HHZ Map,
2. The Tree Mortality HHZ Map is not owned or maintained by the CPUC, and
3. The Tree Mortality HHZ Map is updated more often (about once a year) than the 10-year update cycle adopted by the above-mentioned decisions for the CPUC Fire-Threat Map.

The fire-safety regulations described below apply only to areas designated as "high fire-threat areas" following the adopted interim maps. The HFTD is intended to represent an area based, in part, upon a mapping product (i.e. CPUC Fire-Threat Map) developed specifically for the purpose of scoping utility regulations.

Fire-Safety Regulations

The fire-safety regulations adopted in R.08-11-005 that relied on the interim maps include:

- **GO 95, Rule 18A**, which requires electric utilities and communication infrastructure providers (CIPs) to place a high priority on the correction of significant fire hazards in high fire-threat areas of Southern California.
- **GO 95, Rules 31.2, 80.1A, and 90.1B**, which set the minimum frequency for inspections of aerial communication facilities located in close proximity to power lines in high fire-threat areas throughout California.

- **GO 95, Rule 35, Table 1, Case 14**, which requires increased radial clearances between bare-line conductors and vegetation in high fire-threat areas of Southern California.
- **GO 95, Appendix E,** which authorizes increased time-of-trim clearances between bare-line conductors and vegetation in high fire-threat areas of Southern California.
- **GO 165, Appendix A, Table 1**, which requires more frequent patrol inspections of overhead powerline facilities in rural, high fire-threat areas of Southern California.
- **GO 166, Standard 1.E.**, which requires each electric utility in Southern California to develop and submit a plan to reduce the risk of fire ignitions by overhead facilities in high fire-threat areas during extreme fire-weather events. Electric utilities in Northern California must also develop and submit a plan if they have overhead facilities in high fire-threat areas that are subject to extreme fire-weather events.

The scope of R.15-05-006 included the identification, evaluation, and adoption of more fire-safety regulations for the HFTD. A series of public workshops was held by a group known as the Fire Safety Technical Panel (FSTP). The panel was chaired by the Safety and Enforcement Division and Southern California Edison Company. On July 10, 2017, the FSTP filed a Workshop Report that had 23 proposed fire-safety regulations and 8 alternatives. Interested parties filed opening comments on July 31, 2017, and reply comments on August 11, 2017. On December 21, 2017, we issued D.17-12-024, adopting new fire-safety regulations in the HFTD.

HOW CAN WE HELP?

Emergency? **Call 911**

File a Complaint

Late Bill Assistance

Power Outage Map

Are you in a high fire-threat area?

Financial Assistance

Consumer Programs and Services

Electric Rate Comparison Website

Website Feedback

MORE INFORMATION

Consumer Support

Regulatory Services

Industries and Topics

News and Updates

Events and Meetings

Proceedings and Rulemaking

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ATTACHMENT 6

Decision 20-12-030

Decision Modifying the High Fire-Threat District Boundaries in Southern California Edison Company's Service

Decision 20-12-030 December 17, 2020

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Develop and Adopt Fire-Threat Maps and Fire-Safety Regulations.	Rulemaking 15-05-006

DECISION MODIFYING THE HIGH FIRE-THREAT DISTRICT BOUNDARIES IN SOUTHERN CALIFORNIA EDISON COMPANY'S SERVICE

Summary

This decision approves a request by Southern California Edison Company to modify the boundaries of the High Fire-Threat District within and near its service territory. As a result of these modified boundaries, there are areas in Southern California Edison Company's territory that were previously not designated as part of the High Fire-Threat District that will now be designated as part of the High-Fire Threat District. The fire-safety regulations adopted in Decision 17-12-024 shall apply to these newly designated High Fire-Threat District areas no later than June 30, 2021.

This proceeding is closed.

1. Background

In Decision (D.) 17-01-009, as modified by D.17-06-024, the California Public Utilities Commission (Commission or CPUC) adopted a work plan for developing a map that designates areas of the state of California "where there is

an elevated hazard for utility-associated wildfires to occur and spread rapidly, and where communities face an elevated risk from utility-associated wildfires,"[1] commonly referred to as the CPUC Fire-Threat Map (previously referred to as Fire Map 2).[2] The CPUC High Fire-Threat District Map is comprised of two map sources and includes three fire-threat areas:

- **Zone 1** consists of Tier 1 High-Hazard Zones (HHZs) from the United States Forest Service (USFS) and California Department of Forestry and Fire Protection (CAL FIRE) joint map of Tree Mortality HHZs. Tier 1 HHZs are in direct proximity to communities, roads, and utility lines, and are a direct threat to public safety.
- **Tier 2** consists of areas on the CPUC Fire-Threat Map where there is an elevated risk (including likelihood and potential impacts on people and property) from wildfires associated with overhead utility power lines or overhead utility power-line facilities also supporting communication facilities.
- **Tier 3** consists of areas on the CPUC Fire-Threat Map where there is an extreme risk (including likelihood and potential impacts on people and property) from wildfires associated with overhead utility power lines or overhead utility power-line facilities also supporting communication facilities. Tier 3 is distinguished from Tier 2 by having the highest likelihood of utility-associated fire initiation and growth that would impact people or property, and where the most restrictive utility regulations are necessary to reduce utility fire risk.

Together, Zone 1, Tier 2 and Tier 3 constitute the High-Fire Threat District.

[1] Decision 17-01-009, issued January 19, 2017, at 2.

[2] Further information about and Internet access to the CPUC Fire-Threat Map is available at: https://www.cpuc.ca.gov/FireThreatMaps/.

Pursuant to the adopted work plan, Pacific Gas and Electric Company and San Diego Gas & Electric Company submitted a joint advice letter for approval of the CPUC Fire-Threat Map. On January 19, 2018, the Commission adopted the CPUC Fire-Threat Map via staff approval of the joint advice letter.[3]

D.17-12-024 also adopted regulations to enhance fire safety in the High Fire-Threat District. These fire-safety regulations aim to reduce the fire hazards associated with overhead power-line facilities and aerial communication facilities located in close proximity to overhead power lines, and are contained in the Commission's General Orders 95, 165 and 166, and Rule 11 of each of the electric investor owned utilities' electric tariff rules.

On August 19, 2019, Southern California Edison Company (SCE) filed a petition to modify D.17-12-024 (petition). The petition sought to add specific areas that are not currently included in the High Fire-Threat District, into Tier 2 of the High Fire-Threat District. Of the 43 proposed additions, 40 are within SCE's service territory; the other three areas are located within SCE's boundaries and house SCE equipment, but are not within SCE's service territory.[4] The petition states SCE conducted a review of areas it historically identified as "high fire risk areas," which the petition describes as a combination of SCE's historical map boundaries, CAL FIRE's Fire Hazard Severity Zone maps, and the CPUC Fire-Threat Map. Some parts of SCE's designated "high fire risk areas" are not currently part of the High Fire-Threat District, and therefore the Commission's fire-safety regulations do not apply to the entirety of SCE's designated "high fire risk areas." The petition states, however, that SCE has generally treated all of its

[3] Advice Letter 5211-E and 3172-E.

[4] *Southern California Edison Company's (U 338-E) Petition for Modification of Decision 17-12-014*, filed August 19, 2019 (petition), at 6 and footnote 11.

designated "high fire risk areas" consistently with respect to wildfire threat mitigation strategies, standards, programs and activities. The petition explains that much of SCE's "high fire risk areas" and the proposed areas to be included in the High Fire-Threat District reflect the results of a Monte Carlo-based modeling. The modeling simulated hundreds of thousands of ignitions at randomly selected points within 100 meters of overhead electric facilities, and was performed by a third-party engineering firm with experience in fire engineering and risk modeling. Appendix C of the petition includes a report of those modeling results, with detailed information for each area, or polygon, that SCE proposes to include in the High Fire-Threat District. The petition explains SCE did not complete its report until mid-2019 and therefore the petition could not have been presented within one year after the effective date of D.17-12-024.

No party filed a response to the petition.

On July 27, 2020, the assigned Administrative Law Judge (ALJ) issued an email ruling directing SCE to submit supplemental information to facilitate the Commission's review of SCE's proposed changes to the High Fire-Threat District, and providing notice that CAL FIRE would serve in the role that the Independent Review Team (IRT) served during the original development of the CPUC Fire-Threat Map. SCE filed the supplemental information as directed.

2. SCE's Proposed Changes to the Boundaries of the High Fire-Threat District Are Approved With Modifications

Because SCE did not complete the report on which the petition is based until mid-2019, the petition's late submission is justified. SCE's proposed changes to the boundaries of the High Fire-Threat District are approved, with modifications as addressed in this section. These modifications result from a review process modeled after the process employed for developing the CPUC

Fire-Threat Map, wherein the IRT conducted a technical review of changes proposed by "Territory Leads,"[5] and sought further information about, modified, accepted or rejected those proposed changes based on its technical review. The CPUC Fire-Threat Map development process utilized a ticketing system through which Territory Leads had an opportunity to modify or provide further justification for their proposed changes.[6] For SCE's proposed changes, CAL FIRE (serving in the role of the IRT) provided the results of its technical review to SCE; CAL FIRE based its technical review on the same criteria used by the IRT for reviewing proposed changes in the development of the CPUC Fire-Threat Map. These criteria were factors that impact the likelihood of fire ignition and spread, including fuel type, density and arrangement, climate influences on moisture content distributions; climatology of fire weather (fire wind speeds and directions, temperature, precipitation); and terrain (slope, ruggedness, access, and fire break) along with geographical context to other key land and fuel features.[7]

Based on its initial review, CAL FIRE rejected polygons 110, 149, 281, 314, 448, 841, 974, 987, and 1052 for inclusion in Tier 2 of the High Fire-Threat District. In general, these polygons do not represent areas with an elevated risk of wildfire ignition or spread, due to the absence of continuous fuels. CAL FIRE also rejected polygon 5 for inclusion in Tier 2, because this area is adjacent to and more closely reflects the ignition and spread characteristics of Tier 3 areas.

---

[5] Employees of electric utilities who assisted in identifying areas where there is an increased risk for utility associated wildfires in specific geographical areas under the utility's responsibility.

[6] Decision 17-01-009 *Decision Adopting a Work Plan for the Development of Fire Map 2* (D.17-01-009), at 21-22.

[7] D.17-01-009, Attachment 2, Figure 1: Tier Quadrant.

CAL FIRE's review also identified imprecise boundary alignment of many of SCE's proposed polygons with the boundaries of the current High Fire-Threat District. SCE then had an opportunity to modify and/or provide further rationale for a rejected polygon's inclusion in the High Fire-Threat District. SCE submitted a revised geodatabase to correct the imprecise boundary alignment issues identified by CAL FIRE; to provide further justification for its request to include polygons 314, 448, and 1052 in Tier 2; and to specify its request regarding polygon 5 to be included in Tier 3 of the High Fire-Threat District. SCE's resubmission clarifies that polygons 314, 448 and 1052 contain some fuels that, though not entirely continuous, still potentially allow for fire to propagate and impact nearby structures or higher-risk areas. CAL FIRE conducted technical review of and approved SCE's revised geodatabase. Therefore, SCE's proposed changes to the High Fire-Threat District, as reflected in Appendix C of the petition, is approved with the following modifications:

- Polygons 110, 149, 281, 841, 974, and 987 shall not be included in the High Fire-Threat District.
- Polygon 5 shall be included in Tier 3 of the High Fire-Threat District.
- The remaining polygons that SCE proposes to include in Tier 2 of the High-Fire Threat District, as modified by SCE's revised geodatabase, shall be included in Tier 2 of the High Fire-Threat District.[8]

[8] The approved areas for inclusion in the High Fire-Threat District constitute 36,673 acres, or approximately 82 percent of the 44,527 acres proposed by the petition for inclusion in the High Fire-Threat District.

3. Implementation of Approved Changes to the CPUC Fire-Threat Map

As a result of the modifications to the High Fire-Threat District adopted by this decision, there are new areas in SCE's service territory to which the fire--safety regulations adopted in D.17-12-024 will apply. The Commission's fire--safety regulations shall be fully implemented in these newly designated areas of the High Fire-Threat District no later than June 30, 2021, including full compliance with requirements pertaining to the frequency of inspections, vegetation clearances, correction timeframes, etc.

Consistent with the work plan for developing the CPUC Fire-Threat Map, we direct SCE to submit an advice letter to seek approval of modifications to the CPUC Fire-Threat Map, as approved in this decision. The modified CPUC Fire--Threat Map will become effective upon staff approval of SCE's advice letter (whether by disposition or resolution). Commission staff shall update the relevant links on the Commission's Fire-Threat Map webpage no later than 30 days after staff approves SCE's advice letter.

4. Comments on Proposed Decision

The proposed decision of Commissioner Batjer in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on December 3, 2020 by the California Cable and Telecommunications Association (CCTA), and no party filed reply comments.

CCTA requests the Commission to direct SCE to provide a GIS shapefile depicting the revised High Fire-Threat District boundaries within two business days after receiving a written request, to facilitate timely implementation by communication service providers of the Commission's fire-safety regulations in

the areas newly designated as part of the High Fire-Threat District as a result of this decision. We agree with CCTA's reasoning and have included a new ordering paragraph in alignment with their request.

5. Assignment of Proceeding

Marybel Batjer is the assigned Commissioner and Valerie U. Kao is the ALJ in this proceeding.

Findings of Fact

1. The areas identified in SCE's petition, as modified by this decision, are areas where there is an elevated or extreme risk (including likelihood and potential impacts on people and property) from wildfires associated with overhead utility power lines or overhead utility power-line facilities also supporting communication facilities; these areas are therefore appropriate for inclusion in the High Fire-Threat District.

Conclusions of Law

1. It is reasonable to consider SCE's petition to modify D.17-12-024 despite it being filed more than one year after the effective date of D.17-12-024, because SCE did not complete the report on which the petition is based until mid-2019.
2. It is reasonable to approve SCE's proposed changes to the CPUC Fire--Threat Map, as modified by this decision.
3. It is reasonable to apply the fire-safety regulations adopted in D.17-12-024 boundaries to the newly designated areas of the High Fire Threat District, as adopted in this decision, as quickly as possible.

O R D E R

IT IS ORDERED that:

1. Southern California Edison Company's proposed changes to the High Fire-Threat District are adopted with modifications specified in Section 2 of this decision.

2. Within 30 days after the issue date of this decision, Southern California Edison Company must submit an advice letter, effective upon Commission approval, to seek approval of modifications to the California Public Utilities Commission Fire-Threat Map, as approved in this decision. The modified California Public Utilities Commission Fire-Threat Map will become effective upon staff approval of Southern California Edison Company's advice letter (whether by disposition or resolution). Commission staff shall update the relevant links on the Commission's Fire-Threat Map webpage no later than 30 days after staff approves Southern California Edison Company's advice letter.

3. Within two business days after receiving a written request, Southern California Edison Company shall make available to interested parties a geographic information systems shapefile depicting accurate and specific information regarding the revised High Fire-Threat District boundaries.

4. The fire-safety regulations adopted in Decision 17-12-024 shall be fully implemented in the newly designated areas of the High Fire-Threat District, adopted in Ordering Paragraph 1, no later than June 30, 2021.

5. Rulemaking 15-05-006 is closed.

This order is effective today.

Dated December 17, 2020, at San Francisco, California.

MARYBEL BATJER
President
LIANE M. RANDOLPH
MARTHA GUZMAN ACEVES
CLIFFORD RECHTSCHAFFEN
GENEVIEVE SHIROMA
Commissioners

ATTACHMENT 7

Safety Enforcement Division,
High Fire-Threat District Map Archive.
https://files.cpuc.ca.gov/safety/fire-threat_map/

files.cpuc.ca.gov - /safety/fire-threat_map/

[To Parent Directory]

3/16/2018 11:27 AM	<dir>	2018
9/22/2021 3:30 PM	<dir>	2021
3/16/2018 11:27 AM	<dir>	Version 1
3/16/2018 11:27 AM	<dir>	Version 1 Jan 19 2018
6/12/2023 10:54 AM	<dir>	Version 2
6/12/2023 11:05 AM	<dir>	Version 2 Feb 9 2021
9/22/2021 3:30 PM	<dir>	Version 3 Aug 19 2021

ATTACHMENT 8

California Energy Commission, Open Data Portal, Administrative Boundaries Dataset "Electric Load Serving Entities (IOU & POU)." https://cecgis-caenergy.opendata.arcgis.com/

CALIFORNIA ENERGY COMMISSION



The California Energy Commission has configured this open data site to help our partners discover and collaborate with geospatial data published by the Commission.

Energy Infrastructure Data

Resource Area Data

National Electric Vehicle Infrastructure Program (NEVI)

Administrative Boundary Data

Land-Use Screens

PDF Maps

Web Mapping Applications

CEC Investment Programs

Community Charging in Urban Areas

SB 1000 EV Charging Infrastructure Deployment

Parking and Transportation

REV 2.0

Contact Information

GIS@energy.ca.gov

CALIFORNIA ENERGY COMMISSION

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- Documents (96)
- Apps & Maps (11)

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- Web Mapping Application (0)
- File Geodatabase (0)
- Map Service (0)

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Source

Filter options

- California Energy Commission (6)
- Bureau of Land Management (0)
- California Department of Fish and Wildlife (0)
- BLM (0)
- CA Office of Mine Reclamation (0)

Show 19 more

Tags

Filter options

- California Natural Resources Agency (6)
- CAOpenData (6)

1 - 6 of 6 results

Sort by: Relevance | List

Dataset

Electric Load Serving Entities (Other)

California Energy Commission

This layer represents non-Investor-Owned Utilities (IOUs) and Publicly Owned Utilities (POUs) electric service territories such as tribal and community choice aggregators in th…

Type: **Feature Service** Date updated: **8/28/2025**
Tags: **CAOpenData, California Energy Commissi…** Categories: **Administrative Boundaries**

Dataset

California Electric Balancing Authority Areas (Retired)

California Energy Commission

California Electric Balancing Authority Areas

Type: **Feature Service** Date updated: **4/19/2024**
Tags: **BANC, IID, LADWP, NV Energy, PacificCorp…** Categories: **Administrative Boundaries**

Dataset

Electric Load Serving Entities (IOU & POU)

California Energy Commission

This layer represents Investor-Owned Utilities (IOUs) and Publicly Owned Utilities (POUs) electric service territories in the state of California. Other electric load serving entities ar…

Type: **Feature Service** Date updated: **8/28/2025**
Tags: **PDF, CAOpenData, California Energy Com…** Categories: **Administrative Boundaries**

Dataset

California Building Climate Zones

California Energy Commission

"Building Climates Zones" or California Climate Zone Descriptions for New Buildings

Type: **Feature Service** Date updated: **2/8/2024**
Tags: **Building, Climate, CEC, Energy Commissio…** Categories: **Administrative Boundaries, Efficiency**

Dataset

California Natural Gas Service Area

California Energy Commission

CA-03-0447

CALIFORNIA ENERGY COMMISSION

PDF (1)

Show 78 more

Categories

Administrative Boundaries

Cec Investments

Efficiency

Energy Infrastructure

Land Use

Show 7 More

License

Custom (6)

None (0)

Date updated

MM/DD/YYYY

MM/DD/YYYY

Dataset

California Electricity Demand Forecast Zones

California Energy Commission

Forecast Zones for the California Energy Commission's Commercial End-Use Survey (CEUS).

Type: **Feature Service** Date updated: **12/2/2021**

Tags: **Forecast Zone, CAOpenData, California En…** Categories: **Administrative Boundaries**

1 - 6 of 6 results

Back to top

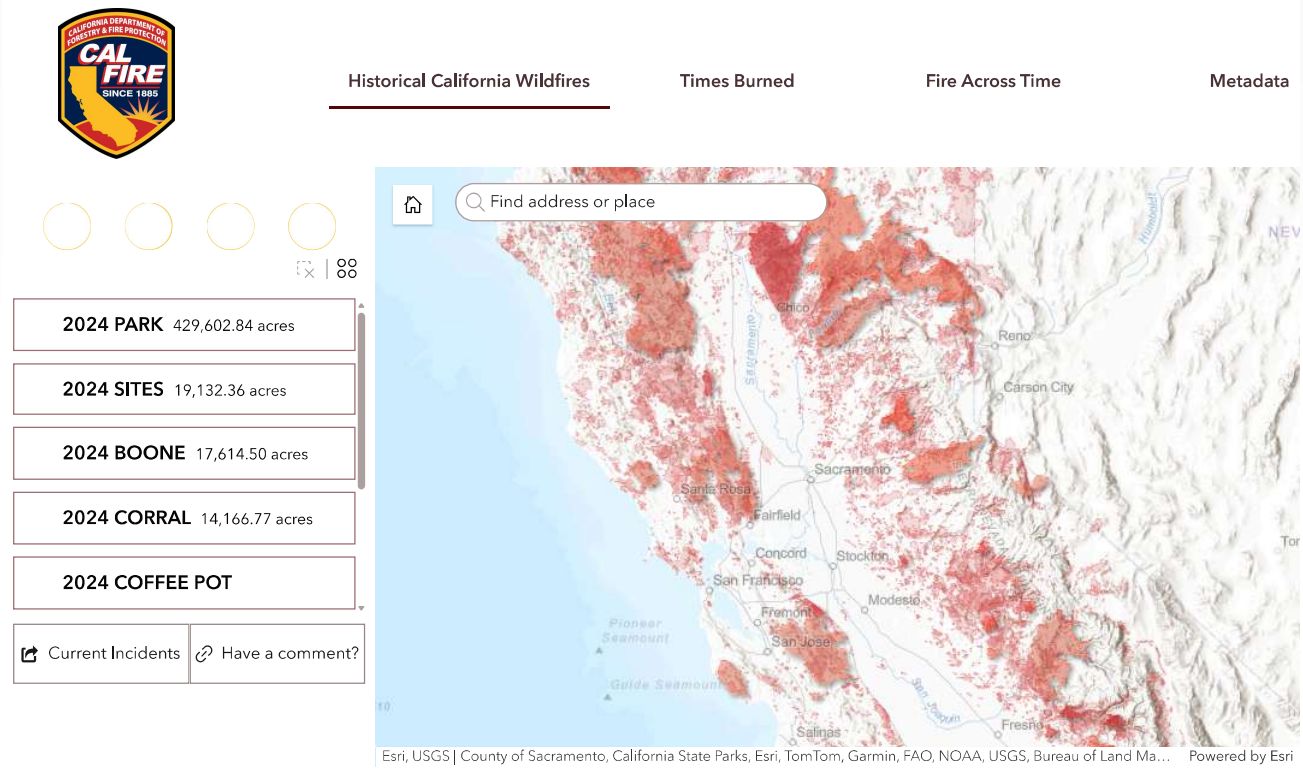
Explore Feeds Manage Privacy

CA-03-0448

ATTACHMENT 9

California Department of Forestry and Fire Protection, Fire Resource and Assessment Program, "Historical Fire Perimeters." https://www.fire.ca.gov/what-we-do/fire-resource-assessment-program/fire-perimeters

Historical Fire Perimeters



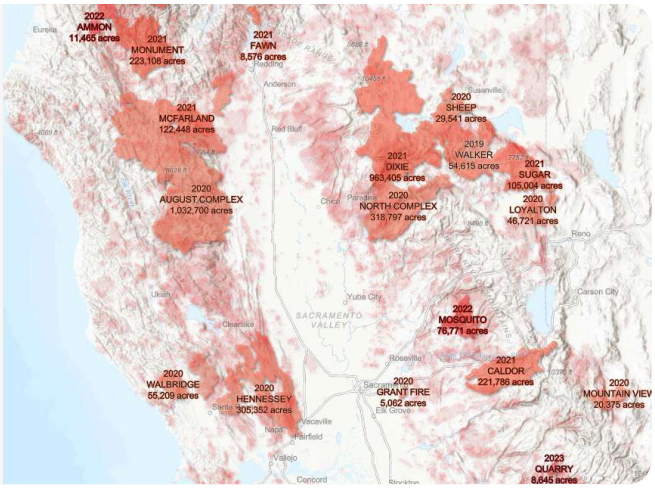
The Fire and Resource Assessment Program (FRAP) annually maintains and distributes an historical fire perimeter data set from across public and private lands in California. The GIS data is jointly developed with the cooperation of the United States Forest Service Region 5, the Bureau of Land Management, the National Park Service and the Fish and Wildlife Service and is released in April.

Although the database represents the most complete digital record of fire perimeters in California, it is still incomplete, and users should be cautious when drawing conclusions based on the data. To learn more about potential errors and their sources, please refer to the Existing Errors and Corrections section.

Fire Perimeter ESRI Blog

ESRI highlighted the work FRAP provides to the worldwide GIS community with the publication of a blog on their Living Atlas platform.

READ BLOG





Fire Perimeter Data

The fire perimeters database includes two layers—historical fire perimeters (firep) and prescription treatments using fire (rxburn). Use cases include:

- Improving fire prevention, suppression, and initial attack success.
- Reduce and track hazards and risks in urban interface areas.
- Provide information for fire ecology studies for example studying fire effects on vegetation over time.

AGOL | DOWNLOAD DATA | VIEWER | PDF

Methodology

Data Update Process +

Update Lineage Details +

Existing Errors and Correction +

CA-03-0451

Data Dictionary +

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Current Incidents
2025 Incidents
Defensible Space
Resources
Statistics
Subscribe to Newsletter
Residential Burn Permits

PROGRAMS

Board of Forestry and Fire Protection
Communications
Equal Employment Opportunity
Fire and Resource Assessment Program
Fire Protection
Natural Resource Management
Office of the State Fire Marshal
Professional Standards Program

GRANTS

Business and Workforce Development
California Forest Improvement Program
Forest Health
Forest Legacy
Urban and Community Forestry
Wildfire Prevention
Tribal Wildfire Resilience
Wildfire Resilience

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ATTACHMENT 10

Liberty's Response to Data Request CalAdvocates-LIB-A2506017-006

Liberty Utilities (CalPeco Electric) LLC

A.25-06-017
WEMA

The Public Advocates Office

Data Request No.:	CalAdvocates-LIB-A2506017-006
Requesting Party:	Public Advocates Office
Originator:	Herman Eng, Herman.Eng@cpuc.ca.gov
cc:	Aaron Louie, Aaron.Louie@cpuc.ca.gov
	Patrick Huber, Patrick.Huber@cpuc.ca.gov
Date Received:	August 21, 2025
Due Date:	September 5, 2025

Question 1

Please provide a GIS file geodatabase (.gdb) with spatial data for the following:

(a) Line feature layer for Liberty's distribution circuits for November 17, 2020, including the Topaz 1261 circuit with attribute information as requested in Wildfire Mitigation Plan data guidelines (such as circuit name);

(b) Line feature layer for Liberty's transmission circuits; and

(c) Polygon feature layer for National Weather Service (NWS) zones overlapping Liberty's service territory for November 17, 2020.

Response to Question 1:

Please refer to attachment *CalAdvocates-LIB-A250617-006-Q1.zip* for data requested in subparts (a)-(c).

Question 2

Please provide the latitude and longitude coordinates (in decimal degrees to at least 5 decimal places) for the following:

(a) West Pole (Pole 266731) at the origin area;

(b) East Pole (Pole 40288) at the origin area; and

(c) Topaz 1261 R2 recloser.

Response to Question 2:

Liberty understands the term "origin area" to refer to the area where the Mountain View Fire ignited on November 17, 2020 as described in *Liberty-02: Ignition* and *Liberty-03: Prudence of Operations*.

(a) West Pole (Pole 266731): 38.513000, -119.467520

(b) East Pole (Pole 40288): 38.512970, -119.466580

(c) Topaz 1261 R2 Recloser: 38.540520, -119.497830

Question 3

Please provide an Excel file that identifies each Liberty weather station as of November 17, 2020, including the six on the Topaz circuit area as described in *Liberty-03 - Prudence of Operations*, with the following information:

a) Unique ID number or identifier;
b) Name;
c) Latitude (in decimal degrees to 5 decimal places);
d) Longitude (in decimal degrees to 5 decimal places);
e) Installation date;
f) Last inspection date;
g) Last maintenance date;
h) Year of removal (for any weather stations that were eventually removed);
i) The types of data the weather station collected (e.g., wind speed, humidity);
j) How often the weather station collected data;
k) Whether Liberty had a means to receive data automatically or whether the data required a manual pull;
l) Whether the weather station was successfully communicating data as of November 17, 2020;
m) If the weather station was not successfully communicating data, explain why;
n) Which circuit(s) did Liberty use that weather station's data for; and
o) Whether Liberty used the weather station to monitor conditions for Liberty's PSPS events

prior to November 17, 2020.

Response to Question 3:

Liberty objects to this Question as vague and ambiguous as to subpart (o). Subject to and without waiving these objections, Liberty responds as follows: Liberty understands subpart (o) as asking whether Liberty used data from the weather stations to inform its PSPS

decision-making, as of November 17, 2020. As referenced in *Liberty-03: Prudence of Operations*, Part VI.B.1, data from these weather stations provided inputs to Liberty's FPI tool and forecast models behind Liberty's PSPS predictive tool. Localized weather data from Liberty's stations also helped to validate and improve the accuracy of those tools and models. In the event of a PSPS activation, live weather station observations, along with data from field observers, would guide the ultimate decision to de-energize. For information requested in subparts (a)-(n), please refer to attachment *CalAdvocates-LIB-A2506017-006-Q3.xlsx*.

Question 4

Please provide an Excel file that lists all Red Flag Warning (RFW) notifications from 2016-2020 that affected the Topaz 1261 circuit. Each event should be a row. The file should have the following columns:

(a) NWS forecast zone;

(b) RFW Start Date and Time;

(c) RFW End Date and Time;

(d) Total Duration (in minutes);

(e) Name or Identifier of the nearest wind measurement station to the West or East Poles;
- West Pole (Pole 266731): 38.513000, -119.467520
- East Pole (Pole 40288): 38.512970, -119.466580

(f) Latitude (in decimal degrees to 5 decimal places) of this nearest wind measurement station;

(g) Longitude (in decimal degrees to 5 decimal places) of this nearest wind measurement station;

(h) Maximum sustained wind speed recorded at this wind measurement station; and

(i) Maximum gust wind speed recorded at this wind measurement station.

Response to Question 4:

Liberty objects to this Question as overbroad and burdensome to the extent it seeks information not maintained in the ordinary course of business. Subject to and without waiving these objections, Liberty responds as follows:

For information requested in subparts (a)-(i), please refer to attachment *TZP_2016_2020_RFW Data.xlsx*. The nearest weather station that recorded data for the entire time period requested by this Question is Walker RAWS station. Liberty is thus providing data requested in subparts (h) and (i) from this station. As indicated in the attachment *CalAdvocates-LIB-A2506017-006-Q3.xlsx*, the Liberty weather stations nearest to the West and East Poles went into service on May 31, 2019 (LIB-3106/LIB06) and October 20, 2020 (LIB-3130/LIB26) and do not have data for the whole time period requested. Data from all three weather stations are publicly available via

MesoWest: https://mesowest.utah.edu/. Data from the two Liberty weather stations are also publicly available from Western Weather Group: https://liberty.westernweathergroup.com/search.

ATTACHMENT 11

Tahoe Regional Planning Agency, Lake Tahoe Boundary Dataset “Lake Tahoe.” https://nationaldataplatform.org/catalog/dataset/lake-tahoe

Lake Tahoe

Followers
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Organization

TAHOE REGIONAL PLANNING AGENCY

Tahoe Regional Planning Agency

The Tahoe Regional Planning Agency protects and restores Lake Tahoe's environment while revitalizing and enhancing our communities. TRPA is charged with regional planning,...

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No License Provided

Dataset Groups

Lake Tahoe

Layers:

100 Year Flood Zone (100 year flood zone data for the Lake Tahoe Basin)

Lake Tahoe (Lake Tahoe boundary delineation)

High Water Line, 6,229 ft. (Lake Tahoe high water line or mark. This is a contour representing the center of the 1898 and 1899 meter DEM elevation values in the Lake Tahoe Region. This was derived from the 2010 LIDAR (Light Detection and Ranging) data)

Natural Rim, 6,223 ft. (26)

Streams (Streams within the Lake Tahoe Basin)

Water Bodies (Water bodies and lakes within the Lake Tahoe Basin, not including Lake Tahoe itself)

Wetlands

Priority Watersheds (Watersheds within the Lake Tahoe Basin)

Hydrologic Resource Areas (Hydrologic transfer areas within the Lake Tahoe Basin)

Soil Survey (Digital soil survey and generally is the most detailed level of soil geographic data developed by the National Cooperative Soil Survey)

Soil Survey - 2003 Land Capability - Bailey (Indicates land capability boundaries within the Lake Tahoe Basin)

Tables: BMP_Status (BMP Certificate and Source Certificate Information)BMP_Site_Constraints (Parcel-level site constraints record in the BMP Database)

Data and Resources

HTML	**ArcGIS Hub Dataset**	Jupyter Hub Explore
DATA	**Esri Rest API**	Jupyter Hub Explore
geoJSON	**GeoJSON**	Jupyter Hub Explore
CSV	**CSV**	Jupyter Hub Explore
KML	**KML**	Jupyter Hub Explore
ZIP	**Shapefile**	Jupyter Hub Explore

Lake Tahoe | Soils | TRPA | Tahoe | Tahoe Basin | Tahoe Regional... | Water | Wetlands

CA-03-0459

Additional Info

Field	Value
Source	https://data-trpa.opendata.arcgis.com/datasets/9d7ae4b852254684bd310c68b98b3772_1
Last Updated	February 28, 2024, 9:21 AM (UTC-08:00)
Created	February 28, 2024, 9:21 AM (UTC-08:00)
dcat_issued	2017-10-05T20:08:13.000Z
dcat_modified	2019-01-15T00:52:55.000Z
dcat_publisher_name	Tahoe Regional Planning Agency
encoding	utf8
guid	https://data-trpa.opendata.arcgis.com/datasets/9d7ae4b852254684bd310c68b98b3772_1
harvest_object_id	2dbf9fa0-d84f-4242-9333-d8946fa93c37
harvest_source_id	a2637971-af12-457f-ae4a-831d2202a539
harvest_source_title	WIFIRE Commons
language	
spatial	{"type": "Polygon", "coordinates": [[[-120.1702, 38.9404], [-120.1702, 39.2472], [-119.9231, 39.2472], [-119.9231, 38.9404], [-120.1702, 38.9404]]]}

About CKAN
CKAN API
CKAN Association
OPEN DATA

Powered by ckan

Language:
English

ATTACHMENT 12

Bureau of Land Management, Nevada Wildfire Intelligence, Nevada Wildland Fire Perimeters Dataset "Nevada Wildland Fire Perimeters." https://nvfireintel-nifc.hub.arcgis.com/

Home Applications Data Fire Management Plans Resources

Nevada Wildfire Intelligence



Dixie Fire 07.24.2018 | BLM Elko District | Photo by Jearred Foruria

Welcome to Nevada Wildfire Intelligence where maps, data, and documents are provided to visualize, download, and inform those interested in wildland fire throughout Nevada. Our goal is to provide easy access to current wildland fire activity, historic wildland fire information and data, as well as, official documents for how the Bureau of Land Management, Nevada manages wildland fire on public lands.

Applications

Interactive maps and dashboards...

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Data

Historical fire-related data for...

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How NV BLM manages wildla...

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Resources

Additional information and..

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Nevada Fire and Aviation

NEVADA FIRE INFO nevadafireinfo.org

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CA-03-0462

ATTACHMENT 13

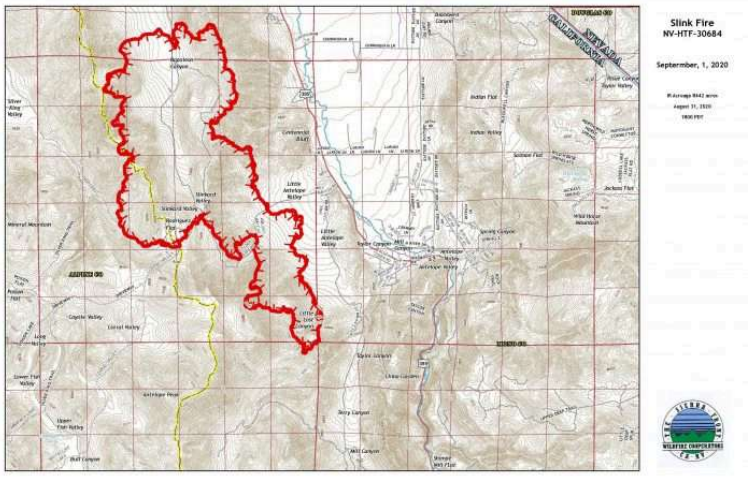
The Pine Tree, "Slink Fire Grows to 11,000 Acres, Evacuations Lifted, Hwy 395 Reopens & Smoke Output Drops," September 1, 2020. https://new.thepinetree.net/?p=106522

Slink Fire Grows to 11,000 Acres, Evacuations Lifted, Hwy 395 Reopens & Smoke Output Drops

By admin on September 1, 2020 11:29 pm - · Comments Off

Coleville, CA…The Slink Fire was reported on August 29th at 6 p.m. in the Slinkard Valley southwest of Topaz Lake. It is burning in pinyon juniper, sage and grass and was a result of recent lightning in the area. September 1st, 2020– The Slink Fire behavior moderated today and hard work by firefighters has increased the containment to 10%. All evacuations in the towns of Walker and Coleville have been lifted and Highway 395 is now open to traffic.





The fire is now 11,000 acres. Air operations have been a challenge for the Slink Fire due to dense smoke creating poor visibility in the last few days. Today, however, clearer air gave aircraft the opportunity to engage in firefighting efforts for the entire operational shift. Several retardant drops were made by heavy airtankers, single engine airtankers and very large airtankers, also known as VLATS. A VLAT is a converted passenger jetliner that can carry up to 12,000 gallons of fire retardant. The combination

of fixed wing retardant drops and helicopter water drops greatly supported firefighters on the eastern and southern portions of the fire.

Because of the proximity to the Marine Corps Mountain Warfare Training Center, the Marine Corps personnel have offered assistance to the fire. They are being utilized in several ways to support the fire camp and logistical needs.

“The cooperation between the Marine Corps and the Incident Management team has been outstanding. They have been a valuable asset and we greatly appreciate their help. When we have needed anything, we didn’t even have to ask, they were already doing it,” said Scott Fraser, Sierra Front Team 2 Incident Commander.

A type 2 Incident Management Team has been ordered and will be taking over the fire in the next few days.

Incident Information

Basic Information

Current as of	9/1/2020, 8:14:29 PM
Incident Type	Wildfire
Cause	Lightning
Date of Origin	Saturday August 29th, 2020 approx. 06:00 PM
Location	Slinkard Valley 2 miles west of Coleville, California
Incident Commander	Humboldt-Toiyabe National Forest
Incident Description	The Slink Fire Was Reported On August 29th At 6 P.m. In The Slinkard Valley Southwest Of Topaz Lake.
Coordinates	38.568 latitude, -119.568 longitude

Current Situation

Total Personnel	466
Size	11,000 Acres

Percent of Perimeter Contained	10%
Estimated Containment Date	Sunday September 20th, 2020 approx. 12:00 AM
Fuels Involved	Mixed Conifer, Pinyon Juniper, sage and grass
Significant Events	Extreme fire behavior, spotting, group torching and wind driven runs were observed on portions of the fire today while fire behavior moderated on other sections of the fire. Crews were able to make good progress on the ground and with clearer air fixed wing aircraft were able to support ground forces with retardant. Helicopters were also able to fly all day and support with water drops.

Outlook

Planned Actions	Anchor and flank the incident to stop forward progress. Continue air support as available.
Projected Incident Activity	Fire will continue to burn on HTF land, in Carson Iceburg Wilderness, BLM and private lands

Current Weather

Weather Concerns	A significant heatwave projected starting Thursday lasting through Labor Day weekend. A dry unstable airmass could lead to plume dominated fire behavior this weekend.

Source = USFS & Inciweb



Slink Fire Grows to 11,000 Acres, Evacuations Lifted, Hwy 395 Reopens & Smoke Output Drops added by **admin** *on September 1, 2020 11:29 pm*

–

View all posts by admin →

ATTACHMENT 14

NBC News 4 and Fox 11, "Slink Fire grows to 26,752 acres with 86% containment; evacuations lifted," September 28, 2020 https://mynews4.com/news/local/slink-fire-west-of-coleville-grows-to-4700-acres-5-contained

ADVERTISEMENT

Slink Fire grows to 26,752 acres with 86% containment; evacuations lifted

by News 4 and FOX 11 Digital Team
Mon, August 31, 2020 at 8:07 AM
Updated Mon, September 28, 2020 at 3:12 PM



Authorities continue to respond to the Slink Fire west of Coleville, Calif. (Photo: Reno Fire Department)

0
Comment
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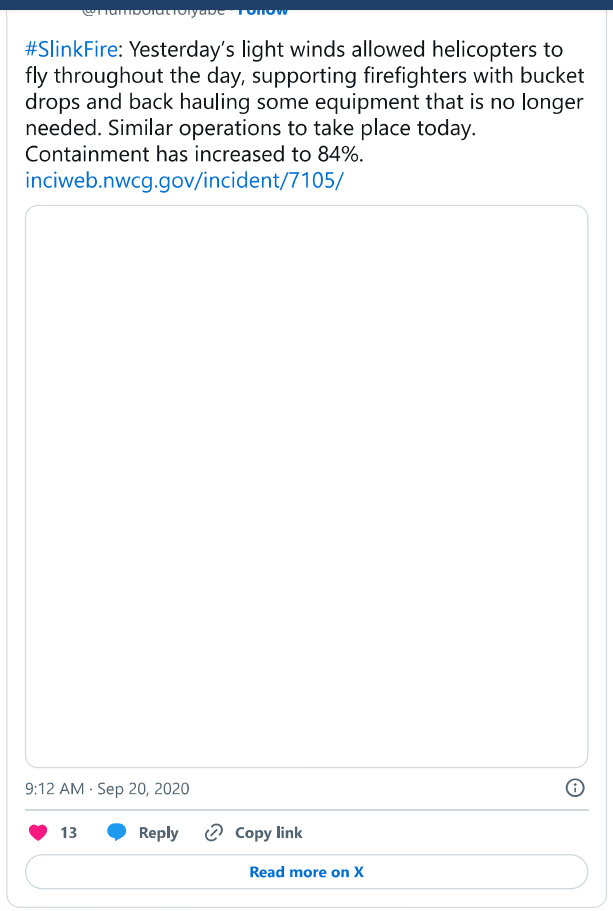
TOPICS: BRIDGEPORT CALIFORNIA,UNITED STATES COLEVILLE COLEVILLE,CALIFORNIA,UNITED STATES SILVER KING UNITED STATES UNITED STATES WALKER

The Bureau of Land Management Bishop Field Office has issued a temporary emergency closure for BLM-managed public lands on the western slope of Antelope Valley, and all of Little Antelope Valley and Slinkard Valley in Mono County.

An emergency closure order has been put in place for the area within the boundaries of the Humboldt-Toiyabe National Forest, Bridgeport and Carson Ranger Districts beginning September 10, 2020, at 8 a.m. View the closure order here.

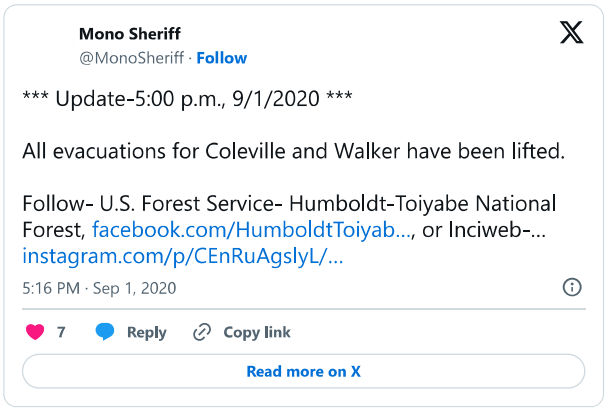
ADVERTISEMENT

An expanded closure order has been put in place by the US Forest Service for the Humboldt-Toiyabe National Forest due to the changing conditions of the Slink Fire. To view the updated closure order, please visit Inciweb.



U.S. Highway 395 has reopened in northern Mono County from Topaz Lane in Topaz to 8.5 miles south at Eastside Lane in Walker. The road was closed for about 24 hours.

According to the Mono County Sheriff's Office, all evacuations for Coleville and Walker have been lifted.



The lightning-caused fire started on Saturday, August 29.

The Humboldt-Toiyabe National Forest has closed all National Forest System lands in the area to the public.

The closure will include all areas, campgrounds, trails and roads:

- From the Forest boundary west of Highway 395 from East Lane Road in Walker, California to Monitor Pass Road on Highway 89
- South of Highway 89 (Monitor Pass) to the northern edge of Summit Meadows Rd (Rd #32059)
- Summit Meadows Road to the Carson Iceberg Wilderness Trails including East Carson River (#21011), Poison Flat (#21018), and Silver King (#21017)

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Conversation

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Be the first to comment...

No one seems to have shared their thoughts on this topic yet

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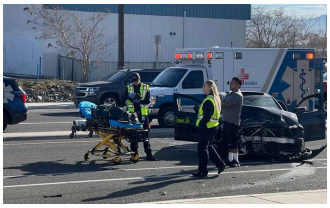
TRENDING



Father, son shot to death along 395 near Reno identified; suspect pleads not guilty



Two parents killed, two kids seriously hurt in Highway 50 crash near Kyburz



Southbound Kietzke lanes between Kuenzli and 2nd reopen after multi-vehicle crash



Truckee mourns battalio

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ATTACHMENT 15

National Weather Service, “Red Flag Warning.” https://www.weather.gov/mqt/redflagtips

Customize Your Weather.gov

City, ST

Enter Your City, ST or ZIP Code

Remember Me

Get Weather

Privacy Policy

Red Flag Warning

Marquette, MI
Weather Forecast Office

Red Flag Warning

A Red Flag Warning means warm temperatures, very low humidities, and stronger winds are expected to combine to produce an increased risk of fire danger.

-If you are allowed to burn in your area, all burn barrels must be covered with a weighted metal cover, with holes no larger than 3/4 of an inch.

-Do not throw cigarettes or matches out of a moving vehicle. They may ignite dry grass on the side of the road and become a wildfire.

-Extinguish all outdoor fires properly. Drown fires with plenty of water and stir to make sure everything is cold to the touch. Dunk charcoal in water until cold. Do not throw live charcoal on the ground and leave it.

-Never leave a fire unattended. Sparks or embers can blow into leaves or grass, ignite a fire, and quickly spread.

ATTACHMENT 16

Iowa State University, Iowa Environmental Mesonet, Red Flag Warnings Dataset "Archived NWS Watch, Warnings, Advisories." https://mesonet.agron.iastate.edu/request/gis/watchwarn.phtml

This page provides a download interface to IEM processed **metadata/geometries** associated with National Weather Service VTEC-enabled watch, warning, and advisory events. You can download this information on-demand in a zip-file (containing a shapefile + CSV), KML, or Microsoft Excel format.

If you are looking for a real-time source of warning shapefiles, you can find that here.

Download Limit: If you do not limit the state or WFO output, you are limited to downloading **1 year** of data at a time. The reason being to keep the requests from timing out as the response content is delivered on the fly.

Related Services

NWS Misc Polygons | SPC Convective Discussions | SPC/WPC Outlooks | SPC Watch Polygons | WPC Precip Discussions

Custom Download

Backend Documentation for scripting against this service.

- Limit State
- Limit Weather Forecast Office (WFO)

All Available
[ABR] Aberdeen
[ALY] Albany
[ABQ] Albuquerque
[AMA] Amarillo

Select time interval (Times are in UTC.)

	Year	Month	Day	Hour	Minute
Option 1: WWA events with start time between the specified start and end dates.					
Start:	2025	Jan	1	0 UTC	0
End:	2025	Dec	9	0 UTC	0
Option 2: WWA events valid at this exact time (UTC)					
Valid:	2025	Dec	9	0 UTC	0

Filter Options

- Limit output to Tornado, Severe Thunderstorm, Marine, and Flash Flood Warnings
- Limit output to only Storm Based Warnings
- Limit output to only Emergencies [2]

Pre-generated Zip Files

These files are same as you could download from the form on the left, just you don't have to wait so long! A script runs at around 2 AM Central Time each day to dump the current year's data. The date stamps with each file denote when they were generated.

Year	All	Limit Tor,Svr,Mar,FF	Limit Storm Based Tor,Svr,Mar,FF
1986	Zip (6.2 MB, 09 May 2025)	Zip (6.2 MB, 09 May 2025)	N/A
1987	Zip (5.16 MB, 09 May 2025)	Zip (5.16 MB, 09 May 2025)	N/A
1988	Zip (5.1 MB, 09 May 2025)	Zip (5.1 MB, 09 May 2025)	N/A
1989	Zip (7.57 MB, 09 May 2025)	Zip (7.57 MB, 09 May 2025)	N/A
1990	Zip (9.53 MB, 09 May 2025)	Zip (9.53 MB, 09 May 2025)	N/A
1991	Zip (9.23 MB, 09 May 2025)	Zip (9.23 MB, 09 May 2025)	N/A
1992	Zip (9.17 MB, 09 May 2025)	Zip (9.17 MB, 09 May 2025)	N/A
1993	Zip (10.13 MB, 09 May 2025)	Zip (10.13 MB, 09 May 2025)	N/A

Limit output to only Particularly Dangerous Situations

Forecaster Filter (optional)

Enter forecaster name or initials

Case-insensitive search against forecaster field

Limit output to selected VTEC phenomena and significance below.

[TO] Tornado [W] Warning

Include polygons/metadata found with any followup (SVS/MWS/etc) statements. [1]

Request Shapefile | Request CSV | Request Excel | Request K

Reset

* Only Storm Based Warnings are available via KML.
[1] By default, only the issuance polygon is included.
[2] In the case of KML output and emergencies, this gets very complex with the download. You likely want to enable "Include polygons/metadata" option to get a complete download. Otherwise, you only get emergencies **at issuance.**

Shapefile DBF Schema

A discussion of the schema can be found on the FAQ Page for this dataset.

Year	All	Limit Tor,Svr,Mar,FF	Limit Storm Based Tor,Svr,Mar,FF
1994	Zip (11.13 MB, 09 May 2025)	Zip (11.13 MB, 09 May 2025)	N/A
1995	Zip (16.08 MB, 09 May 2025)	Zip (16.08 MB, 09 May 2025)	N/A
1996	Zip (18.26 MB, 09 May 2025)	Zip (18.26 MB, 09 May 2025)	N/A
1997	Zip (17.88 MB, 09 May 2025)	Zip (17.88 MB, 09 May 2025)	N/A
1998	Zip (23.43 MB, 09 May 2025)	Zip (23.43 MB, 09 May 2025)	N/A
1999	Zip (19.34 MB, 09 May 2025)	Zip (19.34 MB, 09 May 2025)	N/A
2000	Zip (19.06 MB, 09 May 2025)	Zip (19.06 MB, 09 May 2025)	N/A
2001	Zip (19.31 MB, 09 May 2025)	Zip (19.31 MB, 09 May 2025)	N/A
2002	Zip (26.52 MB, 09 May 2025)	Zip (26.52 MB, 09 May 2025)	Zip (2.39 MB, 09 May 2025)
2003	Zip (28.12 MB, 09 May 2025)	Zip (28.12 MB, 09 May 2025)	Zip (3.7 MB, 09 May 2025)
2004	Zip (29.49 MB, 09 May 2025)	Zip (29.49 MB, 09 May 2025)	Zip (4.18 MB, 09 May 2025)
2005	Zip (88.79 MB, 09 May 2025)	Zip (25.21 MB, 09 May 2025)	Zip (4.27 MB, 09 May 2025)
2006	Zip (179.33 MB, 09 May 2025)	Zip (29.31 MB, 09 May 2025)	Zip (5.17 MB, 09 May 2025)
2007	Zip (193.31 MB, 09 May 2025)	Zip (26.31 MB, 09 May 2025)	Zip (4.34 MB, 09 May 2025)
2008	Zip (277.36 MB, 09 May 2025)	Zip (48.01 MB, 09 May 2025)	Zip (6.62 MB, 09 May 2025)

Year	All	Limit Tor,Svr,Mar,FF	Limit Storm Based Tor,Svr,Mar,FF
2009	Zip (280.11 MB, 09 May 2025)	Zip (42.09 MB, 09 May 2025)	Zip (5.44 MB, 09 May 2025)
2010	Zip (297.04 MB, 09 May 2025)	Zip (39.82 MB, 09 May 2025)	Zip (5.26 MB, 09 May 2025)
2011	Zip (307.25 MB, 09 May 2025)	Zip (53.74 MB, 09 May 2025)	Zip (6.64 MB, 09 May 2025)
2012	Zip (282.84 MB, 09 May 2025)	Zip (41.84 MB, 09 May 2025)	Zip (5.31 MB, 09 May 2025)
2013	Zip (265.98 MB, 09 May 2025)	Zip (36.41 MB, 09 May 2025)	Zip (4.76 MB, 09 May 2025)
2014	Zip (269.24 MB, 09 May 2025)	Zip (33.66 MB, 09 May 2025)	Zip (4.52 MB, 09 May 2025)
2015	Zip (264.37 MB, 09 May 2025)	Zip (38.51 MB, 09 May 2025)	Zip (5.26 MB, 09 May 2025)
2016	Zip (248.22 MB, 09 May 2025)	Zip (37.75 MB, 09 May 2025)	Zip (5.03 MB, 09 May 2025)
2017	Zip (255.16 MB, 09 May 2025)	Zip (38.95 MB, 09 May 2025)	Zip (5.23 MB, 09 May 2025)
2018	Zip (266.85 MB, 09 May 2025)	Zip (36.21 MB, 09 May 2025)	Zip (5 MB, 09 May 2025)
2019	Zip (271.98 MB, 09 May 2025)	Zip (42.64 MB, 09 May 2025)	Zip (5.82 MB, 09 May 2025)
2020	Zip (259.78 MB, 09 May 2025)	Zip (39.62 MB, 09 May 2025)	Zip (5.02 MB, 09 May 2025)
2021	Zip (284.21 MB, 09 May 2025)	Zip (39.01 MB, 09 May 2025)	Zip (5.23 MB, 09 May 2025)
2022	Zip (313.79 MB, 09 May 2025)	Zip (41.29 MB, 09 May 2025)	Zip (5.42 MB, 09 May 2025)
2023	Zip (326.82 MB, 09 May 2025)	Zip (47.34 MB, 09 May 2025)	Zip (6.49 MB, 09 May 2025)

Year	All	Limit Tor,Svr,Mar,FF	Limit Storm Based Tor,Svr,Mar,FF
2024	Zip (335.01 MB, 09 May 2025)	Zip (45.31 MB, 09 May 2025)	Zip (6.19 MB, 09 May 2025)
2025	Zip (303.84 MB, 09 Dec 2025)	Zip (47.43 MB, 09 Dec 2025)	Zip (5.87 MB, 09 Dec 2025)

Service Changes

10 Apr 2024: Polygons associated with CANcel VTEC events when the event is still active for other areas have been culled from the database and thus this portal. These were not providing any value and were confusing users.

12 Mar 2019: Added `UPDATED` column to the dataset providing the timestamp of the most recent NWS Text Product for the event.

3 Feb 2016: This service used to allow the download of the high-resolution AWIPS counties/zones shapes. Sadly, the size of these polygons would overwhelm the backend data service. So now this service only returns the simplified county/zone polygons. You may wish to do a join against the **AWIPS Geodatabase** to get the high resolution depiction. The `NWS_UGC` column is what you would use to join.

Archive Status

Dataset Component	Start Time	Notes
Tornado Severe T'storm Flash Flood Special Marine	1 Jan 2002 (Polygons) 1 Jan 1986 (Counties)	Only the initial polygon is used. Polygon updates in the SVS statements are ignored. The VTEC attributes didn't appear until they became operational.
All VTEC watch/warn	12 Nov 2005	Products other than Tornado and Severe Thunderstorm Warnings.
SVR,TOR Watch by County	12 Nov 2005	

Publications Citing IEM Data (View All)

These are the most recent 10 publications that have cited the usage of data from this page. This list is not exhaustive, so please let us know if you have a publication that should be added.

- Schmidt, J. 2025, Using Random Forest Machine Learning to Identify Homes at High Risk from Wildfires in California Counties. MPRA Paper https://mpra.ub.uni-muenchen.de/id/eprint/126685
- Rafizadeh, C., M. Michaud, et al. 2025, Do We Have Your Attention? Tracking Eye Movements and Assessing Viewer Preferences During Television Weather Warnings. Weather, Climate, and Society. https://doi.org/10.1175/WCAS-D-25-0006.1
- Pankratz, H., A. Molthan, et al. 2025, The Utility of InSAR Coherence for Tornado Damage Track Identification from the 2-3 March 2020 Tennessee Tornado Outbreak. Journal of Applied Meteorology and Climatology. https://doi.org/10.1175/JAMC-D-25-0024.1
- Lee, S., S. Chinthavali, et al. 2025, Evaluating Multi-Weather Impacts on the U.S. Power Grid Reliability. IEEE International Conference on Information Reuse and Integration and Data Science (IRI), San Jose, CA, USA, 2025, pp. 55-60 https://doi.org/10.1109/IRI66576.2025.00018
- Saki, S., G. Sofia, et al. 2025, A multi-year analysis of the impact of heatwaves and compound weather events on power outages. Scientific Reports 15. https://doi.org/10.1038/s41598-025-15065-x
- Gaviria, A., M. Krocak, et al. 2025, Linguistic Challenges in Severe Weather Communication: Comparing English and Spanish-Speaking Populations. BAMS https://doi.org/10.1175/BAMS-D-24-0199.1
- Adams, Q., et al. 2025, Heat alerts and information-seeking behavior: evidence from heatrelated internet searches in the United States. Environ. Res. Lett. https://doi.org/10.1088/1748-9326/adf3cf

- Martz, R. 2025, Improving WoFS-PHI Watch to Warning Severe Weather Guidance Through New Predictor and Target Datasets. University of Oklahoma Masters Thesis https://www.proquest.com/docview/3229717842
- Cooke, A. 2025, Real-time enhanced tornado warning product guidance based on tornado debris signature height and population density. Mississippi State University Masters Thesis https://www.proquest.com/docview/3217844942
- Zhou, S. Q. Huang, et al. 2025, TALES OF THE 2025 LOS ANGELES FIRE: HOTWASH FOR PUBLIC HEALTH CONCERNS IN REDDIT VIA LLM-ENHANCED TOPIC MODELING. arXiv:2505.09665v2 [cs.SI] 16 May 2025 https://arxiv.org/pdf/2505.09665

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ATTACHMENT 17

Liberty's Response to Data Request CalAdvocates-LIB-A2506017-006, Question 4, September 5, 2025, Excel spreadsheet file "*TZP_2016_2020_RFW_Data.xlsx*".

NWZ Forecast Zone	RFW Start Date and Time	RFW End Date and Time	Total Duration (minutes)	Nearest weather station	Latitude	Longitude	Max sustained wind speed (mph)	Max gust wind speed (mph)
CAZ273	20160729 21:00	20160730 04:00	420	Walker RAWS	38.56528	-119.45917	9	20
CAZ273	20161002 19:00	20161003 01:00	360	Walker RAWS	38.56528	-119.45917	23	39
CAZ273	20161013 21:00	20161015 00:00	1620	Walker RAWS	38.56528	-119.45917	24	46
CAZ273	20161023 18:00	20161024 01:00	420	Walker RAWS	38.56528	-119.45917	17	32
CAZ273	20170705 20:00	20170706 12:00	960	Walker RAWS	38.56528	-119.45917	9	14
CAZ273	20171019 15:00	20171020 03:00	720	Walker RAWS	38.56528	-119.45917	13	22
CAZ273	20180711 20:00	20180712 04:00	480	Walker RAWS	38.56528	-119.45917	11	19
CAZ273	20180804 19:00	20180805 05:00	600	Walker RAWS	38.56528	-119.45917	21	33
CAZ273	20180911 20:00	20180913 12:00	2400	Walker RAWS	38.56528	-119.45917	15	39
CAZ273	20190828 18:00	20190829 03:00	540	Walker RAWS	38.56528	-119.45917	8	13
CAZ273	20190909 20:00	20190910 04:00	480	Walker RAWS	38.56528	-119.45917	7	16
CAZ273	20190915 21:00	20190917 01:00	1680	Walker RAWS	38.56528	-119.45917	29	51
CAZ273	20191008 21:00	20191009 21:00	1440	Walker RAWS	38.56528	-119.45917	13	21
NVZ421	20200530 15:00	20200531 03:00	720	Walker RAWS	38.56528	-119.45917	20	35
NVZ421	20200612 19:00	20200613 03:00	480	Walker RAWS	38.56528	-119.45917	23	35
NVZ421	20200615 19:00	20200616 03:00	480	Walker RAWS	38.56528	-119.45917	13	22
NVZ421	20200616 19:00	20200617 03:00	480	Walker RAWS	38.56528	-119.45917	16	30
NVZ421	20200623 21:00	20200624 03:00	360	Walker RAWS	38.56528	-119.45917	15	21
NVZ421	20200627 19:00	20200629 06:00	2100	Walker RAWS	38.56528	-119.45917	20	40
NVZ421	20200706 21:00	20200707 04:00	420	Walker RAWS	38.56528	-119.45917	15	24
NVZ421	20200721 20:00	20200723 04:00	1920	Walker RAWS	38.56528	-119.45917	9	15
NVZ421	20200816 20:00	20200817 12:00	960	Walker RAWS	38.56528	-119.45917	5	20
NVZ421	20200820 21:00	20200821 04:00	420	Walker RAWS	38.56528	-119.45917	14	23
NVZ421	20200824 03:00	20200824 18:00	900	Walker RAWS	38.56528	-119.45917	7	13
NVZ421	20200907 19:00	20200909 03:00	1920	Walker RAWS	38.56528	-119.45917	17	24
NVZ421	20201010 20:00	20201011 03:00	420	Walker RAWS	38.56528	-119.45917	16	26
NVZ421	20201106 06:00	20201106 17:00	660	Walker RAWS	38.56528	-119.45917	34	56

ATTACHMENT 18

Colin McKellar, National Weather Service Reno, Email Communication, November 18-19, 2025.

Outlook

Re: [EXTERNAL] Re: Red Flag Warning historic data for NVZ421 zone - privileged and confidential

From Colin McKellar - NOAA Federal <colin.mckellar@noaa.gov>
Date Wed 11/19/2025 4:03 AM
To Tang, Benjamin <Benjamin.Tang@cpuc.ca.gov>
Cc Tony.Fuentes@noaa.gov <Tony.Fuentes@noaa.gov>; Dawn.Johnson@noaa.gov <Dawn.Johnson@noaa.gov>; Huber, Patrick <Patrick.Huber@cpuc.ca.gov>

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Ben,

Typically, a cancelled RFW means that the warning ended earlier than the forecasted ending time. The RFW was still issued and was in effect for that zone. In the 7 years I've been in the NWS I've only seen one Fire Weather Watch get cancelled.

I'm happy to help with any other questions.

On Tue, Nov 18, 2025 at 10:29 PM Tang, Benjamin <Benjamin.Tang@cpuc.ca.gov> wrote:

> **Privileged and confidential**
>
> Thanks, Colin! I appreciate the fast, and comprehensive, response. Does the RFW count data you've attached include cancelled RFWs? I don't quite understand what cancelled RFWs are (are they cancelled before some RFW starting deadline?) If I were to assess how "risky" an NWS zone for wildfire, relative to other NWS zones, should one include cancelled RFWs (as if they were "yellow" alerts instead of "red" alerts)?
>
> Ben
>
> ---
>
> **From:** Colin McKellar - NOAA Federal <colin.mckellar@noaa.gov>
> **Sent:** Tuesday, November 18, 2025 9:30 PM
> **To:** Tang, Benjamin <Benjamin.Tang@cpuc.ca.gov>
> **Cc:** Tony.Fuentes@noaa.gov <Tony.Fuentes@noaa.gov>; Dawn.Johnson@noaa.gov <Dawn.Johnson@noaa.gov>; Huber, Patrick <Patrick.Huber@cpuc.ca.gov>
> **Subject:** [EXTERNAL] Re: Red Flag Warning historic data for NVZ421 zone - privileged and confidential
>
> **CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.
>
> Hi Benjamin,
>
> Yes, there was a reorganization of the fire weather zones back in 2020. The Sierra Front (now NV420) used to be NV450; while Topaz Lake and Walker used to be located in CA273. I attached a map of the old zones for reference. I also attached the RFW data for those two zones dating back to 2006. Any time before 2006 you'll need to search IEM using NV450 and CA273. You can also use those two zones to find the text product in IEM. Here is a link for historical data for the Walker RAWS dating back to 2001. This link will give you surrounding RAWS datasets.

Let me know if you have any questions,

Colin

On Tue, Nov 18, 2025 at 11:55 AM Tang, Benjamin <Benjamin.Tang@cpuc.ca.gov> wrote:

Privileged and confidential

Hi Tony and Colin,
I'm a wildfire safety analyst for the California state government. I'm trying to find historic data for Red Flag Warning days before the year 2020 for the NWS zone NV421/NVZ421 around Reno (specifically interested in meteorological data around City of Walker and Topaz Lake), but I'm having a difficult time.

I have searched Iowa State University's Iowa Environmental Mesonet (IEM :: NWS Watches Warnings Advisories Download), and for NVZ421, there have been no(!) RFWs at all issued since 1986 to 2019. I find that very difficult to believe.

Was there a reorganization and/or renumbering of NVZ421 before 2020? If so, what was the old zone ID, and more importantly, where can I get RFW data before 2020 (preferably since 2010 or 2015 to 2020)?

I apologize for the short notice, however, I only just realized this data oddity and I'm facing a deadline – it would be great if you could get back to me before Thanksgiving, if possible. Thank you for your time.

Best,
Ben

Benjamin Tang *(he/him)*
Regulatory Analyst • Public Advocates Office
California Public Utilities Commission

benjamin.tang@cpuc.ca.gov • 619.246.3792

The Public ADVOCATES OFFICE

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Forecaster NWS Reno
Incident Meteorologist (IMET)
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--
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ATTACHMENT 19

National Weather Service, "CON/COR/EXP/CAN VTEC Logic." https://vlab.noaa.gov/web/hazard-services/con-cor-exp-can-vtec-logic

CON/COR/EXP/CAN VTEC LOGIC

Purpose:

This jobsheet will help forecasters understand the particulars about VTEC messages, when they are used, and how to initiate the VTEC actions.

Tasks:

AT-A-GLANCE:

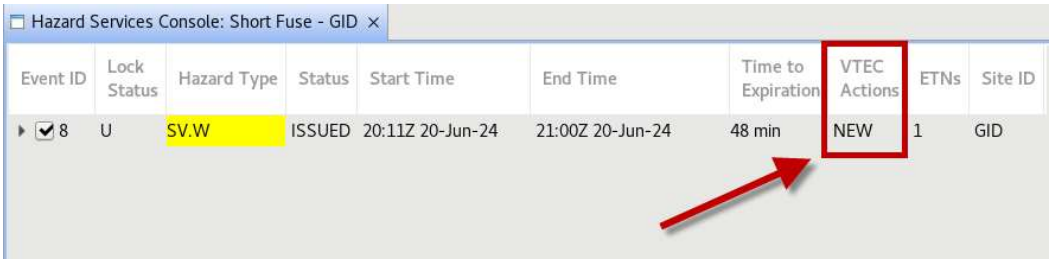
- **What?** Valid Time Event Code (**VTEC**) allow automated dissemination of critical weather information. The actions we will focus on are the Cancel (**CAN**), Continue (**CON**), Expiration (**EXP**), and Correction (**COR**). **Hazard Services** streamlines certain VTEC behavior for issued short-fused hazard events. While some of the behavior is automatic, Hazard Services allows some flexibility with VTEC actions, even more so than **WarnGen**. This handy one pager over VTEC codes is available for forecasters to refresh on the format: https://www.weather.gov/media/vtec/VTEC_explanation_ver9.pdf (https://www.weather.gov/media/vtec/VTEC_explanation_ver9.pdf)
- **Note:** Only products supported in Hazard Services and have **VTEC messages** in the text product can have follow up actions. Therefore products such as Special Weather Statements and Airport Weather Warnings (**SP.S and AW.W**) cannot be modified after issuance.
- **Important to know.** If you are working on an SVS/update to a hazard **before** the **expiration period (> 5 minutes**) and it crosses over **to the expiration period (<= 5 minutes)**, you will **lose** previous work and be forced to issue an **EXP instead**.

Part A: Continue (CON)
CON VTEC actions are the default for hazard events before the expiration period. Selecting the event in the Hazard Services console until **5 minutes before** the end of the event will automatically bring up the CON selections in the **HID**.

1 Remember to have AWIPS in practice mode.

2 Begin with issuing a short-fused convective warning. Either tornado (**TO.W**) or severe thunderstorm warning (**SV.W**) can be issued for this jobsheet.

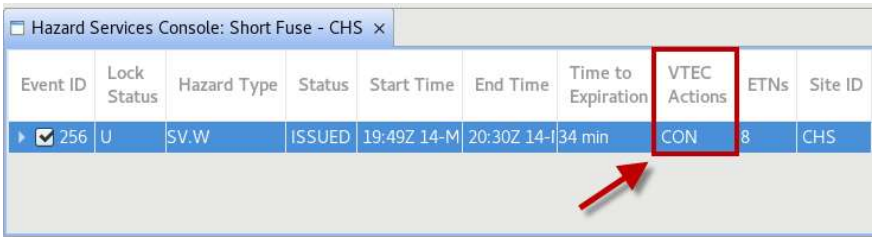
3 The VTEC action of the hazard event will be **NEW** in the console. Left click to highlight the event and the HID will populate with the options to update or modify the hazard event.



Select preview and review the event before issuing.



4 The VTEC action of the hazard event will change to **CON**. The default behavior of Hazard Services is to CON and you may update the event with **severe weather statements (SVS)** as many times as needed before the **expiration period** for the event (5 minutes before and 10 minutes after end time).

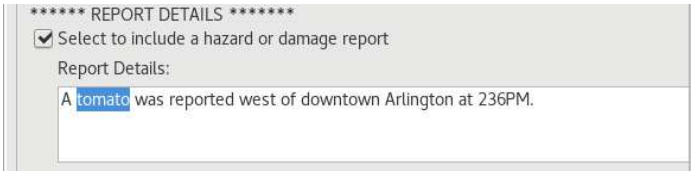


Part B: Correction (COR)

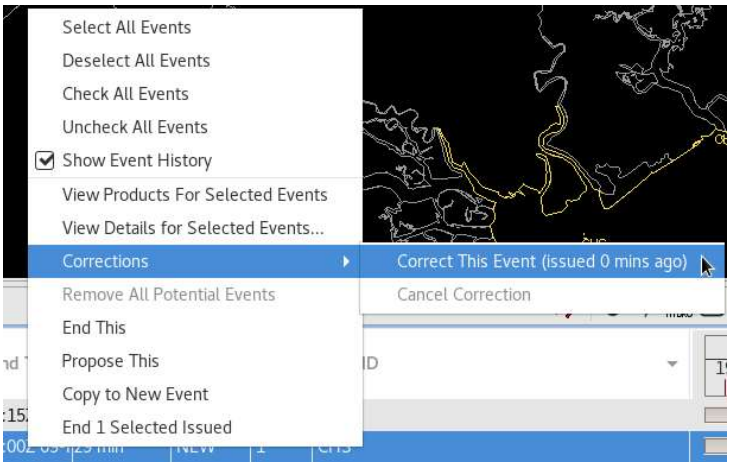
COR VTEC actions are manually initiated by a forecaster whenever corrections are needed to fix formatting or grammatical errors within the event product. You may issue a COR on a hazard event at any point of the valid warning time, however it is *strongly* encouraged to issue a COR **within 10 minutes** of the last product issuance and before the expiration period.

1 Remember to have AWIPS in practice mode.

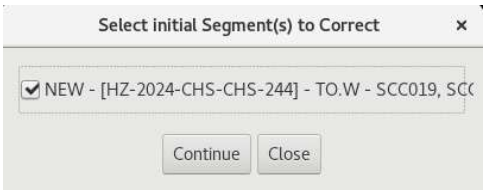
2 Begin with a new short-fused convective warning. Either tornado (TO.W) or severe thunderstorm warning (SV.W) can be issued. In the HID make sure to select hazard reported. Before issuing the warning, insert a typo somewhere in the report details. For example insert "A Tomato was reported..." in the report detail text instead of "A Tornado was reported...". Issue the warning with the typo.



3 The product sent out has a typo and you want to correct it. Highlight the event row in the Console and **right click**.



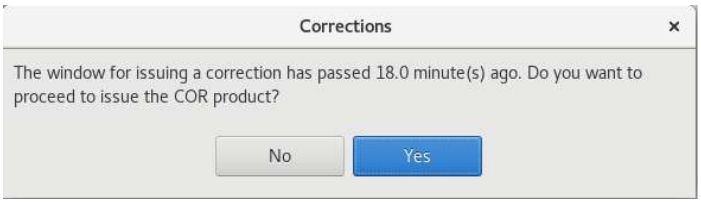
This will bring up a menu of options and actions you can perform, one of which is **Corrections**. Select to **Correct This Event** (Issued a number mins ago).



A popup box will appear with segments available to correct. Select the event you just issued with the typo.

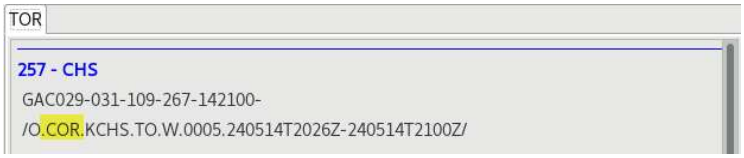


After selecting the event Hazard Services will be put in correction mode. A text banner at the bottom of the console with display.

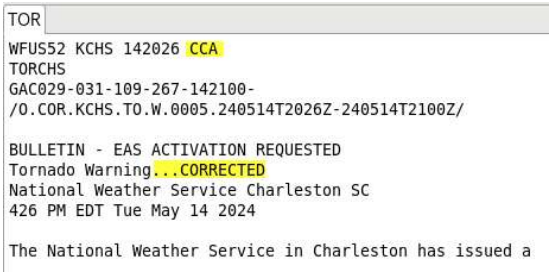


Note: If the window for issuing a correction has passed you will get a popup dialog box informing you of the missed time window.

4 The HID will populate with the usual text as it would when you are starting a warning or issuing a severe weather statement **(SVS)**. It is here that you will correct any text or product formatting errors in the originally issued product.



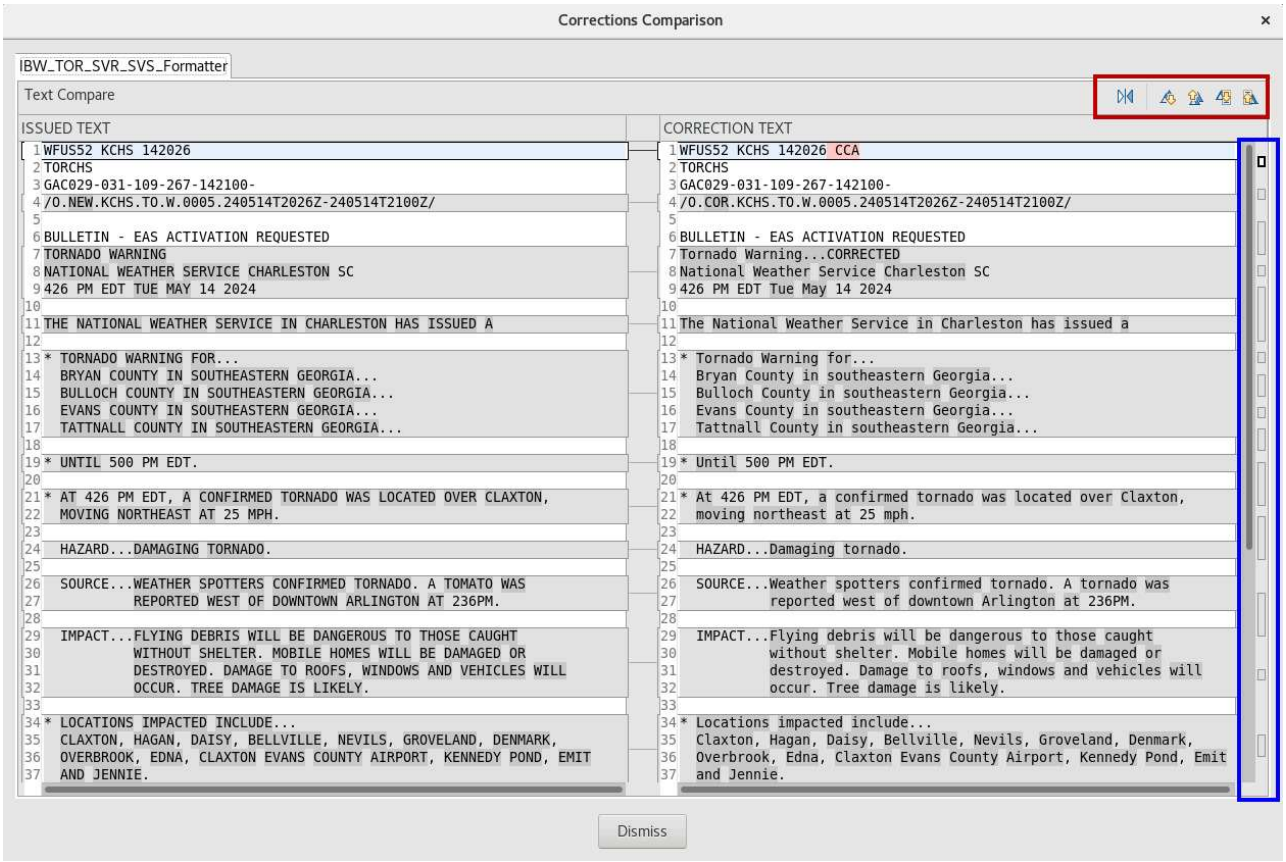
Click preview and make sure the VTEC of the event is COR.



If you view the formatter tab the header should include "CCA" and "...CORRECTED" in the product type.



An additional option is present in the **Product Editor** to **Review Corrections**.



Selecting this option will bring up a comparison popup window that links the text that has been changed between the uncorrected and corrected events. The text lines that are different or corrected will be linked. On the right side of the comparisons window are icons/buttons to quickly jump to differences/changes in the text products.

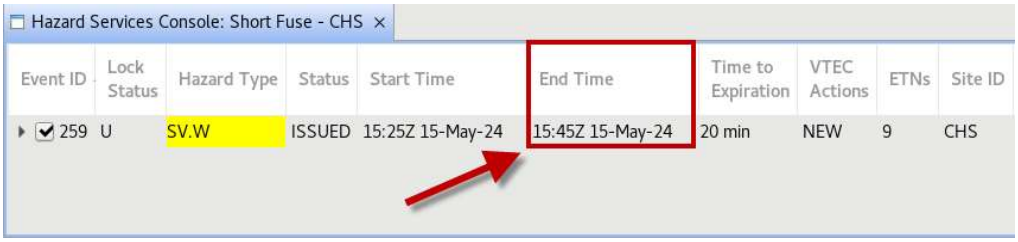
5 Select issue to send out the corrected product.

Part C: Expiration (EXP)

EXP VTEC actions are the default when entering the **ending period** of a hazard event. The typical period is **5 minutes before** and **10 minutes following** the **end time** of the event, however this behavior may differ depending on your site's overrides. When highlighting the event row in the Hazard Services console in this period will setup the HID for an EXP of the event. A more detailed jobsheet (https://vlab.noaa.gov/web/hazard-services/exp-short-fused-convective-warnings) is available for exploring multiple situations forecasters may experience expiring hazards.

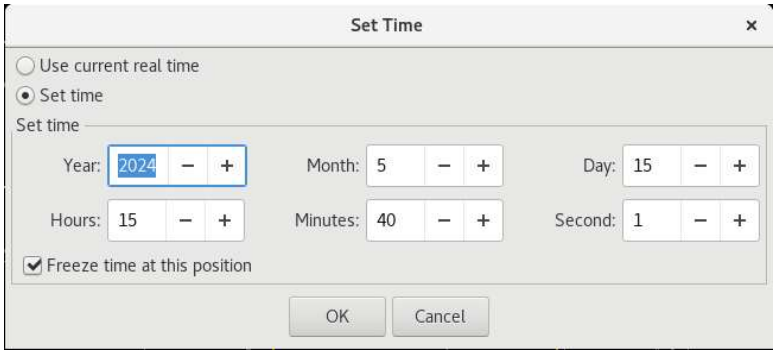
1 Remember to have AWIPS in practice mode.

2 If you have an active warning from the previous jobsheet steps you may use it for this section. If not create a new short-fused convective event that is either a tornado (TO.W) or a severe thunderstorm warning (SV.W).

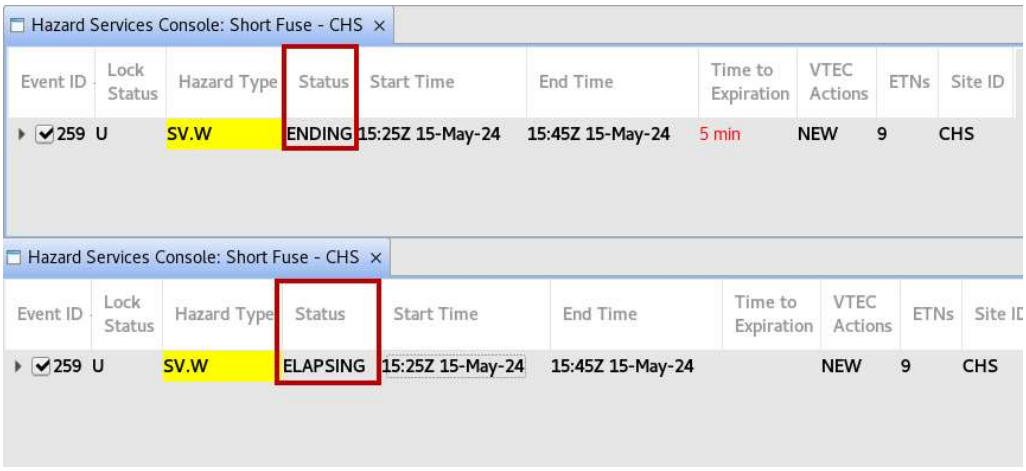


Take note of the end time of the events.

3 You may wait for the expiration period of the product, or more practically adjust the CAVE clock to a time **5 minutes before** the end time of the event.

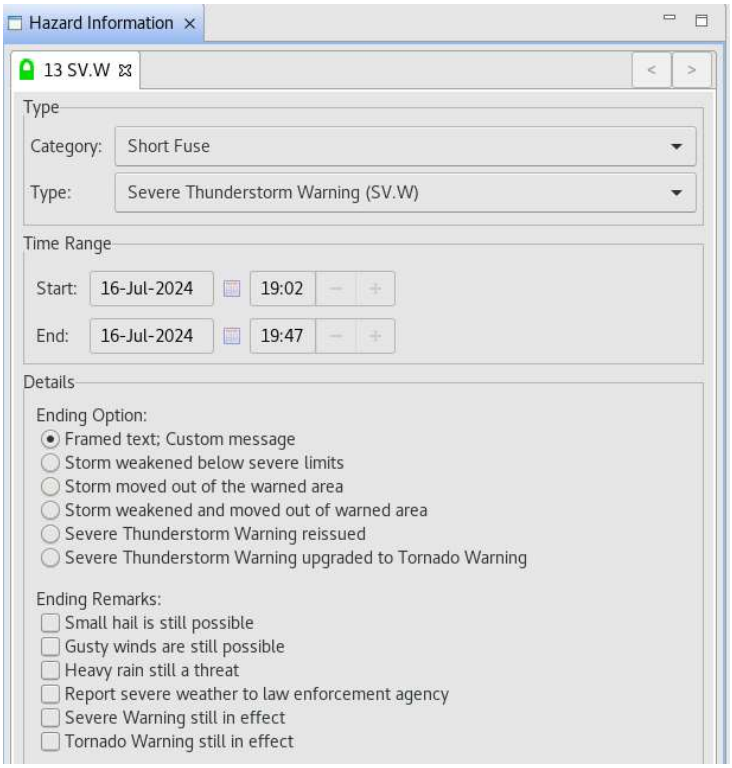


4 Once you have advanced the time you will notice that the status of the event has changed to **Ending**.

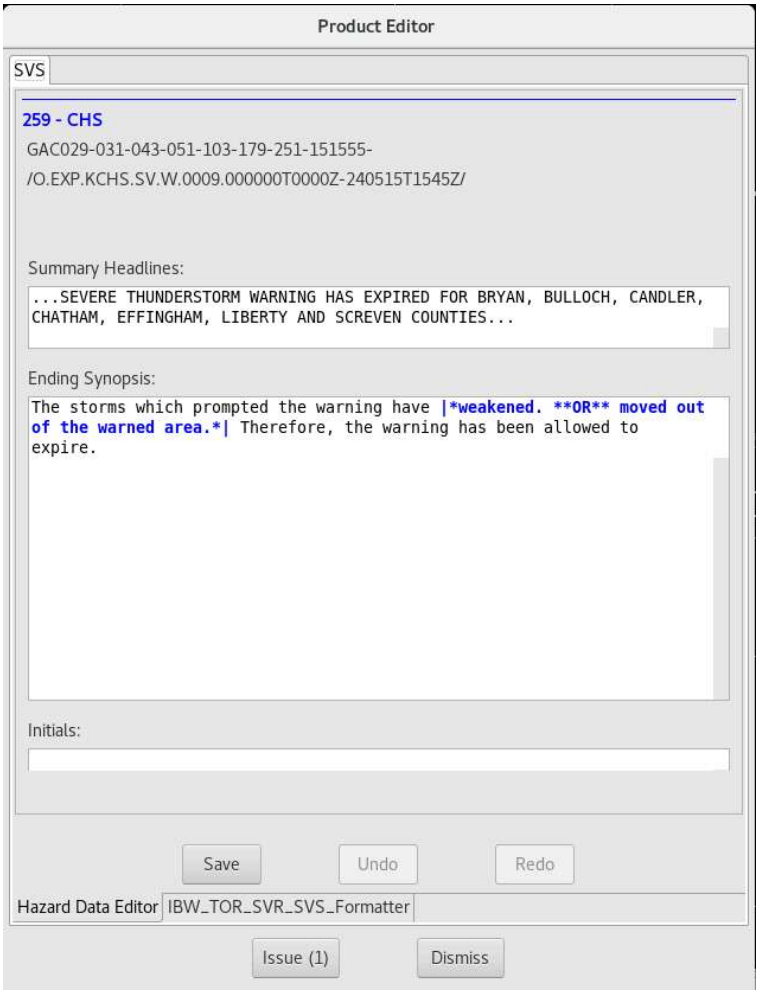


If you set the clock to a time within **10 minutes after** the ending time of the event the status will be **Elapsing**. Regardless of whether the event status is ending or elapsing, the default behavior at this time is to EXP the product. 10 minutes after the end time of the event you will no longer be able to update the event with an EXP.

5 Highlight the hazard event in the console. The HID should autogenerate the options to expire the event. This will be presented as radial buttons with **ending options and remarks** for the product. You may select options that are relevant for the situation, however we will not select any option for this jobsheet. At the bottom of the HID select preview.

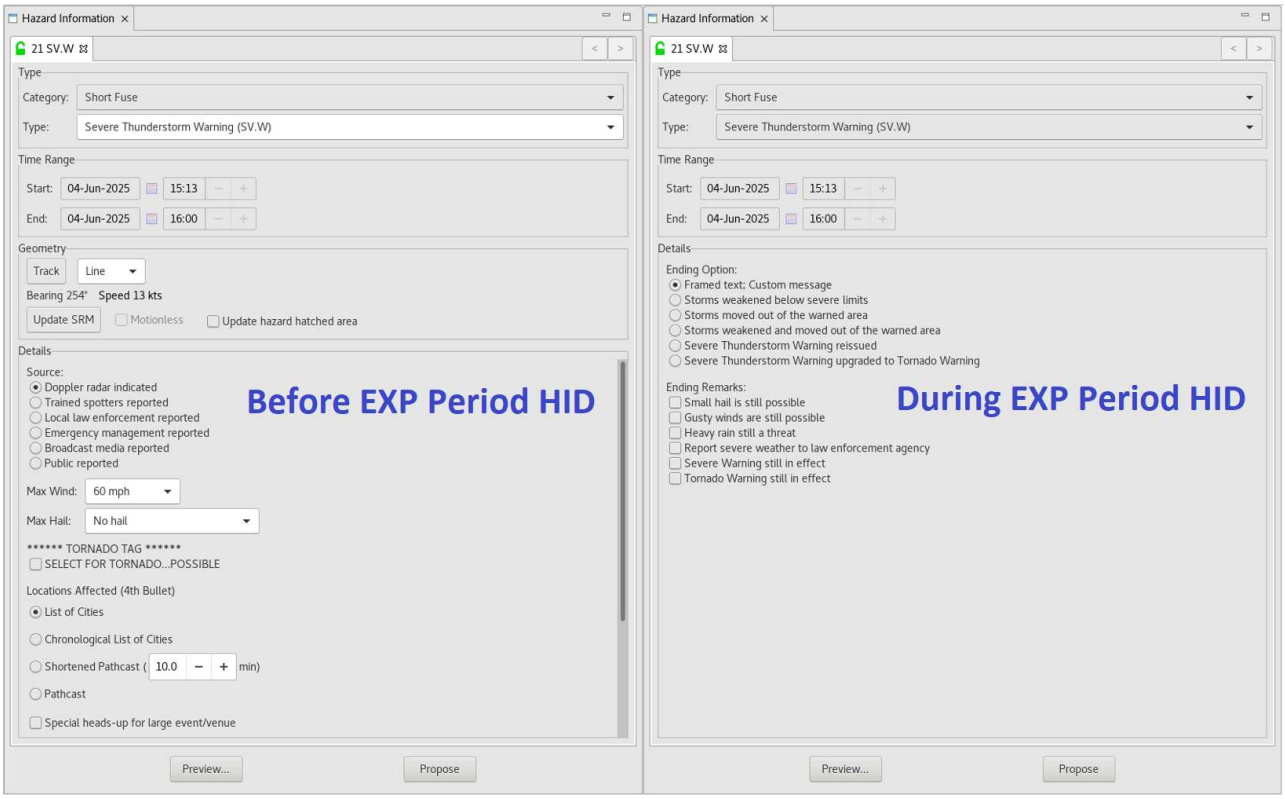


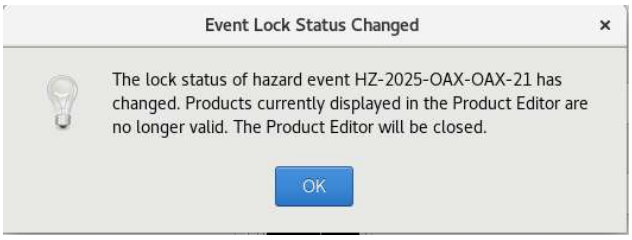
6 The preview text should show an **EXP VTEC** for the product in the header. When we chose to not select any ending options in the HID, the preview text will have framed text to modify with the options to say the storm has weakened or moved out of the warned area for the expiration. Edit the text to say the storm has weakened by deleting the other framed text.



7 Select issue and send out the expired product.
Note that expiring and cancelling are two separate actions and have different messaging for the event which will be covered in Part D.

8 Lastly, if you are editing a hazard during the time the hazard enters its expiration period, you will **lose your edits**. A pop-up warning will display stating that the product lock states has changed as it entered it's expiration period and the product editor will close. You will then be forced to EXP the product with the steps above.





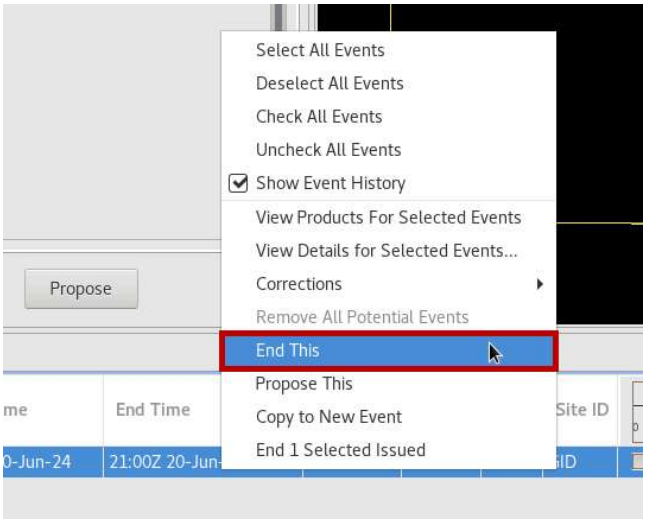
Part D: Cancel (CAN)

CAN VTEC actions are reserved for when the hazard event needs to be cancelled outside the normal lifecycle of a short-fused event. Such situations are when the hazards have left the warning polygon **before the expiration time period** of the event, or when the hazard has **completely diminished before the end period**. This action is manually activated by a forecaster and should not be encountered otherwise in the event lifecycle.

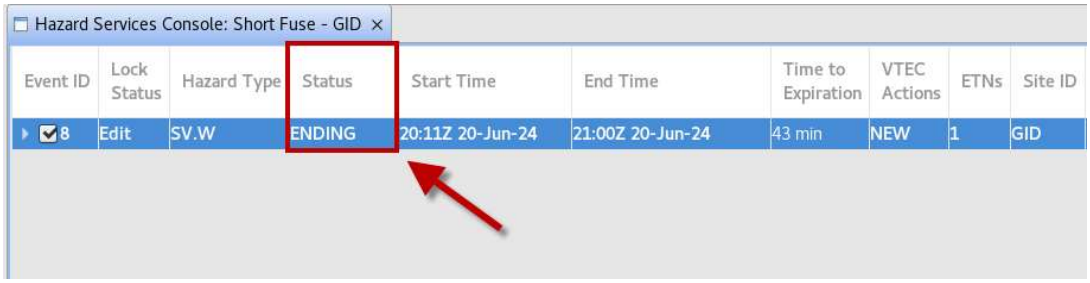
1. Remember to have AWIPS in practice mode.

2. Create a new short-fused convective event. Either tornado (TO.W) or severe thunderstorm warning (SV.W) can be issued. Unlike other VTEC actions, which have time period constraints on when they can be used, CAN actions can be enacted at **any period during the event**.

3. With the newly issued event **left click** to highlight it in the Hazard Services console, then **right click** on the highlighted event. A menu should appear with an option to **End This**. You may also use the **End Number Selected Issued events** to cancel multiple events at once. You would do this by first highlighting multiple events in the console then right clicking and selecting that option, however for this jobsheet continue with the End This option.

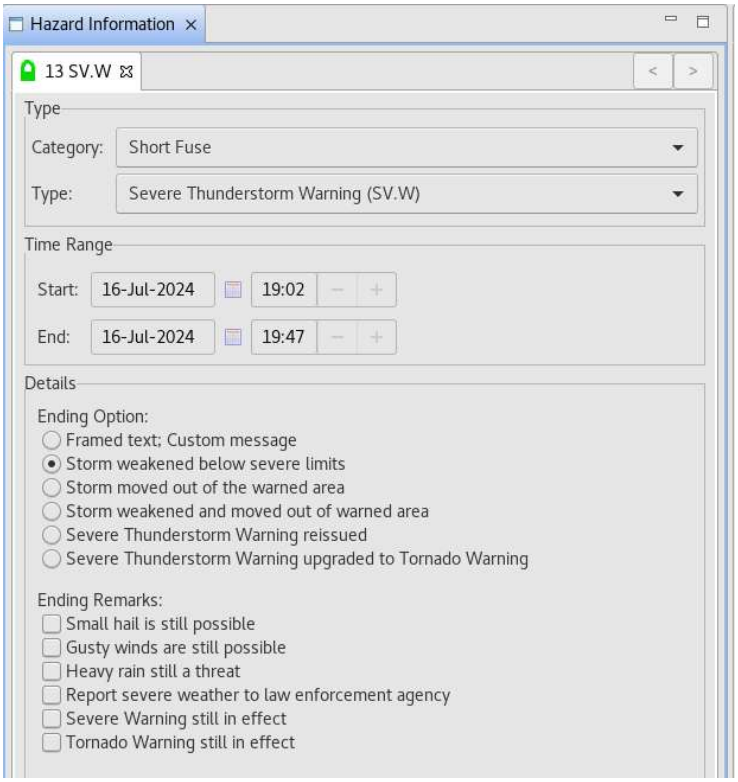


4 The status of the event will change to **ENDING**.



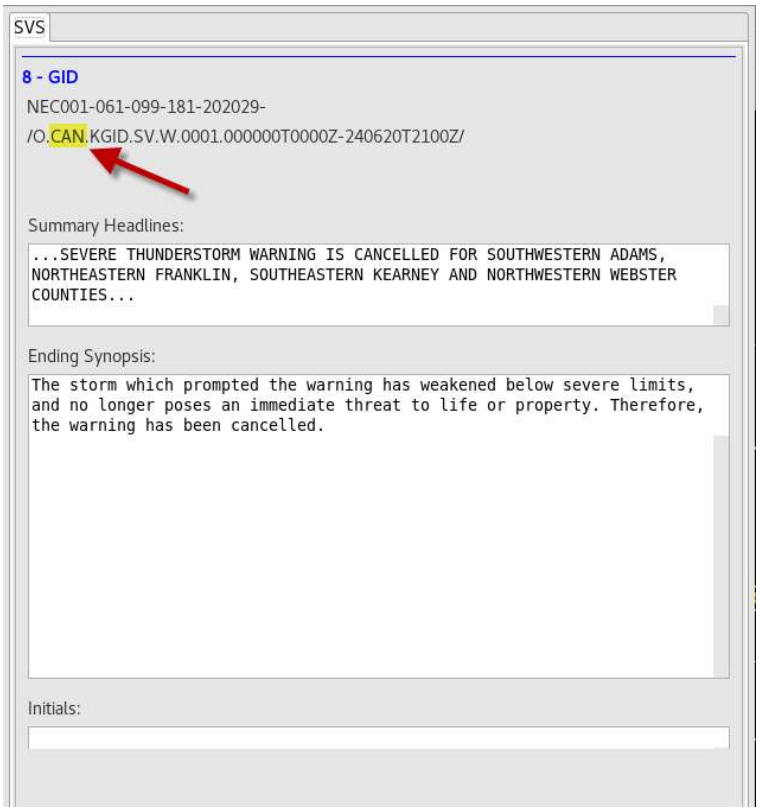
You may right click and select **Revert This** to undo the cancellation action, however we will not for this step.

5 The HID should autogenerate with ending options for the event which should be similar to the expiration ending options.



Go ahead and select “Storm weakened below severe limits” a SV.W or “Storm weakened; No longer capable of producing a tornado” for a TO.W and select preview.

6 The preview text should have CAN in the header with an Ending Synopsis for the event.



7 Select issue and send out the cancellation product.

8 You are done with this jobsheet!

(http://www.usa.gov/)
US Dept of Commerce (http://www.commerce.gov/)
National Oceanic and Atmospheric Administration (http://www.noaa.gov)
National Weather Service (https://www.weather.gov)
Disclaimer (https://www.weather.gov/disclaimer)
Information Quality (http://www.cio.noaa.gov/services_programs/info_quality.html)
Help (https://www.weather.gov/help)
Glossary (http://www.weather.gov/glossary)
Acronyms (https://vlab.noaa.gov/web/mdl/acronyms)
Privacy Policy (https://www.weather.gov/privacy)
Freedom of Information Act (FOIA) (http://www.rdc.noaa.gov/~foia)
About Us (https://vlab.noaa.gov/web/mdl/abou mdl)
Career Opportunities (https://www.weather.gov/careers)

ATTACHMENT 20

National Weather Service, "National Digital Forecast Database Definitions." https://graphical.weather.gov/supplementalpages/definitions.php

National Digital Forecast Database Definitions

National Weather Service
National Headquarters

Apparent Temperature
is the perceived temperature derived from either a combination of temperature and wind (Wind Chill) or temperature and humidity (Heat Index) for the indicated hour. When the temperature at a particular grid point falls to 50 F or less, wind chill will be used for that point for the Apparent Temperature. When the temperature at a grid point rises above 80 F, the heat index will be used for Apparent Temperature. Between 51 and 80 F, the Apparent Temperature will be the ambient air temperature.

Ceiling
is the height of the lowest cloud layer that contributes at least five oktas to the total sky cover.

Convective Hazard Outlook
is a categorical forecast (marginal, slight, enhanced, moderate, or high risk) that specifies the perceived level of threat of thunderstorms, severe thunderstorms, hail, damaging winds, and tornadoes.

Critical Fire Weather
delineates areas where pre-existing fuel conditions, combined with forecast weather conditions will result in a significant threat for wildfires. Two types of areas are specified: critical fire weather areas for wind and relative humidity, and extremely critical fire weather areas for extreme conditions of wind and relative humidity.

Damaging Thunderstorm Wind Probability
is the probability (in percent) of winds greater than 58 miles per hour occurring within 25 miles of any point during the outlook period. The higher the probability, the higher the threat of severe thunderstorm winds occurring.

Dew Point
is the expected dew point temperature for the indicated hour. Dew point temperature is a measure of atmospheric moisture. It is the temperature to which air must be cooled in order to reach saturation (assuming air pressure and moisture content are constant).

Dry Thunderstorms
delineates areas expecting widespread or numerous thunderstorms that produce little wetting rain (<0.10 in) where dried fuels exist.

Extreme Hail Probability
is the probability (in percent) of hail greater than 2 inches in diameter within 25 miles of any point during the outlook period. The higher the probability, the higher the threat of extreme hail occurring.

Extreme Thunderstorm Wind Probability
is the probability (in percent) of winds greater than 75 miles per hour occurring within 25 miles of any point during the outlook period. The higher the probability, the higher the threat of extreme thunderstorm winds occurring.

Extreme Tornado Probability
is the probability (in percent) of Enhanced Fujita scale 2 (EF2) tornadoes occurring within 25 miles of any point during the outlook period. The higher the probability, the higher the threat of extreme tornadoes.

Forecast of Reference Crop Evapotranspiration (FRET)
is the expected depth of water that would evaporate and transpire from a reference crop under the forecast weather conditions on a daily and weekly basis over the next 7 days. The FRET is for short crops with an approximate height of 12 cm similar to full cover grasses.

Hail Probability
is the probability (in percent) of hail greater than three-quarters of an inch in diameter (size of a penny) occurring within 25 miles of any point during the outlook period. The higher the probability, the higher the threat of severe hail.

Hazards
are weather or hydrologic hazardous events issued for the protection of life and property and the enhancement of the national economy. The hazards grid includes long duration coastal, marine, non-precipitation, tropical, convective, winter weather and some hydrological hazards. It does not include some short duration watches and warnings such as Tornado, Severe Thunderstorm, Flash Flood, Gale, and Special Marine Warnings. See the latest Hazards Product Description Document at: https://nws.weather.gov/products/PDD/HazardsGrid.pdf for the latest listing of included hazards and definitions.

National Forecast Digital Database
Watch, Warning, & Advisory Legend

Color	Label	Hazard / Weather Event
		None
	Wind	
	LW.Y, WI.Y	Lake Wind Advisory, Wind Advisory
	HW.A	High Wind Watch
	HW.W	High Wind Warning
	Flood	
	FF.A	Flash Flood Watch
	CF.Y, LS.Y	Coastal Flood Advisory, Lakeshore Flood Advisory
	CF.A, LS.A	Coastal Flood Watch, Lakeshore Flood Watch
	CF.W, LS.W	Coastal Flood Warning, Lakeshore Flood Warning
	FA.A	Flood Watch (Area)
	FL.Y, FA.Y	Flood Advisory (Point), Flood Advisory
	Thunderstorm	
	SV.A	Severe Thunderstorm Watch
	Tornado	

CA-03-0499

Color	Label	Hazard / Weather Event
	TO.A	Tornado Watch
	Tropical	
	SS.A	Storm Surge Watch
	SS.W	Storm Surge Warning
	SS.A	Hurricane Wind Watch
	SS.W	Hurricane Wind Warning
	HU.A, TY.A	Hurricane Watch, Typhoon Watch
	HU.W, TY.W	Hurricane Warning, Typhoon Warning
	TI.A, TR.A	Tropical Storm Wind Watch, Tropical Storm Watch
	TI.W, TR.W	Tropical Storm Wind Warning, Tropical Storm Warning
	Marine	
	HF.A	Hurricane Force Wind Watch
	HF.W	Hurricane Force Wind Warning
	SR.A	Storm Watch
	SR.W	Storm Warning
	GL.A	Gale Watch
	GL.W	Gale Warning
	SU.Y	High Surf Advisory
	SU.W	High Surf Warning
	SW.Y, RB.Y, SI.Y, SC.Y	Small Craft Advisory
	SE.A	Hazardous Seas Watch
	SE.W	Hazardous Seas Warning
	UP.Y	Freezing Spray Advisory
	UP.A	Heavy Freezing Spray Watch
	UP.W	Heavy Freezing Spray Warning
	BW.Y	Brisk Wind Advisory
	LO.Y	Low Water Advisory
	BH.S, RP.S	Beach Hazard Statement, Rip Current Statement
	Winter Weather	
	WW.Y	Winter Weather Advisory
	WS.A	Winter Storm Watch
	WS.W	Winter Storm Warning
	Snow	
	LE.A	Lake Effect Snow Watch
	LE.W	Lake Effect Snow Warning
	LE.Y, LB.Y	Lake Effect Snow Advisory, Lake Effect & Blowing Snow Advisory
	Blizzard	
	BZ.A	Blizzard Watch
	BZ.W	Blizzard Warning
	Ice	
	IS.W	Ice Storm Warning
	ZR.Y	Freezing Rain Advisory
	ZF.Y	Freezing Fog Advisory
	Cold	
	WC.Y	Wind Chill Advisory
	WC.A	Wind Chill Watch
	WC.W	Wind Chill Warning
	EC.A, EC.W	Extreme Cold Watch, Extreme Cold Warning
	FR.Y	Frost Advisory
	FZ.A	Freeze Watch
	FZ.W	Freeze Warning
	HZ.A	Hard Freeze Watch
	HZ.W	Hard Freeze Warning
	Heat	
	HT.Y	Heat Advisory
	EH.A	Excessive Heat Watch
	EH.W	Excesssive Heat Warning
	Miscellaneous	
	FW.A	Fire Weather Watch
	FW.W	Red Flag Warning
	DU.Y	Blowing Dust Advisory
	SM.Y	Dense Smoke Advisory
	DS.W	Dust Storm Warning
	FG.Y	Dense Fog Advisory
	AS.Y	Air Stagnation Advisory
	AF.Y	Ashfall Advisory
	AF.W	Ashfall Warning

HeatRisk (Experimental)

is a color-numeric-based index that uses high-resolution weather, climate, and Centers for Disease Control and Prevention (CDC) heat-health data to place the upcoming temperature forecast into climatological context and identifies potentially dangerous heat that will lead to increased heat-related impacts. It takes into account how significantly above normal the high and low temperatures are, the time of the year, the duration of the unusual heat, if there is overnight relief, and if temperatures are at high enough levels to pose an elevated risk for heat complications based on CDC heat-health thresholds.

Risk of Heat-Related Impacts

0	Little to no risk from expected heat.
1	Minor - This level of heat affects primarily those individuals extremely sensitive to heat, especially when outdoors without effective cooling and/or adequate hydration.
2	Moderate - This level of heat affects most individuals sensitive to heat, especially those without effective cooling and/or adequate hydration. Impacts possible in some health systems and in heat-sensitive industries.

CA-03-0500

3 Major = This level of heat affects anyone without effective cooling and/or adequate hydration. Impacts likely in some health systems, heat-sensitive industries and infrastructure.

4 Extreme = This level of rare and/or long-duration extreme heat with little to no overnight relief affects anyone without effective cooling and/or adequate hydration. Impacts likely in most health systems, heat-sensitive industries and infrastructure.

Hurricane Threats

are the worst-case plausible scenario or threat associated with each of four tropical cyclone hazards: wind, storm surge, flooding rain, and tornadoes. Threats take into account the forecast magnitude and the associated forecast uncertainty of the hazard. There are four significant levels which describe each threat grid and are described in the tables below:

Wind Threat

- Potential for wind greater than 110 mph
- Potential for wind 74 to 110 mph
- Potential for wind 58 to 73 mph
- Potential for wind 39 to 57 mph

Storm Surge Threat

- Potential for storm surge > 9 ft above ground
- Potential for storm surge > 6 ft above ground
- Potential for storm surge > 3 ft above ground
- Potential for storm surge > 1 ft above ground

Flooding Rain Threat

- Potential for extreme flooding rain
- Potential for major flooding rain
- Potential for moderate flooding rain
- Potential for localized flooding rain

Tornado Threat

- Potential for an outbreak of tornadoes
- Potential for many tornadoes
- Potential for several tornadoes
- Potential for a few tornadoes

Threats are valid whenever tropical cyclone watches and warnings are in effect along the Atlantic and Gulf Coasts, as well as Puerto Rico. They convey the threat for the duration of the event, not specific timing. See the latest Tropical Cyclone Threats Product Description Document at: https://nsdesk.servicenowservices.com/api/g_noa/nwspc/res2/d73d1bd91b7a2110135feb9ce54bcb7a for the listing and description of the included threats.

Ice Accumulation

is the expected thickness of new ice accumulation upon an elevated horizontal flat surface (in hundredths of inches) during a six-hour period.

Low Level Wind Shear

is the speed and direction of the wind at the height (above ground) of top of the low-level wind shear layer.

Maximum/Minimum Temperature

is the daytime maximum or the overnight minimum temperature.

Maximum/Minimum Relative Humidity

is the highest or lowest relative humidity (%) expected for the indicated 12-hour period.

Precipitation Amount

is the expected quantity of liquid precipitation accumulated over a six hourly period. A quantitative precipitation forecast (QPF) will be specified when a measurable (1/100th of an inch or more) precipitation type is forecast for any hour during a QPF valid period. NDFD valid periods for QPF are 6 hours long beginning and ending at 0000, 0600, 1200 and 1800 UTC. QPF includes the liquid equivalent amount for snow and ice.

Probability of Precipitation (PoP12)

is the likelihood, expressed as a percent, of a measurable precipitation event (1/100th of an inch or more) at a grid point during the 12-hour valid period. The 12-hour valid periods begin and end at 0000 and 1200 Coordinated Universal Time (UTC).

Precipitation Potential Index (PPI)

is a means to show confidence as to the location of precipitation at each forecast time across the forecast area. PPI values range from 0 to 100 and resemble PoP12 values in magnitude. The PoP12 for any 12- hour period can be derived by taking the maximum PPI value within the desired period.

Relative Humidity

is a ratio, expressed as a percent, of the amount of atmospheric moisture present relative to the amount that would be present if the air were saturated. Since the latter amount is dependent on temperature, relative humidity is a function of both moisture content and temperature.

Sky Cover

is the expected amount of opaque clouds (in percent) covering the sky valid for the indicated hour.

Snow Amount

is the expected total accumulation of new snow during a 6 hour period. A snow accumulation grid will be specified whenever a measurable snowfall is forecast for any hour during a valid period. Valid periods for the NDFD begin and end at 0600, 1200, 1800, and 0000 UTC.

Snowfall high end

indicates there's a 1 in 10 chance (10%) of higher snowfall during the specified 24-hour, 48-hour, or 72-hour period.

Snowfall low end

indicates there's a 9 in 10 chance (90%) of higher snowfall during the specified 24-hour, 48-hour, or 72-hour period.

Snow Level

is the lowest elevation in feet/meters at which precipitation is expected to be snow for the indicated hour.

Snow or Sleet > 0.25in Liquid Equivalent Probabilty (in percent)

is the Weather Prediction Center's Day 4-7 Winter Weather Outlook probabilistic forecast depicting the probability of winter precipitation (snow/sleet) exceeding 0.25 inches (~6 mm) water equivalent over a 24-hour period.

Snow to Liquid Ratio
is the ratio of snow accumulation to its melted liquid equivalent for the indicated 6-hour period.

Temperature
is the expected temperature valid for the indicated hour.

Tornado Probability
is the probability (in percent) of a tornado occurring within 25 miles of any point during the outlook period. The higher the probability, the higher the threat of tornadoes occurring.

Total New Ice
is the sum of all forecast six hourly ice accumulations prior to the indicated hour.

Total New Precipitation
is the sum of all forecast six hourly liquid precipitation amounts prior to the indicated hour. This total includes the liquid equivalent amount for snow and ice.

Total New Snow
is the sum of all forecast six hourly snow amounts prior to the indicated hour.

Total Probability of Extreme Severe Thunderstorms
is the probability in percent of EF2 (Enhanced Fujita scale 2) tornadoes, damaging winds with speeds greater than 75 miles per hour, or large hail two inches or greater in diameter occurring within 25 miles of any point during the outlook period.

Total Probability of Severe Thunderstorms
is the probability in percent of tornadoes, damaging winds with speeds greater than 58 miles per hour, or large hail three quarters of an inch in diameter (penny-size) occurring within 25 miles of any point during the outlook period.

Tropical Cyclone Surface Wind Speed Probability (Cumulative)
is the probability (in percent) of sustained surface wind speed greater than 34-, 50- and 64-knots (3 separate elements) sometime during the specified cumulative forecast period (0 - 6 hours, 0-12, 0-18, etc.) at each specific point. NOTE: This element is provided for coastal and inland points as well as offshore locations (e.g., buoys).

Tropical Cyclone Surface Wind Speed Probability (Incremental)
is the probability (in percent) of sustained surface wind speed greater than 34-, 50-, and 64-knots (3 separate elements) sometime during the specified forecast period (0 - 6 hours, 6 -12, 12 -18, etc.) at each specific point. These values are incremental since they can increase in value by accounting for the possibility the event might start in an earlier period and still be occurring in the specified period. NOTE: This element is provided for coastal and inland points as well as offshore locations (e.g., buoys).

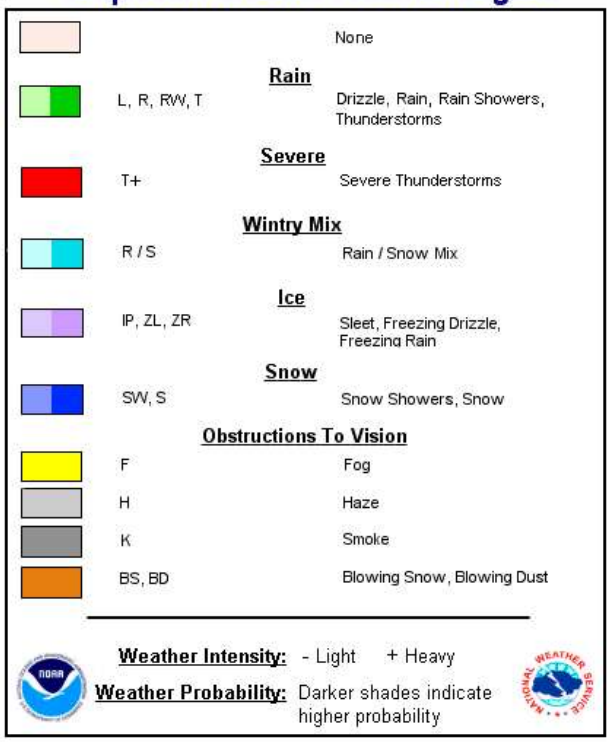
Visibility
is the distance at which a given standard object can be seen and identified with the unaided eye.

Wave Height
is the average height (from trough to crest) of the one-third highest waves valid for the top of the designated hour. Wave Height is a combination of wind waves and swell.

Weather
is the expected weather (precipitating or non-precipitating) valid at the indicated hour. Precipitating weather includes type, probability, and intensity information. In cases of convective weather, coverage may be substituted for probability.

National Digital Forecast Database

Graphical Forecast Weather Legend



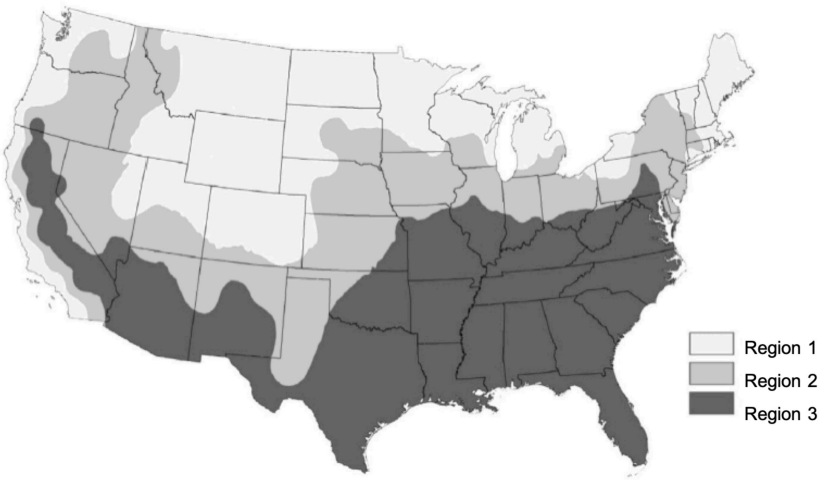
Wet Bulb Globe Temperature

is an indication of expected heat stress in direct sunlight, which takes into account: temperature, humidity, wind speed, sun angle and cloud cover (solar radiation). This differs from the heat index, or apparent temperature, which takes into consideration temperature and humidity and is calculated for shady areas. If you work or exercise in direct sunlight, the wet bulb globe temperature is a good element to monitor. The depicted heat stress categories associated with wet bulb globe forecast values vary by region to account for geographic variations in heat exposure and acclimatization.

Disclaimer: Always check with local officials for appropriate actions and activity levels. Experienced heat stress will depend upon duration and intensity of activity and personal health and vulnerability.

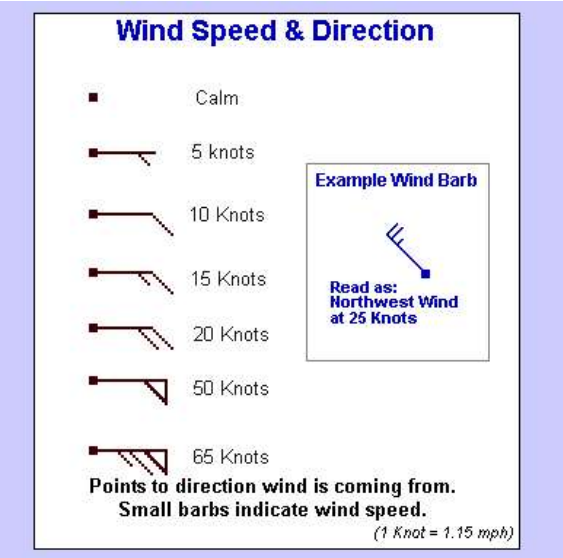
WBGT by Region (°F)			Threat Level WBGT at these values increasing heat stress.	Risk of heat illness
Region 1	Region 2	Region 3		
< 72.3	< 75.9	< 78.3	Low Threat	Increased risk for heat illness
72.3 - 76.1	75.9 - 78.7	78.3 - 82.0	Elevated Threat	
76.2 - 80.1	78.8 - 83.7	82.1 - 86.0	Moderate Threat	
80.1 - 84.0	83.8 - 87.6	86.1 - 90.0	High Threat	
>84.0	>87.6	>90.0	Extreme Threat	

Regions are from Grundstein, A., Williams, C., Phan, M and Cooper, E., 2015. Regional heat safety thresholds for athletics in the contiguous United States. *Applied Geography*, 56, pp.55-60. 10.1016/j.apgeog.2014.10.014.



Wind Direction & Speed

Wind direction is the expected sustained 10-meter wind direction for the indicated hour, using 36 points of a compass. Wind Speed is the expected sustained 10-meter sustained wind speed for the indicated hour. Wind barbs (shown below) are used to denote wind speed and direction.



Wind Gust

is the maximum 3-second wind speed forecast to occur within a 2-minute interval at a height of 10 meters. Wind gust forecasts are valid at the top of the indicated hour.

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Hurricanes
Aviation Weather
Climatic Outlook

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ATTACHMENT 21

University of Utah, MesoWest, Weather Station Measurements Dataset. https://mesowest.utah.edu/

Station Search Help

Address

QUICK LINKS

Find a Nearby Station

Current Status

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Synoptic Data PBC Services

Department of Atmospheric Sciences

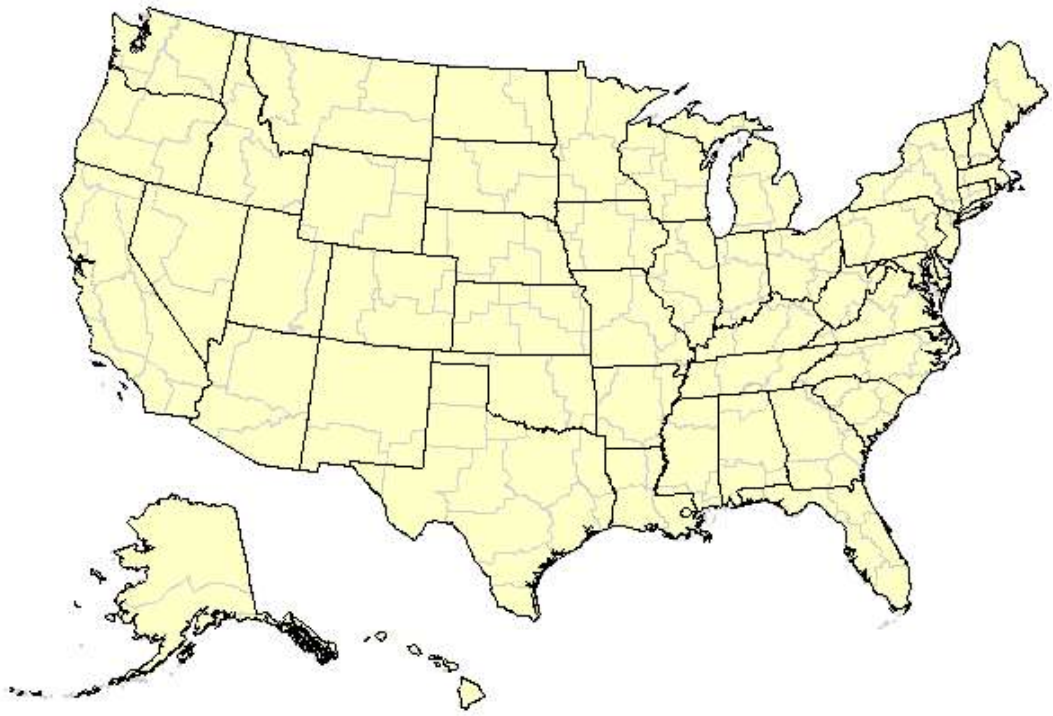
MESOWEST

THE UNIVERSITY OF UTAH

For Users: Recently Implemented Product Changes at MesoWest (full summary available here)

States

Click on a State to access weather observations



States CWAs Text Only

Observations and Summaries

Region UTAH

Product Surface Weather Maps Go

University of Utah Department of Atmospheric Sciences
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For Questions or Comments about this page or MesoWest contact atmos-mesowest@lists.utah.edu

ATTACHMENT 22

Oregon State University PRISM Group, "PRISM Time Series Data." https://prism.oregonstate.edu/data/



PRISM Time Series Data

PRISM time series datasets are available for daily data (1981-present), monthly data (1895-present), and annual data (1895-present). These datasets use all of the station networks and data sources ingested by the PRISM Group (version AN, for "all networks"), not just those that have existed for long periods of time.

PRISM time series datasets are re-modeled multiple times within a rolling 6-month window (7 times for monthly data, 8 times for daily data) and are considered stable after 6 months. See our PRISM Datasets document for more information, and our calendar of dataset updates for exact timing. We also provide web services and an FTP repository that can help automate the fetching and updating of PRISM datasets to the latest versions.

Note that individual grids contain inhomogeneities due to station equipment and location changes, stations openings and closings, and varying observation times. Please review the data usage conditions and disclaimers in our terms of use.

To **download PRISM data in bulk**, see our FTP and web services documentation.

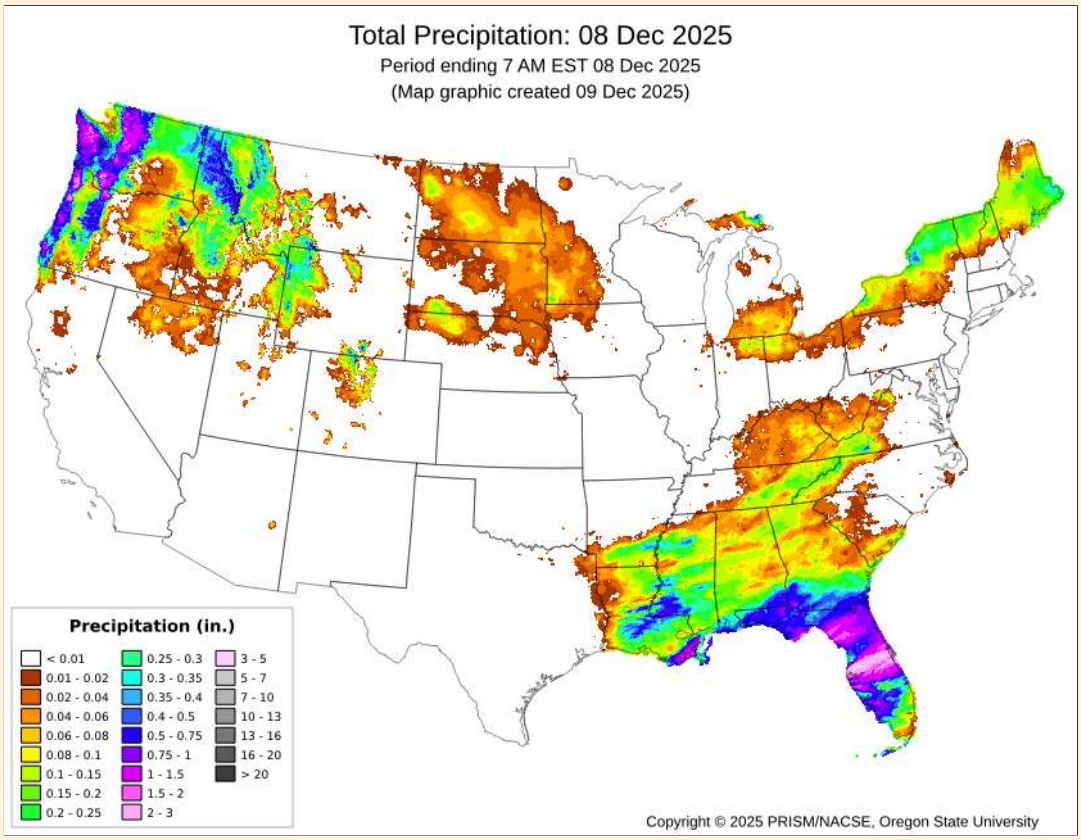
Spatial Resolution: (●) 800m ( ) 4km [What is data stability?]

Variable: Precipitation (ppt)

Temporal Period:
(●) Daily Year: 2025 Month: December Day: 8 Data for this day is: **Preliminary**
( ) Monthly Year: 2025 Month: November
( ) Annual Year: 2024

Data Download

High resolution version of this map graphic | Browse the map graphics archive



RMA

Questions to prism-questions@nacse.org

This website is supported by the USDA Risk Management Agency.

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CA-03-0508

ATTACHMENT 23

Liberty's Response to Data Request CalAdvocates-LIB-A2506017-006, Question 3, September 5, 2025, Excel spreadsheet file "*CalAdvocates-LIB-A2506017-006-Q3.xlsx*".

Station_Co	Station_Na	Latitude	Longitude	Date_Install	Last Inspected	Last Maintained	Removed	Data Collected 1	Data Collected 2	Data Collected 3	Data Collected 4	Data Collected 5	Data Collected 6	Data Collected 7	Data Collected 8	Data Collected 9	Data Collected 10	Data collection interval	Automatic or Manual data pull	Communicating as of 11/17/2020	Why not communicating as of 11/17/2020	Circuit	Used to monitor conditions for PSPS events prior to 11/17/2020
LIB-3101	GLS7600-Walden	39.3314	-120.073873	5/1/2019	5/1/2019	5/1/2019	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	GLS7600	See narrative response
LIB-3102	TAH7300-DL Bliss	38.975618	-120.100287	5/2/2019	5/2/2019	5/2/2019	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	TAH7300	See narrative response
LIB-3103	MUL1296-Woodfords	38.782655	-119.817875	5/17/2019	5/17/2019	5/17/2019	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	MUL1296	See narrative response
LIB-3105	TPZ1261–Park Ranch	38.641208	-119.520245	5/20/2019	5/20/2019	5/20/2019	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	TAH1261	See narrative response
LIB-3106	TPZ1261-Walker	38.533929	-119.504175	5/31/2019	5/31/2019	5/31/2019	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	TPZ1261	See narrative response
LIB-3104	BKY4201-Summit	39.261201	-120.07203	6/10/2019	6/10/2019	6/10/2019	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	BKY4201	See narrative response
LIB-3108	111Line-Columbine Trail	38.890622	-119.959667	6/10/2019	6/10/2019	6/10/2019	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	111 Line	See narrative response
LIB-3109	POR31- Iron Horse	39.77898	-120.502853	6/17/2019	6/17/2019	6/17/2019	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	POR31	See narrative response
LIB-3110	619 Line-Sierra Valley West	39.759316	-120.374116	6/24/2019	6/24/2019	6/24/2019	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	619 Line	See narrative response
LIB-3107	Meyers3400-Uplands	38.895633	-120.037454	4/30/2020	4/30/2020	4/30/2020	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	MEY3400	See narrative response
LIB-3111	SQV8200-Squaw Valley	39.198471	-120.230336	7/27/2020	7/27/2020	7/27/2020	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	SQV8200	See narrative response
LIB-3128	7201-Alpine Meadows	39.181695	-120.221456	7/30/2020	7/30/2020	7/30/2020	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	SQV7201	See narrative response
LIB-3121	7400-Glenshire	39.352082	-120.097467	8/21/2020	8/21/2020	8/21/2020	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	GLS7400	See narrative response
LIB-3124	Washoe204-Fariad	39.449832	-120.009825	8/27/2020	8/27/2020	8/27/2020	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	WSH204	See narrative response
LIB-3115	Hobart Sub	39.399213	-120.149933	9/11/2020	9/11/2020	9/11/2020	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	HOB7700	See narrative response
LIB-3120	TAH7300-Homewood	39.085796	-120.161076	9/14/2020	9/14/2020	9/14/2020	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	TAH7300	See narrative response
LIB-3125	MEY3400-Camp Richardson	38.934039	-120.047506	9/14/2020	9/14/2020	9/14/2020	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	MEY3400	See narrative response
LIB-3126	MEY3500-STPD Office	38.921807	-119.970729	9/14/2020	9/14/2020	9/14/2020	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	MEY3500	See narrative response
LIB-3117	TRK7202-Cabin Tree	39.292012	-120.215211	9/16/2020	9/16/2020	9/16/2020	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	TRK7202	See narrative response
LIB-3123	WSH201-Floriston	39.4048	-120.025474	10/5/2020	10/5/2020	10/5/2020	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	WSH201	See narrative response
LIB-3112	CEM41-Garage Pit Rd	39.675089	-120.221981	10/9/2020	10/9/2020	10/9/2020	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	CEM41	See narrative response
LIB-3116	SRB51-Smithneck Rd	39.643493	-120.21375	10/9/2020	10/9/2020	10/9/2020	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	SRB51	See narrative response
LIB-3113	CAL204-Dog Valley	39.52486	-120.004442	10/16/2020	10/16/2020	10/16/2020	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	CAL204	See narrative response
LIB-3118	Muller1296-Emigrant Trail	38.819952	-119.779508	10/17/2020	10/17/2020	10/17/2020	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	MUL1296	See narrative response
LIB-3127	621Line-I-80 Gravel Pit	39.369637	-120.11362	10/20/2020	10/20/2020	10/20/2020	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	621 Line	See narrative response
LIB-3130	TPZ1261-Eastside Lane	38.521953	-119.456098	10/20/2020	10/20/2020	10/20/2020	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	TPZ1261	See narrative response
LIB-3122	MEY3300-Grass Lake Road	38.803324	-120.015564	10/30/2020	10/30/2020	10/30/2020	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	MEY3300	See narrative response
LIB-3129	MUL1296-Markleeville	38.694666	-119.780667	10/30/2020	10/30/2020	10/30/2020	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	MUL1296	See narrative response
LIB-3114	TRUCKEE7203 - Northstar Golf Course	39.300652	-120.115562	11/2/2020	11/2/2020	11/2/2020	N/A	Dew Point (°F)	Fuel Moisture (%)	Precipitatio n (in)	Relative Humidity (%)	Soil Moisture (%)	Soil Temperature (°F)	Temperatur e (°F)	Wind Direction (°)	Wind Gust (mph)	Wind Speed (mph)	10 minutes	Automatic	Yes	N/A	TRK7203	See narrative response

ATTACHMENT 24

Latham and Rothermel (1993),
"Probability of fire-stopping precipitation events," in
National Wildfire Coordinating Group,
"Weather: Fire Season Climatology."
https://www.nwcg.gov/publications/pms437/weather/fire-season-climatology

Weather: Fire Season Climatology

1. **Drought Assessments**
    - **Meteorological Indicators**
    - **Assessments Resources**
2. **Local Climatology and Current Season Trends**
    - **Evaluate Fire Occurrence Patterns**
    - **Identify Normal Seasonal Trends**
    - **Fire Season Severity**
    - **Current Trends and Historic Norms and Extremes**
    - **Evaluate Historic Trends for Weather that Slows or Stops Fire Growth**
    - **Event Frequency and Duration**
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3. **Regional Fire Seasonality**
    - **Alaska**
    - **Northwest**
    - **Northern California**
    - **Southern California**
    - **Southwest**
    - **Great Basin**
    - **Northern/Central Rockies and Great Plains**
    - **Great Lakes and Northeast**
    - **Southeast**
    - **Hawaii**

Drought Assessments

Meteorological Indicators

A wide range of weather-based indices are available, based on accumulated precipitation alone, as well as precipitation combined with modeled evaporation and/or transpiration rates. These include spatial representations of soil moisture, vegetative stress, agriculture, and water supply. Many can be found using the **assessment resources** listed below.

National Fire Danger Rating System (NFDRS) includes the 1000-hr timelag fuel moisture, Energy Release Component (ERC), Growing Season Index (GSI), and Keetch-Byram Drought Index (KBDI) among its outputs. **See Fire Danger Section**.

Canadian Forest Fire Danger Rating System (CFFDRS) includes the Du Moisture Code (DMC), Drought Code (DC), and Buildup Index (BUI) among its codes and indices. **See CFFDRS Section**.

Evaporative Demand Drought Index (EDDI) is an experimental drought monitoring and early warning guidance tool. It examines how anomalous the atmospheric evaporative demand (E0; also known as "the thirst of the atmosphere") is for a given location and across a time period of interest.

Standardized Precipitation Evapotranspiration Index (SPEI) can measure drought severity according to its intensity and duration, and can identify the onset and end of drought episodes and allows comparison of drought severity through time and space, since it can be calculated over a wide range of climates.

Evaporative Stress Index (ESI) describes temporal anomalies in evapotranspiration (ET), highlighting areas with anomalously high or low rates of water use across the land surface.

Standardized Precipitation Index (SPI) is the number of standard deviations that the observed value would deviate from the long-term mean. Since precipitation is not normally distributed, a transformation is first applied so that the transformed precipitation values follow a normal distribution.

Quantitative Precipitation Estimate (QPE) show spatial distribution of precipitation are multi-model estimates. Using a multi-sensor approach, it is one of the best sources of timely, high resolution precipitation information available.

Assessments Resources

The US Global Climate Change Research Program (USGCRP) is mandated by Congress in the Global Change Research Act (GCRA) of 1990 to assist the Nation and the world to understand, assess, predict, and respond to human-induced and natural processes of global change.

NOAA Climate.gov is a source of timely and authoritative scientific data and information about climate. It provides news items, maps and data, and teaching resources.

Western Water Assessment NOAA Integrated Sciences and Assessments

Drought Monitor National Drought Mitigation Center

National Integrated Drought Information System National Centers for Environmental Information

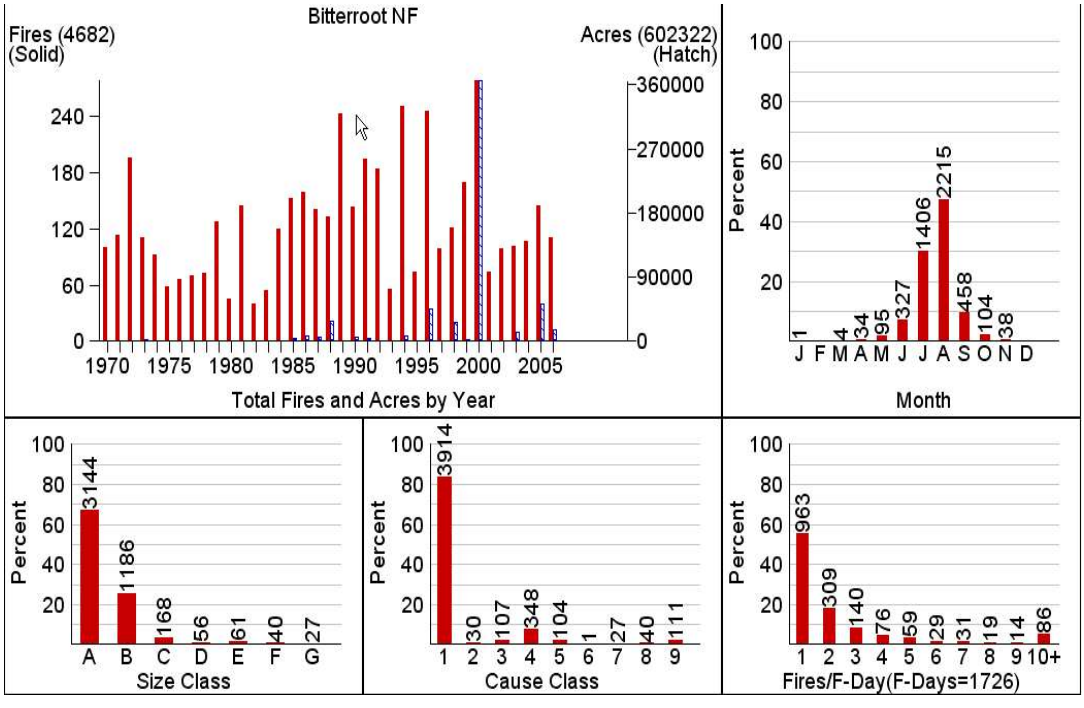
National Drought Mitigation Center University of Nebraska – Lincoln

River Forecast Centers National Weather Service (NWS) Advanced Hydrological Prediction Services provides depictions of river flows and flooding; rain and snow fall in graphic and digital formats.

Local Climatology and Current Season Trends

Evaluate Fire Occurrence Patterns

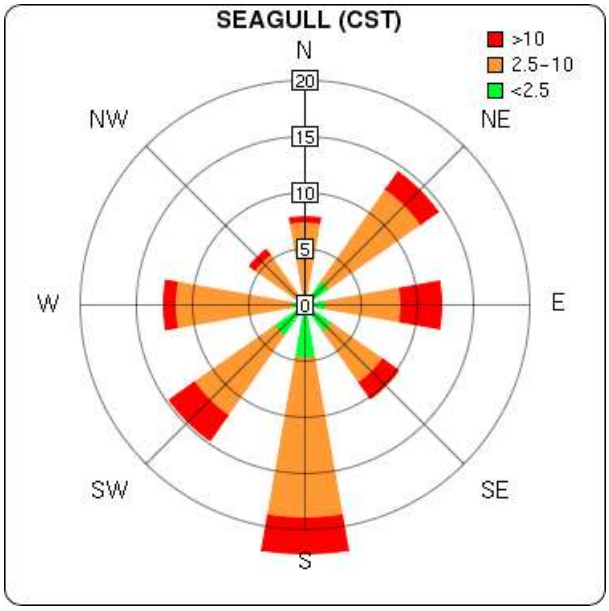
FireFamily Plus depictions of fire occurrence patterns are good for evaluating ignition patterns but may provide little insight to climatology and fire growth in regions where incidents commonly exhibit multiple growth events during extended periods of active fire behavior.



Identify Normal Seasonal Trends

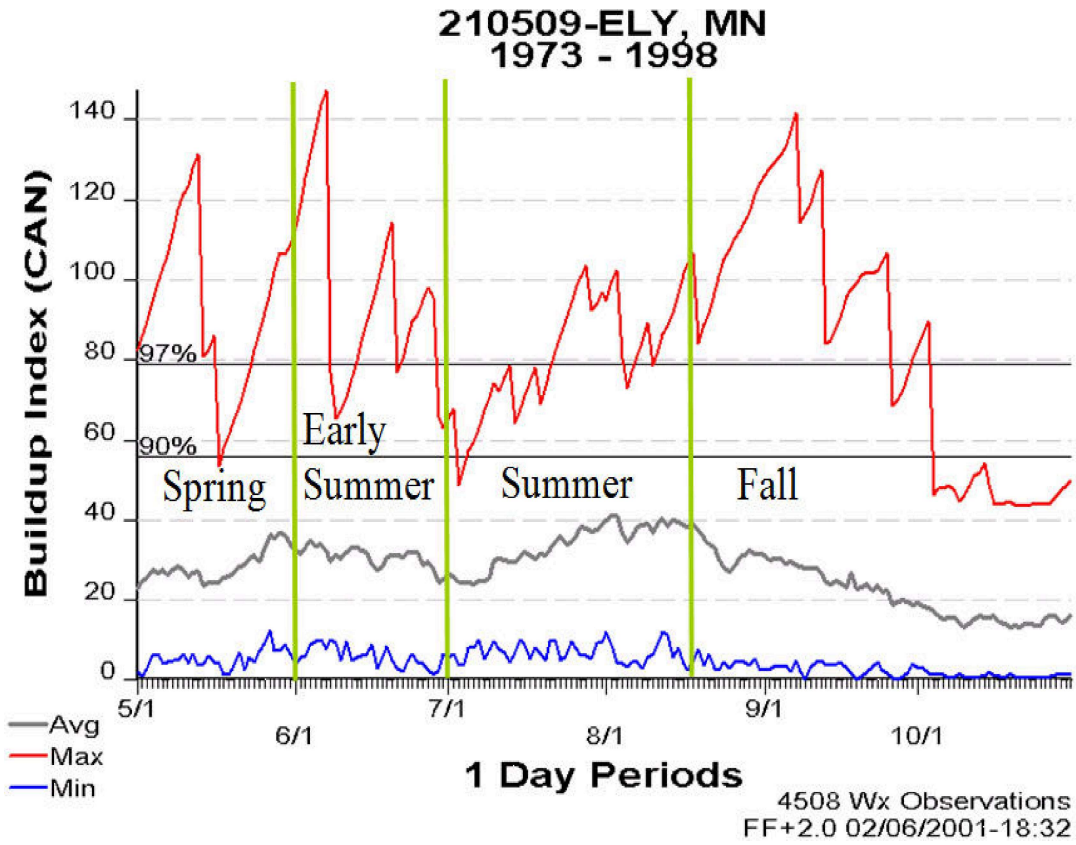
Local Winds Climatology

Wind roses are available in FireFamily Plus, **Western Regional Climate Center**, and in other tools. Ensure it includes only relevant winds, (e.g., exclude other seasons, night-time winds, etc.)



Fire Season Severity

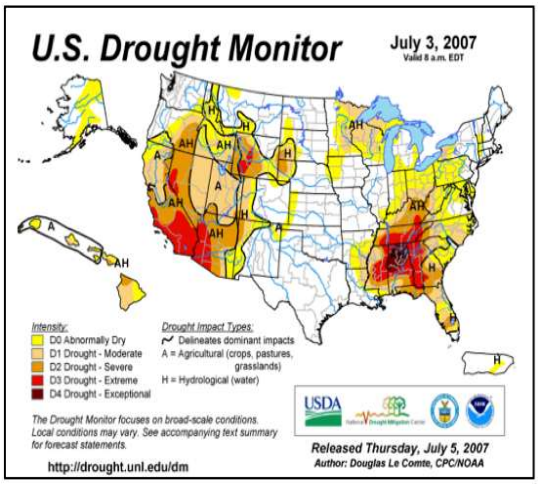
Use Appropriate **Fire Potential Indicators** (ERC, BUI) and determine season start, peak season, shoulder seasons, and season end.

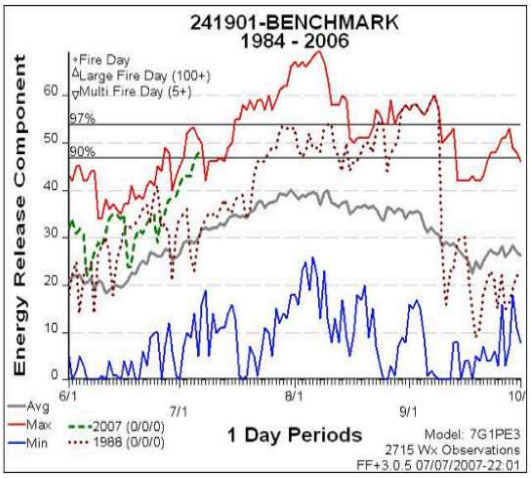


Current Trends and Historic Norms/Extremes

General Trends

Evaluate and depict current conditions spatially, using a combination of drought assessment resources appropriate for the area of interest.





Current Local Conditions

Graphical Time Series depictions can highlight seasonal departures from norms and exceptional events. This FireFamily Plus Climatology graphic includes historic range (average, max, min), current year, and analog year.

Consult with Local Managers and Experts.

Get their help evaluating the objective analysis and to identify any local anomalies that may not be apparent.

Evaluate Historic Trends for Weather That Slows or Stops Fire Growth

Fire Stopping Events

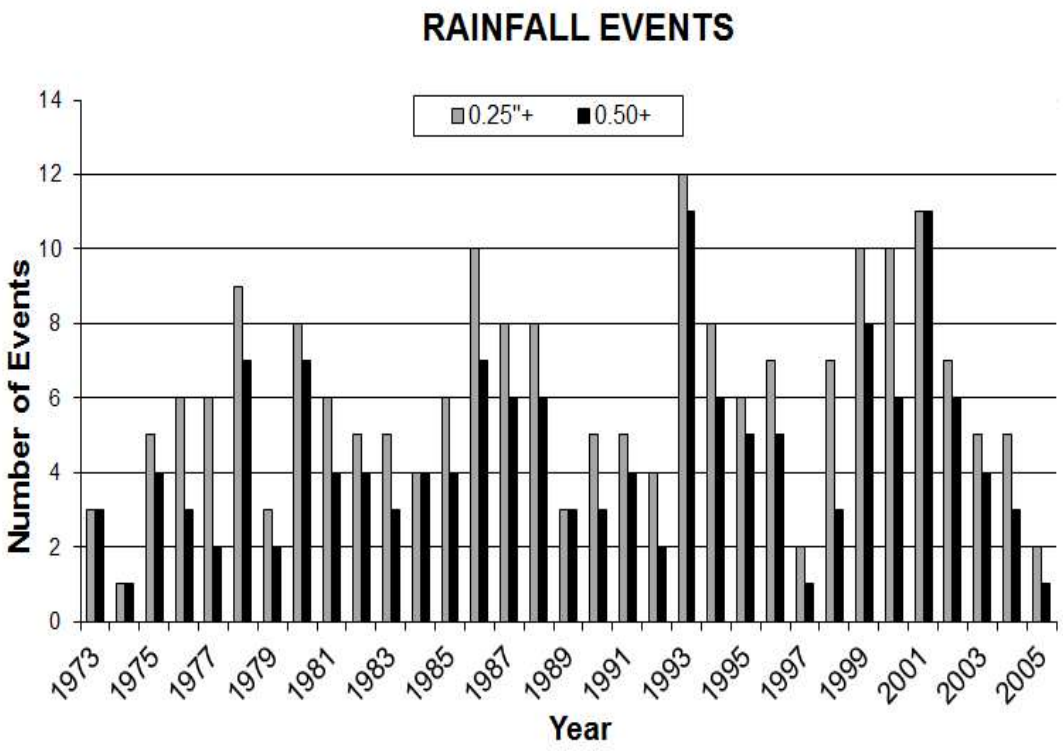
Originally reported by Latham and Rothermel (1993) from opinions of persons familiar with fire and fire weather in the Northern Rockies, example criteria were suggested as 0.5 inches of rain accumulated in 5 days or less. However, other fire potential indicators, such as cloud cover and relative humidity, can help identify periods of continuous low- or no-spread days during a fire season in a locality. These discrete events may not signal the end of the fire or the season. As such, it may be just as important to identify the frequency with which they occur and the duration of their influence as it is to predict a waiting time for the next event.

Fire Season-Ending Date

It is possible to identify the date in a fire season when fire growth is no longer likely or possible. This is generally understood to be the season end. If a fire's threat to values of concern is more imminent or it is early in the fire season, a prediction of the season end may be less important than suggesting if and when a weather event will put the fire out. In bimodal seasons, such as the spring seasons in the Southwest and the lake states, weather criteria can suggest fire ending dates in the early "season," even though fire potential is expected to rise again in subsequent periods. Anticipating this date may be critical to strategic decisions as the season end approaches.

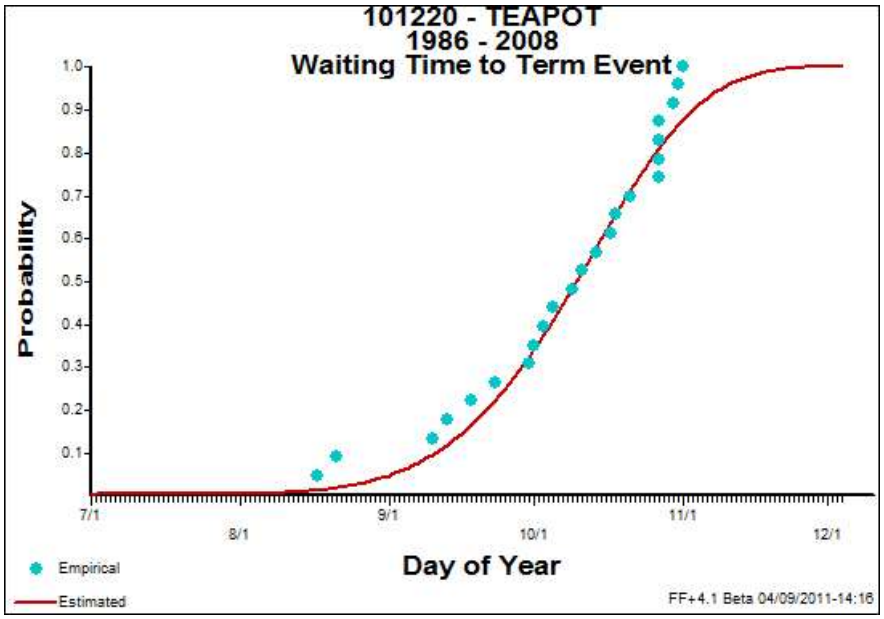
Event Frequency and Duration

As suggested above and depicted here, it may be valuable to identify the frequency of fire slowing or stopping events, especially if they are more common, such as in the eastern United States (US). FireFamily Plus Event Locator can be used to evaluate data from a local Remote Automatic Weather Station (RAWS) station.



TERM Waiting Time Distribution

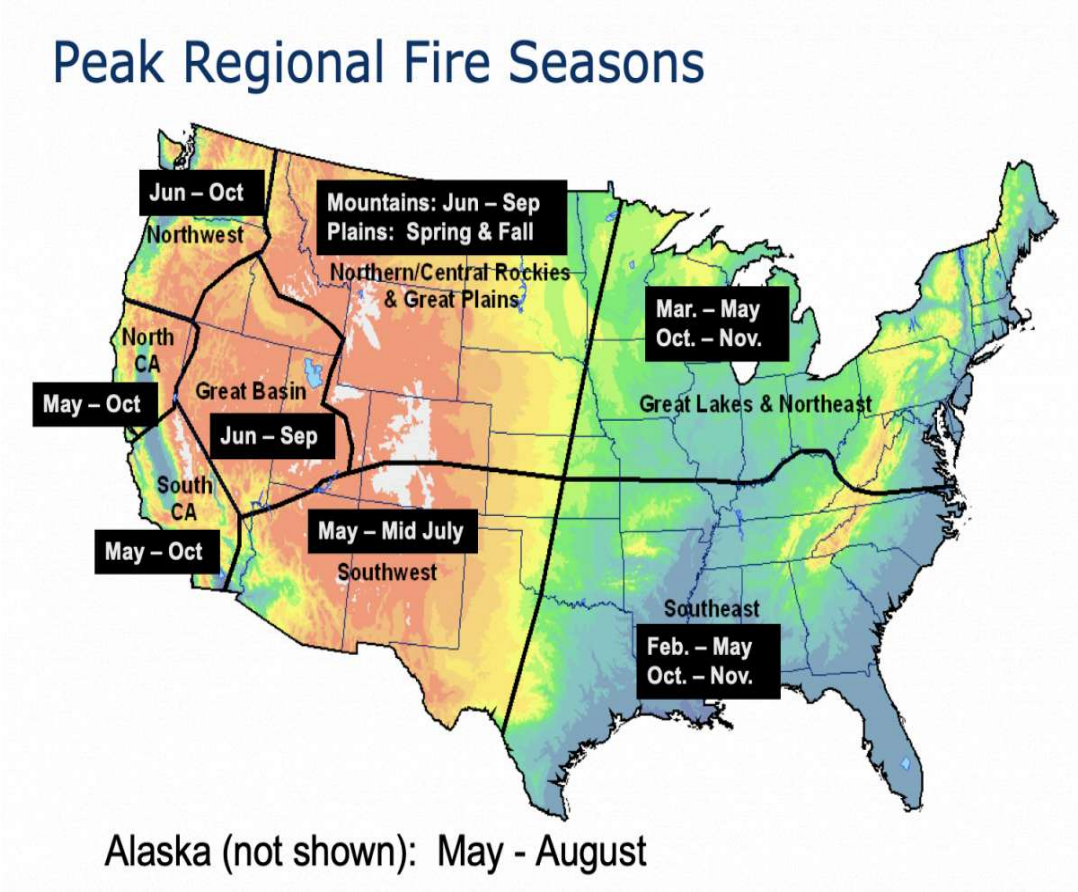
FireFamily Plus (version 4.1) includes a TERM tool, in the Weather menu, to produce a waiting time distribution of historic fire- or season-ending dates. For each year evaluated, a single date is selected as the ending date based on established criteria. These dates are recorded, and the distribution plotted to estimate the probability that the fire or season will end by a specific date.



Regional Fire Seasonality

The basic climate/weather factors temperature (hot vs. cold), atmospheric moisture (dry vs. moist), and wind patterns affect the fuel conditions and the tendency for fire start and spread. Fire season characteristics are driven by seasonal and continental-scale

weather patterns, their movement, and variation. **Seasonal** air mass and jet stream changes affect various regions at different times and in different ways.



The following will be key words and catch phrases meteorologists typically use to describe critical fire weather growing and slowing patterns. These terms will often be used to explain weather patterns but not exclusively used. The terminology will often be found in National Weather Service Area Forecast (AFD) and fire weather planning forecast discussions as well as Predictive Service 7-day outlook assessments.

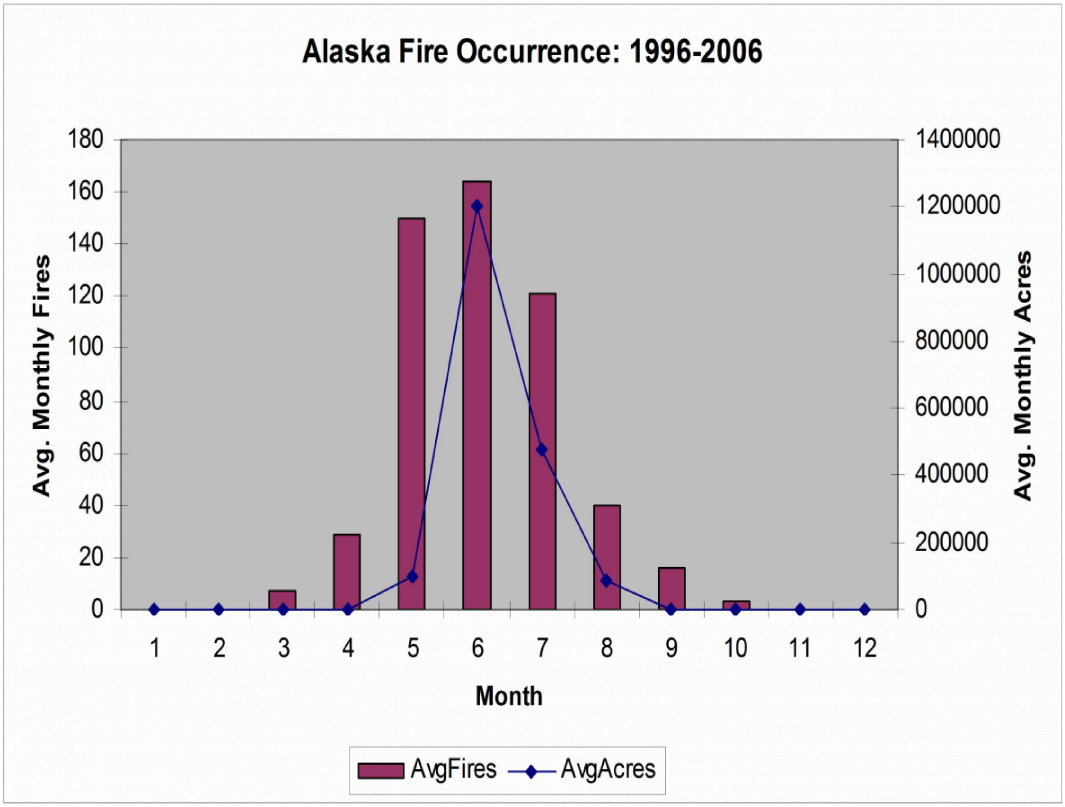
Alaska

Climatology

- Winter – generally very cold and dry.
- Spring – cold and dry early, then warming with increasing downslope wind event potential.
- Summer – warm and dry with lightning in June, then gradually moistening. Occasional wind events.
- Fall – moist initially, then back towards winter conditions.

Fire Activity

- Peak fire activity late spring and summer coincident with warmest/driest conditions, and wind event and dry lightning potential.
- Great majority of activity in interior between Alaska and Brooks ranges.
- Season ramps up quickly a er melt-o and strongly relates to length of day.
- Season ends quickly with late summer/early fall moisture increase.



Critical Weather Events

- Foehn and Downslope wind – Glacial Katabatic downstream from glaciers, e.g. Juneau fjords, Alaska Range Chinook in the western Tanana Valley, Hillside Katabatic Winds, e.g. Anchorage Bowl, and Yukon Chinook winds in the eastern interior and through the Brooks Range.
- Breakdown of the Upper Ridge – Boreal interior area from Galena to Fort Yukon, warming-drying ahead of the low-pressure system originating from the Sea of Okhotsk with gusty W-SW winds, and Low Pressure moving inland and loses wetting characteristics but keeps enough moisture for drier storms.

Fire Slowing or Stopping Events

- Closed low/occluded low is a low-pressure system that originate from the Sea of Okhotsk and Bering Sea moves inland and stays for a multi-day period or a persistent moist southwest flow impacting the coastal areas.
- Marine Inversion: coastal areas of Alaska especially during night.

Fire Growth Potential Indicators

- FFMC and BUI, ISI, and Fire Weather Index (FWI)

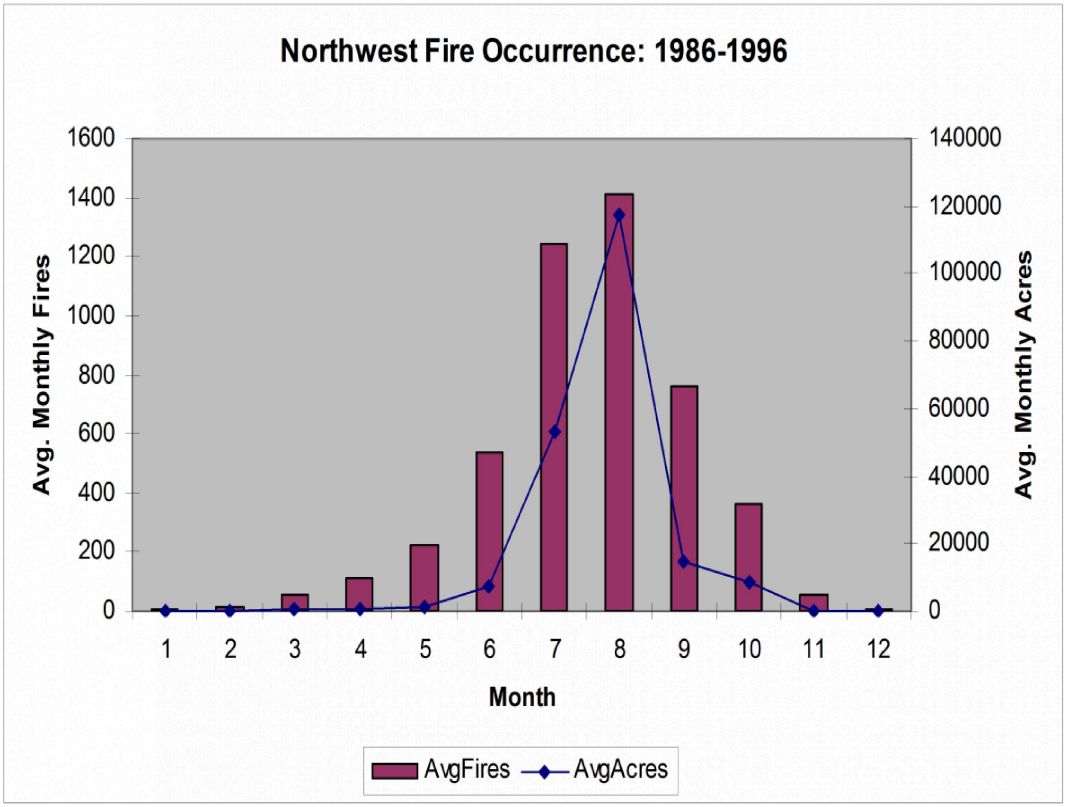
Northwest

Climatology

- Winter/Spring – cool and moist with frequent and abundant precipitation, especially western portion of area. Relatively dry east.
- Summer – some windy and dry potential early, then becoming generally warm and dry with infrequent wind events due to dry cold fronts.
- Fall – return of cooler, more moist conditions ushered in by a period of windy, dry conditions with cold frontal passages. Potential for dry o shore wind events behind storm systems.

Fire Activity

- Fire activity peaks in summer due to increasingly warm and dry conditions and potential for wind and lightning with dry cold frontal passages.
- Rapid decrease in activity in fall with Pacific moisture on the increase, though this the peak period for dry o shore wind events and a few dry cold front passages are still possible.
- Little to no activity late fall through spring.



Critical Weather Events

- Thermal Low/Subtropical Ridge
- Breakdown of the Upper Ridge and Passage of a dry cold front
- Foehn or Downslope Wind (East Wind west slopes of Cascades and Chinook Wind east slopes of the Cascades)

Fire Slowing or Stopping Events

- Closed Lows/Wet Cold Front
- Marine Layer/Onshore Flow
- Smoke Events

Fire Growth Potential Indicators

- Energy Release Component
- 100-hr fuel moisture
- AVHRR satellite NDVI DA and RG
- NWS QPE (30-60 days)
- Drought Monitor

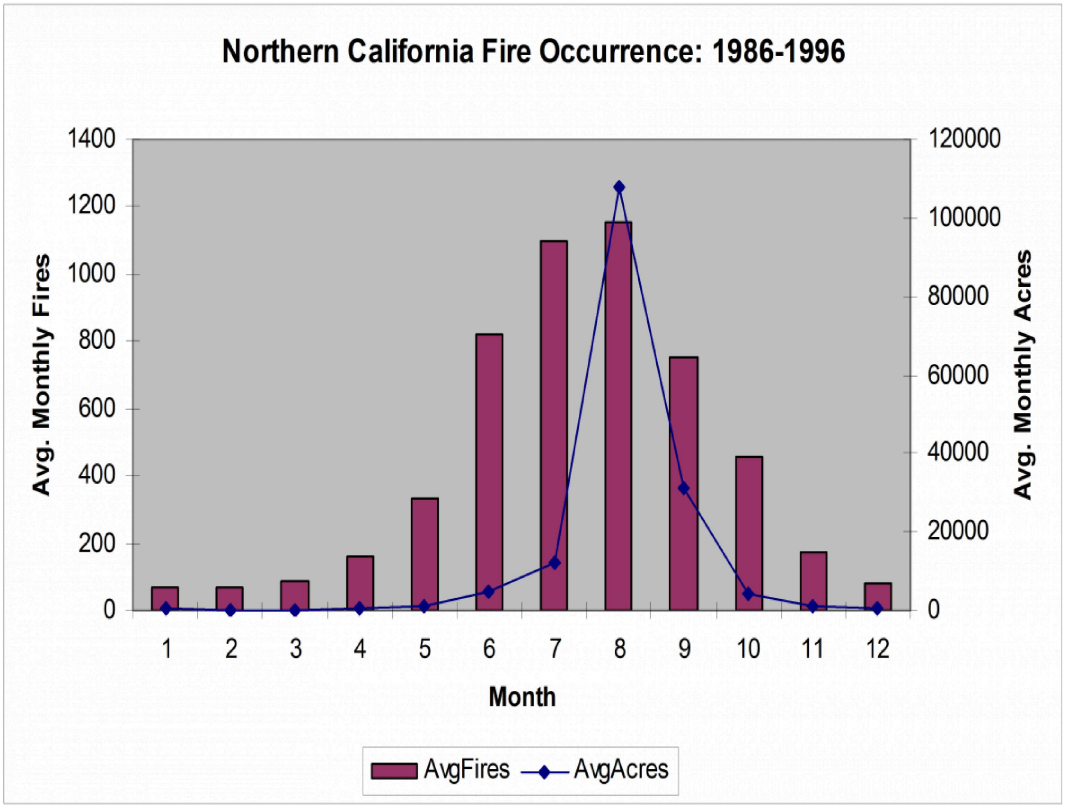
Northern California

Climatology

- Winter/Early Spring – cool and moist with regular precipitation events, especially in the mountains.
- Late Spring/Summer – some windy/dry potential early, then generally warm and dry with infrequent wind events due to dry cold front influences.
- Fall – return of cooler, more moist conditions ushered in by a period of windy, dry conditions with cold frontal passages. Potential for dry, north through east wind events behind storm systems.

Fire Activity

- Fire activity peaks in summer due to increasingly warm and dry conditions and potential for wind and lightning with infrequent dry cold frontal passages.
- Rapid decrease in activity by late fall with Pacific moisture on the increase, though peak period for dry northeast wind events.
- Little to no activity late fall through early spring.



Critical Weather Events

- Foehn or Downslope Wind (Mono, North Winds)
- Breakdown of the Upper Ridge in the Interior
- Subtropical Ridge/Thermal low

Fire Slowing or Stopping Events

- Closed Low/Pacific Trough
- Marine Layer/Onshore flow
- Smoke Events

Fire Growth Potential Indicators

- Spread Component (SC)
- Burning Index (BI)
- Energy Release Component (ERC)
- Live Fuel Index (LFI)/GSI
- AVHRR satellite NDVI DA and RG
- NASA SPoRT GVF
- NWS QPE (30-60 days)
- Drought Monitor

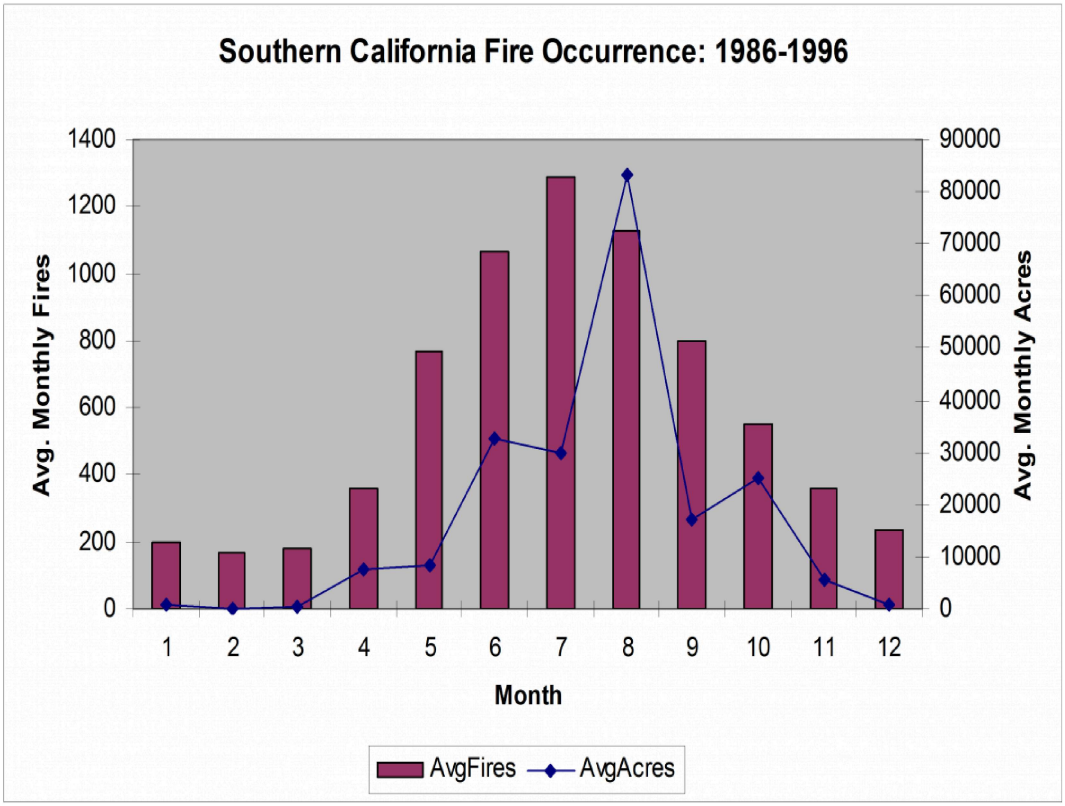
Southern California

Climatology

- Winter – occasional storm systems with mainly mountain precipitation. Inland intrusions of cool, moist Pacific air. Relatively dry inland lower elevations.
- Spring – less frequent precipitation events and substantial inland intrusions of marine air.
- Summer – hot and dry inland and maritime influence along coast. Occasional influx of monsoon moisture from southeast.
- Fall – end of any monsoon moisture influence and begin of gradual inland shift in marine air mass. Period of greatest potential for dry offshore wind events.

Fire Activity

- Fire activity peaks late spring through fall, when influence of maritime air is diminished.
- Greatest potential for offshore wind events in the fall, when fuels are often driest.
- Little activity winter-early spring due to maritime influence.
- Fires possible at any time with offshore wind events.



Critical Weather Events

- Foehn or Downslope wind (Santa Ana and Sundowners)
- Breakdown of the Upper Ridge away from the coasts
- Subtropical Ridge

Fire Slowing or Stopping Events

- Marine Layer/Onshore Flow
- Closed Low/Pacific Trough

Fire Growth Potential Indicators

- Spread Component (SC)
- Burning Index (BI)
- Energy Release Component (ERC)
- National Fuel Moisture Database
- Live Fuel Index (LFI)/GSI
- AVHRR satellite NDVI DA and RG
- NASA SPoRT GVF
- NWS QPE (30-60 days)
- Drought Monitor

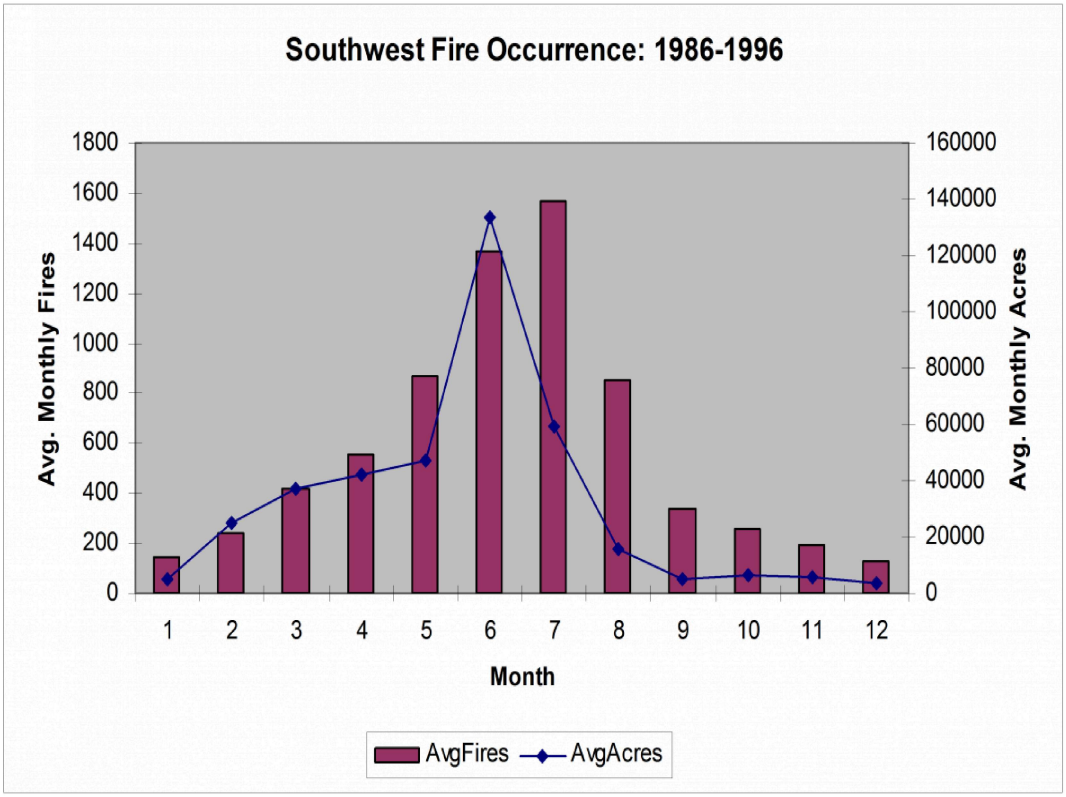
Southwest

Climatology

- Winter – cool to cold with occasional precipitation. Dry, downslope winds possible in lee of Rockies.
- Spring – warming, windy and dry transitioning to hot and dry.
- Summer – hot and dry gives way to warm and moist abruptly with monsoon.
- Fall – turning much drier and mild. Potential for few wind events followed by dropping temperatures.

Fire Activity

- Fire activity increases in spring as it transitions from windy and dry to hot and dry.
- Peak from May – mid-July, with monsoon thereafter.
- Rare secondary fall season as moisture exits and jet drops south and wind event potential returns.
- Little activity late fall – early winter.



Critical Weather Events

- Breakdown of the Upper Ridge
- Subtropical Ridge
- Monsoon transition (Edge of a Monsoon Burst and Edge of Back Door Cold Front)
- Foehn or Downslope wind
- Low Level Jet on Rangeland of the Front Range
- Surface Dryline Passage on Rangeland of the Front Range

Fire Slowing or Stopping Events

- Closed Low-Cold Frontal Passage
- Back Door Cold Front
- Monsoon Burst

Fire Growth Potential Indicators

- ERC and BI
- NFMD
- LFI/GSI
- AVHRR satellite NDVI RG and DA
- NASA SPoRT GVF
- NASA SPoRT RSM (0 to 10 cm)
- NWS QPE (30 day)
- Drought Monitor

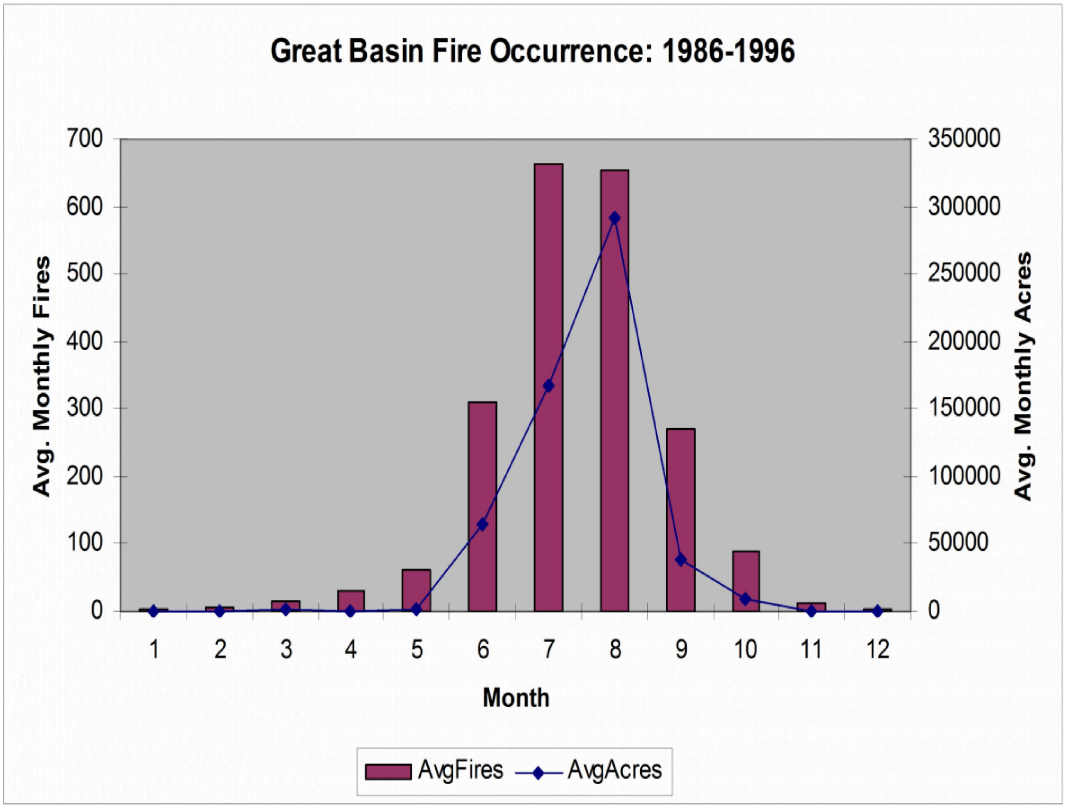
Great Basin

Climatology

- Winter – periodic precipitation, mainly over mountains.
- Spring – becoming windy, dry, and warmer.
- Summer – hot and dry. Periodic wind events north and moisture surges south.
- Fall – period of windy and dry conditions often followed by period of fair and dry weather before cooler temperatures and increased precipitation potential.

Fire Activity

- Generally fine fuel types, fire season dependent on cured fuels and windy/dry conditions.
- These conditions occur almost exclusively in the summer.
- Little to no activity outside of summer.



Critical Weather Events

- Breakdown of the Upper Ridge
- Subtropical Ridge
- Edge of a Monsoon Burst (Hybrid)
- Foehn or Downslope Wind (Chinooks down east slopes of the Sierras and west slopes of the Wasatch Mountains)

Fire Slowing or Stopping Events

- Closed Low/Pacific trough
- Monsoon Burst duration of three days or more

Fire Growth Potential Indicators

- ERC and BI
- National Fuel Moisture Database
- LFI/GSI

- AVHRR satellite NDVI DA and RG
- NWS QPE (30-60 days)
- NASA SPoRT RSM 0-10 cm/GVF
- Drought Monitor

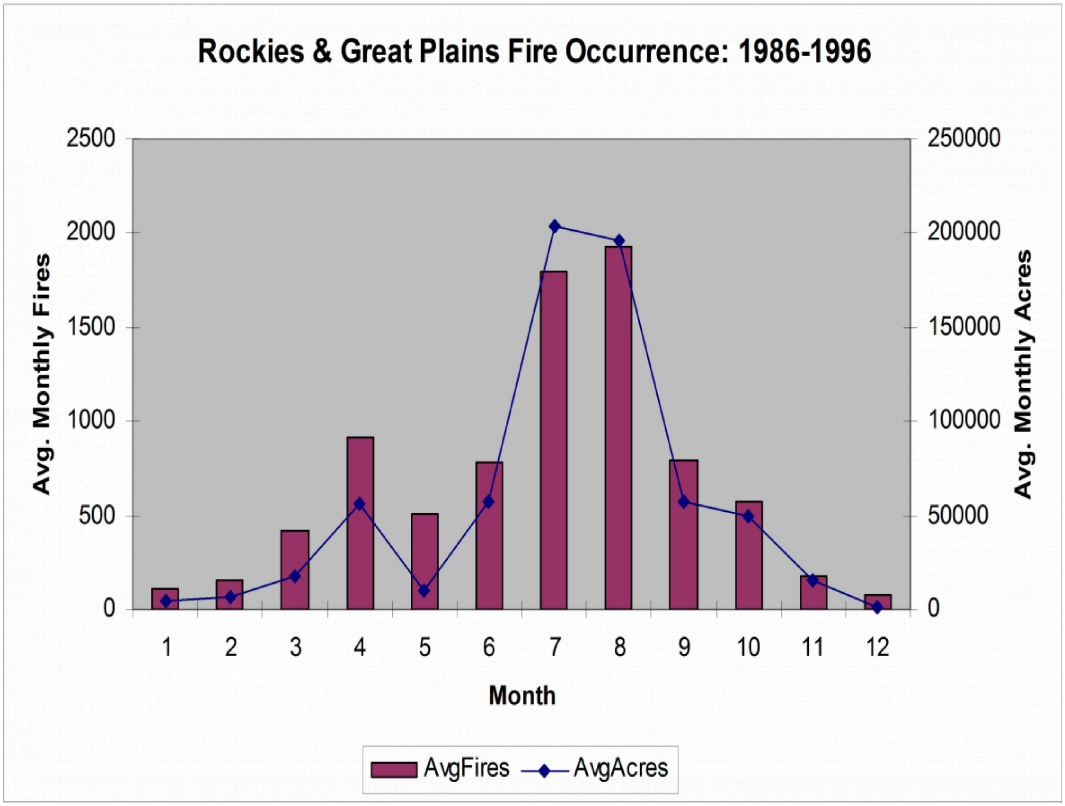
Northern/Central Rockies and Great Plains

Climatology

- Winter – regular storm systems and precipitation, especially over mountains. Cold overall with potential for artic air intrusions.
- Spring – period of heaviest precipitation in the mountains, but greatest Chinook wind potential in lee of Rockies and adjacent plains.
- Summer – warm and dry over most mountain areas with occasional wind events north. Increasingly moist across the plains and far south.
- Fall – period of windy/dry potential, then fairly dry and mild until temperatures drop and moisture increases.

Fire Activity

- Fire activity on the plains peaks in spring and fall when windy/dry periods are coincident with dormant or cured fine fuels.
- Fire activity in the mountains peaks in the summer when it's warmest and driest and some dry cold frontal passages are possible.
- Little to no activity late fall through early spring.



Critical Weather Events

- Breakdown of the Upper Ridge (Dynamic dry slot and Dry Cold Front)
- Subtropical Ridge (Mid-level dry intrusion)
- Edge of a Monsoon Burst (Hybrid)

- Foehn or Downslope Wind (Chinook)
- Low Level Jet and Surface Dryline on the Great Plains

Fire Slowing or Stopping Events

- Closed Low-Pacific Trough-Cold Frontal Passage
- Monsoon Burst
- Smoke Event

Fire Growth Potential Indicators

- ERC and BI
- National Fuel Moisture Database
- Live Fuel Index (LFI)/GSI
- AVHRR satellite NDVI DA and RG
- NASA SPoRT GVF
- NWS QPE (30-60 days)
- Drought Monitor

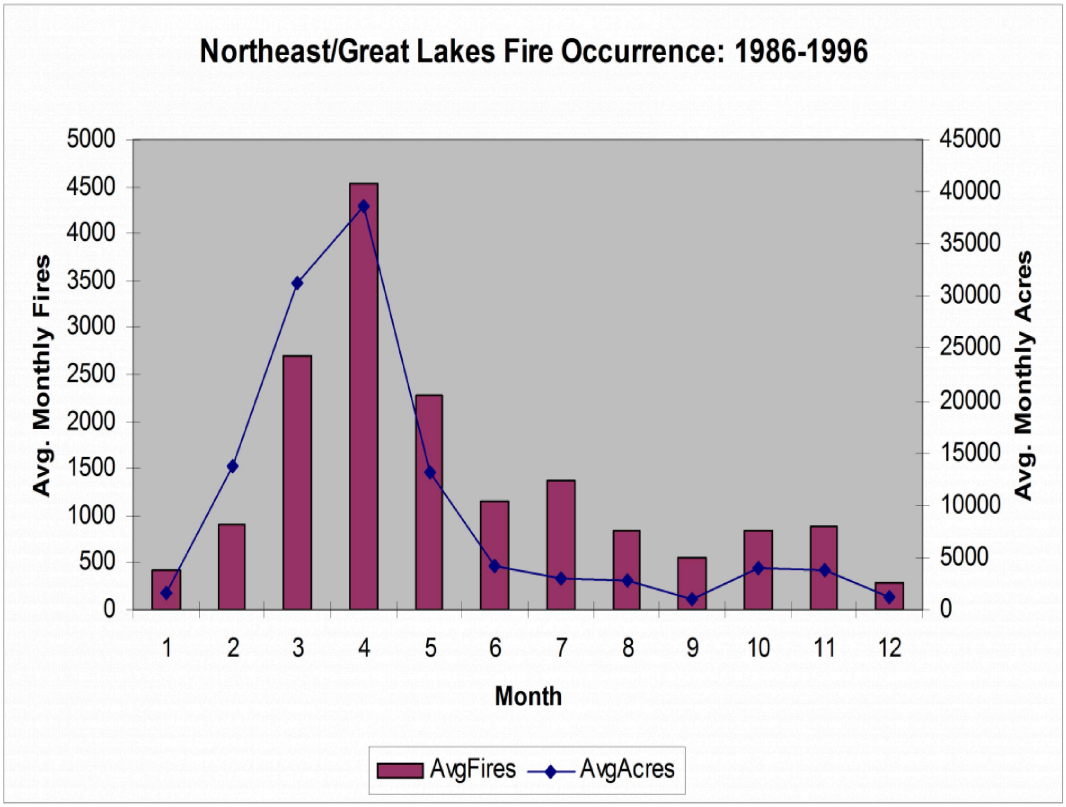
Great Lakes and Northeast

Climatology

- Winter – generally cold with dry periods between widespread periodic precipitation.
- Spring – warmer, windier, and drier. Driest immediately behind storm systems.
- Summer – generally warm and humid under Bermuda High influence. Occasional windy/dry events far north.
- Fall – turning much drier, then generally mild, and dry with potential for windy and dry periods before temperatures drop.

Fire Activity

- Fire activity maxima in spring and fall, coincident with windy periods near jet stream.
- Building warmth and dormant fine fuels in spring, leaf-o in fall.
- Season can extend well into summer far north if jet remains active and brings windy/dry events that are preceded by dry conditions of two weeks or more.
- Little or no activity winter months.



Critical Weather Events

- Post Cold Frontal
- Pre-Cold Frontal Southwest Wind cases
- Bermuda High

Fire Slowing or Stopping Events

- Cold Frontal Passage
- Stationary Front
- Closed Low

Fire Growth Potential Indicators

Canadian Forest Fire Danger Rating System

- Buildup Index (BUI)
- Fire Weather Index (FWI)
- Initial Spread Index (ISI)

National Fire Danger Rating System

- Ignition Component (IC)
- Spread Component (SC)
- Energy Release Component (ERC)
- AVHRR NDVI RG and DA

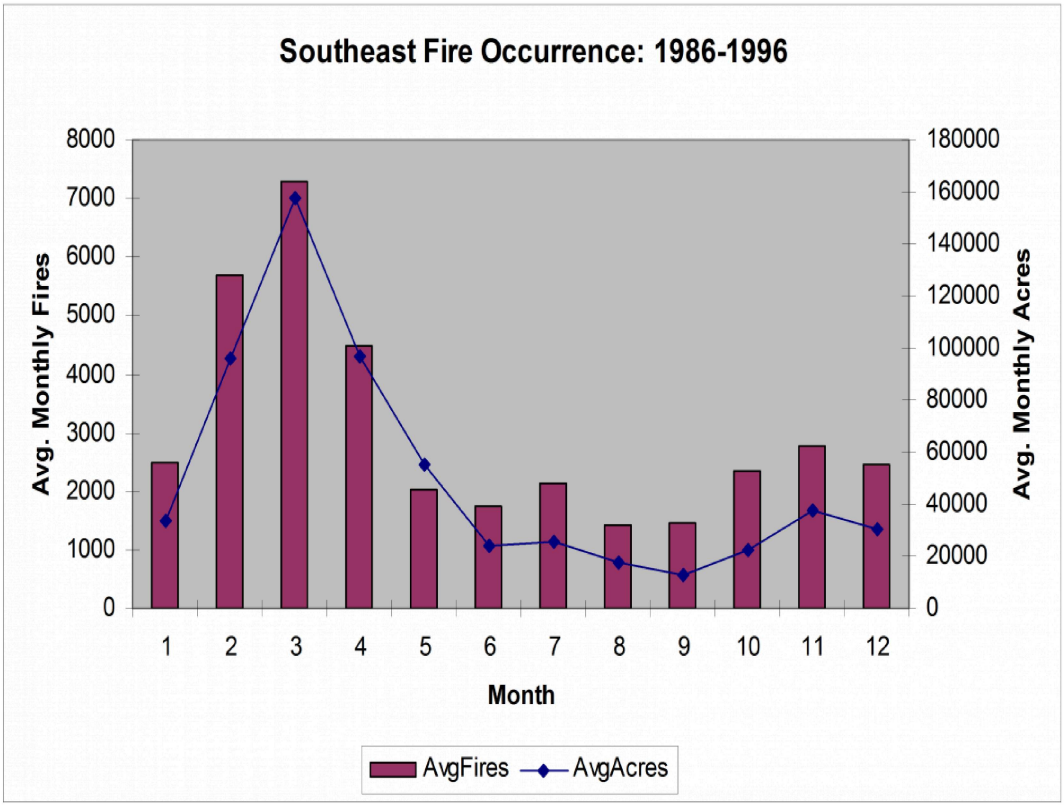
Southeast

Climatology

- Winter – generally driest time of year with greatest wind event potential behind passing storms, though widespread precipitation can also occur.
- Spring – windy/dry potential retreats north, and warm, moist conditions become increasingly dominant.
- Summer – warm to hot and humid with light winds. Occasional dry spells. Tropical cyclone activity increases late in the season.
- Fall – very moist initially, then gradual infiltration of dry air. Moist conditions often persist along Gulf Coast.

Fire Activity

- Fire activity maxima in late winter / early spring and fall, coincident with greatest potential for windy/dry conditions behind passing storm systems.
- Dormant fine fuels with low live fuel moisture in winter and spring, leaf-o in fall in northern portion of region.
- Season can extend year-round anytime warm/moist air becomes suppressed south and east.
- Usually little activity summer months, though significant fire activity has historically occurred during unusual dry spells.



Critical Weather Events

- Post Cold Frontal
- Westerly Downslope Wind in the Appalachians and Ozarks
- Sea Breeze
- Tropical Storms
- Bermuda High

Fire Slowing or Stopping Events

- Closed Low/Cold Frontal Passage
  Stationary Front
  Tropical Storm
  Sea Breeze

Fire Growth Potential Indicators

- ERC
- 100-hour Fuel Moisture
- Keetch-Byram Drought Index (KBDI) is sometimes misused
- SPI
- Crop Moisture Stress Index
- NWS QPE (30 to 60 day)

Hawaii

Climatology

- May occur every year.
- Winter – Windward (NE) and mountain areas. Hurricanes and tropical storms can bring very strong winds and dry air just prior to arrival or as they pass to the south.
- Fall – Transition from dry-to-wet season for the majority of the state.

Fire Activity

- Fires of significance can and have occurred on every calendar day of the year.
- Lightning ignitions are relatively rare, primarily occurring in dry woodlands on the lee side of the islands.
- Lava ignitions may occur during eruption events on Hawaii Island.

Critical Weather Events

- Foehn or Downslope wind on lee sides of the islands.
- Approaching or passing hurricane or tropical storm
- Subsidence inversion

Fire Slowing or Stopping Events

- Large scale weather systems such as Kona Lows, cold fronts, strong upper tropospheric lows/troughs, and direct hit or near miss tropical cyclones.

Fire Growth Potential Indicators

- Burning Index (BI)
- Live Herbaceous Fuel Moisture
- Drought Monitor

Last Modified / Reviewed: April 25, 2024

ATTACHMENT 25

Oregon State University PRISM Group, "Time Series Values for Individual Locations." https://prism.oregonstate.edu/explorer/



Time Series Values for Individual Locations

This section provides an **interactive tool for analyzing time-series data for a single location**. For larger areas, use one of the other tabs to retrieve the gridded data, or use one of our bulk download mechanisms.

The grid cells analyzed are the standard PRISM 4km, except the 30-year normals which are also available at 800m resolution. **Choose a location** by navigating the map or specify lat/lon coordinates to zoom to that location. The highlighted box denotes the enclosing PRISM grid cell. Adjust the settings as desired, then **press the Retrieve button** to display the time series and make the data available for download.

Note: Rather than calculating days based on the 24-hour period ending at midnight local time, PRISM defines a "day" as the 24 hours ending at 12:00 Greenwich Mean Time (GMT, or 7:00am Eastern Standard Time). This means that PRISM data for May 26, for example, actually refers to the 24 hours ending at 7:00am EST on May 26.

When the **Interpolate option** has been selected, the user may click on any location (not necessarily aligned with PRISM grid cells) and the values from surrounding grid cell centers will be factored in using inverse-distance squared weighting.

Data stability indicates how likely the data is to change in the future. Results that include dates older than 6 months are considered **stable** because they are unlikely to change until a major new release of PRISM. If they include dates that are 1-6 months old they are considered **provisional**, since they are likely to change as our reporting networks finalize their information. If any dates fall within the current month, users are cautioned to treat them as **early results**; this data is certain to change as new reporting stations are added and quality control measures are applied. The calculations use as many as possible of the station networks and data sources ingested by the PRISM Group, not just those that have existed for long periods of time. See PRISM datasets for more information; the data available from this page are from the latest versions of "Norm" (normals), and "AN" (daily and monthly). For information on when the grids were most recently updated, see calendar of PRISM data updates.

Note: Solar radiation and cloud transmittance data are currently available as monthly normals only.

Download data from multiple locations Hide text

Location

Click on the map to set the location of interest, or enter coordinates.

Coordinates: Latitude: 38.5130 Longitude: -119.4675 Update Location

Current Location: Latitude: **38.5130** Longitude: **-119.4675** Elevation: **6106ft (1861m)** State: **California** County: **Mono**

Data Settings

- [x] Precipitation
- [x] Minimum temp
- [x] Mean temp
- [x] Maximum temp
- [x] Minimum VPD
- [x] Maximum VPD
- [x] Mean dewpoint temp
- [ ] Cloud transmittance
- [ ] Solar rad (horiz sfc)
- [ ] Solar rad (sloped sfc)
- [ ] Solar rad (clear sky)

- ( ) 30-year monthly normals, 1991-2020
- ( ) 30-year daily normals, 1991-2020
- ( ) Annual values
  start 2017 end 2017
- ( ) Single month values January
  start 2017 end 2017
- ( ) Monthly values
  start January 2017
  end December 2020
- (•) Daily values
  start 01 August 2020
  end 18 November 2020

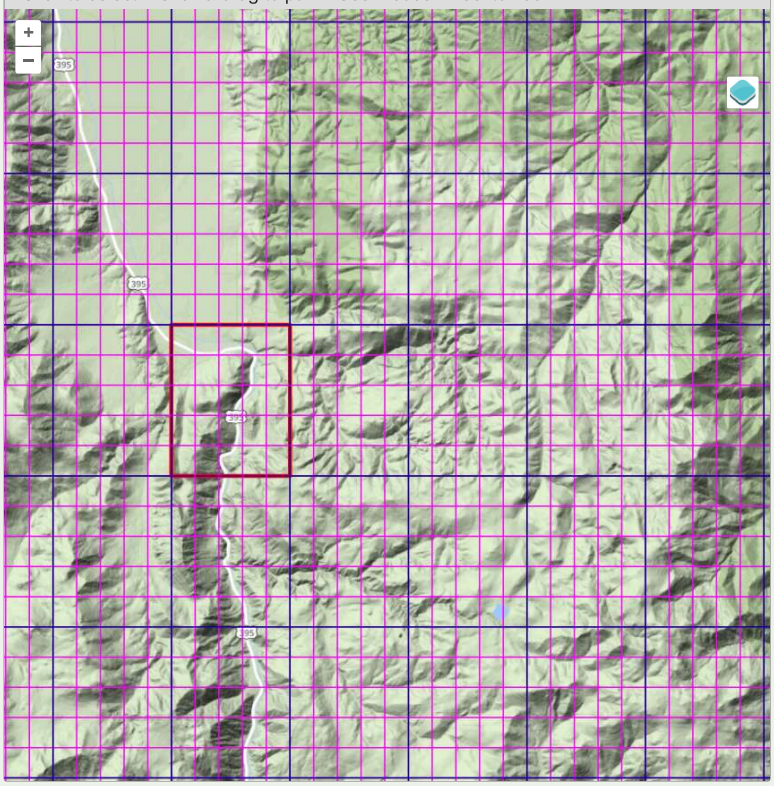
Data Stability: **stable (unlikely to change)**
(based on selected end date)

Resolution: (•) 4km ( ) 800m

Units: (•) English ( ) SI (metric)

[ ] Interpolate grid cell values (see text)

Click to select. Click & drag to pan. Use mouse wheel to zoom.



CA-03-0531

Controls

Retrieve Time Series | Download Time Series | Restore Previous Settings

Once settings are complete, **retrieve** the results

Questions to prism-questions@nacse.org

This website is supported by the USDA Risk Management Agency

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ATTACHMENT 26

National Weather Service, National Operational Hydrologic Remote Sensing Center, "Interactive Snow Information." https://www.nohrsc.noaa.gov/nearest/index.html

Home

Snow Information
National Analyses
Interactive Maps
3D Visualization
Airborne Surveys
Snowfall Analysis
Satellite Products
Forecasts
Data Archive
SHEF Products

Observations near
City, ST
Go

Science/Technology
NOHRSC
GIS Data Sets
Special Purpose Imagery

About The NOHRSC
Staff

NOAA Links
Snow Climatology
Related Links

Help
Help and FAQ
Site Map

Contact Us
Please Send Us Comments!

USA.gov Government Made Easy

Nearby Observation Search

Note: these data are unofficial and provisional.

Location and Date

Enter your "City, ST (or Latitude, Longitude)" Go

English 2020 November 17 - +

NOHRSC
Mission Statement | Contact

National Weather Service
National Operational Hydrologic Remote Sensing Center
Office of Water Prediction
1735 Lake Drive W.
Chanhassen, MN 55317

CA-03-0534

ATTACHMENT 27

Office of Energy Infrastructure Safety, 2023-2025 Wildfire Mitigation Plan Technical Guidelines, December 7, 2022, Appendix A: Definitions, at A-15 to A-16.
https://efiling.energysafety.ca.gov/Lists/DocketLog.aspx?docketnumber=2023-2025-WMPs

Docket Log

Docket #: 2023-2025-WMPs | **Project:** 2023 to 2025 Electrical Corporation Wildfire Mitigation Plans | **Generated On:** 12/9/2025 5:38:36 PM

REF #	Docketed Date	Document Title	To	From
16385	7/25/2025	**SDG&E_2023-2025_Base-WMP_R5 Confidentiality Declaration.pdf (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=59037&shareable=true)** SDG&E's revised 2023-2035 Base WMP pursuant to Energy Safety's Decision on SDG&E's 2025 Petition to Amend its 2023-2025 Base WMP. Revisions reflect the six approved target amendments for 2025 as noted in the decision.		San Diego Gas & Electric
16384	7/25/2025	**SDG&E_2023-2025_Base-WMP_R5-redacted (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=59036&shareable=true)** SDG&E's revised 2023-2035 Base WMP pursuant to Energy Safety's Decision on SDG&E's 2025 Petition to Amend its 2023-2025 Base WMP. Revisions reflect the six approved target amendments for 2025 as noted in the decision.		San Diego Gas & Electric
16259	7/11/2025	**Decision for SDG&E's 2025 Petition to Amend (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=58911&shareable=true)** Energy Safety has evaluated SDG&E's Petition to Amend, submitted on April 10, 2025. The petition seeks to amend SDG&E's 2023-2025 Base WMP. Energy Safety hereby approves six amendments requested by SDG&E and denies 11 amendments.		Office of Energy Infrastructure Safety
16062	6/17/2025	**Decision for Liberty 2025 Change Order Request (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=58714&shareable=true)** Decision on Liberty's April 22, 2025, Change Order Request pertaining to its 2025 WMP Update		Office of Energy Infrastructure Safety
15731	4/28/2025	**Decision for PacifiCorp 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=58352&shareable=true)** Decision for PacifiCorp 2025 Wildfire Mitigation Plan Update.		Office of Energy Safety Infrastructure
15686	4/22/2025	**Liberty 2025 WMP Update Change Order Request (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=58307&shareable=true)**		Liberty Utilities
15613	4/10/2025	**SDGE_2025_Petition_To_Amend_R0.pdf (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=58234&shareable=true)**		San Diego Gas & Electric
15609	4/8/2025	**Decision for Liberty 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=58230&shareable=true)** Decision for Liberty 2025 Wildfire Mitigation Plan Update.		Office of Energy Infrastructure Safety
15469	3/17/2025	**GPI Comments on 2025 PacifiCorp WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=58089&shareable=true)**		Green Power Institute

REF #	Docketed Date	Document Title	To	From
15407	2/24/2025	**Decision on SDG&E's Extension Request for 2025 Wildfire Mitigation Plan Update Change Order Request and the Change Order Request (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=58027&shareable=true)** Decision on San Diego Gas and Electric Company's (SDG&E's) request for an extension of time to submit a change order request for its 2025 mitigation initiative targets, submitted November 13, 2024, and the change order request, submitted January 27, 2025.		The Office of Energy Infrastructure Safety
15401	2/24/2025	**Letter to Draft Decision for PacifiCorp 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=58021&shareable=true)** Letter to Draft Decision for PacifiCorp 2025 Wildfire Mitigation Plan Update. Stakeholder comments are due March 17, 2025. Reply comments are due March 27, 2025. This comment period supersedes prior comment period referenced on 2/11/2025 by REF #15352.		Office of Infrastructure Energy Safety
15373	2/18/2025	**COMMENTS OF THE GREEN POWER INSTITUTE ON THE DRAFT DECISION ON LIBERTY UTILITIES 2025 WILDFIRE MITIGATION PLAN UPDATE (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57992&shareable=true)** Electrical Infrastructure 6 page(s)		Green Power Institute
15371-1	2/18/2025	**PG&E's Report on Updated EPSS Reliability Impact Study Cover Letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57988&shareable=true)**		PG&E
15371-2	2/18/2025	**2025 WMP Commitment GM-07 EPSS Reliability Study Narrative (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57989&shareable=true)**		PG&E
15371-3	2/18/2025	**GM-07 2025 WMP EPSS Reliability Dataset (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57990&shareable=true)**		PG&E
15368	2/18/2025	**Decision for LS Power 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57985&shareable=true)** Decision for LS Power 2025 Wildfire Mitigation Plan Update.		Office of Energy Infrastructure Safety
15362	2/13/2025	**Confidentiality Declaration (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57979&shareable=true)**		PG&E
15359	2/13/2025	**PG&E's 2023-2025 Wildfire Mitigation Plan Revision 8 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57976&shareable=true)** On February 10, 2025, Energy Safety published a decision on PG&E's 2025 Change Order Request pertaining to PG&E's 2023-2025 Base WMP. Pursuant to the 2025 Change Order Request Decision PG&E is submitting an updated version of its 2023-2025 Base WMP.		PG&E
15352	2/11/2025	**Draft Decision for PacifiCorp 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57969&shareable=true)** Draft Decision for PacifiCorp 2025 Wildfire Mitigation Plan Update. Stakeholder comments are due March 3, 2025. Reply comments are due March 13, 2025.		Office of Energy Infrastructure Safety
15343	2/10/2025	**Decision on PG&E's Change Order Request (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57959&shareable=true)** Decision on PG&E's December 5, 2024, Change Order Request pertaining to its 2023-2025 WMP		Office of Energy Infrastructure Safety
15270	1/31/2025	**Revised Schedule for PacifiCorp 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57886&shareable=true)** Revised Schedule for PacifiCorp 2025 WMP Update		Office of Energy Infrastructure Safety

REF #	Docketed Date	Document Title	To	From
15260	1/27/2025	**2025-01-27_SDGE_2025_Change Order Report_R0** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57876&shareable=true)** 2025-01-27_SDGE_2025_Change Order Report_R0		San Diego Gas and Electric
15247	1/27/2025	**Draft Decision for Liberty 2025 WMP Update** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57863&shareable=true)** Draft Decision for Liberty 2025 Wildfire Mitigation Plan Update. Stakeholder comments are due February 18, 2025. Reply comments are due February 28, 2025.		Office of Energy Infrastructure Safety
15210	1/17/2025	**2025.01.17_PC-23-07_Joint_IOU_CC_Workstream_2025 WMP Rpt** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57826&shareable=true)**		PacifiCorp
15209	1/17/2025	**PC_2025_WMP Update_EFR Outage Summary 2023 Data Errata** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57825&shareable=true)**		PacifiCorp
15208	1/17/2025	**2025.01.17_PC_2025_WMP-Update_CA Line Rebuild Data 23-25** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57824&shareable=true)**		PacifiCorp
15207	1/17/2025	**2025.01.17_PC_2023-2025_Base_WMP_Revision_Rev 6 (R6) - Clean** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57823&shareable=true)**		PacifiCorp
15206	1/17/2025	**2025.01.17_PC_2023-2025_Base_WMP_Revision_Rev 6 (R6) - Redline** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57822&shareable=true)**		PacifiCorp
15205	1/17/2025	**2025.01.17_PC_2025_WMP_Update_Rev 2 (R2) Clean** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57821&shareable=true)**		PacifiCorp
15204	1/17/2025	**2025.01.17_PC_2025_WMP_Update_Rev 2 (R2) Redline** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57820&shareable=true)**		PacifiCorp
15203	1/17/2025	**2025.01.17_PC_2025_WMP_Update_Errata CItr** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57819&shareable=true)**		PacifiCorp
15190	1/10/2025	**Notice on Errata for PacifiCorp 2025 WMP Update** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57806&shareable=true)**		Office of Energy Infrastructure Safety
15168	12/27/2024	**Revised Schedule for PacifiCorp and Liberty Utilities 2025 WMP Updates** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57784&shareable=true)** Revised Schedule for PacifiCorp and Liberty Utilities 2025 WMP Updates Electrical Infrastructure 1 page(s)		Office of Energy Infrastructure Safety
15115	12/13/2024	**Draft Decision for LS Power 2025 WMP Update** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57730&shareable=true)** Draft Decision for LS Power 2025 Wildfire Mitigation Plan Update. Stakeholder comments are due January 6, 2025. Reply comments are due January 16, 2025.		Office of Energy Infrastructure Safety
15092	12/11/2024	**Decision for TBC 2025 WMP Update** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57707&shareable=true)** Decision for Trans Bay Cable 2025 Wildfire Mitigation Plan Update.		Office of Energy Infrastructure Safety
15091	12/11/2024	**Decision for HWT 2025 WMP Update** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57706&shareable=true)** Decision for Horizon West Transmission 2025 Wildfire Mitigation Plan Update.		Office of Energy Infrastructure Safety

REF #	Docketed Date	Document Title	To	From
15068	12/5/2024	**DRU11407.002_OEIS Confidentiality Declaration R7** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57683&shareable=true)** Confidentiality Declaration for 2023-2025 WMP Revision 7		PG&E
15067	12/5/2024	**PG&E's 2023-2025 Base Wildfire Mitigation Plan Revision 7 REDACTED** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57682&shareable=true)** Public Version		PG&E
15066	12/5/2024	**PG&E's 2025 Wildfire Mitigation Plan Update Revision 2** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57681&shareable=true)**		PG&E
15062	12/5/2024	**PG&E's 2025 Change Order for the 2023-2025 WMP** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57677&shareable=true)**		PG&E
15014	11/19/2024	**Decision for PG&E 2025 WMP Update** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57629&shareable=true)** Decision for Pacific Gas and Electric Company 2025 Wildfire Mitigation Plan Update.		Office of Energy Infrastructure Safety
15010	11/14/2024	**SCE 2023-2025 Base WMP R3.1** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57620&shareable=true)** This version incorporates all approved errata, corrections requested by Energy Safety, and reportable updates arising from the 2025 WMP Update. It also includes an update that the R3 version did not include.		Southern California Edison
15003	11/13/2024	**2024-11-13_SDGE_2025_WMP_Update_Change_Order_Letter** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57613&shareable=true)**		San Diego Gas & Electric
14984	11/6/2024	**SCE 2023-2025 Base WMP R3** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57594&shareable=true)**		Southern California Edison
14971	11/4/2024	**SCE 2025 WMP Update R1 (November 4, 2024)** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57581&shareable=true)**		Southern California Edison
14938	10/31/2024	**Decision for SCE 2025 WMP Update** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57548&shareable=true)** Decision for Southern California Edison Company 2025 Wildfire Mitigation Plan Update.		Office of Energy Infrastructure Safety
14931	10/30/2024	**Decision for SDG&E 2025 WMP Update** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57541&shareable=true)** Decision for San Diego Gas & Electric 2025 Wildfire Mitigation Plan Update.		Office of Energy Infrastructure Safety
14916	10/21/2024	**Decision for BVES 2025 WMP Update** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57526&shareable=true)** Decision for Bear Valley Electric Service, Inc. 2025 Wildfire Mitigation Plan Update.		Office of Energy Infrastructure Safety
14883	10/9/2024	**Draft Decision for TBC 2025 WMP Update** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57493&shareable=true)** Draft Decision for Trans Bay Cable 2025 Wildfire Mitigation Plan Update. Stakeholder comments are due October 29, 2024. Reply comments are due November 8, 2024.		Office of Energy Infrastructure Safety
14882	10/9/2024	**Draft Decision for HWT 2025 WMP Update** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57492&shareable=true)** Draft Decision for Horizon West Transmission 2025 Wildfire Mitigation Plan Update. Stakeholder comments are due October 29, 2024. Reply comments are due November 8, 2024.		Office of Energy Infrastructure Safety

REF #	Docketed Date	Document Title	To	From
14839	9/30/2024	**Public Advocates Office Reply Comments on Draft Decision PGE (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57449&shareable=true)** Reply Comments on PG&E 2025 WMP Update Draft Decision		California Public Utilities Commission
14836	9/30/2024	**PG&E's Reply Comments to the 2025 Wildfire Mitigation Plan Update Draft Decision (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57446&shareable=true)**		PG&E
14801	9/23/2024	**Public Advocates Office Reply Comments on Draft Decision of SCE 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57411&shareable=true)** Reply Comments		California Public Utilities Commission
14800	9/23/2024	**SCE Reply Comments Draft Decision SCE 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57410&shareable=true)**		Southern California Edison
14790-1	9/20/2024	**2024.09.20_PC_2023-2025_WMP_ Rev 5 (R5) - Clean (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57393&shareable=true)**		PacifiCorp
14790-2	9/20/2024	**2024.09.20_PC_2023-2025_WMP_ Rev 5 (R5) – Redline (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57394&shareable=true)**		PacifiCorp
14790-3	9/20/2024	**2024.09.20_PC_2025_WMP_Update_Rev 1 (R1) - Clean (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57395&shareable=true)**		PacifiCorp
14790-4	9/20/2024	**2024.09.20_PC_2025_WMP_Update_Rev 1 (R1) - Redline (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57396&shareable=true)**		PacifiCorp
14790-5	9/20/2024	**PacifiCorp 2025 WMP Update Resubmission Cover Letter 9-20-24 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57397&shareable=true)** In accordance with the Office of Energy Infrastructure Safety's September 6, 2024, Rejection and Order to Resubmit, PacifiCorp provides this revised 2025 WMP Update originally submitted on July 8, 2024.		PacifiCorp
14790-6	9/20/2024	**2024.09.20_PC_CA Line Rebuild Data 2023-2025 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57398&shareable=true)**		PacifiCorp
14790-7	9/20/2024	**2024.09.20_PC_EFR Outage Summary and 2023 Data Updated 08012024 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57399&shareable=true)**		PacifiCorp
14790-8	9/20/2024	**2024.09.20_PC-23-07_Joint_IOU_CC Effectiveness Workstream_2025 WMP Report FINAL (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57400&shareable=true)**		PacifiCorp
14789	9/20/2024	**2024-09-20_SDGE_Reply_Comments_on_OEIS_Draft_Decision_on_SDGE_2025_WMP_Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57392&shareable=true)**		San Diego Gas & Electric
14777	9/18/2024	**Public Advocates Office Comments on Draft Decision PGE 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57380&shareable=true)**		California Public Utilities Commission
14776	9/18/2024	**GPI Comments on the PG&E 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57379&shareable=true)**		Green Power Institute
14775	9/18/2024	**MGRA Comments on OEIS PGE Draft Decision (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57378&shareable=true)**		Mussey Grade Road Alliance

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14768	9/18/2024	**LSPGC 2023-2025 Base WMP R3 Clean (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57371&shareable=true)**		LS Power
14767	9/18/2024	**LSPGC 2023-2025 Base WMP R3 Redline (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57370&shareable=true)**		LS Power
14766	9/18/2024	**LSPGC 2025 WMP Update R1 Clean (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57369&shareable=true)**		LS Power
14765	9/18/2024	**LSPGC 2025 WMP Update R1 Redline (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57368&shareable=true)**		LS Power
14764	9/17/2024	**Application for Confidential Treatment HWT 2023-2025 WMP Base R2 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57367&shareable=true)**		Horizon West Transmission LLC
14763	9/17/2024	**HWT 2023-2025 Base WMP R2 – Clean (Public) (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57366&shareable=true)**		Horizon West Transmission LLC
14762	9/17/2024	**HWT 2023-2025 Base WMP R2 – Redline (Public) (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57365&shareable=true)**		Horizon West Transmission LLC
14761	9/17/2024	**HWT 2023-2025 Base WMP Revision Cover Letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57364&shareable=true)** Horizon West Transmission, LLC provides a revision to its 2023-2025 Base WMP to correct errors identified in the Office of Energy Infrastructure Safety's Notice on Errata for Horizon West Transmission, LLC, 2023-2025 Base WMP Revision 1 dated September 10, 2024.		Horizon West Transmission LLC
14760	9/17/2024	**Public Advocates Office Errata to Comments SCE 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57363&shareable=true)** Errata		California Public Utilities Commission
14740	9/11/2024	**2025 WMP Update - MGRA Comments on OEIS SCE Draft Decision (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57343&shareable=true)**		Mussey Grade Road Alliance
14739	9/11/2024	**Public Advocates Office Comments on SCE 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57342&shareable=true)**		California Public Utilities Commission
14738	9/11/2024	**GPI Comments on Draft Decision on SCE 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57341&shareable=true)**		Green Power Institute
14736	9/11/2024	**Revised Schedule for Group 2 Electrical Corporation 2025 WMP Updates (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57339&shareable=true)** Revised Schedule for Group 2 Electrical Corporations' 2025 Wildfire Mitigation Plan Updates.		Office of Infrastructure Energy Safety
14735	9/11/2024	**GPI Comments on Draft Decision on SDG&E 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57338&shareable=true)**		Green Power Institute
14728	9/10/2024	**Rejection and Order to Resubmit for LS Power 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57331&shareable=true)** This is a Rejection and Order to Resubmit for LS Power's 2025 WMP Update. LS Power's resubmission is due by Sept. 17, 2024. Opening comments on LS Power's resubmitted 2025 WMP Update are due by Sept. 27 and reply comments are due by Oct. 2, 2024.		Office of Energy Infrastructure Safety

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14727	9/10/2024	**WMP-2025 - MGRA Comments on OEIS SDGE Draft Decision (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57330&shareable=true)**		Mussey Grade Road Alliance
14726	9/10/2024	**Public Advocates Office Opening Comments on the SDG&E Draft Decision (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57329&shareable=true)** Public Advocates Office's Opening Comments on the Draft Decision Approving San Diego Gas & Electric Company's 2023-2025 Wildfire Mitigation Plan		California Public Utilities Commission
14725	9/10/2024	**Notice on Errata for HWT 2023-2025 Base WMP R1 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57328&shareable=true)** Notice on substantive and non-substantive errata for Horizon West Transmission, LLC, 2023-2025 Base WMP R1. Revision due September 17, 2024.		Office of Energy Infrastructure Safety
14724	9/10/2024	**2024-09-10_SDGE_Comments_on_OEIS_Draft_Decision_on_SDGE_2025_WMP_Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57327&shareable=true)**		San Diego Gas & Electric
14721	9/6/2024	**Rejection and Order to Resubmit for PacifiCorp 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57324&shareable=true)** Energy Safety rejects PacifiCorp's 2025 WMP Update and orders PacifiCorp to resubmit its 2025 WMP Update, including redlined and clean versions of all required components. Opening comments are due by October 2, 2024. Reply comments are due by October 7, 2024.		Office of Energy Safety Infrastructure
14695	9/3/2024	**Liberty Application_Confidential Treatment of 2023-2025 WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57298&shareable=true)**		Liberty Utilities
14694	9/3/2024	**2024-09-03_Liberty_2023_WMP_R6_Clean_Redacted (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57297&shareable=true)**		Liberty Utilities
14693	9/3/2024	**2024-09-03_Liberty_2023_WMP_R6_Redline_Redacted (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57296&shareable=true)**		Liberty Utilities
14692	9/3/2024	**2024-09-03_Liberty_2025_WMP-Update_R1_Clean (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57295&shareable=true)**		Liberty Utilities
14691	9/3/2024	**2024-09-03_Liberty_2025_WMP-Update_R1_Redline (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57294&shareable=true)**		Liberty Utilities
14690	9/3/2024	**Liberty 2025 WMP Update Cover Letter_09032024 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57293&shareable=true)**		Liberty Utilities
14670	8/29/2024	**Draft Decision for PG&E 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57273&shareable=true)** Draft Decision for Pacific Gas and Electric Company 2025 Wildfire Mitigation Plan Update. Stakeholder comments are due Sept. 18, 2024. Reply comments are due Sept. 30, 2024.		Office of Energy Infrastructure Safety
14653	8/27/2024	**Draft Decision for BVES 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57256&shareable=true)** Draft Decision for Bear Valley Electric Service, Inc. 2025 Wildfire Mitigation Plan Update. Stakeholder comments due Sept. 16, 2024. Reply comments are due Sept. 26, 2024.		Office of Energy Infrastructure Safety
14637	8/22/2024	**PacifiCorp 2023-2025-WMP Update Reply Comments 8-22-24 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57240&shareable=true)**		PacifiCorp

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14635	8/22/2024	**RCRC Reply Comments, Group 2 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57238&shareable=true)** Reply comments of the Rural County Representatives of California on Group 2 2025 Wildfire Mitigation Plan Updates Electrical Infrastructure 3 page(s)	Caroline Thomas Jacobs	Rural County Representatives of California
14629	8/22/2024	**Draft Decision for SCE 2025 Wildfire Mitigation Plan Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57232&shareable=true)** This is Energy Safety's Draft Decision on SCE's 2025 Wildfire Mitigation Plan Update. Opening comments are due Sept. 11, 2024. Reply comments are due Sept. 23, 2024. Electrical Infrastructure		Office of Energy Infrastructure Safety
14626	8/21/2024	**Draft Decision for SDG&E 2025 Wildfire Mitigation Plan Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57229&shareable=true)** This is Energy Safety's Draft Decision on SDG&E's 2025 Wildfire Mitigation Plan Update. Opening comments are due Sept. 10, 2024. Reply comments are due Sept. 20, 2024. Electrical Infrastructure		Office of Energy Infrastructure Safety
14616	8/19/2024	**2024.08.19_PC_2025_WMP Update_EFR Outage Summary 2023 Data (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57219&shareable=true)**		PacifiCorp
14615	8/19/2024	**2024.08.19_PC_2023-2025_Base_WMP_R4_Redlined_Non-Substantive Errata (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57218&shareable=true)**		PacifiCorp
14614	8/19/2024	**2024.08019_PC_2023-2025_Base_WMP_R4 Cover Letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57217&shareable=true)** PacifiCorp submits its non-substantive errata changes to its 2023-2025 Base Wildfire Mitigation Plan submitted on July 8, 2024.		PacifiCorp
14610	8/19/2024	**Rejection and Order to Resubmit for Liberty 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57213&shareable=true)** This is a Rejection and Order to Resubmit for Liberty Utilities' 2025 WMP Update. Liberty's resubmission is due by Sept. 3, 2024. Opening comments on Liberty's resubmitted 2025 WMP Update are due by Sept. 13 and reply comments are due by Sept. 20, 2024. Electrical Infrastructure		Office of Energy Infrastructure Safety
14582	8/12/2024	**Comments of the Public Advocates Office on PacifiCorp's 2025 Wildfire Mitigation Plan Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57184&shareable=true)**		California Public Utilities Commission
14581	8/12/2024	**GPI Comments on Group 2 2025 WMP Updates (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57183&shareable=true)**		Green Power Institute
14580	8/12/2024	**Comments of the Public Advocates Office on Liberty's 2025 Wildfire Mitigation Plan Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57182&shareable=true)**		California Public Utilities Commission
14579	8/9/2024	**CDFW Comments: PacifiCorp 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57181&shareable=true)** Electrical Infrastructure		California Department of Fish and Wildlife

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14578	8/9/2024	**CDFW Comments: Liberty 2025 WMP Update** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57180&shareable=true)** Electrical Infrastructure		California Department of Fish and Wildlife
14571	8/9/2024	**Liberty Application_Confidential Treatment of 2023-2025 WMP** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57173&shareable=true)**		Liberty Utilities
14570	8/9/2024	**2024-08-09_Liberty_2023-2025 Base_WMP_R5_Redlined Errata_Redacted** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57172&shareable=true)** Liberty Utilities provides summarizing non-substantive errata changes to its 2023-2025 Base WMP submission on July 8, 2024		Liberty Utilities
14569	8/9/2024	**2024-08-09_Liberty_Cover Letter_2023_WMP_R5** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57171&shareable=true)** Liberty Utilities provides summarizing non-substantive errata changes to its 2023-2025 Base WMP submission on July 8, 2024		Liberty Utilities
14559	8/8/2024	**Group 2 WMP Workshop Recording and Slides** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57161&shareable=true)** July 31, 2024, Group 2 Workshop on 2025 Wildfire Mitigation Plan Updates of Liberty Utilities, PacifiCorp, Horizon West Transmission, Trans Bay Cable, & LS Power Grid California Electrical Infrastructure		Office of Energy Infrastructure Safety
14489	7/26/2024	**2024-07-26_Liberty_2023_WMP_R3.1 REDACTED** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57090&shareable=true)** Liberty is submitting its clean updated 2023-2025 Base WMP to include approved changes from its 2024 Change Order request. No other changes have been made.		Liberty Utilities
14488	7/29/2024	**Liberty Application_Confidential Treatment of 2023-2025 WMP** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57089&shareable=true)** Liberty is submitting its clean updated 2023-2025 Base WMP to include approved changes from its 2024 Change Order request. No other changes have been made.		Liberty Utilities
14487	7/26/2024	**2023-07-26_Liberty_Cover Letter_2023_WMP_R3.1** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57088&shareable=true)** Liberty is submitting its clean updated 2023-2025 Base WMP to include approved changes from its 2024 Change Order request. No other changes have been made.		Liberty Utilities
14456	7/22/2024	**2024-07-22_BVES_2025_WMP_R2_Redline** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57057&shareable=true)** Submission in response to notice dated July 15, 2024.		Bear Valley Electric Service, Inc.
14455	7/22/2024	**2024-07-22_BVES_2025_WMP_R2** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57056&shareable=true)** Submission in response to notice dated July 15, 2024.		Bear Valley Electric Service, Inc.
14454	7/22/2024	**2024-07-22_BVES_2025_WMP-Update_R2** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57055&shareable=true)** Submission in response to notice dated July 15, 2024.		Bear Valley Electric Service, Inc.
14453	7/22/2024	**GPI Comments on PGE Supplemental Updates** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57054&shareable=true)** Comments of the Green Power Institute on the errata and supplemental reportable updates for Pacific Gas and Electric Company 2025 Wildfire Mitigation Plan Update		Green Power Institute

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14446	7/19/2024	**Public Meeting Notice - Group 2 2025 WMP Update Workshop** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57047&shareable=true)** Public Meeting Notice - Group 2 2025 WMP Update Workshop Electrical Infrastructure 3 page(s)		Office of Energy Infrastructure Safety
14430	7/9/2024	**Application for Confidential Treatment HWT 2023-2025 Base WMP R1** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57031&shareable=true)**		Horizon West Transmission LLC
14429	7/8/2024	**Application for Confidential Treatment HWT 2025 WMP Update R0** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57030&shareable=true)**		Horizon West Transmission LLC
14428	7/8/2024	**Application for Confidential Treatment TBC 2023-2025 Base WMP (redlined and clean)** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57029&shareable=true)**		Trans Bay Cable LLC
14427	7/15/2024	**Notice on Errata for BVES 2025 WMP Update** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57028&shareable=true)** Notice on substantive and non-substantive errata for Bear Valley Electric Service, Inc., 2025 WMP Update. Revision due July 22, 2024. Comments on revised version due August 5, 2024.		Office of Energy Infrastructure Safety
14402	7/8/2024	**Application for Confidential Treatment TBC_2025-WMP-Update** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57003&shareable=true)**		Trans Bay Cable LLC
14401	7/8/2024	**HWT 2023-2025 Base WMP R1 - Redline REDACTED** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57002&shareable=true)**		Horizon West Transmission LLC
14400	7/8/2024	**HWT 2023-2025 Base WMP R1 - Clean REDACTED** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57001&shareable=true)**		Horizon West Transmission LLC
14399	7/8/2024	**HWT 2025 WMP Update R0 REDACTED** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=57000&shareable=true)**		Horizon West Transmission LLC
14398	7/8/2024	**HWT 2025 WMP Update Cover Letter** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56999&shareable=true)**		Horizon West Transmission LLC
14397	7/8/2024	**TBC 2023-2025 Base WMP R1 - Redline REDACTED** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56998&shareable=true)**		Trans Bay Cable LLC
14396	7/8/2024	**TBC 2023-2025 Base WMP R1 - Clean REDACTED** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56997&shareable=true)**		Trans Bay Cable LLC
14395	7/8/2024	**TBC 2025 WMP-Update_R0 REDACTED** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56996&shareable=true)**		Trans Bay Cable LLC
14394	7/8/2024	**TBC 2025 WMP Update Cover Letter** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56995&shareable=true)**		Trans Bay Cable LLC
14393	7/8/2024	**LSPGC 2023-2025 Base WMP R2 Redline** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56994&shareable=true)**		LS Power

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14392	7/8/2024	**LSPGC 2023-2025 Base WMP R2 Clean (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56993&shareable=true)**		LS Power
14391	7/8/2024	**2024-07-08_LSPGC_2025_WMP-Update_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56992&shareable=true)**		LS Power
14390	7/8/2024	**2024.07.08_PC_2025_WMP_Redline (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56991&shareable=true)**		PacifiCorp
14389	7/8/2024	**2024.07.08_PC_2025_WMP_Clean (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56990&shareable=true)**		PacifiCorp
14388	7/8/2024	**2024.07.08_PC_2025_WMP Update_EFR Outage Summary 2023 Data (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56989&shareable=true)**		PacifiCorp
14387	7/8/2024	**2024.07.08_PC_2025_WMP-Update_CA Line Rebuild Data2023-2025 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56988&shareable=true)** See PC-23-15		PacifiCorp
14386	7/8/2024	**2024.07.08_PC_2025_WMP-Update R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56987&shareable=true)**		PacifiCorp
14385	7/8/2024	**PacifiCorp Cover Letter 2025 WMP Update Submission 7-8-24 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56986&shareable=true)**		PacifiCorp
14382	7/5/2024	**Confidentiality Declaration (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56983&shareable=true)**		PG&E
14379	7/5/2024	**SDG&E 2025 WMP Update Confidentiality Declaration_R5_7.5.24 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56980&shareable=true)** SDG&E is submitting its redline and clean updated 2023-2025 Base WMP. This version includes approved changes from its 2024 Change Order request, reportable updates requested in the 2025 WMP Update, and corrections and supplemental reportable updates per the letter issued by Energy Safety on 6/20/24		San Diego Gas & Electric
14376	7/8/2024	**Liberty Application_Confidential Treatment of 2023-2025 WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56977&shareable=true)**		Liberty Utilities
14375	7/8/2024	**2024_07-08_Liberty_2023_WMP_R4_Redline_Redacted (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56976&shareable=true)**		Liberty Utilities
14374	7/8/2024	**2024-07-08_Liberty_2023_WMP_R4_Clean_Redacted (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56975&shareable=true)**		Liberty Utilities
14373	7/8/2024	**2024-07-08_Liberty_2025_WMP-Update_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56974&shareable=true)**		Liberty Utilities
14372	7/8/2024	**Liberty 2025 WMP Update Cover Letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56973&shareable=true)**		Liberty Utilities
14366	7/5/2024	**Confidentiality Declaration (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56967&shareable=true)**		PG&E
14365	7/5/2024	**2024-07-05_PGE_2023_WMP_R6_Appendix D ACI PG&E 22-16_Atch01 REDACTED (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56966&shareable=true)**		PG&E

REF #	Docketed Date	Document Title	To	From
14364	7/5/2024	**PG&E's 2023-2025 Wildfire Mitigation Plan Revision 6 – Redline Version (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56965&shareable=true)** PG&E is submitting its redline and clean updated 2023-2025 Base WMP. This version includes approved changes from its 2024 Change Order request, reportable updates requested in the 2025 WMP Update, and corrections and supplemental reportable updates per the letter issued by Energy Safety on 6/20/24.		PG&E
14363	7/5/2024	**PG&E's 2023-2025 Wildfire Mitigation Plan Revision 6 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56964&shareable=true)** PG&E is submitting its redline and clean updated 2023-2025 Base WMP. This version includes approved changes from its 2024 Change Order request, reportable updates requested in the 2025 WMP Update, and corrections and supplemental reportable updates per the letter issued by Energy Safety on 6/20/24.		PG&E
14362	7/5/2024	**PG&E's 2025 Wildfire Mitigation Plan Update Revision 1 – Redline Version (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56963&shareable=true)** PG&E is submitting its redline and clean 2025 WMP Update document. This version includes changes made per the letter issued by Energy Safety on 6/20/2024.		PG&E
14361	7/5/2024	**PG&E's 2025 Wildfire Mitigation Plan Update Revision 1 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56962&shareable=true)** PG&E is submitting its redline and clean 2025 WMP Update document. This version includes changes made per the letter issued by Energy Safety on 6/20/2024.		PG&E
14357	7/5/2024	**2024-07-05_SDGE_2023_WMP_R5_redacted_redline (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56958&shareable=true)** SDG&E is submitting its redline and clean updated 2023-2025 Base WMP. This version includes approved changes from its 2024 Change Order request, reportable updates requested in the 2025 WMP Update, and corrections and supplemental reportable updates per the letter issued by Energy Safety on 6/20/24.		San Diego Gas & Electric
14356	7/5/2024	**2024-07-05_SDGE_2023_WMP_R5_redacted (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56957&shareable=true)** SDG&E is submitting its redline and clean updated 2023-2025 Base WMP. This version includes approved changes from its 2024 Change Order request, reportable updates requested in the 2025 WMP Update, and corrections and supplemental reportable updates per the letter issued by Energy Safety on 6/20/24.		San Diego Gas & Electric
14355	7/5/2024	**2024-07-05_SDGE_2025_WMP-Update_R2_redline (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56956&shareable=true)** SDG&E is submitting its redline and clean 2025 WMP Update document. This version includes changes made per the letter issued by Energy Safety on 6/20/2024.		San Diego Gas & Electric
14354	7/5/2024	**2024-07-05_SDGE_2025_WMP-Update_R2 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56955&shareable=true)** SDG&E is submitting its redline and clean 2025 WMP Update document. This version includes changes made per the letter issued by Energy Safety on 6/20/2024.		San Diego Gas & Electric
14353	7/5/2024	**2024-07-05_SDGE_2025_WMP-Update_R2_Cover_Letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56954&shareable=true)** SDG&E is submitting its redline and clean 2025 WMP Update document. This version includes changes made per the letter issued by Energy Safety on 6/20/2024.		San Diego Gas & Electric
14336	7/1/2024	**Decision on Liberty Change Order Request (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56937&shareable=true)** Energy Safety's Decision on Liberty's May 28, 2024, Change Order Request		Office of Energy Infrastructure Safety

REF #	Docketed Date	Document Title	To	From
14276	6/21/2024	**Approval for BVES Request to Amend 2024 Maturity Survey Questions (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56877&shareable=true)** Energy Safety's response to BVES's request to its amend 2024 Maturity Survey missing responses		Office of Energy Infrastructure Safety
14274	6/21/2024	**Revised Schedule for Group 1 Electrical Corporation 2025 WMP Updates (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56875&shareable=true)** Revised Schedule for Group 1 Electrical Corporations' 2025 Wildfire Mitigation Plan Updates. 3 page(s)		Office of Energy Infrastructure Safety
14260	6/20/2024	**Notice on SDG&E Errata and Supplemental Reportable Updates (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56861&shareable=true)** This notice to SDG&E includes a list of non-substantive errors for SDG&E to correct in its 2025 WMP Update and revised 2023-2025 WMP and mitigation iniatives for which SDG&E may submit supplemental reportable updates for 2025. SDG&E must respond by July 5, 2024. Electrical Infrastructure		Office of Energy Infrastructure Safety
14259	6/20/2024	**Notice on PG&E Errata and Supplemental Reportable Updates (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56860&shareable=true)** This notice to PG&E includes a list of non-substantive errors for PG&E to correct in its 2025 WMP Update and revised 2023-2025 WMP and mitigation iniatives for which PG&E may submit supplemental reportable updates for 2025. PG&E must respond by July 5, 2024. Electrical Infrastructure		Office of Energy Infrastructure Safety
14249	6/17/2024	**BVES 2024 Maturity Survey Amendment Request (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56849&shareable=true)**	Deputy Director Shannon O'Rourke	Bear Valley Electric Service, Inc.
14248	6/17/2024	**Submission Timeframes for Change Order Requests (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56848&shareable=true)** Submission timeframes for 2024 and 2025 Change Order requests		Office of Energy Safety Infrastructure
14193	6/7/2024	**2024-06-07_SDGE_2023_WMP_R2.1 (REDACTED VERSION) (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56793&shareable=true)** SDG&E is submitting its clean updated 2023-2025 Base WMP to include approved changes from its 2024 Change Order request. No other changes have been made.		San Diego Gas & Electric
14192	6/7/2024	**2024-06-07_SDGE_2023_WMP_R2.1 Confidentiality Declaration (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56792&shareable=true)** SDG&E is submitting its clean updated 2023-2025 Base WMP to include approved changes from its 2024 Change Order request. No other changes have been made.		San Diego Gas & Electric
14190	6/7/2024	**2023-2025 Wildfire Mitigation Plan R4-1 (REDACTED VERSION) (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56791&shareable=true)** PG&E is submitting its clean updated 2023-2025 Base WMP to include approved changes from its 2024 Change Order request. No other changes have been made.		PG&E
14189	6/7/2024	**OEIS Confidentiality Declaration R4-1 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56789&shareable=true)**		PG&E
14170	6/4/2024	**2024-06-04_SCE_2023_WMP_R1.1 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56770&shareable=true)** SCE is submitting its clean updated 2023-2025 Base WMP to include approved changes from its 2024 Change Order request. No other changes have been made.		Southern California Edison

REF #	Docketed Date	Document Title	To	From
14152	5/31/2024	**Decision on PG&E Change Order Request** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56752&shareable=true)** Energy Safety's decision on PG&E's January 8, 2024, Change Order Request		Office of Energy Infrastructure Safety
14151	5/31/2024	**Decision on SDG&E Change Order Request** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56751&shareable=true)** Energy Safety's decision on SDG&E's November 1, 2023, Change Order Request		Office of Energy Infrastructure Safety
14150	5/31/2024	**Decision on SCE Change Order Request** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56750&shareable=true)** Energy Safety's decision on SCE's November 1, 2023, Change Order Request		Office of Energy Infrastructure Safety
14142-1	5/29/2024	**2024-05-29_BVES_2025_WMP-Update_R1** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56740&shareable=true)**		Bear Valley Electric Service, Inc.
14142-2	5/29/2024	**2024-05-29_BVES_2025_WMP_R1** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56741&shareable=true)**		Bear Valley Electric Service, Inc.
14142-3	5/29/2024	**2024-05-29_BVES_2025_WMP_R1_Redline** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56742&shareable=true)**		Bear Valley Electric Service, Inc.
14130	5/28/2024	**Liberty 2024 WMP Update Change Order Report_05282024** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56728&shareable=true)**		Liberty Utilities
14113	5/21/2024	**Request to Correct Information Provided in PG&E's 2024 Change Order** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56711&shareable=true)**		PG&E
14112	5/21/2024	**SCE Reply Comments 2025 WMP Update** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56710&shareable=true)**		Southern California Edison
14111	5/21/2024	**PG&E's 2025 Wildfire Mitigation Plan Update Reply Comments** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56709&shareable=true)**		PG&E
14110	5/21/2024	**SDGE_ReplyComments_SDGE_2025_WMP_Update_R0** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56708&shareable=true)** WMP Update reply comments		San Diego Gas & Electric
14101	5/20/2024	**BVES Response to Stakeholder Comments on 2025 WMP Update** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56699&shareable=true)** WMP Update Reply Comments	Caroline Thomas Jacobs, Director	Bear Valley Electric Service, Inc.
14091	5/17/2024	**2025 WMP Update Reply Comments Extended to 5/21/24** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56689&shareable=true)** Group 1 WMP Update reply comment deadline has been extended from May 17, 2024, to May 21, 2024.		Office of Energy Infrastructure Safety
14086	5/14/2024	**SDG&E 2023-2025 Base WMP R4 Redlined_Non-Substantive Errata** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56684&shareable=true)** Redacted version		San Diego Gas & Electric

REF #	Docketed Date	Document Title	To	From
14085	5/14/2024	**SDG&E 2023-2025 Base WMP R4 (Clean Updated)_Non-Substantive Errata (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56683&shareable=true)** Redacted version		San Diego Gas & Electric
14084	5/14/2024	**SDG&E 2025 WMP Update Non-substantive Errata Confidentiality Declaration (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56682&shareable=true)**		San Diego Gas & Electric
14083	5/14/2024	**SCE 2025 WMP Update Errata (May 14, 2024) (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56681&shareable=true)**		Southern California Edison
14082	5/14/2024	**SDG&E's 2025 Wildfire Mitigation Plan Update Non-Substantive Errata (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56680&shareable=true)**		San Diego Gas & Electric
14081	5/14/2024	**SDG&E's 2025 Wildfire Mitigation Plan Update Non-Substantive Errata Cover Letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56679&shareable=true)**		San Diego Gas & Electric
14080	5/14/2024	**PG&E's 2025 Wildfire Mitigation Plan Update Non-Substantive Errata (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56678&shareable=true)**		PG&E
14078	5/14/2024	**Rejection and Order to Resubmit for BVES 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56676&shareable=true)** Rejection and Order to Resubmit for Bear Valley Electric Service Inc 2025 WMP Update. BVES resubmit due by May 29, 2024.		Office of Energy Infrastructure Safety
14033	5/7/2024	**Group 1 WMP Workshop Recording and Slides (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56631&shareable=true)** Notice of Group 1 April 25, 2024, WMP Workshop recording link and associated slides Electrical Infrastructure		Office of Energy Infrastructure Safety
14032	5/7/2024	**Comments on the Group 1 2025 WMP Updates (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56630&shareable=true)**		Green Power Institute
14031	5/7/2024	**Public Advocates Comments on SCE 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56629&shareable=true)** Comments of the Public Advocates Office on SCE's 2025 Wildfire Mitigation Plan Update		California Public Utilities Commission
14029	5/7/2024	**Public Advocates Office Comments on PGEs 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56627&shareable=true)**		California Public Utilities Commission
14024	5/7/2024	**Public Advocates Office Comments on SDGE 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56622&shareable=true)**		California Public Utilities Commission
14023	5/7/2024	**Public Advocates Office Comments on BVES 2025 WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56621&shareable=true)**		California Public Utilities Commission
14018	5/7/2024	**Opening Comments of the Rural County Representatives of California on Group 1 2025 Wildfire Mitigation Plan Updates (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56616&shareable=true)** Comments from RCRC pertaining to the 2025 Wildfire Mitigation Plan Updates of PG&E and Southern California Edison, dated April 2, 2024. Electrical Infrastructure	Caroline Thomas Jacobs	Rural County Representatives of California

REF #	Docketed Date	Document Title	To	From
14017	5/7/2024	**MUSSEY GRADE ROAD ALLIANCE COMMENTS ON THE 2025 UPDATE OF THE WILDFIRE MITIGATION PLANS OF PG&E, SCE, AND SDG&E (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56615&shareable=true)**		Mussey Grade Road Alliance
14009	5/6/2024	**CDFW Comments on BVES's 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56607&shareable=true)**		California Department of Fish and Wildlife
14008	5/6/2024	**CDFW Comments on PG&E's 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56606&shareable=true)**		California Department of Fish and Wildlife
14007	5/6/2024	**CDFW Comments on SCE's 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56605&shareable=true)**		California Department of Fish and Wildlife
14006	5/6/2024	**CDFW Comments on SDG&E's 2025 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56604&shareable=true)**		California Department of Fish and Wildlife
13901	4/16/2024	**2024-04-16_SCE_2025_WMP_Errata (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56499&shareable=true)** Submission is SCE's errata to Table 3-1, Table 8-15, and Figure 7-1 to address errors identified and corresponding redline.		Southern California Edison
13898	4/15/2024	**Notice of 2025 WMP Update Workshop - Group 1 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56496&shareable=true)** The Office of Energy Infrastructure Safety will hold a virtual public workshop on April 25, 2024, on the 2025 Wildfire Mitigation Plan Updates from PG&E, SCE, SDG&E, and Bear Valley ("Group 1").		Office of Energy Infrastructure Safety
13881	4/11/2024	**2023-2025 WMPs SCE 2023 WMP R2 - Redline (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56479&shareable=true)** SCE is resubmitting its redlined 2023-2025 Base WMP, which was initially submitted on April 2, 2024, to include pages that do not have redlines.		Southern California Edison
13878	4/9/2024	**SDG&E 2023-2025 Base WMP Redlined (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56476&shareable=true)** SDG&E is resubmitting it's redlined 2023-2025 Base WMP, which was initially submitted on April 2, 2024, to include all the appendices that were not previously included and correct certain erroneous confidentiality/redacted markings.		San Diego Gas & Electric
13877	4/9/2024	**SDG&E 2023-2025 Base WMP (Clean Updated) (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56475&shareable=true)** SDG&E is resubmitting it's clean updated 2023-2025 Base WMP, which was initially submitted on April 2, 2024, to correct certain erroneous confidentiality/redacted markings.		San Diego Gas & Electric
13876	4/11/2024	**SDG&E 2025 WMP Update Confidentiality Declaration (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56474&shareable=true)** SDG&E is resubmitting it's confidential redlined and clean updated 2023-2025 Base WMP, which was initially submitted on April 2, 2024, to include all the appendices that were not previously included and correct certain erroneous confidentiality/redacted markings.		San Diego Gas & Electric

REF #	Docketed Date	Document Title	To	From
13860	4/5/2024	**2024-04-02_BVES_2025_WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56458&shareable=true)** BVES is resubmitting its 2023-2025 WMP to include the appendices. No other content changes since the April 2 submission.		Bear Valley Electric Service, Inc.
13859	4/5/2024	**2024-04-02_BVES_2025_WMP_R0_Redline (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56457&shareable=true)** BVES is resubmitting its 2023-2025 WMP to include the appendices. No other content changes since the April 2 submission.		Bear Valley Electric Service, Inc.
13851	4/4/2024	**SDG&E 2025 Wildfire Mitigation Plan Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56449&shareable=true)** SDG&E is resubmitting its 2025 WMP due to PDF errors identified in which the letter combination “ti” is changed to a symbol when copy and pasted. No other changes have been made to what was submitted on April 2.		San Diego Gas & Electric
13828	4/2/2024	**2025 WMP Update ACI SCE-23-18 calibration tracker (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56426&shareable=true)**		Southern California Edison
13827	4/2/2024	**2025 WMP Update ACI SCE-23-15 Fast Curve Outages 2023 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56425&shareable=true)**		Southern California Edison
13826	4/2/2024	**2025 WMP Update ACI SCE-23-10 splice findings (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56424&shareable=true)**		Southern California Edison
13825	4/2/2024	**2025 WMP Update ACI SCE-23-09 Item 2 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56423&shareable=true)**		Southern California Edison
13824	4/2/2024	**2025 WMP Update ACI SCE-23-09 IWMS (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56422&shareable=true)**		Southern California Edison
13823	4/2/2024	**2025 WMP Update ACI SCE-23-08 location list (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56421&shareable=true)**		Southern California Edison
13822	4/2/2024	**2025 WMP Update Chapter 1 Tables 1-1 and 1-2 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56420&shareable=true)**		Southern California Edison
13821	4/2/2024	**2024-04-02_SCE_2023_WMP_R2- Redline (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56419&shareable=true)**		Southern California Edison
13820	4/2/2024	**2024-04-02_SCE_2023_WMP_R2- Clean (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56418&shareable=true)**		Southern California Edison
13819	4/2/2024	**2024-04-02_SCE_2025_WMP-Update_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56417&shareable=true)**		Southern California Edison

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13818	4/2/2024	**SCE 2025 WMP Update Cover Letter** (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56416&shareable=true)		Southern California Edison
13817	4/2/2024	**SDG&E 2025 WMP Update Confidentiality Declaration** (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56415&shareable=true)		San Diego Gas & Electric
13816	4/2/2024	**SDG&E 2023-2025 Base WMP R3 Redlined** (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56414&shareable=true)		San Diego Gas & Electric
13815	4/2/2024	**SDG&E 2023-2025 Base WMP R3 (Clean Updated)** (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56413&shareable=true)		San Diego Gas & Electric
13814	4/2/2024	**SDG&E 2025 Wildfire Mitigation Plan Update** (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56412&shareable=true)		San Diego Gas & Electric
13813	4/2/2024	**SDG&E 2025 WMP Update Cover Letter** (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56411&shareable=true)		San Diego Gas & Electric
13812	4/2/2024	**DRU11407.002_OEIS Confidentiality Declaration R5** (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56410&shareable=true)		PG&E
13811	4/2/2024	**DRU13121_OEIS Confidentiality Declaration** (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56409&shareable=true) For confidential attachments respective to PG&E's 2025 WMP Update.		PG&E
13810	4/2/2024	**2024-04-02_PGE_2025_WMP-Update_R0_ACI-23-26_Atch01_Redacted.xlsx** (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56408&shareable=true)		PG&E
13809	4/2/2024	**2024-04-02_PGE_2025_WMP-Update_R0_ACI-23-20_Atch01_Redacted.pdf** (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56407&shareable=true)		PG&E
13808	4/2/2024	**2024-04-02_PGE_2025_WMP-Update_R0_ACI-23-15_Atch01.pdf** (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56406&shareable=true)		PG&E
13807	4/2/2024	**2024-04-02_PGE_2025_WMP-Update_R0_ACI-23-07_Atch02.xlsx** (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56405&shareable=true)		PG&E
13806	4/2/2024	**2024-04-02_PGE_2025_WMP-Update_R0_ACI-23-07_Atch01.xlsx** (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56404&shareable=true)		PG&E
13805	4/2/2024	**PG&E's 2023-2025 Wildfire Mitigation Plan Revision 5 - Redlined** (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56403&shareable=true)		PG&E
13804	4/2/2024	**PG&E's 2023-2025 Wildfire Mitigation Plan Revision 5** (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56402&shareable=true) Clean/public.		PG&E
13803	4/2/2024	**PG&E's 2025 Wildfire Mitigation Plan Update** (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56401&shareable=true)		PG&E
13802	4/1/2024	**2025 Update Attachment to BVES-23-15 BVES 2023 Outage Log** (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56400&shareable=true)		Bear Valley Electric Service, Inc.

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13801	4/1/2024	**Bear Valley Electric Service 2023-2025 Wildfire Mitigation Plan - Redline (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56399&shareable=true)**		Bear Valley Electric Service, Inc.
13800	4/1/2024	**Bear Valley Electric Service 2023-2025 Wildfire Mitigation Plan (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56398&shareable=true)** Bear Valley Electric Service 2023-2025 Wildfire Mitigation Plan - 2025 Revision 0		Bear Valley Electric Service, Inc.
13799	4/1/2024	**Bear Valley Electric Service 2025 Wildfire Mitigation Plan Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56397&shareable=true)**		Bear Valley Electric Service, Inc.
13739	2/22/2024	**2023-2025 Wildfire Mitigation Plan Submission Cover Letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56337&shareable=true)**		PacifiCorp
13738	2/22/2024	**2023-2025 Wildfire Mitigation Plan (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56336&shareable=true)** PacifiCorp submits this final version of its 2023-2025 Wildfire Mitigation Plan to the '2023- 2025-WMP docket which includes its previously submitted errata, changes resulting from the Revision Notice, as well as the corrections for the errata listed in Appendix A of Energy Safety's letter dated February 12, 2024.		PacifiCorp
13736	2/22/2024	**2025 WMP Updated Letter and Schedule (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56334&shareable=true)** 2025 WMP update of schedule originally posted on January 26, 2024. Electrical Infrastructure 2 page(s)		Office of Energy Infrastructure Safety
13730	2/15/2024	**Liberty Application_Confidential Treatment of 2023-2025 WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56328&shareable=true)**		Liberty Utilities
13729	2/15/2024	**2024-02-15_Liberty_2023_WMP_R3 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56327&shareable=true)** This version of Liberty's 2023 WMP is submitted in accordance with Section 4.2 of the WMP Process Guidelines and Energy Safety's Non-Substantive Errata Request.		Liberty Utilities
13728	2/16/2024	**PG&E's GM-07 2024 WMP EPSS Cover Letter and Supporting Narrative (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56326&shareable=true)**		PG&E
13725	2/15/2024	**GM-07 2024 Supporting Narrative (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56323&shareable=true)**		PG&E
13724	2/15/2024	**GM-07 2024 WMP EPSS Reliability Dataset (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56322&shareable=true)**		PG&E
13723	2/15/2024	**PG&E's Cover Letter ACI 22-32 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56321&shareable=true)**		PG&E
13722	2/15/2024	**LSPGC_2023_WMP_Errata (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56320&shareable=true)**		LS Power - California
13721	2/15/2024	**LSPGC_2023-20205 Base WMP R1 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56319&shareable=true)** LS Power 2023-2025 approved WMP is identical to that submitted on 10/18/23.		LS Power - California

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13720	2/15/2024	**LSPGC_2023-2025_WMP_R1_Cover_Letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56318&shareable=true)**		LS Power - California
13717	2/14/2024	**Request for LSP Final WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56315&shareable=true)**		Office of Energy Infrastructure Safety
13712	2/12/2024	**Request for PacifiCorp Final 2023-2025 WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56310&shareable=true)** Energy Safety's request for PacifiCorp's Final 2023-2025 WMP.		Office of Energy Infrastructure Safety
13711	2/12/2024	**PacifiCorp 2023-2025 Base WMP Decision (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56309&shareable=true)** Energy Safety's Decision on PacifiCorp's 2023-2025 Wildfire Mitigation Plan.		Office of Energy Infrastructure Safety
13708	2/9/2024	**Revised 2023-2025 Maturity Survey (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56306&shareable=true)** Revised 2023-2025 Electrical Corporation Wildfire Mitigation Maturity Survey adopted January 31, 2024; and cover letter explaining corrections.		Office of Energy Infrastructure Safety
13683	2/5/2024	**Non-Substantive Request for Liberty 2023-2025 WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56281&shareable=true)** Energy Safety request for non-substantive errata for Liberty Utilities' 2023-2025 WMP.		Office of Energy Infrastructure Safety
13678	2/5/2024	**Liberty 2023-2025 WMP Decision (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56276&shareable=true)** Energy Safety's decision on Liberty Utilities' 2023-2025 Wildfire Mitigation Plan		Office of Energy Infrastructure Safety
13667	2/2/2024	**2025 WMP Update Guidelines Adoption Meeting Recording and Slides (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56265&shareable=true)** Recording link and slide deck from January 31, 2024, adoption meeting for 2025 Wildfire Mitigation Plan Update Guidelines documents.		Office of Energy Infrastructure Safety
13658	2/1/2024	**Revised 2023-2025 Maturity Model (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56256&shareable=true)** Revised 2023-2025 Electrical Corporation Wildfire Mitigation Maturity Model adopted January 31, 2024.		Office of Energy Infrastructure Safety
13657	2/1/2024	**Revised 2023-2025 WMP Process Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56255&shareable=true)** Revised 2023-2025 Wildfire Mitigation Plan Process and Evaluation Guidelines adopted January 31, 2024.		Office of Energy Infrastructure Safety
13656	2/1/2024	**2025 WMP Update Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56254&shareable=true)** 2025 Wildfire Mitigation Plan Update Guidelines adopted January 31, 2024.		Office of Energy Infrastructure Safety
13655	2/1/2024	**FInal 2025 Update Guidelines Cover Letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56253&shareable=true)** Cover letter for final 2025 Wildfire Mitigation Plan Guidelines documents. The final documents were adopted at the January 31, 2024, adoption meeting.		Office of Energy Infrastructure Safety

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13631	1/30/2024	**LS Power Grid 2023-2025 WMP Decision and Cover Letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56225&shareable=true)** Energy Safety's Decision on LS Power Grid California's 2023-2025 WMP with cover letter and appendices Electrical Infrastructure		Office of Energy Infrastructure Safety
13630	1/30/2024	**Horizon West Transmission 2023-2025 WMP Decision and Cover Letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56224&shareable=true)** Energy Safety's Decision on Horizon West Transmission 2023-2025 WMP with cover letter and appendices Electrical Infrastructure		Office of Energy Infrastructure Safety
13629	1/30/2024	**Trans Bay Cable 2023-2025 WMP Decision and Cover Letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56223&shareable=true)** Energy Safety's Decision on Trans Bay Cable's 2023-2025 WMP with cover letter and appendices Electrical Infrastructure		Office of Energy Infrastructure Safety
13628	1/30/2024	**Proposed Final Revisions to 2023-2025 Maturity Model and Survey (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56222&shareable=true)** The proposed final is set to be considered for adoption at the January 31, 2024, adoption meeting.		Office of Energy Infrastructure Safety
13627	1/30/2024	**Proposed Final Revisions to 2023-2025 WMP Process Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56221&shareable=true)** The proposed final is set to be considered for adoption at the January 31, 2024, adoption meeting.		Office of Energy Infrastructure Safety
13626	1/30/2024	**Proposed Final 2025 WMP Update Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56220&shareable=true)** The proposed final is set to be considered for adoption at the January 31, 2024, adoption meeting.		Office of Energy Infrastructure Safety
13615	1/26/2024	**2025 WMP Update Schedule (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56209&shareable=true)** Schedule for 2025 Wildfire Mitigation Plan Updates		Office of Energy Infrastructure Safety
13591	1/21/2024	**GPI Comments on Draft Decision on Liberty WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56185&shareable=true)**		Green Power Institute
13590	1/22/2024	**MGRA Comments on 2025 Guideline Revision (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56184&shareable=true)**		Mussey Grade Road Alliance
13589	1/22/2024	**Joint Utility Comments on Draft Revisions to 2025 WMP Updates (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56183&shareable=true)**		San Diego Gas & Electric
13588	1/22/2024	**Public Advocates Office Comments on 2025 WMP Updates (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56182&shareable=true)**		California Public Utilities Commission
13585	1/21/2024	**GPI Comments on Draft Revisions to the 2025 WMP Updates (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56179&shareable=true)**		Green Power Institute

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13580	1/19/2024	**Notice of 2025 WMP Update Guidelines Adoption Meeting (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56174&shareable=true)** Energy Safety will hold a public meeting on January 31, 2024 , to consider adoption of the 2025 Wildfire Mitigation Plan Update Guidelines and associated revised 2023-2025 WMP documents.		Office of Energy Infrastructure Safety
13569	1/17/2024	**GPI Comments on Draft Decision on PacifiCorp WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56163&shareable=true)** The Green Power Institute (GPI), the renewable energy program of the Pacific Institute for Studies in Development, Environment, and Security, provides these Comments of the Green Power Institute on the Draft Decision on PacifiCorp's Wildfire Mitigation Plan.		Green Power Institute
13561	1/8/2024	**DRU11407.002_OEIS Confidentiality Declaration R4 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56155&shareable=true)**		PG&E
13558	1/11/2024	**2024_01_11_Liberty_Comments_2023 WMP-Liberty Draft Decision (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56152&shareable=true)**		Liberty Utilities
13555	1/8/2024	**PG&E's 2023-2025 WMP Change Order Attachment A (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56149&shareable=true)**		PG&E
13554	1/8/2024	**PG&E's 2023-2025 WMP Change Order (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56148&shareable=true)**		PG&E
13553	1/8/2024	**PG&E's 2023-2025 Wildfire Mitigation Plan R4 Cover Letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56147&shareable=true)**		PG&E
13552	1/8/2024	**PG&E's 2023-2025 Wildfire Mitigation Plan R4 Redline Version (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56146&shareable=true)**		PG&E
13551	1/8/2024	**PG&E's 2023-2025 Wildfire Mitigation Plan R4 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56145&shareable=true)**		PG&E
13540	12/29/2023	**PG&E's 2023 WMP Decision with cover letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56134&shareable=true)** Energy Safety's Decision on PG&E's 2023 - 2025 WMP Electrical Infrastructure 196 page(s)		Office of Energy Infrastructure Safety
13535	12/28/2023	**PacifiCorp 2023 WMP Draft Decision with cover letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56129&shareable=true)** Energy Safety's Draft Decision on PacifiCorp's 2023-2025 WMP. Opening comments due January 17, 2024, and reply comments due January 29, 2023.		Office of Energy Infrastructure Safety
13496	12/22/2023	**2023 WMP Liberty Draft Decision (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56090&shareable=true)** Energy Safety's Draft Decision on Liberty Utilities' 2023-2025 WMP. Opening comments due January 11, 2024, and reply comments due January 22, 2023.		Office of Energy Infrastructure Safety
13494	12/22/2023	**Energy Safety's Response to the WSAB's 2023 Recs for WMP Guidelines and SCA Process (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56088&shareable=true)** Office of Energy Infrastructure Safety's response to the Wildfire Safety Advisory Board's June 13, 2023, recommendations for the Wildfire Mitigation Plan Guidelines and Safety Culture Assessment process. Electrical Infrastructure		Office of Energy Infrastructure Safety

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13492	12/22/2023	**Draft Revisions to 2023-2025 Process Guidelines, Maturity Model, and Maturity Survey (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56086&shareable=true)** Draft revisions to the 2023-2025 Process Guidelines, 2023-2025 Maturity Model, and 2023-2025 Maturity Survey. Comments on the draft revisions will be accepted through January 22, 2024.		Office of Energy Infrastructure Safety
13485-1	12/19/2023	**2023-12-19_SDGE_2023_Change Order Report_R1 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56078&shareable=true)**		San Diego Gas & Electric
13485-2	12/19/2023	**2023-12-19_SDGE_2023_Change Order Report_R1_Attachment A (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56079&shareable=true)**		San Diego Gas & Electric
13476	12/14/2023	**Energy Safety Response to SDG&E's Request to Resubmit its Change Order Request (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56069&shareable=true)** This is a letter approving SDG&E's request to revise and resubmit its November 1, 2023, Change Order Request by December 19, 2023. Stakeholder comments on SDG&E's revised Change Order Request must be submitted within 20 days of the date SDG&E submits the revised Change Order Request. Electrical Infrastructure		Office of Energy Infrastructure Safety
13475	12/14/2023	**Reply Comments on the Draft Decision Approving Pacific Gas and Electric Company's 2023-2025 Wildfire Mitigation Plan (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56068&shareable=true)**		PG&E
13474	12/14/2023	**Public Advocates Office Reply Comments on PGE 2023-2025 WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56067&shareable=true)**		California Public Utilities Commission
13473	12/14/2023	**MGRA Reply Comments re PG&E Draft Decision (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56066&shareable=true)**		Mussey Grade Road Alliance
13454	12/8/2023	**TBC 2023 WMP Draft Decision with cover letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56047&shareable=true)** Energy Safety's Draft Decision of TBC's 2023-2025 Wildfire Mitigation Plan with cover letter and appendices. Electrical Infrastructure		Office of Energy Infrastructure Safety
13453	12/8/2023	**HWT 2023 WMP Draft Decision with cover letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56046&shareable=true)** Energy Safety's Draft Decision of HWT 2023-2025 Wildfire Mitigation Plan with cover letter and appendices. Electrical Infrastructure		Office of Energy Infrastructure Safety
13452	12/8/2023	**LS Power 2023 WMP Draft Decision with cover letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56045&shareable=true)** Energy Safety's Draft Decision on LS Power's 2023-2025 Wildfire Mitigation Plan with cover letter and appendices. Electrical Infrastructure		Office of Energy Infrastructure Safety
13437	12/6/2023	**2023.12.06_Joint IOU Comments on Draft 2025 WMP Update Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56030&shareable=true)**		Southern California Edison
13436	12/6/2023	**2023 12-06 Public Advocates Office Comments on Draft 2025 WMP Update Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56029&shareable=true)**		California Public Utilities Commission

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13431	12/4/2023	**2023_12_04_Shasta County DA Stephanie A. Bridgett OpeningComments OEIS PG&E WMP Draft Decision (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56024&shareable=true)** A letter from the Shasta County District Attorney, Stephanie A. Bridgett, expressing personal and community concerns regarding the Draft Decision for PG&E's 2023-2025 WMP. Electrical Infrastructure 2 page(s)	Shannon O'Rourke, Deputy Director	Shasta County District Attorney
13430	12/4/2023	**2023_12_04_Public Advocates Office OpeningComments OEIS PG&E WMP Draft Decision (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56023&shareable=true)**		California Public Utilities Commission
13429	12/4/2023	**2023_12_04_The Utility Reform Network OpeningComments OEIS PG&E WMP Draft Decision (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56022&shareable=true)**		The Utility Reform Network
13428	12/4/2023	**2023_12_04_PG&E OpeningComments OEIS PG&E WMP Draft Decision (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56021&shareable=true)**		PG&E
13427	12/4/2023	**2023_12_04_Mussey Grade Road Alliance OpeningComments OEIS PG&E WMP Draft Decision (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56020&shareable=true)**		Mussey Grade Road Alliance
13425	12/4/2023	**2025 WMP Update Guidelines Workshop Recording and Slides (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=56018&shareable=true)** Recording link and slide deck from November 15, 2023, workshop on Draft 2025 WMP Update Guidelines		Office of Energy Infrastructure Safety
13386	11/16/2023	**BVES 2023-2025 R2 WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55979&shareable=true)** In accordance with the Office of Energy Infrastructure Safety's 2023-2025 Wildfire Mitigation Plan Process and Evaluation Guidelines, specifically Section 4.3, Bear Valley Electric Service, Inc. hereby submits an updated version of its 2023-2025 Wildfire Mitigation Plan following Energy Safety's approval of Bear Valley's WMP on 11/6/23.		Bear Valley Electric Service, Inc.
13385	11/16/2023	**BVES 2023-2025 R2 WMP Non-Substantive Cover Letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55978&shareable=true)** In accordance with the Office of Energy Infrastructure Safety's 2023-2025 Wildfire Mitigation Plan Process and Evaluation Guidelines, specifically Section 4.3, Bear Valley Electric Service, Inc. hereby submits an updated version of its 2023-2025 Wildfire Mitigation Plan following Energy Safety's approval of Bear Valley's WMP on 11/6/23.		Bear Valley Electric Service, Inc.
13374	11/13/2023	**PG&E's 2023 WMP Draft Decision with cover letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55967&shareable=true)** Energy Safety's Draft Decision on PG&E's 2023-2025 Base WMP Electrical Infrastructure 195 page(s)		Office of Energy Infrastructure Safety
13372	11/9/2023	**PGE_WMP DR-Summary_20231109.pdf (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55965&shareable=true)**		PG&E
13355	11/2/2023	**Liberty Application_Confidential Treatment of 2023-2025 WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55948&shareable=true)**		Liberty Utilities

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13352	11/6/2023	**Bear Valley 2023-2025 Wildfire Mitigation Plan Decision and Cover Letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55945&shareable=true)** Office of Energy Infrastructure Safety's Decision and Cover Letter approving BVES's 2023-2025 WMP Electrical Infrastructure		Office of Energy Infrastructure Safety
13319	11/2/2023	**2023_11_2_Liberty_Reply Comments_2023-2025 WMP_R2 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55912&shareable=true)**		Liberty Utilities
13298	11/1/2023	**SCE 2023-2025 WMP Change Order (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55891&shareable=true)** Pursuant to the 2023-2025 WMP Process and Evaluation Guidelines, SCE respectfully submits updates to its 2024 WMP program targets. SCE does not have any changes to 2023 targets or to performance metric forecasts.		Southern California Edison
13295	11/1/2023	**2023-11-01_SDGE_2023_Change Order Report_R0_Attachment A (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55888&shareable=true)**		San Diego Gas & Electric
13294	11/1/2023	**2023-11-01_SDGE_2023_Change Order Report_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55887&shareable=true)** Energy Safety issued a final decision approving SDG&E's 2023-2025 Base WMP on October 13, 2023. SDG&E provides the following updates that meet the change order requirements.		San Diego Gas & Electric
13290	10/30/2023	**Draft 2025 WMP Update Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55883&shareable=true)** Draft 2025 Wildfire Mitigation Plan Update Guidelines. A virtual public workshop will be held on November 15, 2023. Comments on the draft will be accepted through December 6, 2023.		Office of Energy Infrastructure Safety
13280	10/27/2023	**Public Advocates Office Comments on PacifiCorp Revision Notice Response (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55873&shareable=true)**		Public Utilities Commission
13279	10/27/2023	**GPI Comments on PacifiCorp Revision Notice Response (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55872&shareable=true)**		Green Power Institute
13273	10/26/2023	**2023-10-26_SCE_2023_WMP_R1 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55866&shareable=true)** Pursuant to Section 4.3 of the 2023-2025 WMP Process and Evaluation Guidelines, SCE is submitting an updated version of its 2023-2025 Wildfire Mitigation Plan. This version reflects errata and corrections.		Southern California Edison
13267	10/23/2023	**SDGE_Application_for_Confidential_Treatment_of_WMP_Errata (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55860&shareable=true)**		San Diego Gas & Electric
13266	10/25/2023	**2023-2025 SDGE WMP R2 with Attachments_Errata_10-23-23 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55859&shareable=true)**		San Diego Gas & Electric
13265	10/23/2023	**SDGE_2023-2025_WMP_R2_Cover Letter and Non-Substantive_Errata_10-23-23 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55858&shareable=true)** In accordance with Energy Safety Process Guidelines, SDG&E hereby submits a final version of its 2023-2025 WMP that includes all previously submitted errata.		San Diego Gas & Electric
13264	10/24/2023	**SCE 2023-2025 WMP Decision and Cover Letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55857&shareable=true)** Office of Energy Infrastructure Safety's Decision approving Southern California Edison Company's 2023-2025 Wildfire Mitigation Plan.		Office of Energy Safety Infrastructure

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13263	10/23/2023	**Public Advocates Office Comments to Liberty Revision Notice Response (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55856&shareable=true)** The Public Advocates Office submits comments on the revised 2023-2025 Wildfire Mitigation Plan of Liberty Utilities.		California Public Utilities Commission
13262	10/23/2023	**GPI Comments on Liberty Revision Notice Response (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55855&shareable=true)** Comments of the Green Power Institute on the Liberty 2023 Wildfire Mitigation Plan Final Revision Notice Responses.		Green Power Institute
13259	10/23/2023	**BVES Reply Comments 2023-2025 WMP Draft Decision (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55852&shareable=true)** 1 page(s)		Bear Valley Electric Service, Inc.
13251	10/20/2023	**PG&E's 2023 WMP Supplemental Revision Notice Response to Comments (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55844&shareable=true)**		PG&E
13242	10/18/2023	**2023-10-18_LSPGC_2023-2025 Base WMP R1 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55835&shareable=true)** LSPGC WMP Revision 1		LS Power
13241	10/17/2023	**LSPGC WMP Errata (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55834&shareable=true)** LSPGCA submits updates to section 9.1.2 and 9.2 of our WMP per the substantive errata request received on October 4, 2023.		LS Power
13194	10/13/2023	**Public Advocates Office Opening Comments on PG&E 2023 WMP SRNR (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55787&shareable=true)**		California Public Utilities Commission
13193	10/13/2023	**MGRA Modification of PGE_2305_SRNR_R0_Atch02 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55786&shareable=true)**		Mussey Grade Road Alliance
13192	10/13/2023	**Mussey Grade Road Alliance Comments on 2023-2025 Wildfire Mitigation Plan R3 of PG&E and Associated Files (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55785&shareable=true)**		Mussey Grade Road Alliance
13191	10/13/2023	**Comments Of The Utility Reform Network On PG&E's 2023-2025 WMP Supplemental Response To Revision Notice (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55784&shareable=true)**		The Utility Reform Network
13190	10/13/2023	**GPI Comments on PG&E Supplemental Revision Notice Response (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55783&shareable=true)**		Green Power Institute
13189	10/13/2023	**SDG&E 2023-2025 WMP Decision and Cover Letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55782&shareable=true)** This is Energy Safety's Decision approving the 2023-2025 Wildfire Mitigation Plan (WMP) of San Diego Gas & Electric Company (SDG&E). Electrical Infrastructure		Office of Energy Infrastructure Safety
13188	10/13/2023	**Joint Comments on PG&E WMP R3 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55781&shareable=true)** Electrical Infrastructure 4 page(s)	Caroline Thomas Jacobs, Director	William Abrams, et. al.

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13181	10/12/2023	**PacifiCorp's Revised 2023- 2025 Base WMP – Redline (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55774&shareable=true)**		PacifiCorp
13180	10/12/2023	**PacifiCorp's Revised 2023-2025 Base WMP – Clean (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55773&shareable=true)**		PacifiCorp
13179	10/12/2023	**Revised 2023 WMP Submission Cover Letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55772&shareable=true)**		PacifiCorp
13178	10/12/2023	**Revision Notice Response (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55771&shareable=true)**		PacifiCorp
13175	10/10/2023	**GPI Comments on Draft Decision of BVES WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55768&shareable=true)**		Green Power Institute
13174	10/6/2023	**Liberty Application for Confidential Treatment of 2023-2025 WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55767&shareable=true)**		Liberty Utilities
13173-1	10/6/2023	**2023-10-06_Liberty_Cover Letter_2023_WMP_R2 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55764&shareable=true)**		Liberty Utilities
13173-2	10/6/2023	**2023-10-06_Liberty_2023_WMP_R2 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55765&shareable=true)**		Liberty Utilities
13173-3	10/6/2023	**2023-10-06_Liberty_2023_WMP_R2_Redlined (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55766&shareable=true)**		Liberty Utilities
13172	10/6/2023	**PG&E Supplemental Response to Revision Notice Comment Period Extension (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55763&shareable=true)** Energy Safety extending the opening and reply comment period for PG&E's supplemental response to revision notice. Electrical Infrastructure 1 page(s)		Office of Energy Infrastructure Safety
13169	10/6/2023	**2023 - 2025 BVES WMP Non-Substantive Errata Request (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55760&shareable=true)** Office of Energy Infrastructure Safety Non-Substantive Errata Request for Bear Valley Electric Service Company, Inc.'s 2023-2025 Wildfire Mitigation Plan		Office of Energy Infrastructure Safety
13161	10/5/2023	**Request for Extension to Respond to PG&E 2023-2025 WMP Supplemental Response to the Revision Notice (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55752&shareable=true)**		The Utility Reform Network
13160	10/4/2023	**2023 WMP LS Power Substantive Errata Request (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55751&shareable=true)** Energy Safety requests that LS Power address substantive errata Electrical Infrastructure 1 page(s)	LS Power	Office of Energy Infrastructure Safety
13158	9/29/2023	**2023-09-29 SCE Reply Comments 2023 2025WMP Draft Decision (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55749&shareable=true)**		Southern California Edison
13157	9/29/2023	**SDGE_Reply Comments_on_Draft_Decision_on_SDGE_2023-2025_WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55748&shareable=true)**		San Diego Gas & Electric

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13154	9/29/2023	**Reply Comments Of The Utility Reform Network On The Draft Decision On Southern California Edison Company's 2023-2025 WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55745&shareable=true)**		The Utility Reform Network
13153	9/29/2023	**Reply Comments Of The Utility Reform Network On The Draft Decision On San Diego Gas And Electric Company's 2023-2025 WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55744&shareable=true)**		The Utility Reform Network
13124	9/29/2023	**MGRA Reply Comments on SCE and SDG&E Draft Decisions (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55715&shareable=true)**		Mussey Grade Road Alliance
13067	9/28/2023	**Energy Safety Non-Substantive Errata Request for SCE 2023-2025 WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55658&shareable=true)** Electrical Infrastructure		Office of Energy Infrastructure Safety
13054	9/27/2023	**PG&E's 2023-2025 Wildfire Mitigation Plan R3 - Redline (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55645&shareable=true)**		PG&E
13053	9/27/2023	**PG&E's 2023-2025 Wildfire Mitigation Plan R3 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55644&shareable=true)**		PG&E
13052	9/27/2023	**2023-09-27_PGE_23-05_SRNR_R0_Atch03_Redacted.xlsx (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55643&shareable=true)**		PG&E
13051	9/27/2023	**2023-09-27_PGE_23-05_SRNR_R0_Atch02.xlsx (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55642&shareable=true)**		PG&E
13050	9/27/2023	**2023-09-27_PGE_23-05_SRNR_R0_Atch01_Redacted.xlsx (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55641&shareable=true)**		PG&E
13049	9/27/2023	**2023-09-27_PGE_23_SRNR_R1_Tables 1-47 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55640&shareable=true)**		PG&E
13048	9/27/2023	**PG&E's 2023-2025 Wildfire Mitigation Plan Supplemental Response to Revision Notice - Redline (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55639&shareable=true)**		PG&E
13047	9/27/2023	**PG&E's 2023-2025 Wildfire Mitigation Plan Supplemental Response to Revision Notice (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55638&shareable=true)**		PG&E
13046	9/27/2023	**Confidentiality Declaration for PG&E's WMP R3 and SRNR Attachments (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55637&shareable=true)** Confidentiality Declaration for 2023-09-27_PGE_23-05_SRNR_R0_Atch01_CONF.xlsx and 2023-09-27_PGE_23-05_SRNR_R0_Atch03_CONF.xlsx.		PG&E
13045	9/27/2023	**Confidentiality Declaration for PG&E's Wildfire Mitigation Plan Revision 3 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55636&shareable=true)** Confidentiality Declaration for 2023-09-27_PGE_23_WMP_R3_CONF.pdf and 2023-09-27_PGE_23_WMP_R3_Redline_CONF.pdf.		PG&E
13037	9/21/2023	**2023 WMP Bear Valley Electric Service Draft Decision with cover letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55628&shareable=true)** Electrical Infrastructure		Office of Energy Infrastructure Safety

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13025	9/19/2023	**Public Advocates Office Comments on Draft Decision SCE 2023-2025 WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55616&shareable=true)**		California Public Utilities Commission
13024	9/19/2023	**Public Advocates Office Comments on Draft Decision SDGE 2023-2025 WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55615&shareable=true)**		California Public Utilities Commission
13023	9/19/2023	**GPI Comments on Decision on SCE and SDG&E 2023-2025 WMPs (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55614&shareable=true)**		Green Power Institute
13022	9/19/2023	**SCE_Comments_on_OEIS_Draft_Decision_on_SCE_2023_2025WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55613&shareable=true)**		Southern California Edison
13021	9/19/2023	**SDGE_Comments_on_OEIS_Draft_Decision_on_SDGE_2023-2025_WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55612&shareable=true)**		San Diego Gas & Electric
13020	9/19/2023	**Opening Comments Of The Utility Reform Network On The Draft Decision On SCE's 2023-2025 WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55611&shareable=true)**		The Utility Reform Network
13019	9/19/2023	**Opening Comments Of The Utility Reform Network On The Draft Decision On SDG&E's 2023-2025 WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55610&shareable=true)**		The Utility Reform Network
13018	9/19/2023	**MGRA APPENDIX A - WMP 2023-2025 - TAIL RISK WHITEPAPER (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55609&shareable=true)**		Mussey Grade Road Alliance
13017	9/19/2023	**MUSSEY GRADE ROAD ALLIANCE COMMENTS ON OEIS DRAFT DECISIONS ON SCE AND SDG&E 2023-2025 WMPS (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55608&shareable=true)**		Mussey Grade Road Alliance
13008	9/13/2023	**Corrected Energy Safety Response to PG&E's Request for Supplemental Response to Revision Notice (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55599&shareable=true)** Correction to decision dates published in September 12, 2023, Energy Safety Response letter. Corrections are shown in redline.		Office of Energy Infrastructure Safety
13007	9/12/2023	**Energy Safety Response to PG&E's Request for Supplemental Response to Revision Notice (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55598&shareable=true)** Response to PG&E's September 11, 2023, request to submit a supplemental response to Energy Safety's Revision Notice. The request is approved. PG&E's supplemental response is due September 27, 2023. Stakeholders may submit comments on PG&E's supplemental response.		Office of Energy Infrastructure Safety
12999	9/11/2023	**Pacific Gas and Electric Company's Request to Supplement its 2023-2025 Wildfire Mitigation Plan Submission (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55590&shareable=true)**		PG&E
12998	9/11/2023	**2023 PacifiCorp Erratum (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55589&shareable=true)** Letter indicating an erratum that PacifiCorp must correct in its 2023-2025 WMP. Electrical Infrastructure		Office of Energy Infrastructure Safety

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12997	9/11/2023	**2023 PacifiCorp Revision Notice (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55588&shareable=true)** Revision Notice for PacifiCorp's 2023-2025 Wildfire Mitigation Plan. Response is due October 11, 2023. Opening comments on PacifiCorp's Revision Notice Response due October 26, 2023, and reply comments due November 6, 2023. Electrical Infrastructure		Office of Energy Infrastructure Safety
12981	9/6/2023	**2023 Liberty Revision Notice (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55572&shareable=true)** Revision Notice for Liberty Utilities' 2023-2025 Wildfire Mitigation Plan. Response is due October 6, 2023.		Office of Energy Infrastructure Safety
12976	9/1/2023	**2023-09-01_PGE_2023_RNRReplyComments_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55567&shareable=true)**		PG&E
12965	8/30/2023	**2023 SCE Draft Decision with cover letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55556&shareable=true)** This is Energy Safety's Draft Decision on SCE's 2023-2025 WMP, submitted for public comment with opening comments due September 19, 2023, and reply comments due September 29, 2023. Electrical Infrastructure		Office of Energy Infrastructure Safety
12964	8/30/2023	**2023 SDG&E Draft Decision with cover letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=55555&shareable=true)** This is Energy Safety's Draft Decision on SDG&E's 2023-2025 WMP, submitted for public comment with opening comments due September 19, 2023, and reply comments due September 29, 2023. Electrical Infrastructure		Office of Energy Infrastructure Safety
12942	8/22/2023	**2023-08-22_BVES_WMP_Substantive Erratum.pdf (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54544&shareable=true)**		Bear Valley Electric Service, Inc.
12941	8/22/2023	**Bear Valley Electric Service 2023-2025 Wildfire Mitigation Plan 2023 Revision 1 Redlined (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54543&shareable=true)**		Bear Valley Electric Service, Inc.
12940	8/22/2023	**Bear Valley Electric Service 2023-2025 Wildfire Mitigation Plan 2023 Revision 1 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54542&shareable=true)**		Bear Valley Electric Service, Inc.
12939	8/22/2023	**BVES Response to the Office of Energy Infrastructure Safety Issuance of Revision Notice for Bear Valley Electric Service Company (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54541&shareable=true)**		Bear Valley Electric Service, Inc.
12938	8/20/2023	**2023_08_20_So_OpeningComments_PGE_2023_RNR_R0 Attachment (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54540&shareable=true)**		Brenda So
12937	8/20/2023	**2023_08_20_So_OpeningComments_PGE_2023_RNR_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54539&shareable=true)**		Brenda So
12936	8/19/2023	**2023_08_19_Curran Mechem Family_OpeningComments_PGE_2023_RNR_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54538&shareable=true)**		Curran Mechem Family

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12935	8/20/2023	**2023_08_20_Klinedinst_OpeningComments_PGE_2023_RNR_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54537&shareable=true)** Letter Responding to PG&E Final Revision Electrical Infrastructure 2 page(s)	Melissa Semcer Deputy Director	Charles Klinedinst
12934	8/21/2023	**2023_08_21_Tonus_OpeningComments_PGE_2023_RNR_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54536&shareable=true)**		Susan Tonus
12933	8/21/2023	**2023_08_21_Harman_OpeningComments_PGE_2023_RNR_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54535&shareable=true)** Document refutes PG&E's latest plan and calls for action from OEIS Electrical Infrastructure 2 page(s)	OEIS	Douglas Harman
12932	8/22/2023	**2023_08_22_Abrams_OpeningComments_PGE_2023_RNR_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54534&shareable=true)** Electrical Infrastructure 6 page(s)		William Abrams
12931	8/22/2023	**2023_08_22_Anonymous_OpeningComments_PGE_2023_RNR_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54533&shareable=true)**		Residence in Montclair
12930	8/22/2023	**2023_08_22_Collins_OpeningComments_PGE_2023_RNR_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54532&shareable=true)** Public Comment Electrical Infrastructure 3 page(s)	Office of Energy Infrastructure Safety	Kevin Collins
12929	8/22/2023	**2023_08_22_Holmes_OpeningComments_PGE_2023_RNR_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54531&shareable=true)** A comment on your proceeding		Joseph Holmes
12928	8/22/2023	**2023_08_22_Nichols_OpeningComments_PGE_2023_RNR_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54530&shareable=true)**		Elizabeth Nichols
12927	8/22/2023	**2023_08_22_GPI_OpeningComments_PGE_2023_RNR_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54529&shareable=true)**		Green Power Institute
12926	8/22/2023	**2023_08_22_TURN_OpeningComments_PGE_2023_RNR_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54528&shareable=true)**		The Utility Reform Network
12925	8/22/2023	**2023_08_22_Joint CCA_OpeningComments_PGE_2023_RNR_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54527&shareable=true)** OPENING COMMENTS OF MARIN CLEAN ENERGY, SONOMA CLEAN POWER AUTHORITY, PIONEER COMMINITY ENERGY, AND EAST BAY COMMUNITY ENERGY ON PG&E'S 2023 WILDFIRE MITIGATION PLAN REVISION NOTICE RESPONSE Electrical Infrastructure		Law Office of David Peffer
12924	8/22/2023	**2023_08_22_CalAdvocates_OpeningComments_PGE_2023_RNR_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54526&shareable=true)**		California Public Utilities Commission
12922	8/22/2023	**2023_08_22_MGRA_OpeningComments_PGE_2023_RNR_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54524&shareable=true)**		Mussey Grade Road Alliance

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12921	8/22/2023	**2023_08_22_RCRC_OpeningComments_PGE_2023_RNR_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54523&shareable=true)** Comments on PG&E's Revised 2023-2025 Wildfire Mitigation Plan submitted on August 7, 2023. 5 page(s)	Caroline Thomas Jacobs	Rural County Representatives of California
12918	8/18/2023	**2023_08_18_CalAdvocates Comments_2025WMPGuidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54520&shareable=true)**		California Public Utilities Commission
12916	8/18/2023	**2023_08_18_Joint IOU Comments_2025WMPGuidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54518&shareable=true)**		Southern California Edison
12915	8/18/2023	**2023_08_18_GPI_Comments_2025WMPGuidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54517&shareable=true)**		Green Power Institute
12912	8/17/2023	**2023_08_17_Falk_OpeningComments_PGE_2023_RNR_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54514&shareable=true)**		Allison and Ryan Falk
12906	8/17/2023	**2023_08_17_Cohen_OpeningComments_PGE_2023_RNR_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54508&shareable=true)** Request for undergrounding Oakland Hills Electrical Infrastructure 1 page(s)	Office of Energy Infrastructure Safety	Andrew Cohen
12905	8/16/2023	**2023_08_16_Bereny_OpeningComments_PGE_2023_RNR_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54507&shareable=true)**		Amanda Bereny
12902	8/14/2023	**2023-08-14_SCE_2023_WMP_Errata (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54504&shareable=true)**		Southern California Edison
12892	8/11/2023	**Revised 2023 PG&E Wildfire Mitigation Plan (WMP) Draft Decision Schedule (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54494&shareable=true)** 1 page(s)		Office of Energy Infrastructure Safety
12878	8/8/2023	**2023 BVES Revision Notice (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54480&shareable=true)** Revision Notice for Bear Valley Electric Service Company's 2023-2025 Wildfire Mitigation Plan. Response Due August 23, 2023 Electrical Infrastructure		Office of Energy Infrastructure Safety
12877	8/8/2023	**BVES Erratum Letter August 2023 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54479&shareable=true)** Letter indicating an erratum that BVES must correct in its 2023-2025 WMP Electrical Infrastructure		Office of Energy Infrastructure Safety
12867	8/7/2023	**2023-08-07_PGE_23-07_RNR_R0_Atch01 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54469&shareable=true)**		PG&E
12866	8/7/2023	**2023-08-07_PGE_23-05_RNR_R0_Atch01 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54468&shareable=true)**		PG&E
12865	8/7/2023	**2023-08-07_PGE_23-04_RNR_R0_Atch01 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54467&shareable=true)**		PG&E

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12864	8/7/2023	**2023-08-07_PGE_2023_RNR_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54466&shareable=true)**		PG&E
12863	8/7/2023	**2023-08-07_PGE_2023_WMP_R2_Redlined (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54465&shareable=true)**		PG&E
12862	8/7/2023	**2023-08-07_PGE_2023_WMP_R2 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54464&shareable=true)**		PG&E
12861	8/7/2023	**DRU11407.002_OEIS Confidentiality Declaration R2 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54463&shareable=true)**		PG&E
12829	7/31/2023	**Climate Change Scoping Meeting Comment Solicitation, Meeting and Recording (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54413&shareable=true)** Meeting slides and recording from July 25, 2023, Climate Change Scoping Meeting. Written comments are due on September 5, 2023.		Office of Energy Infrastructure Safety
12787	7/20/2023	**2025 WMP Update Guidelines Workshop Slides and Recording (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54371&shareable=true)** Recording link and slides from July 19, 2023, workshop on the development of the 2025 Wildfire Mitigation Plan Update Guidelines.		Office of Energy Infrastructure Safety
12786	7/20/2023	**Notice of Scoping Meeting: Climate Change and Fire Risk-Consequence Modeling (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54370&shareable=true)** Updated Event Flyer and Agenda for the Climate Change Scoping Meeting Electrical Infrastructure		Office of Energy Infrastructure Safety
12747	7/13/2023	**Notice of Scoping Meeting: Climate Change and Fire Risk-Consequence Modeling (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54335&shareable=true)** Scoping meeting on Climate Change on July 25, 2023 Electrical Infrastructure		Office of Energy Infrastructure Safety
12726	7/10/2023	**2023_07_10_Liberty_ReplyComments_2023-2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54314&shareable=true)**		Liberty Utilities
12713	7/10/2023	**2023 07-10 BVES ReplyComments 2023-2025WMP R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54301&shareable=true)** 15 page(s)		Bear Valley Electric Service, Inc.
12674	6/29/2023	**2023 06_29 GPI OpeningComments 2023_2025WMP R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54262&shareable=true)** Comments on SMJU WMPs		Green Power Institute
12673	6/29/2023	**2023 06_29 Public Advocates Office OpeningComments Liberty 2023_2025WMP R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54261&shareable=true)**		California Public Utilities Commission
12672	6/29/2023	**2023 06_29 Public Advocates Office OpeningComments BVES 2023_2025WMP R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54260&shareable=true)**		California Public Utilities
12671	6/29/2023	**2023 06_29 Public Advocates Office OpeningComments PacifiCorp 2023_2025WMP R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54259&shareable=true)**		California Public Utilities

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12621	6/28/2023	**2023_06_28_RCRC_OpeningComments_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54209&shareable=true)** Opening Comments to SMJU Wildfire Mitigation Plans 2 page(s)		Rural County Representatives of California
12608	6/23/2023	**Small WMP Workshop Slides (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54196&shareable=true)** PowerPoint slides from the June 16, 2023, Small and Multi-Jurisdiction WMP Public Workshop. Electrical Infrastructure		Office of Energy Infrastructure Safety
12607	6/23/2023	**Small WMP Workshop Recording Notice (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54195&shareable=true)** Notice for the YouTube link for the June 16, 2023, Small and Multi-Jurisdiction WMP Public Workshop. Electrical Infrastructure 1 page(s)		Office of Energy Infrastructure Safety
12604	6/22/2023	**2023_06_22_CDFW_OpeningComments_PacifiCorp_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54192&shareable=true)** Electrical Infrastructure		California Department of Fish and Wildlife
12603	6/22/2023	**2023_06_22_CDFW_OpeningComments_Liberty_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54191&shareable=true)** Electrical Infrastructure		California Department of Fish and Wildlife
12602	6/22/2023	**2023_06_22_CDFW_OpeningComments_BVES_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54190&shareable=true)** Electrical Infrastructure		California Department of Fish and Wildlife
12595	6/22/2023	**Revision Notice for PG&E's 2023-2025 WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54183&shareable=true)** Enclosed is a Revision Notice the Office of Energy Infrastructure Safety (Energy Safety) is issuing in conjunction with its review of Pacific Gas and Electric Company's (PG&E) 2023-2025 WMP (Base WMP).		Office of Energy Infrastructure Safety
12586	6/21/2023	**Notice of 2025 WMP Update Guidelines Workshop (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54174&shareable=true)** Notice of a public workshop on the development of the 2025 Wildfire Mitigation Plan Update Guidelines to be held on July 19, 2023. Included in the document are Energy Safety's preliminary proposals.		Office of Energy Infrastructure Safety
12485	6/15/2023	**Risk Modeling Working Group Summary Report, Phase I (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54073&shareable=true)** In October 2021, Energy Safety began hosting a series of RMWG sessions. The sessions were split into two phases. Phase I prioritized information sharing related to wildfire risk modeling. This report summarizes Phase I and establishes a foundation for Phase II work.		Office of Energy Safety Infrastructure
12455	6/9/2023	**Energy Safety Response to PacifiCorp Request for Extension (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54043&shareable=true)** Energy Safety response to PacifiCorp's request to extend Cal Advocates' comment deadline for PacifiCorp's 2023-2025 WMP.		Office of Energy Infrastructure Safety

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12451	6/8/2023	**Regulatory Recommendations Workshop Notice and Agenda (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54039&shareable=true)** Electrical Infrastructure		Office of Energy Infrastructure Safety
12446	6/8/2023	**Revised 2023 Wildfire Mitigation Plan Schedule (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54034&shareable=true)** Energy Safety is hereby extending the 2023 WMP schedule. This includes a delay to the SMJU public workshop, to the publication dates for the Large Investor-Owned Utilities (IOUs) Revision Notices (where necessary) and draft Decisions, and to the publication dates for the SMJU and ITO Revision Notices (where necessary) and draft Decisions. 2 page(s)	Wildfire Mitigation Plan Stakeholders	Office of Energy Infrastructure Safety
12438	6/7/2023	**Bear Valley Electric Service 2023-2025 Wildfire Mitigation Plan (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54026&shareable=true)** with non-substantive errata changes 411 page(s)		Bear Valley Electric Service, Inc.
12437	6/7/2023	**BVES Errata to 2023-2025 Wildfire Mitigation Plan (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54025&shareable=true)** Non-substantive errata 2 page(s)	Caroline Thomas Jacobs Director	Bear Valley Electric Service, Inc.
12436	6/6/2023	**2023_06_06_SDG&E_ReplyComments_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54024&shareable=true)**		San Diego Gas & Electric
12435	6/6/2023	**2023_06_06_SCE_ReplyComments_2023-2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54023&shareable=true)**		Southern California Edison
12433	6/6/2023	**2023 06-06 PG&E ReplyComments 2023-2025WMP R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54021&shareable=true)**		PG&E
12432	6/6/2023	**2023 06-06 RCRC ReplyComments 2023-2025WMP R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54020&shareable=true)** Reply Comments to Large IOUs 3 page(s)		Rural County Representatives of California
12431	6/6/2023	**2023 06-06 Mussey Grade Road Alliance ReplyComments 2023-2025WMP R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54019&shareable=true)** REPLY COMMENTS ON 2023-2025 WILDFIRE MITIGATION PLANS OF PG&E, SCE, AND SDG&E		Mussey Grade Road Alliance
12429	6/5/2023	**PacifiCorp 2023 WMP Comment Extension Request (6-5-23) (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=54017&shareable=true)**		PacifiCorp
12403	6/1/2023	**2023 SMJU ITO WMP Workshop Agenda (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53991&shareable=true)** Description and agenda for Friday, June 16, 2023, workshop Electrical Infrastructure		Office of Energy Infrastructure Safety
12390	5/28/2023	**2023_05_28_Troy_OpeningComments_PGE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53978&shareable=true)**		Montclair Hills, Oakland Resident

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12389	5/27/2023	**2023_05_27_Christenson_OpeningComments_PGE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53977&shareable=true)** Personal experience with 1991 Oakland Hills firestorm Electrical Infrastructure		Montclair Hills, Oakland Resident
12388	5/26/2023	**2023_05_26_Ramachandran_OpeningComments_PGE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53976&shareable=true)** Letter from Councilmember Ramachandran 1 page(s)		Oakland City Council D4
12387	5/26/2023	**2023_05_26_Anonymous_OpeningComments_PGE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53975&shareable=true)**		Montclair Resident
12386	5/26/2023	**2023_05_26_Buckingham_OpeningComments_PGE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53974&shareable=true)** Comment on Risk Factors and Concern of Montclair for improved risk assessment and mitigation. Electrical Infrastructure 3 page(s)	Office of Energy Infrastructure Safety	Montclair Property Owner
12385	5/26/2023	**2023_05_26_Green_Power_Institute_OpeningComments_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53973&shareable=true)** Comments to PG&E, SCE, and SDG&E WMP filings		Green Power Institute
12384	5/26/2023	**2023_05_26_The_Utility_Reform_Network_OpeningComments_SCE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53972&shareable=true)**		The Utility Reform Network
12383	5/26/2023	**2023_05_26_The_Utility_Reform_Network_Appendices_SDGE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53971&shareable=true)**		The Utility Reform Network
12382	5/26/2023	**2023_05_26_The_Utility_Reform_Network_OpeningComments_SDGE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53970&shareable=true)**		The Utility Reform Network
12381	5/26/2023	**2023_05_26_The_Utility_Reform_Network_Appendices_PGE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53969&shareable=true)**		The Utility Reform Network
12380	5/26/2023	**2023_05_26_The_Utility_Reform_Network_OpeningComments_PGE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53968&shareable=true)**		The Utility Reform Network
12379	5/26/2023	**2023_05_26_Joint_CCAs_OpeningComments_PGE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53967&shareable=true)** Opening Comments of Marin Clean Energy, Sonoma Clean Power Authority, Pioneer Community Energy, and East Bay Community Energy on PG&E's 2023 to 2025 Wildfire Mitigation Plan Electrical Infrastructure 36 page(s)	Office of Energy Infrastructure Safety	Law Office of David Peffer
12378	5/26/2023	**2023_05_26_CalAdvocates_OpeningComments_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53966&shareable=true)** Comments to PG&E, SCE, and SDG&E WMP filings		California Public Utilities Commission
12377	5/26/2023	**2023_05_26_So_OpeningComments_PGE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53965&shareable=true)**		Individual
12376	5/26/2023	**2023_05_26_Isola_OpeningComments_PGE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53964&shareable=true)** Comments		Montclair, Oakland resident

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12375	5/26/2023	**2023_05_26_RCRC_OpeningComments_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53963&shareable=true)** Comments to PG&E and SCE WMP filings 8 page(s)		Rural County Representatives of California
12374	5/26/2023	**2023_05_26_City_of_Oakland_OpeningComments_PGE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53962&shareable=true)**		City of Oakland
12369	5/26/2023	**2023_05_26_Mechem_OpeningComments_PGE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53957&shareable=true)** Comments about why Montclair should be in the PGE WMP Electrical Infrastructure 3 page(s)	Energy Safety	Curran Mechem Family
12368	5/26/2023	**2023_05_25_CDFW_OpeningComments_SDGE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53956&shareable=true)** Electrical Infrastructure		California Department of Fish and Wildlife
12367	5/26/2023	**2023_05_25_CDFW_OpeningComments_SCE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53955&shareable=true)** Electrical Infrastructure		California Department of Fish and Wildlife
12366	5/26/2023	**2023_05_25_CDFW_OpeningComments_PGE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53954&shareable=true)** Electrical Infrastructure		California Department of Fish and Wildlife
12365	5/26/2023	**2023_05_26_Joint_Local_Governments_OpeningComments_PGE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53953&shareable=true)**		Downey Brand LLP
12364	5/26/2023	**2023_05_26_City_of_Moorpark_OpeningComments_SCE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53952&shareable=true)**		Downey Brand LLP
12363	5/26/2023	**2023_05_26_MGRA_OpeningComments_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53951&shareable=true)** Mussey Grade Road Alliance Comments on 2023-2025 Wildfire Mitigation Plans of PG&E, SCE, and SDG&E		Mussey Grade Road Alliance
12362	5/25/2023	**2023_05_25_Southard_OpeningComments_PGE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53950&shareable=true)**		Undergrounding Montclair
12341	5/22/2023	**2023_05_22_Allenby_OpeningComments_PGE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53929&shareable=true)**		Montclair, Oakland resident
12340	5/19/2023	**2023_05_19_Barbera_OpeningComments_PGE_2023_2025WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53928&shareable=true)** Electrical Infrastructure		Montclair Hills, Oakland California resident
12336	5/19/2023	**2023-05-19_Liberty_2023_WMP_R1 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53924&shareable=true)**		Liberty Utilities

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12335	5/19/2023	**2023-05-19_Liberty_Cover Letter_2023_WMP_R1** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53923&shareable=true)**		Liberty Utilities
12332	5/19/2023	**Liberty Application for Confidential Treatment of 2023 WMP** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53920&shareable=true)**		Liberty Utilities
12319	5/18/2023	**BVES Wildfire Mitigation Plan Errata 05-18-2023** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53907&shareable=true)** BVES Errata to 2023-2025 Wildfire Mitigation Plan Electrical Infrastructure 2 page(s)	Caroline Thomas Jacobs	Bear Valley Electric Service, Inc.
12303	5/17/2023	**Large IOU WMP Reply Comment Extension** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53893&shareable=true)** Reply Comment Deadline for Large IOU WMP has been extended to Tuesday, June 6, 2023. Electrical Infrastructure		Office of Energy Infrastructure Safety
12290	5/15/2023	**2023-2025-WMPs_SCE_Request to Change Reply Comments Deadline** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53880&shareable=true)**		Southern California Edison
12289	5/12/2023	**Energy Safety Community Vulnerability Scoping Meeting Slide Deck** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53879&shareable=true)** PowerPoint Presentation Scoping Meeting: Community Vulnerability in Wildfire Mitigation Planning May 10, 2023		Office of Energy Infrastructure Safety
12229	5/8/2023	**2023-05-08_PC_2023_WMP_R0.pdf** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53819&shareable=true)**		PacifiCorp
12228	5/8/2023	**PacifiCorp 2023 WMP Submission Cover Letter - May 8 2023.pdf** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53818&shareable=true)**		PacifiCorp
12227	5/8/2023	**2023-05-08 LSPGC 2023-2025 Base WMP R0** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53817&shareable=true)**		LS Power
12226	5/8/2023	**LSPGC 2023-2025 Base WMP Cover Letter** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53816&shareable=true)**		LS Power
12225	5/8/2023	**Trans Bay Cable 2023-2025 Base WMP R0** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53815&shareable=true)**		Trans Bay Cable LLC
12224	5/8/2023	**Trans Bay Cable 2023-2025 Base WMP Cover Letter** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53814&shareable=true)**		Trans Bay Cable LLC
12223	5/8/2023	**Horizon West Transmission 2023-2025 Base WMP R0** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53813&shareable=true)**		Horizon West Transmission LLC
12222	5/8/2023	**Horizon West Transmission 2023-2025 Base WMP Cover Letter** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53812&shareable=true)**		Horizon West Transmission LLC
12221	5/8/2023	**Horizon West Transmission Application for Confidential Treatment** **(https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53811&shareable=true)**		Horizon West Transmission LLC

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12220	5/8/2023	**Bear Valley Electric Service, Inc. 2023-2025 WMP Appendices (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53810&shareable=true)**		Bear Valley Electric Service, Inc.
12219	5/8/2023	**Bear Valley Electric Service, Inc. 2023-2025 Wildfire Mitigation Plan (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53809&shareable=true)**		Bear Valley Electric Service, Inc.
12218	5/8/2023	**Liberty Application for Confidential Treatment of WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53808&shareable=true)**		Liberty Utilities
12217	5/5/2023	**2023-05-05_Liberty_2023_WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53807&shareable=true)**		Liberty Utilities
12216	5/5/2023	**Liberty_Cover Letter_2023 WMP Update (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53806&shareable=true)**		Liberty Utilities
12215	5/8/2023	**Trans Bay Cable Application for Confidential Treatment (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53805&shareable=true)**		Trans Bay Cable LLC
12191	5/3/2023	**Large IOU WMP Workshop Slides and Recording (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53781&shareable=true)** Recording link and slides from the April 27 and 28, 2023, workshop on the Wildfire Mitigation Plans of PG&E, SCE, and SDG&E.		Office of Energy Infrastructure Safety
12124	4/26/2023	**SDG&E 2023-2025 Wildfire Mitigation Plan R1 Non-Substantive Errata (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53714&shareable=true)**		San Diego Gas & Electric
12123	4/26/2023	**SDG&E Application for Confidential Treatment of WMP Errata (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53713&shareable=true)**		San Diego Gas & Electric
12122	4/26/2023	**SCE Non-Substantive Errata for the 2023-2025 WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53712&shareable=true)**		Southern California Edison
12121	4/26/2023	**PG&E's 2023-2025 Wildfire Mitigation Plan Non-Substantive Errata (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53711&shareable=true)**		PG&E
12120	4/26/2023	**2023-04-06_PGE_2023_WMP_R2_Section 6.4.2_Atch01 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53710&shareable=true)**		PG&E
12119	4/26/2023	**Revised 2023 Maturity Survey Adoption Meeting Materials (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53709&shareable=true)** Recording link and slides from the April 24, 2023, public meeting where the Revised 2023 Electrical Corporation Wildfire Mitigation Maturity Survey was adopted.		Office of Energy Infrastructure Safety
12118	4/26/2023	**Revised 2023 Maturity Survey (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53708&shareable=true)** Revised 2023 Electrical Corporation Wildfire Mitigation Maturity Survey adopted at the April 24, 2023, public meeting.		Office of Energy Infrastructure Safety
12080	4/21/2023	**Revised 2023 WMP Workshop Agenda (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53670&shareable=true)** Meeting details and agenda for WMP Workshop April 27-28, 2023. Meeting links have been revised.		Office of Energy Infrastructure Safety

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12066	4/19/2023	**Proposed Final Revisions to 2023 Maturity Survey (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53656&shareable=true)** Proposed final revisions to the 2023 Electrical Corporation Wildfire Mitigation Maturity Survey to be considered for adoption at the April 24, 2023, adoption meeting.		Office of Energy Infrastructure Safety
12043	4/14/2023	**Adoption Meeting Notice for Revised 2023 Maturity Survey. (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53633&shareable=true)** Energy Safety will hold a public meeting on April 24, 2023, to consider the adoption of the Revised 2023 Electrical Corporation Wildfire Mitigation Maturity Survey.		Office of Energy Infrastructure Safety
12038	4/13/2023	**SCOPING MEETING Community Vulnerability in Wildfire Mitigation Planning (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53628&shareable=true)** Scoping Meeting Flyer & Agenda @caenergysafety SCOPING MEETING Community Vulnerability in Wildfire Mitigation Planning An Opportunity to Share Your Expertise FEATURED SPEAKERS: WEDNESDAY May 10, 2023 10 a.m. - 12:30 p.m.		Office of Energy Infrastructure Safety
12033	4/7/2023	**Workshop Notice - Large IOU WMPs (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53623&shareable=true)** Notice of April 27 - 28, 2023, public workshop on 2023-2025 Wildfire Mitigation Plan submissions of PG&E, SCE, and SDG&E.		Office of Energy Infrastructure Safety
12031	4/6/2023	**PG&E's 2023-2025 WMP Errata Confidentiality Declaration (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53621&shareable=true)**		PG&E
12026	4/6/2023	**PG&E's 2023-2025 Wildfire Mitigation Plan Errata (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53616&shareable=true)**		PG&E
12025	4/6/2023	**2023-04-06_PGE_2023_WMP_R1_Section 6.4.2_Atch01 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53615&shareable=true)** Errata attachment to 2023-2025 WMP		PG&E
12024	4/6/2023	**PG&E's 2023-2025 Wildfire Mitigation Plan Errata Cover Letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53614&shareable=true)**		PG&E
12023	4/6/2023	**2023-04-06_SCE_2023_WMP_Errata (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53613&shareable=true)**		Southern California Edison
12019	4/5/2023	**SH-12 PSPS MICROGRID SITE REVIEW Redacted (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53609&shareable=true)**		Southern California Edison
12018	4/5/2023	**OEIS Declaration of Confidentiality 2023 WMP April 4 2023 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53608&shareable=true)**		Southern California Edison
12010	4/3/2023	**SDG&E Comments_Substantive Revision to 2023 Maturity Survey (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53600&shareable=true)**		San Diego Gas & Electric
12009	4/3/2023	**SCE Comments re OEIS Notice Substantive Rev Maturity Survey (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53599&shareable=true)**		Southern California Edison
12008	4/3/2023	**PG&E's Comments on Substantive Revision to 2023 Maturity Survey (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53598&shareable=true)**		PG&E

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11994	3/30/2023	**PG&E's 2023 WMP Discovery Tracker – March 30, 2023 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53584&shareable=true)**		PG&E
11987	3/28/2023	**Limitations of E-Filing System with PG&E's 2023-2025 WMP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53577&shareable=true)**		PG&E
11986	3/28/2023	**2023-03-27_SDGE_2023_WMP_Cover_Letter_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53576&shareable=true)**		San Diego Gas & Electric
11965-1	3/27/2023	**PG&E's 2023-2025 Wildfire Mitigation Plan (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53547&shareable=true)**		PG&E
11965-2	3/27/2023	**2023-03-27_PGE_2023_WMP_R0_Appendix D ACI PG&E-22-11_Atch01 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53548&shareable=true)**		PG&E
11965-3	3/27/2023	**2023-03-27_PGE_2023_WMP_R0_Appendix D ACI PG&E-22-11_Atch02 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53549&shareable=true)**		PG&E
11965-4	3/27/2023	**2023-03-27_PGE_2023_WMP_R0_Section 6.4.2_Atch01 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53550&shareable=true)**		PG&E
11965-5	3/27/2023	**2023-03-27_PGE_2023_WMP_R0_Section 10_Atch01 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53551&shareable=true)**		PG&E
11965-6	3/27/2023	**2023-03-27_PGE_2023_WMP_R0_Section 10_Atch02_Redacted (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53552&shareable=true)**		PG&E
11965-7	3/27/2023	**2023-03-27_PGE_2023_WMP_R0_Section 6.6.1_Atch01 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53553&shareable=true)**		PG&E
11965-8	3/27/2023	**2023-03-27_PGE_2023_WMP_R0_Section 8.2.3_Atch01_Redacted (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53554&shareable=true)**		PG&E
11965-9	3/27/2023	**2023-03-27_PGE_2023_WMP_R0_Section 8.3.3_Atch01 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53555&shareable=true)**		PG&E
11964-1	3/27/2023	**CAISO Standards for Reliability Safety Emergencies Disasters (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53540&shareable=true)**		Southern California Edison
11964-2	3/27/2023	**GO 128 Rules - Const UG Electric Supply Comm Systems 01.06 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53541&shareable=true)**		Southern California Edison
11964-3	3/27/2023	**GO 166 Stdrs Op Reliability Safety During ER and Disasters (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53542&shareable=true)**		Southern California Edison
11964-4	3/27/2023	**Joint IOU CC Testing Cumulative Report 12-22-22_Redacted (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53543&shareable=true)**		Southern California Edison
11964-5	3/27/2023	**Quant and Qual Factors for PSPS Decision Making (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53544&shareable=true)**		Southern California Edison

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11964-6	3/27/2023	**REFCL Projects at Southern California Edison (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53545&shareable=true)**		Southern California Edison
11964-7	3/27/2023	**SCE Fast Curve Protection Philosophy Review_Redacted (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53546&shareable=true)**		Southern California Edison
11963	3/27/2023	**PG&E's 2023-2025 Wildfire Mitigation Plan Confidentiality Declaration (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53539&shareable=true)**		PG&E
11962-1	3/27/2023	**PSPS Decision-making Technical Paper (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53515&shareable=true)**		Southern California Edison
11962-2	3/27/2023	**PSPS OIR Phase 1 D.19-05-042 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53516&shareable=true)**		Southern California Edison
11962-3	3/27/2023	**PSPS OIR Phase 2 D.20-05-051 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53517&shareable=true)**		Southern California Edison
11962-4	3/27/2023	**PSPS OIR Phase 3 D.21-06-034 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53518&shareable=true)**		Southern California Edison
11962-5	3/27/2023	**PSPS Order Instituting Investigation (OII) (D.21-06-014) (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53519&shareable=true)**		Southern California Edison
11962-6	3/27/2023	**Public Safety Power Shutoff_ Decision-Making (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53520&shareable=true)**		Southern California Edison
11962-7	3/27/2023	**REFCL_2014 Analysis of resonant earthed networks (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53521&shareable=true)**		Southern California Edison
11962-8	3/27/2023	**SB901 Sep2017 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53522&shareable=true)**		Southern California Edison
11962-9	3/27/2023	**SCE VM-3_Program Guide (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53523&shareable=true)**		Southern California Edison
11962-10	3/27/2023	**SH-12 PSPS MICROGRID SITE REVIEW_Redacted (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53524&shareable=true)**		Southern California Edison
11962-11	3/27/2023	**Southern California Edison All-Hazards Plan_Redacted (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53525&shareable=true)**		Southern California Edison

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11962-12	3/27/2023	**Transmission Detail QC Inspection Process_Redacted (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53526&shareable=true)**		Southern California Edison
11962-13	3/27/2023	**Transmission Inspection and Maintenance Program (TIMP) (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53527&shareable=true)**		Southern California Edison
11962-14	3/27/2023	**UVM-01 (Utility Vegetation Management Program Manual) (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53528&shareable=true)**		Southern California Edison
11962-15	3/27/2023	**UVM-02 (Transmission Vegetation Management Program (TVMP)) (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53529&shareable=true)**		Southern California Edison
11962-16	3/27/2023	**UVM-03 (Distribution Vegetation Management Program (DVMP)) (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53530&shareable=true)**		Southern California Edison
11962-17	3/27/2023	**UVM-04 (Hazard Tree Management Program (HTMP)) (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53531&shareable=true)**		Southern California Edison
11962-18	3/27/2023	**UVM-05 (Integrated Vegetation Management Plan (IVMP)) (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53532&shareable=true)**		Southern California Edison
11962-19	3/27/2023	**UVM-06 (LiDAR Schedule Reference Guide) (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53533&shareable=true)**		Southern California Edison
11962-20	3/27/2023	**UVM-07 (Post Work Verification and UVM Program Oversight) (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53534&shareable=true)**		Southern California Edison
11962-21	3/27/2023	**UVM-08 (Managing Vegetation Threats) (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53535&shareable=true)**		Southern California Edison
11962-22	3/27/2023	**UVM-18 (Assessment and Removal of Dead and Dying Trees) (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53536&shareable=true)**		Southern California Edison
11962-23	3/27/2023	**Vegetation Management - Operations IMT Storm Manual (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53537&shareable=true)**		Southern California Edison
11962-24	3/27/2023	**WRF User Guide (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53538&shareable=true)**		Southern California Edison
11961	3/27/2023	**OEIS_Confidentiality_Application_2023_WMP executed (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53514&shareable=true)**		Southern California Edison

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11960	3/27/2023	**OEIS_Confidentiality_Application_2023_WMP executed (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53513&shareable=true)**		Southern California Edison
11959	3/27/2023	**OEIS_Confidentiality_Application_2023_WMP executed (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53512&shareable=true)**		Southern California Edison
11958	3/27/2023	**OEIS_Confidentiality_Application_2023_WMP executed (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53511&shareable=true)**		Southern California Edison
11957	3/27/2023	**OEIS_Confidentiality_Application_2023_WMP executed (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53510&shareable=true)**		Southern California Edison
11956	3/27/2023	**OEIS_Confidentiality_Application_2023_WMP executed (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53509&shareable=true)**		Southern California Edison
11955	3/27/2023	**OEIS_Confidentiality_Application_2023_WMP executed (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53508&shareable=true)**		Southern California Edison
11954	3/27/2023	**OEIS_Confidentiality_Application_2023_WMP executed (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53507&shareable=true)**		Southern California Edison
11953	3/27/2023	**OEIS_Confidentiality_Application_2023_WMP executed (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53506&shareable=true)**		Southern California Edison
11952-1	3/27/2023	**2023-03-27_SCE_2023_WMP_Cover_Letter_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53491&shareable=true)**		Southern California Edison
11952-2	3/27/2023	**2023-03-27_SCE_2023_WMP_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53492&shareable=true)**		Southern California Edison
11952-3	3/27/2023	**AFN Plan (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53493&shareable=true)**		Southern California Edison
11952-4	3/27/2023	**2023 WMP SCE Table 8-59 List of Community Partners (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53494&shareable=true)**		Southern California Edison
11952-5	3/27/2023	**2023 WMP SCE Sections 8-4 and 8-5 Large Tables – REDACTED (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53495&shareable=true)**		Southern California Edison
11952-6	3/27/2023	**Covered Conductor Compendium (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53496&shareable=true)**		Southern California Edison

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11952-7	3/27/2023	**Distribution Inspection and Maintenance Program (DIMP) (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53497&shareable=true)**		Southern California Edison
11952-8	3/27/2023	**Energy Release Component (ERC) Fact Sheet (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53498&shareable=true)**		Southern California Edison
11952-9	3/27/2023	**ESRB-8 Resolution Extending De-Energization Reasonableness, Notification, Mitigation, and Reporting Requirements in Decision 12- (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53499&shareable=true)**		Southern California Edison
11952-10	3/27/2023	**Generation QC Inspection Process (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53500&shareable=true)**		Southern California Edison
11952-11	3/27/2023	**GO 95 Rules for Electric Overhead Line Construction Jan2020 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53501&shareable=true)**		Southern California Edison
11952-12	3/27/2023	**Maintenance and Inspection Manual - Appendix A (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53502&shareable=true)**		Southern California Edison
11952-13	3/27/2023	**Materials Specification 454 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53503&shareable=true)**		Southern California Edison
11952-14	3/27/2023	**Overhead Detailed QC Inspection Process_Redacted (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53504&shareable=true)**		Southern California Edison
11952-15	3/27/2023	**PGE_ACI_Covered_Conductor_Testing_Redacted (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53505&shareable=true)**		Southern California Edison
11949	3/27/2023	**Application for CONFIDENTIAL Treatment (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53488&shareable=true)**		San Diego Gas & Electric Company
11948	3/27/2023	**2023-2025 SDGE WMP R0 with Attachments (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53487&shareable=true)**		San Diego Gas & Electric Company
11939	3/21/2023	**Revised WMP Schedule for SMJUs and ITOs (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53478&shareable=true)** Revised WMP schedule for Small Multi-Jurisdictional Utilities and Independent Transmission Operators. The SMJUs and ITOs will submit their 2023-2025 WMPs on May 8, 2023.		Office of Energy Infrastructure Safety
11881	3/3/2023	**Substantive Revisions to Maturity Survey for Public Comment (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53417&shareable=true)** Proposed substantive revisions to 2023 Electrical Corporation Wildfire Mitigation Maturity Survey. Comments will be accepted through April 3, 2023.		Office of Energy Infrastructure Safety

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11866	2/24/2023	**Data Request Stakeholder Designation (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53402&shareable=true)** RCRC Data Request Stakeholder Designation for all electrical corporations Electrical Infrastructure 2 page(s)		Rural County Representatives of California
11851-1	2/21/2023	**Second Revised Maturity Model (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53394&shareable=true)**		Office of Energy Infrastructure Safety
11851-2	2/21/2023	**Second Revised Maturity Survey (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53395&shareable=true)**		Office of Energy Infrastructure Safety
11850	2/21/2023	**Second Revised Maturity Model and Survey Letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53393&shareable=true)** Non-substantive edits to the Maturity Model and Maturity Survey. Clean versions of the Maturity Model and Maturity Survey will be filed immediately following the publication of this letter.		Office of Energy Infrastructure Safety
11845	2/16/2023	**Request to become stakeholder (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53388&shareable=true)**		Green Power Institute
11844	2/16/2023	**Request for Data Request Stakeholder Designation (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53387&shareable=true)** Requests Data Request Stakeholder designation for 2023-2025 WMP docket Electrical Infrastructure 2 page(s)	Caroline Thomas Jacobs	The Utility Reform Network
11841	2/10/2023	**Energy Safety Utility Vegetation Management Best Practices Scoping Meeting Slide Deck (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53384&shareable=true)** This slide deck was presented during Energy Safety's scoping meeting on Utility Vegetation Management for Wildfire Safety, February 10, 2023. The slides include the results of the live polls, a link to the recording of the meeting, and a link to the post-meeting survey.		Office of Energy Infrastructure Safety
11811	2/1/2023	**MGRA Request for Stakeholder Designation (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53352&shareable=true)**		Mussey Grade Road Alliance
11809	1/31/2023	**Public Advocates Office Request for Data Request Stakeholder Designation 2023-2025-WMPs (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53350&shareable=true)**		California Public Utilities Commission
11807	1/24/2023	**SCOPING MEETING Utility Vegetation Management Best Practices for Wildfire Safety (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53348&shareable=true)** Energy Safety is hosting an initial scoping meeting for stakeholders, relevant state agencies, and California's electrical corporations to share ideas and discuss best practices for utility vegetation management (UVM) for wildfire safety. This meeting will be on Friday, February 10 from 9am to 12:30pm PST. 2 page(s)		Office of Energy Infrastructure Safety
11806	1/23/2023	**QDR Table 10 Projections Expectations (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53347&shareable=true)** Expectations for Projections in Quarterly Data Report Table 10: Recent use of Public Safety Power Shutoffs (PSPS) and other PSPS metrics		Office of Energy Infrastructure Safety

REF #	Docketed Date	Document Title	To	From
11798	1/10/2023	**QDR Table 2 Projections Expectations (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53339&shareable=true)** Letter of expectations regarding projections of Performance Metrics in Table 2 of the Quarterly Data Report		Office of Energy Infrastructure Safety
11795	1/6/2023	**Revised Final Electrical Corporation Wildfire Mitigation Maturity Survey and Model (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53336&shareable=true)** Final versions of the Electrical Corporation Wildfire Mitigation Maturity Survey and Model including non-substantive edits to correct typos and errors in numbering. Electrical Infrastructure		Office of Energy Infrastructure Safety
11783	12/23/2022	**Letter Soliciting Input in Review of Electrical Infrastructure Safety Requirements (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53324&shareable=true)** Energy Safety letter soliciting public input in its review of electrical infrastructure safety requirements. Energy Safety's review, pursuant to Public Utilites Code section 326(a)(7), will focus on, ". . . safety requirements for electrical transmission and distribution infrastructure and infrastructure and equipment attached to that electrical infrastructure. . ."		Office of Energy Infrastructure Safety
11753	12/8/2022	**Adoption Meeting Slides and Recording (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53294&shareable=true)** Presentation slides and recording link from December 6, 2022, public adoption meeting for 2023-2025 Wildfire Mitigation Plan Guidelines.		Office of Energy Infrastructure Safety
11750	12/7/2022	**2023 WMP Schedule (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53291&shareable=true)** Schedule for 2023 Wildfire Mitigation Plan submission and evaluation		Office of Energy Infrastructure Safety
11749	12/7/2022	**2023-2025 ITO Supplement (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53290&shareable=true)** Final 2023-2025 Independent Transmission Operator Supplement to the Technical Guidelines		Office of Energy Infrastructure Safety
11748	12/7/2022	**2023-2025 Wildfire Mitigation Maturity Model (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53289&shareable=true)** Final 2023-2025 Electrical Corporation Wildfire Mitigation Maturity Model		Office of Energy Infrastructure Safety
11747	12/7/2022	**2023 Wildfire Mitigation Maturity Survey (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53288&shareable=true)** Final 2023 Electrical Corporation Wildfire Mitigation Maturity Survey		Office of Energy Infrastructure Safety
11746	12/7/2022	**2023-2025 WMP Process Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53287&shareable=true)** Final 2023-2025 Wildfire Mitigation Plan Process and Evaluation Guidelines		Office of Energy Infrastructure Safety
11745	12/7/2022	**2023-2025 WMP Technical Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53286&shareable=true)** Final 2023-2025 Wildfire Mitigation Plan Technical Guidelines		Office of Energy Infrastructure Safety
11744	12/7/2022	**Final 2023-2025 WMP Guidelines Cover Letter (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53285&shareable=true)** Cover letter for Final 2023-2025 Wildfire Mitigation Plan Guidelines documents. The final documents were adopted at the December 6, 2022, adoption meeting.		Office of Energy Infrastructure Safety

REF #	Docketed Date	Document Title	To	From
11741	12/5/2022	**Proposed Final 2023-2025 ITO Supplement (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53282&shareable=true)** Proposed Final 2023-2025 Independent Transmission Operator Supplement to the Wildfire Mitigation Plan Technical Guidelines. The proposed final is set to be considered for adoption at the December 6, 2022, adoption meeting.		Office of Energy Infrastructure Safety
11738	12/5/2022	**Proposed Final 2023-2025 WMP Technical Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53279&shareable=true)** Proposed Final 2023-2025 Wildfire Mitigation Plan Technical Guidelines. The proposed final is set to be considered for adoption at the December 6, 2022, adoption meeting.		Office of Energy Infrastructure Safety
11737	12/5/2022	**Proposed Final 2023-2025 WMP Process Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53278&shareable=true)** Proposed Final 2023-2025 Wildfire Mitigation Plan Process and Evaluation Guidelines. The proposed final is set to be considered for adoption at the December 6, 2022, adoption meeting.		Office of Energy Infrastructure Safety
11736	12/5/2022	**Proposed Final 2023 Maturity Survey (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53277&shareable=true)** Proposed Final 2023 Electrical Corporation Wildfire Mitigation Maturity Survey. The proposed final is set to be considered for adoption at the December 6, 2022, adoption meeting.		Office of Energy Infrastructure Safety
11735	12/5/2022	**Proposed Final 2023-2025 Maturity Model (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53276&shareable=true)** Proposed Final 2023-2025 Electrical Corporation Wildfire Mitigation Maturity Model. The proposed final is set to be considered for adoption at the December 6, 2022, adoption meeting.		Office of Energy Infrastructure Safety
11734	12/2/2022	**Letter on 2023 WMP Submission Template (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53275&shareable=true)** Letter providing an update on the 2023 Wildfire Mitigation Plan Submission Template.		Office of Energy Infrastructure Safety
11716	11/23/2022	**Notice of Adoption Meeting for 2023-2025 WMP Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53257&shareable=true)** Public meeting announcement for 2023-2025 Wildfire Mitigation Plan Guidelines Adoption Meeting to take place December 6, 2022.		Office of Energy Infrastructure Safety
11715	11/23/2022	**Energy Safety Response to WSAB Recommendations on WMP Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53256&shareable=true)** Office of Energy Infrastructure Safety's response to Wildfire Safety Advisory Board's April 26, 2022, recommendations on Wildfire Mitigation Plan Guidelines		Office of Energy Infrastructure Safety
11607	10/27/2022	**Pacific Gas and Electric Company's Comments on the Office of Energy Infrastructure Safety's Draft 2023-2025 WMP Schedule (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53148&shareable=true)**		PG&E
11604	10/26/2022	**Nancy B Macy Comments on OEIS Draft 2023-2025 Wildfire Mitigation Plan Guidelines Package 1 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53145&shareable=true)** Comments on OEIS Draft 2023 Wildfire Mitigation Plan Guidelines Electrical Infrastructure 2 page(s)	OEIS	Valley Women's Club Environmental Committee for San Lorenzo Valley
11603	10/26/2022	**GPI Comments on the Draft 2023 WMP Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53144&shareable=true)**		Green Power Institute
11601	10/26/2022	**SDGE Comments to Draft 2023-2025 Wildfire Mitigation Plan Guidelines - Package 1 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53142&shareable=true)**		San Diego Gas & Electric

REF #	Docketed Date	Document Title	To	From
11600	10/26/2022	**SDG&E Comments to Draft 2023-2025 Electrical Corporation Wildfire Mitigation Maturity Survey (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53141&shareable=true)**		San Diego Gas & Electric
11598	10/26/2022	**LS Power Comments on the Draft 2023 WMP Schedule (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53139&shareable=true)**		LS Power
11597	10/26/2022	**SCE Comments on the Draft 2023-2025 Wildfire Mitigation Plan Guidelines - Package 1 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53138&shareable=true)**		Southern California Edison
11596	10/26/2022	**SCE Comments on the Draft 2023-2025 Electrical Corporation Wildfire Mitigation Maturity Survey (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53137&shareable=true)**		Southern California Edison
11595	10/26/2022	**Public Advocates Office Comments on 2023 WMP Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53136&shareable=true)**		California Public Utilities Commission
11594	10/26/2022	**Joint Local Governments' Comments on 2023-2025 WMP Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53135&shareable=true)** Electrical Infrastructure		Downey Brand LLP
11593	10/26/2022	**California Association of Small and Multi-Jurisdictional Utilities ("CASMU") Comments on the Draft 2023-2025 Wildfire Mitigation (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53134&shareable=true)** Electrical Infrastructure 13 page(s)	Office of Energy Infrastructure Safety	Downey Brand LLP
11591	10/26/2022	**Pacific Gas and Electric Company's Comments on the Office of Energy Infrastructure Safety's Draft 2023-2025 WMP Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53132&shareable=true)**		PG&E
11590	10/26/2022	**Pacific Gas & Electric Company's Comments on the Draft 2023-2025 Electrical Corporation Wildfire Mitigation Maturity Survey (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53131&shareable=true)**		PG&E
11588	10/26/2022	**California Association of Small and Multi-Jurisdictional Utilities ("CASMU") Comments on the Draft 2023 WMP Schedule (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53129&shareable=true)** Electrical Infrastructure 4 page(s)	Office of Energy Infrastructure Safety	Downey Brand LLP
11586	10/26/2022	**Comments of Kevin Collins addressing 2023 WMP guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53127&shareable=true)** Letter to OEIS as comment upon the 2023 - 2025 guidelines for wildfire mitigation plans. Electrical Infrastructure 9 page(s)	Office of Energy Infrastructure Safety	Kevin Collins

REF #	Docketed Date	Document Title	To	From
11585	10/26/2022	**MUSSEY GRADE ROAD ALLIANCE COMMENTS ON WILDFIRE MITIGATION PLAN GUIDELINES FOR 2023-2025 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53126&shareable=true)** Electrical Infrastructure		Mussey Grade Road Alliance
11584	10/25/2022	**Robert A. Johnston Comments on the Draft 2023-25 WMP Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53125&shareable=true)** Comments Electrical Infrastructure 4 page(s)	OEIS	UC Davis, retired
11577	10/21/2022	**Draft 2023-2025 WMP Guidelines Workshop Slides and Recording (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53118&shareable=true)** Presentation slides and recording link from October 17, 2022, public workshop.		Office of Energy Infrastructure Safety
11563	10/14/2022	**Draft 2023 WMP Schedule (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53104&shareable=true)** Draft 2023 Wildfire Mitigation Plan Schedule published for public comment. Comments will be accepted through October 26, 2022.		Office of Energy Infrastructure Safety
11556	10/7/2022	**Draft Independent Transmission Operator Supplement to the 2023-2025 Wildfire Mitigation Plan Technical Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53097&shareable=true)** This supplement presents the modified reporting requirements for ITOs, intended to inform the preparation and submission of their 2023–2025 comprehensive WMPs. Electrical Infrastructure		Office of Energy Infrastructure Safety
11544	10/4/2022	**Public Meeting Notice: Workshop on Draft 2023-2025 WMP Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53085&shareable=true)** The Office of Energy Safety will host a public workshop on October 17, 2022, to take public comments on documents related to the Draft 2023-2025 Wildfire Mitigation Plan Guidelines.		Office of Energy Infrastructure Safety
11495	9/21/2022	**2023-2025 Wildfire Mitigation Plans Maturity Survey (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53036&shareable=true)** Maturity Survey 2022 09-21		Office of Energy Infrastructure Safety
11491	9/19/2022	**Draft 2023-2025 Wildfire Mitigation Plan Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=53032&shareable=true)** Draft 2023-2025 Wildfire Mitigation Plan Guidelines package for public review and comment. Public comment will be accepted through October 26,2022. This package includes: 1) Draft 2023-2025 WMP Technical Guidelines (including Maturity Model) and 2) Draft 2023-2025 WMP Process and Evaluation Guidelines		Office of Energy Infrastructure Safety
10879	5/6/2022	**Comments of Kevin Collins addressing 2023 WMP guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=52423&shareable=true)** WMP comment filing Electrical Infrastructure 5 page(s)	Office of Energy Infrastructure Safety	Kevin Collins

REF #	Docketed Date	Document Title	To	From
10872	5/6/2022	**#2023-WMPs Comments--Valley Women's Club (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=52416&shareable=true)** #2023-WMPs Comments--Valley Women's Club Electrical Infrastructure 3 page(s)	Melissa Spencer, Deputy Director Electrical Infrastructure Directorate California Office of Infrastructure Safety	Valley Women's Club
10870	5/6/2022	**Abrams 2023 WMP Proposed Guidelines and Comments (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=52414&shareable=true)**		Self
10868	5/6/2022	**Cal Advocates Comments on 2023 WMP Guidelines (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=52412&shareable=true)**		California Public Utilities Commission
10867	5/6/2022	**2022-05-06_SCE_2022_Comments-Re-Workshop- 2023-WMP-Guideline-Development_R0 (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=52411&shareable=true)**		Southern California Edison
10866-1	5/6/2022	**MUSSEY GRADE ROAD ALLIANCE COMMENTS ON THE 2023 WILDFIRE MITIGATION PLAN GUIDELINES WORKSHOP (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=52407&shareable=true)** Electrical Infrastructure		Mussey Grade Road Alliance
10866-2	5/6/2022	**SDG&E Comments to 2023 WMP Guidelines Workshop (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=52408&shareable=true)** 7 page(s)		San Diego Gas & Electric
10866-3	5/6/2022	**PGE Comments on 2023 WMP Guidelines Workshop (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=52409&shareable=true)** Comments of Pacific Gas and Electric Company on the 2023 Wildfire Mitigation Plan Guidelines Workshop Docket: 2023-WMPs		PG&E
10866-4	5/6/2022	**Comments of the Green Power Institute on the 2023 WMP Guidelines and April 22 Workshop (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=52410&shareable=true)** Electrical Infrastructure 32 page(s)		Green Power Institute
10819	4/26/2022	**2023 WMP Guidelines Workshop Slides and Recording (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=52335&shareable=true)** Presentation slides and recording link from April 22, 2022, public workshop.		Office of Energy Infrastructure Safety
10795	4/19/2022	**2023 WMP Guidelines Pre-Workshop Material (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=52311&shareable=true)** Pre-workshop material for April 22, 2022, public workshop. Overview of preliminary proposals for 2023 Wildfire Mitigation Plan Guidelines.		Office of Energy Infrastructure Safety

REF #	Docketed Date	Document Title	To	From
10755	4/8/2022	**2023 WMP Guidelines Workshop Announcement (https://efiling.energysafety.ca.gov:443/eFiling/Getfile.aspx?fileid=52256&shareable=true)** Public Meeting Announcement - April 22, 2022: Workshop on 2023 Wildfire Mitigation Plan Guideline Development. Written comments accepted through May 6, 2022.		Office of Energy Infrastructure Safety

ATTACHMENT 28

Liberty's Response to Data Request CalAdvocates-LIB-A2506017-001, Question 11, September 10, 2025, Excel spreadsheet file "*CalAdvocates-LIB-A2506017-001-Q11.xlsx*".

Incident ID	Date of Wire Down Event a)	Time of Wire Down Event b)	Geolocation of Wire down c) - d)	Number of nearest pole e)	Cause f)	Open asset corrective notifications g)	Linked to asset corrective notification h)	ID number Protective device i)	Geolocation of Protective device j) - k)	Protective device tripped l)
13401	2/9/2017	2:56:35 PM	923574.293, 14015379.603	293589	<Unknown>	N/A	N/A	480	913257.5317722730,14058990.2944441000	Y
7710	12/24/2016	7:55:49 AM	930563.5316527610,13996420.4361529000	650464	Tree Fell	N/A	N/A	6794	930577.247, 13996448.127	Y
12711	1/23/2017	4:59:00 PM	934977.1199999980,14030308.2900000000	295182	<Unknown>	N/A	N/A	1260	929957.7827337430,14016394.4397449000	Y

ATTACHMENT 29

Liberty's Response to Data Request CalAdvocates-LIB-A2506017-001, Question 12, September 10, 2025, Excel spreadsheet file "*CalAdvocates-LIB-A2506017-001-Q12.xlsx*".

Incident ID	Circuit Segment ID a)	Date of Outage b)	Start time of Outage c)	Cause of Outage d)	Equipment failure e)	Outage duration in minutes f)	Protective device type g)	ID number Protective device h)	Geolocation of Protective device i) - j)
101	N/A	1/29/2016	1:54:49 PM	Non-Company Activities		3h 20m	Fuse Bank	2134	920981.7054217280, 14030900.3681720000
6264	N/A	4/14/2016	4:36:21 AM	<Unknown>		1h 43m	Fuse Bank	2088	934640.7419948470, 13994244.9266298000
6692	N/A	7/29/2016	4:35:39 PM	Non-Company Activities		4h 48m	Dynamic Protective Device Bank	480	913257.5317722730, 14058990.2944441000
6695	N/A	7/30/2016	4:11:52 AM	Non-Company Activities		13m	Dynamic Protective Device Bank	52	917451.5000000000, 14045002.8600000000
7067	N/A	10/14/2016	7:31:23 AM	3rd Party Outage		1h 43m	Dynamic Protective Device Bank	51	926316.6798177180, 14005024.5267405000
7091	N/A	10/14/2016	10:59:38 AM	3rd Party Outage		4h 0m	Dynamic Protective Device Bank	52	917451.5000000000, 14045002.8600000000
7313	N/A	10/29/2016	10:31:55 PM	<Unknown>		6h 6m	Dynamic Protective Device Bank	51	926316.6798177180, 14005024.5267405000
7314	N/A	10/29/2016	10:31:55 PM	<Unknown>		6h 6m	lecalpeco.LEGIS.ServiceLocation	7006, 128918	932872.9585760440, 13992844.8953547000
7350	N/A	11/10/2016	10:48:31 AM	Planned Outage		1h 16m	Dynamic Protective Device Bank	52	917451.5000000000, 14045002.8600000000
7386	N/A	11/16/2016	2:01:33 AM	<Unknown>		1h 13m	Dynamic Protective Device Bank	881	913460.3049176840, 14056601.5204244000
7392	N/A	11/19/2016	8:22:28 AM	Improper Installation		1h 47m	Dynamic Protective Device Bank	52	917451.5000000000, 14045002.8600000000
7475	N/A	11/27/2016	6:51:55 AM	Moisture		2h 46m	lecalpeco.LEGIS.ServiceLocation, Fuse Bank	7167, 2134	920981.7054217280, 14030900.3681720000
7589	N/A	12/6/2016	2:54:39 PM	<Unknown>		2h 13m	Fuse Bank	2088	934640.7419948470, 13994244.9266298000
7641	N/A	12/15/2016	2:29:43 AM	<Unknown>		1h 35m	Dynamic Protective Device Bank	881	913460.3049176840, 14056601.5204244000
7648	N/A	12/15/2016	6:45:56 AM	Deterioration		1h 38m	Fuse Bank, lecalpeco.LEGIS.ServiceLocation	2132, 141913	937137.9091311430, 13995212.1149143000
7755	N/A	1/1/2017	6:00:27 PM	<Unknown>		44m	Fuse Bank	2132	934577.0708743950, 13994787.3185069000
7764	N/A	1/1/2017	10:26:59 PM	<Unknown>		1h 18m	Fuse Bank	2132	934577.0708743950, 13994787.3185069000
8658	N/A	1/9/2017	1:22:18 AM	Moisture		7h 23m	lecalpeco.LEGIS.ServiceLocation, Dynamic Protective Device Bank	141915, 6906, 6767, 6814, 142814, 7109, 6593, 6661, 6803, 480	913257.5317722730, 14058990.2944441000
9054	N/A	1/11/2017	6:27:27 AM	Deterioration		14h 32m	Fuse Bank	2134	920981.7054217280, 14030900.3681720000
12687	N/A	1/23/2017	6:01:05 AM	<Unknown>		5h 28m	Dynamic Protective Device Bank	480	913257.5317722730, 14058990.2944441000
12703	N/A	1/23/2017	2:25:13 PM	<Unknown>		3h 4m	Fuse Bank	2105	933798.4891313820, 13994936.0596521000

12711	N/A	1/23/2017	4:59:00 PM	<Unknown>		5h 47m	localpeco.LEGIS.ServiceLocation, Transformer Bank	6687, 1260, 128949	936818.7732240160, 14018392.954400100 0
13123	N/A	2/1/2017	11:39:30 PM	Deterioration		1h 57m	Fuse Bank	2134	920981.7054217280, 14030900.368172000 0
13211	N/A	2/2/2017	3:00:14 AM	<Unknown>		4d 13h 44m	Dynamic Protective Device Bank	881	913460.3049176840, 14056601.520424400 0
13401	N/A	2/9/2017	8:15:12 AM	<Unknown>		23h 59m	Dynamic Protective Device Bank	480	913257.5317722730, 14058990.294444100 0
13934	N/A	2/15/2017	12:48:30 PM	<Unknown>		2h 6m	Transformer Bank	1502	933901.6997498150, 13993837.880056100 0
13939	N/A	2/15/2017	12:46:21 PM	<Unknown>		1h 53m	Dynamic Protective Device Bank	51	926316.6798177180, 14005024.526740500 0
14405	N/A	2/21/2017	10:42:29 PM	<Unknown>		9h 24m	Transformer Bank	1268	937250.0200000000, 13995593.220000000 0
15028	N/A	3/21/2017	6:51:15 PM	3rd Party Outage		12h 1m	Dynamic Protective Device Bank	480	913257.5317722730, 14058990.294444100 0
15270	N/A	4/12/2017	10:42:14 PM	Device Failed		2h 8m	Fuse Bank	2104	920096.4500248660, 14035231.962593200 0
15305	N/A	4/20/2017	8:10:59 AM	Animal		1h 59m	Fuse Bank	2142	925644.9859155740, 14006949.256990600 0
15336	N/A	4/28/2017	1:27:54 PM	Device Failed		1h 11m	Primary OH Conductor	15174	934801.4160209990, 14028169.881259200 0
15337	N/A	4/28/2017	1:27:54 PM	<Unknown>		1h 14m	Primary OH Conductor	15174	934796.4284122980, 14028170.051408900 0
15339	N/A	4/28/2017	4:44:06 PM	Device Failed	Anchor	3h 55m	localpeco.LEGIS.ServiceLocation, Primary OH Conductor	105845, 15174	934885.1558550040, 14028530.872083300 0
15414	N/A	5/9/2017	4:16:51 PM	<Unknown>		2h 19m	Transformer Bank	1649	926281.9641343710, 14027783.721038500 0
15423	N/A	5/12/2017	6:53:38 PM	3rd Party Outage		2h 50m	Transformer Bank	1649	926279.8104949060, 14027788.621921400 0
15763	N/A	6/6/2017	3:16:43 PM	<Unknown>		18h 43m	Dynamic Protective Device Bank	480	913257.5317722730, 14058990.294444100 0
16693	N/A	8/31/2017	8:37:22 AM	Fire on Company Equipment		1d 10h 26m	localpeco.LEGIS.ServiceLocation, Dynamic Protective Device Bank	7156, 128911, 6937, 7182, 6823, 6700, 480, 128894	931542.0824877750, 13994689.787758100 0
17187	N/A	10/20/2017	12:18:09 AM	<Unknown>		1h 41m	Fuse Bank	2104	920096.4500248660, 14035231.962593200 0
17188	N/A	10/20/2017	2:10:45 AM	<Unknown>		1h 24m	Fuse Bank	2110	918916.8287626770, 14041987.940436500 0
17340	N/A	11/9/2017	3:52:27 AM	<Unknown>		1h 37m	Dynamic Protective Device Bank	881	913460.3049176840, 14056601.520424400 0
17554	N/A	11/26/2017	1:59:29 PM	<Unknown>		1h 35m	Dynamic Protective Device Bank	881	913460.3049176840, 14056601.520424400 0
17555	N/A	11/26/2017	2:25:00 PM	Deterioration		3h 50m	Fuse Bank	2142	925644.9859155740, 14006949.256990600 0

17574	N/A	11/26/2017	4:52:31 PM	Deterioration		4h 17m	Fuse Bank	2104	920096.4500248660, 14035231.9625932000
17767	N/A	12/19/2017	10:43:44 PM	<Unknown>		2h 36m	Fuse Bank	2104	920096.4500248660, 14035231.9625932000
17868	N/A	1/11/2018	1:43:31 PM	3rd Party Outage		33m	lecalpeco.LEGIS.ServiceLocation, Transformer Bank, Fuse Bank	6716, 6601, 1469, 6792, 6939, 7006, 7126, 6661, 2134, 6737, 7056, 7117, 141904, 6700, 6834	937367.5095547560, 14008007.4017405000
17921	N/A	1/24/2018	4:01:05 PM	Device Failed		1h 58m	Fuse Bank	2104	920096.4500248660, 14035231.9625932000
18074	N/A	2/21/2018	5:52:10 AM	3rd Party Outage		1h 18m	Dynamic Protective Device Bank	480	913257.5317722730, 14058990.2944441000
18165	N/A	3/1/2018	6:15:50 PM	<Unknown>		3h 29m	Dynamic Protective Device Bank	881	913460.3049176840, 14056601.5204244000
18203	N/A	3/1/2018	11:30:00 PM	<Unknown>		7h 32m	lecalpeco.LEGIS.ServiceLocation, Dynamic Protective Device Bank, Fuse Bank	6661, 7006, 6645, 6842, 6700, 7111, 7050, 128896, 881, 2094	932872.9585760440, 13992844.8953547000
18527	N/A	3/28/2018	3:42:46 PM	Other Company Activities		22m	Dynamic Protective Device Bank	480	913257.5317722730, 14058990.2944441000
19501	N/A	5/30/2018	4:10:22 PM	Deterioration		1h 31m	Fuse Bank	2129	920915.7235175410, 14033409.6475384000
19611	N/A	6/14/2018	10:01:32 AM	Construction by Company Contractor		7h 55m	Primary OH Conductor	15666	922017.0558224620, 14021280.0509991000
19612	N/A	6/14/2018	10:48:24 AM	Construction by Company Contractor		7m	Dynamic Protective Device Bank	881	913460.3049176840, 14056601.5204244000
19625	N/A	6/17/2018	4:32:44 PM	3rd Party Outage		5h 46m	Dynamic Protective Device Bank	480	913257.5317722730, 14058990.2944441000
19656	N/A	6/23/2018	10:00:48 AM	Non-Company Activities		2h 40m	Dynamic Protective Device Bank	881	913460.3049176840, 14056601.5204244000
20230	N/A	10/2/2018	12:17:17 PM	<Unknown>		14m	Dynamic Protective Device Bank	881	913460.3049176840, 14056601.5204244000
20233	N/A	10/2/2018	12:22:50 PM	<Unknown>		12m	Dynamic Protective Device Bank	881	913460.3049176840, 14056601.5204244000
21042	N/A	12/14/2018	5:11:16 PM	Device Failed	Tap Wire	2h 18m	Transformer Bank	1620	934056.5598079120, 13994839.4499911000
21347	N/A	1/16/2019	2:34:29 AM	<Unknown>		2h 25m	Fuse Bank	2048	922573.2640090220, 14019014.4793104000
21408	N/A	1/17/2019	9:29:33 AM	Deterioration		4h 10m	Transformer Bank	1538	920125.6199999990, 14035289.7500000000
21957	N/A	2/14/2019	5:11:08 AM	3rd Party Outage		8m	lecalpeco.LEGIS.ServiceLocation	128911	933539.0590635020, 13993241.1658517000
22003	N/A	2/14/2019	5:37:25 PM	Tree - Broken Limb		1d 1h 57m	Transformer Bank	1552	932785.8401863540, 13993680.0802972000
22668	N/A	2/25/2019	1:16:18 PM	Device Failed		2h 43m	Dynamic Protective Device Bank	881	913460.3049176840, 14056601.5204244000

22711	N/A	2/25/2019	11:45:31 PM	Non-Company Activities		3h 19m	Dynamic Protective Device Bank	881	913460.3049176840, 14056601.5204244000
22740	N/A	2/26/2019	5:12:48 AM	Deterioration		4h 47m	Fuse Bank	2048	922573.2640090220, 14019014.4793104000
22950	N/A	3/14/2019	7:04:58 AM	Animal		2h 47m	Fuse Bank	2072	936621.2030854290, 14006816.1521873000
22993	N/A	3/15/2019	7:24:52 AM	Device Failed		4h 35m	Dynamic Protective Device Bank	881, 51	913460.3049176840, 14056601.5204244000
23022	N/A	3/22/2019	8:05:00 AM	Planned Outage		36m	Dynamic Protective Device Bank	881	913460.3049176840, 14056601.5204244000
23049	N/A	3/22/2019	9:05:37 AM	Planned Outage		3d 8h 20m	Dynamic Protective Device Bank	881, 51	913460.3049176840, 14056601.5204244000
23101	N/A	3/26/2019	12:01:36 PM	<Unknown>		38m	Transformer Bank	1587	933423.9803551800, 13993089.4803972000
23105	N/A	3/26/2019	11:53:06 AM	<Unknown>		47m	Dynamic Protective Device Bank	881	913460.3049176840, 14056601.5204244000
23164	N/A	4/11/2019	11:17:56 AM	3rd Party Outage		7m	Transformer Bank	1431	931609.6804722000, 13996694.5526952000
23168	N/A	4/11/2019	11:18:01 AM	3rd Party Outage		6m	lecalpeco.LEGIS.ServiceLocation	6716, 7110	937367.5095547560, 14008007.4017405000
23171	N/A	4/11/2019	11:17:29 AM	3rd Party Outage		7m	lecalpeco.LEGIS.ServiceLocation	7006, 128919	935373.2320017840, 13994120.2254942000
23175	N/A	4/11/2019	11:18:40 AM	3rd Party Outage		6m	lecalpeco.LEGIS.ServiceLocation	141908, 6737	931551.0252783800, 14008012.3169707000
23177	N/A	4/11/2019	11:24:22 AM	3rd Party Outage		0m	lecalpeco.LEGIS.ServiceLocation	6956, 128911	931316.4840082990, 13994475.0927395000
24277	N/A	9/16/2019	1:04:37 PM	Tree - Broken Limb		8h 15m	Fuse Bank	2118	919720.3092361710, 14036233.1157568000
24279	N/A	9/16/2019	6:03:30 PM	Flying Debris		1h 52m	Transformer Bank	1478	934064.8693632600, 14006359.0000768000
24360	N/A	9/28/2019	7:10:50 AM	<Unknown>		4h 34m	Transformer Bank	1614	920754.5099999990, 14033172.1900000000
25414	N/A	4/9/2020	9:06:54 AM	Fire on Company Equipment		49m	Fuse Bank	2134	920981.7054217280, 14030900.3681720000
25424	N/A	4/13/2020	9:37:16 AM	Planned Outage		4h 18m	Fuse Bank	2134	920981.7054217280, 14030900.3681720000
25429	N/A	4/16/2020	4:45:00 PM	Planned Outage		3h 30m	Fuse Bank	2110	918916.8287626770, 14041987.9404365000
25492	N/A	5/19/2020	8:48:51 AM	Planned Outage		8h 18m	Secondary OH Conductor	9629	923458.8721172410, 14015412.4700548000
25532	N/A	6/3/2020	8:30:14 AM	Planned Outage		7h 57m	Transformer Bank	1606	923685.1300000000, 14014595.8200000000
25543	N/A	6/5/2020	11:29:34 AM	Planned Outage		5h 34m	Fuse Bank	2123	923804.9440835340, 14014333.9966943000

25564	N/A	6/8/2020	8:34:29 AM	Planned Outage		8h 13m	Transformer Bank	1540	923862.0281625300, 14013972.9845607000
25635	N/A	6/16/2020	2:32:00 PM	<Unknown>		49m	Dynamic Protective Device Bank	881	913460.3049176840, 14056601.5204244000
25882	N/A	7/20/2020	10:49:37 AM	Planned Outage		4h 40m	Fuse Bank	2142	925654.6838216140, 14006910.6963192000
25895	N/A	7/20/2020	2:57:00 PM	<Unknown>		5m	Dynamic Protective Device Bank	881	913460.3049176840, 14056601.5204244000
26618	N/A	8/14/2020	2:36:04 PM	<Unknown>		51m	lecalpeco.LEGIS.ServiceLocation, Dynamic Protective Device Bank	6937, 881	933592.2564358840, 13992230.6572890000
26776	N/A	9/12/2020	3:29:42 PM	Flying Debris		1h 20m	Fuse Bank	2124	931377.5143581960, 13995364.6024104000
27841	N/A	11/17/2020	9:48:00 AM	Weather - wind		55m	Dynamic Protective Device Bank	51	926198.5101381660, 14005033.2151270000
27871	N/A	11/17/2020	11:55:00 AM	Wildfire		2d 8h 16m	Dynamic Protective Device Bank	51	926198.5101381660, 14005033.2151270000
27873	N/A	11/17/2020	12:32:00 PM	Planned Outage		2d 23h 10m	Fuse Bank, Primary OH Conductor	2142, 15534	925654.6838216140, 14006910.6963192000
27875	N/A	11/17/2020	12:51:00 PM	Planned Outage		20h 9m	Dynamic Protective Device Bank	881	913460.3049176840, 14056601.5204244000
27955	N/A	11/17/2020	12:32:00 PM	Planned Outage		1d 1h 11m	Dynamic Protective Device Bank	881	913460.3049176840, 14056601.5204244000
27963	N/A	11/18/2020	11:40:00 AM	Planned Outage		6h 38m	Dynamic Protective Device Bank	881	913460.3049176840, 14056601.5204244000
27967	N/A	11/18/2020	5:35:00 PM	<Unknown>		15h 35m	Fuse Bank	2048	922573.2640090220, 14019014.4793104000
27973	N/A	11/17/2020	11:55:00 AM	Planned Outage		2d 23h 55m	Fuse Bank	2065	929176.5235477980, 13999641.5887330000
27975	N/A	11/17/2020	11:55:00 AM	Planned Outage		4d 7h 35m	Fuse Bank	2044	931501.5966649770, 13995937.7862738000
27976	N/A	11/19/2020	5:00:00 PM	Planned Outage		1d 23m	Fuse Bank	2120	933047.9657727530, 13995236.6405441000
27977	N/A	11/17/2020	11:55:00 AM	Planned Outage		5d 3h 8m	Fuse Bank	2105	933798.4891313820, 13994936.0596521000
27979	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 2h 25m	Fuse Bank	2115	935417.0951424200, 13994794.1802897000
27981	N/A	11/17/2020	11:55:00 AM	Planned Outage		2d 5h 5m	Fuse Bank	2057	936046.7096045070, 13994751.3013339000
27985	N/A	11/19/2020	8:00:00 PM	Planned Outage		21h 0m	Transformer Bank	1295	926755.9757641240, 14004261.9074566000
27990	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 14m	Fuse Bank	2069	929613.7014589190, 13998041.1946656000
27993	N/A	11/19/2020	8:00:00 PM	Planned Outage		1d 15h 0m	Transformer Bank	1445	930611.6900000020, 13996457.9000000000

27994	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 23h 5m	Transformer Bank	1443	930680.5399999990, 13996379.8100000000
27995	N/A	11/19/2020	8:00:00 PM	Planned Outage		1d 15h 0m	Transformer Bank	1254	930928.8099999990, 13996177.8100000000
27997	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 1h 4m	Fuse Bank	2053	931608.8403785120, 13995851.9865628000
27999	N/A	11/19/2020	8:00:00 PM	Planned Outage		16h 37m	Fuse Bank	2056	932163.1206961070, 13995583.8716623000
28002	N/A	11/19/2020	8:00:00 PM	Planned Outage		1d 15h 0m	Transformer Bank	1608	932743.0593336460, 13995397.1003823000
28004	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 1h 1m	Primary OH Conductor	15907	933341.2961903360, 13994970.8949846000
28005	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 1h 9m	Fuse Bank	2137	933730.3401880150, 13994820.4646377000
28006	N/A	11/19/2020	8:00:00 PM	Planned Outage		1d 15h 0m	Transformer Bank	1620	934056.5598079120, 13994839.4499911000
28007	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 1h 16m	Fuse Bank	2132	934577.0708743950, 13994787.3185069000
28009	N/A	11/17/2020	11:55:00 AM	Planned Outage		3d 2h 25m	Fuse Bank	52145	935420.9397720050, 13994776.2423594000
28014	N/A	11/17/2020	12:32:00 PM	Planned Outage		4d 2h 25m	Primary OH Conductor	15475	936622.5896180680, 14006879.2793699000
28015	N/A	11/17/2020	12:32:00 PM	Planned Outage		4d 2h 26m	Primary OH Conductor	15471	936594.1529342590, 14006610.2164531000
28018	N/A	11/20/2020	3:27:21 PM	<Unknown>		6h 39m	lecalpeco.LEGIS.ServiceLocation	6850	925763.9396387830, 14004857.4920219000
28019	N/A	11/19/2020	5:00:00 PM	Planned Outage		2d 18h 0m	Fuse Bank	2133	937400.6710185150, 13995250.6994880000
28020	N/A	11/19/2020	5:00:00 PM	Planned Outage		22h 0m	Transformer Bank	1147	936541.6798180930, 13995168.3407599000
28024	N/A	11/21/2020	10:18:13 AM	<Unknown>		41m	Transformer Bank	1358	931485.2002004600, 13995574.6301103000
28026	N/A	11/17/2020	12:32:00 PM	Planned Outage		4d 5h 0m	Fuse Bank	2052	936221.1306212680, 14004015.8065377000
28027	N/A	11/17/2020	12:32:00 PM	Planned Outage		5d 3h 28m	Primary OH Conductor	15327	935785.2512628820, 14002880.5655680000
28028	N/A	11/17/2020	12:32:00 PM	Planned Outage		5d 1h 23m	Fuse Bank	2076	938004.6950405980, 14000659.7515725000
28029	N/A	11/17/2020	12:32:00 PM	Planned Outage		5d 1h 23m	Fuse Bank	2074	937989.9016502550, 14000654.5812423000
28225	N/A	12/10/2020	7:57:50 PM	<Unknown>		5h 32m	Transformer Bank	1431	931609.6804722000, 13996694.5526952000

ATTACHMENT 30

National Wildfire Coordinating Group, "Weather and Fuel Moisture." https://www.nwcg.gov/publications/pms425-1/11-weather-and-fuel-moisture

Fire Weather: 11. Weather and Fuel Moisture

The moisture content of live and dead vegetation is not in itself a weather element. It is a product, however, of the cumulative effects of past and present weather events and must be considered in evaluating the effects of current or future weather on fire potential. Fuel moisture content limits fire propagation. When moisture content is high, fires are difficult to ignite, and burn poorly if at all. With little moisture in the fuel, fires start easily, and wind and other driving forces may cause rapid and intense fire spread. Successful fire-control operations depend upon accurate information on current fuel moisture and reliable prediction of its changes.

The determination of exact fuel-moisture values at any time is complicated by both the nature of the fuels and their responses to the environment. Fuel moisture changes as weather conditions change, both seasonally and during shorter time periods. This fact, coupled with known attributes of different fuels, provides a useful basis for estimating fire potential in any forest or range area. This chapter describes some of the more important relationships involved.

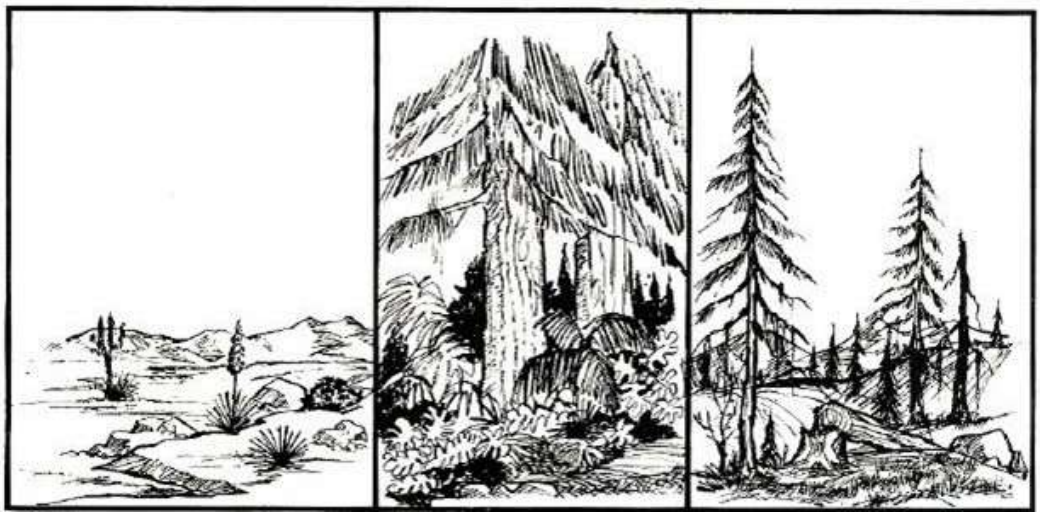
Sections

- **Living Plant Moisture**
- **Dead Fuel Moisture**
- **Mixtures of Living and Dead Fuels**
- **Summary**

In fire-control language, fuel is any organic material—living or dead, in the ground, on the ground, or in the air—that will ignite and burn. Fuels are found in almost infinite combinations of kind, amount, size, shape, position, and arrangement. The fuel on a given acre may vary from a few hundred pounds of sparse grass to 100 or more tons of large and small logging slash. It may consist of dense conifer crowns over heavy and deep litter and duff, or may be primarily underground peat. There is even the "urba-forest," an intimate association of wild-land fuels and human dwellings. Any one composite fuel system is referred to as a **fuel complex.**

Every fuel complex has an inherent built-in flammability potential. The extent to which this potential may be realized is limited largely by the amount of water in the fuel, but fuel moisture is a continuous variable controlled by seasonal, daily, and immediate weather changes.

For convenience, the amount of water in fuel is expressed in percentage, computed from the weight of contained water divided by the ovendry weight of the fuel. Fuel-moisture values in the flammability range extend from about 35 percent to well over 200 percent in living vegetation, and about 1.5 to 30 percent for dead fuels. Remember that living-fuel moisture is primarily the moisture content of living foliage, while dead-fuel moisture is the moisture in any cured or dead plant part, whether attached to a still-living plant or not. Living and dead fuels have different waterretention mechanisms and different responses to weather. Hence, we will discuss them separately before considering them together as a single fuel complex.



Where vegetation is plentiful, fire potential depends largely upon moisture content. The rain forest may be fire-safe virtually al the time, while the parched forest at times may be explosive.

Living Plant Moisture

Water in living plants plays a major role in all plant life processes. It transports soil nutrients from the roots up through conducting tissues to the leaves. In the leaves, some of the water becomes raw material from which the organic materials are manufactured for plant growth; some water transfers the manufactured products to growing tissues and storage points; and finally, some water is transpired through leaf pores to become water vapor in the atmosphere.

Seasonal Changes

The moisture content of living-plant foliage of wildland species varies markedly with seasonal changes in growth habits except in humid southern climates. These changes are usually typical for the local species and climate, but are tempered in timing by deviations from normal weather, such as amount and spacing of precipitation, date of disappearance of snow-pack, or the occurrence of unseasonably warm or cool temperatures. Thus, the beginning or ending dates of growth activity affecting plant moisture may vary 2 weeks or more, and the growth activity may vary during the season.

Growing seasons are longest in the lower latitudes and become progressively shorter toward higher latitudes. They may be as short as 60 days at the northern forest limits. Elevation and aspect affect local microclimate and produce local differences in seasonal development of many plant species. In mountain topography, for example, lower elevations and southern exposures favor the earliest start of the growing season. Moisture content of all new foliage is highest at the time of emergence. Moisture content two or three times the organic dry weight is common. The period of emergence varies according to localities, species, and local weather. The peak moisture normally declines quite rapidly during leaf growth and development, then somewhat more slowly to a terminal value leading to death or dormancy in the fall. In annual plants, the end result is the death of the plant; in deciduous shrub and tree species, the end result is the death of the foliage, while in evergreens some leaves live and others die and fall.

In organic (peat or muck) soils, the excessive demand for moisture to support leaf emergence can result in soil desiccation and in high fire danger if soils are burnable. This problem ceases when normal evapotranspiration is established.

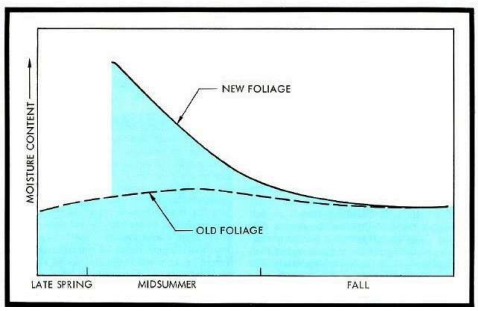
The decrease in plant foliage moisture is usually not smooth, but an irregular succession of ups and downs. These irregularities may result from one or more causes, including periodic changes in food-manufacturing demands, changes in weather, and variations in available soil moisture. Within the individual leaf, however, moisture is maintained within tolerable limits during the growing season through ability of the leaf to open or close the leaf pores and thus regulate the rate of transpiration to the atmosphere. Foliage moisture content may even change during the course of the day.

Effect of Type

Evergreens

Evergreens growing in climates having marked seasonal changes generally have seasonal growth cycles. Leaves that have lived through a dormant period increase in moisture content at the beginning of the new season from a minimum of perhaps 80-100 percent to a maximum of perhaps 120 percent within a few weeks. These values are typical, but do not necessarily apply to all species and regions. Moisture decreases slowly after this modest increase until the minimum is again reached at the onset of dormancy.

Within a few days of the initial increase in moisture in old leaves, twig and leaf buds open and a new crop of leaves begins to emerge. Their initial moisture may exceed 250 percent. Leaves may emerge quickly, or over an extended period, depending on species and the character of the weather-related growing season. The average moisture content of the new growth drops rapidly to perhaps 150 percent, as the new leaves grow in size until about midsummer, and then more slowly, matching the moisture content of the older foliage near the end of the growing season.



The moisture content of old foliage changes only slightly during the season, while that of new foliage is very high at emergence and then drops, first rapidly, then more slowly, matching that of the old foliage at the end of the growing season.

Different species of evergreen trees and shrubs characteristically retain a season's crop of foliage for different periods of years. This may vary among species from one season to five or more. There are also differences within species, due partly to age, health, and stand density, but mostly to the weather-dictated character of the growing season. Thus, in years of poor growth there is normally little leaf fall, and in years of lush growth the fall is heavy. As crown canopies become closed, leaf fall tends to approximate foliage production. The oldest foliage, that closest to the ground, is the first to fall, and, in time, the lower twigs and branches that supported it must also succumb and add to the dead fuel supply.

There are exceptions, of course, to the normal, seasonal growth and leaf-moisture cycle, and to the annual replenishment of foliage. Particularly striking are the variations found in the drought-resistant brush and chaparral species in the semiarid West. It is not uncommon for midseason soil-moisture deficiency to cause cessation of growth in these species, with foliage moisture lowering to between 40 and 50 percent. Usually, these plants retain the ability to recover after the next rain. Prolonged severe drought, however, **can prove fatal** to major branches or even to whole shrubs. Conflagration potential is then at its peak.

The live foliage of evergreens as a class is usually more combustible than that of deciduous species. There are several reasons, but differences in their moisture regimes are most important, All deciduous foliage is the current year's growth, and it maintains relatively high moisture content during most of the growing season. Evergreens, on the other hand, and particularly those that retain their foliage for a number of years, have much lower average foliage moisture during the growing season. Old-growth foliage with its lower moisture may constitute 80 percent or more of the total evergreen foliage volume. Among the evergreens, too, there is greater tendency toward a mixture with dead foliage, branches, and twigs.

Deciduous Species

In contrast to the evergreens, **all** deciduous species contribute each year's total foliage production to the surface dead fuel accumulation. During the process of production and decline, however, there are considerable differences between groups of species in their contributions to forest flammability. Let us compare, for example, two quite different situations: first a deciduous broadleaf forest, and then grasses on the open range.

The foliage of broadleaf forests in full leaf shades the dead litter on the ground. The reduced solar radiation helps maintain temperaturehumidity relationships favoring high moisture content of these dead materials. The forest canopy also reduces wind speeds near the ground—another favorable factor. The surface fuels are relatively unexposed to the elements until the forest is defoliated. Thus, ground fires in a deciduous forest in full leaf are rarely a serious threat. In addition, the live foliage of most deciduous American broadleaf forests is not very flammable, making crown fires in these types rare.

Grasses

All living wildland vegetation responds to good and poor growing seasons as determined by the weather, but annual range grasses are much more sensitive to seasonal and short-term weather variations than are most other fuels. These grasses are shallow-rooted and thus depend primarily on adequate surface soil moisture for full top development. At best, annuals have a limited growth season. They mature, produce seed, and begin to cure or dry. But deficient surface moisture at the beginning of the season, or its depletion by hot, dry weather, may shorten the growth period. Similarly, because of the weather, the curing time may vary from 3 weeks to 2 months after noticeable yellowing.

Green grass is not flammable. After its moisture content has dropped to 30 or 40 percent during the curing stage, however, grass will burn on a good burning day. At the end of the curing period, annual grasses are dead fuels, fully exposed to the high temperatures of solar radiation and to the full force of the wind. Thus, annual **grasses may reach a highly flammable stage while broadleaf foliage is still in prime growth**.

Perennial grasses have deeper, stronger root systems than annuals and are somewhat less sensitive to short-term surface soil moisture and temperature changes. In regions that have marked growing seasons limited by hot, dry seasons or cold winters, the perennial grasses have, however, a growth and curing cycle similar to annuals, but dieback affects only leaves and stems down to the root crowns. The principal differences in moisture content result from a later maturing date and a slower rate and longer period of curing. In warm, humid areas, some stems and blades cure and die while others may remain alive, although more or less dormant. Often, such mixtures will burn in dry weather.

Any living vegetation can be consumed by fire of sufficient intensity burning in associated dead fuels. When vegetation is subjected to heating, however, marked differences appear among species in the rates of output of combustible volatiles. The result is that the living foliage of some species absorbs nearly as much heat to vaporize its contained water as it yields when burned. Living foliage of other species, except in the period of rapid spring growth, may add significantly to the total fire heat output. Among these latter species particularly, the current foliage moisture content is important in determining total flammability.

There is no convenient or practical method for obtaining inplace measurements of live-foliage moisture. A general estimate can be made by a close eye examination of the foliage, and by touching it. Light green succulent leaves of the current year's growth mark the period of maximum moisture content. Darkening and hardening of these leaves mark the beginning of steady moisture decline until dormancy sets in. Evergreen foliage is then mostly tough and leathery.

Dead Fuel Moisture

When a plant part dies, food manufacturing and growth stop and water circulation ceases. The contained water then evaporates until the dead tissues become "air-dry." The amount of water remaining is variable and always changing, depending on how wet or dry the environment happens to be.

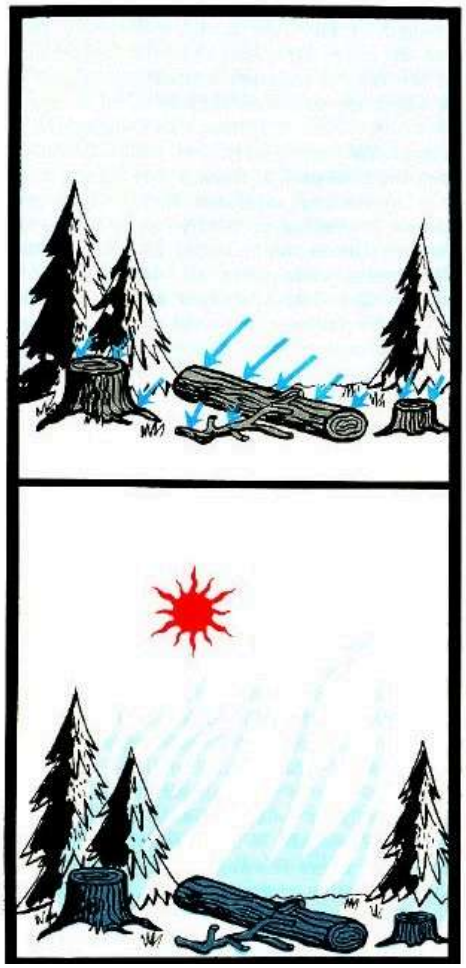
Fuel-Wetting Processes

Dry, dead fuels adsorb moisture from the surrounding air when atmospheric humidity is high. When atmospheric humidity is low, moisture from moist fuels is evaporated into the surrounding air.

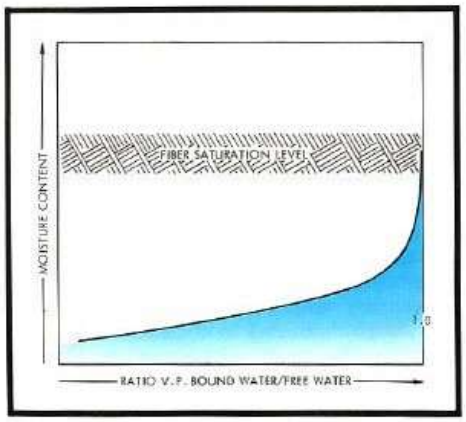
Dead vegetation retains its original structure of cells, intercellular spaces, and capillaries. It can soak up liquid water like a blotter, only more slowly, until all these spaces are filled. Dead vegetation may hold two or more times its own dry weight in water. Fine materials may absorb that much in a matter of minutes, while large logs may require a season or more of heavy precipitation. In some climatic regimes, the centers of large materials may never become completely saturated. One reason is that the rate of penetration slows down with increasing distance from the surface.

A second and equally important consideration in our understanding of fuel-wetting processes is the fact that the materials making up the dead cell walls are **hygroscopic**. Hygroscopic materials have an affinity for moisture which makes it

possible for them to **adsorb** water vapor from the air. This process is one of chemical bonding. We will consider it in the light of our discussions of vapor pressure, evaporation, and condensation in **chapter 3** and the related growth of ice crystals at the expense of water drops in **chapter 9**.



Molecules of water are attracted to, penetrate, and are held to the cell, or fiber, walls by the hygroscopic character of the cell material. The water molecules that penetrate and the few molecular layers that adhere to the cell walls are called **bound water**. The hygroscopic bond between the cell walls and the water molecules is strong enough to effectively reduce the vapor pressure of the bound water. The layer of water molecules immediately in contact with a cell wall has the strongest hygroscopic bond and lowest vapor pressure. Successive molecular layers have progressively weaker bonds until the cell walls become saturated. At that point, the vapor pressure in the outer layer of water on the cell wall is equal to that of free water, or saturation pressure. The amount of bound water at the fiber-saturation point varies with different materials. For most plant fuels it is in the range of 30 to 35 percent of the fuel dry weight.



At moisture contents below the fiber-saturation level, the vapor pressure of bound water is less than that of free water. The ratio of these vapor pressures is unity at that level and decreases as moisture content decreases.

The result of the bonding phenomenon is that **free water** cannot persist in a cell until the cell walls become saturated. Then free water can pass through the cell walls by osmosis. Below the saturation level, moisture is evaporated from cell walls of higher moisture content and taken up by cell walls of lower moisture content until the moisture in each cell attains the same vapor pressure. In this manner, much of the moisture transfer within fuels is in the vapor phase and always in the direction of equalizing the moisture throughout a particular piece of fuel.

Dead fuels will extract water vapor from the atmosphere whenever the vapor pressure of the outer surface of the bound water is lower than the surrounding vapor pressure. In a saturated atmosphere, this may continue up to the fiber saturation point. Full fiber saturation rarely persists long enough in the absence of liquid water to permit the necessary internal vapor transfer.

Fuel-Drying Processes

As noted above, fuel moisture can be raised to perhaps 300 percent by contact with liquid water, and to a maximum fiber saturation of around 30 percent in a saturated atmosphere through adsorption of water vapor. The reverse process of fuel drying is accomplished only by evaporation to the atmosphere.

The moisture content of dead fuels thoroughly wetted with free water within and on the surface decreases in three steps in a drying atmosphere, with different drying mechanisms dominant in each. The **first** step is called the **constant-rate period**. The rate here is independent of both the actual moisture content and the hygroscopic nature of the fuel. It ends at the **critical moisture content**, the condition in which the total fuel surface is no longer at or above fiber saturation. The **second** is an intermediate step, which we will call the **decreasing-rate period**. During this period, there is a decreasing saturated fuel surface area and an increasing proportion of moisture loss through the slower removal of bound water. The period ends when all the fuel surface

reaches the fiber-saturation level. The **third** step is the **falling-rate period** when the hygroscopic nature of dead fuel becomes dominant in the drying process.

The process of moisture loss in the **constant-rate** period is somewhat simpler than those of the succeeding steps. Drying takes place by evaporation exactly as from any free-water surface. It will proceed whenever the surrounding vapor pressure is less than saturation pressure, and at a rate generally proportional to the outward vaporpressure gradient. Wind speed during this period does not affect ultimate attainment of the critical moisture content level. But it does affect the time required to reach that point. When there is evaporation from a water surface in calm air, a thin layer next to the interface between the free water and air tends to become saturated with water vapor. This saturation near the water surface decreases the evaporation rate and dissipates only by relatively slow molecular diffusion in the air. Wind breaks up this thin layer and blows it away, thereby speeding up the evaporation process.

The **intermediate** decreasing-rate period may best be described as a transition step in which there is a variable change in moisture loss rate. This rate begins changing slowly within the defined limits from the linear rate of the constant-rate period to the orderly decreasing rate characteristic of the falling-rate period. Variations in the rate of drying during the decreasing-rate period are caused by fuel and environmental factors that are difficult to evaluate and for which no general rules are available. This period is often considered as part of what we have called the falling-rate period when the error involved in calculations is considered tolerable. It is separated for our purposes because it applies only to drying and is not reversible in the sense of vapor exchange between fuel and air as is the case in the falling-rate period. Wind speed still plays a significant role in the drying process during this period.

The **falling-rate** period of drying depends upon an outward gradient between the bound-water vapor pressure and the ambient vapor pressure in the atmosphere. As moisture removal progresses below the fiber-saturation point, the bound-water vapor pressure gradually declines, and the vapor-pressure gradient is gradually reduced. Either of two conditions must prevail to assure continued significant drying: One is to maintain a surrounding vapor pressure appreciably below the declining bound-water vapor pressure; the other is addition of heat to the fuel at a rate that will increase its temperature and correspondingly its bound-water vapor pressure. Both processes operate in nature, sometimes augmenting and sometimes opposing each other.

As drying progresses toward lower moisture-content values, a vapor pressure gradient is established within the fuel. The external vapor pressure needed to maintain this gradient must therefore be quite low. Under these conditions, molecular diffusion into the atmosphere is more rapid than that within the fuel. This results in a lesser and lesser tendency for thin layers of higher vapor pressure to form at the fuel surface. For this reason, the effect of wind speed on drying gradually decreases at moisture levels progressively below fiber saturation. The effect may never be eliminated, but at low moisture levels it has little practical significance.

Concept of Moisture Equilibrium

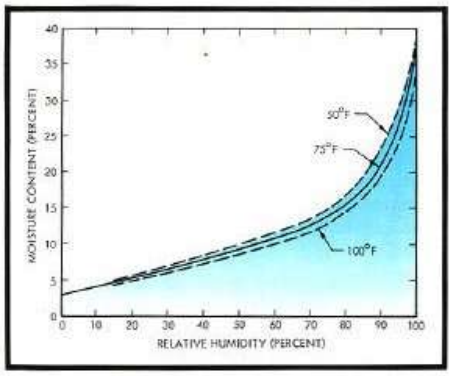
Moisture equilibrium has meaningful application to forest-fuel moisture only in the range of moisture-content values between about 2 percent and fiber saturation. This is the range covered by the falling-rate period of drying. Fuel will either gain or lose moisture within this range according to the relative states of the fuel and its environment. The amount, rate, and direction of moisture exchange depend on the gradient between the vapor pressure of the bound water and the vapor pressure in the surrounding air. If there is no gradient, there is no net exchange, and a state of equilibrium exists.

The **equilibrium moisture content** may be defined as the value that the actual moisture content approaches if the fuel is exposed to constant atmospheric conditions of temperature and humidity for an infinite length of time. The atmospheric vapor pressure is dependent upon the temperature and moisture content of the air. The vapor pressure of the bound water in fuel depends upon the fuel temperature and moisture content.

The equilibrium moisture content—the average for six fuel types is shown—depends mainly upon the relative humidity, and to a lesser extent on temperature.

Assuming that the fuel and the atmosphere are at the same temperature, then for any combination of temperature and humidity there is an equilibrium fuel-

moisture content. At this value, the atmospheric vapor pressure and the vapor pressure of the bound water are in equilibrium. This point almost, but not quite, exists in nature. Small vapor-pressure differences can and do exist without further moisture exchange. This is demonstrated by the fact that a dry fuel in a more moist environment reaches equilibrium at a lower value than a moist fuel approaching the same equilibrium point from above. For this reason also, reduction of humidity to zero does not reduce fuel moisture to that value. Vapor exchange involving bound water is not as readily attained as is free water and atmospheric vapor exchange. At low vapor-pressure gradients involving bound water, there is not sufficient energy at normal temperatures and pressures to eliminate these small gradients.



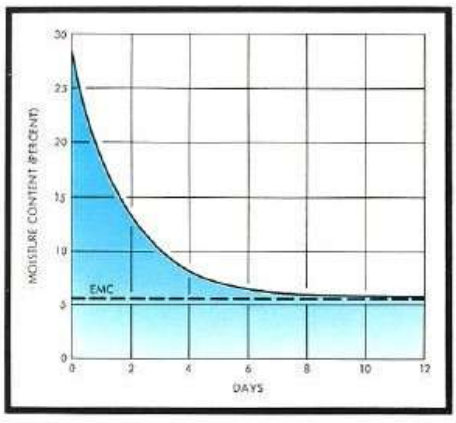
Equilibrium moisture content has been determined in the laboratory for numerous hygroscopic materials, including a variety of forest fuels. The usual procedure is to place the material in an environment of constant temperature and humidity, leaving it there until the moisture content approaches a constant value. The process is then repeated over the common ranges of humidity and temperature encountered in nature. Continuous or periodic weighing shows the changing rates at which equilibrium is approached from both directions. Different fuel types usually have different equilibrium moisture contents, but for most fire-weather purposes it is satisfactory to use the average determined for a number of fuels.

The rates at which moisture content approaches the equilibrium value vary not only with the kind of fuel material, but with other characteristics such as fuel size and shape, and the compactness or degree of aeration of a mass of fuel particles. For any one fuel particle with a moisture content below fiber saturation, the rate of wetting or drying by vapor exchange is theoretically proportional to the difference between the actual moisture content and the equilibrium moisture content for the current environmental conditions.

This means, for example, that when actual fuel moisture is 10 percent from its equilibrium value, the rate of increase or decrease is 10 times as rapid as if the moisture were within 1 percent equilibrium. This relationship indicates that moisture content approaching equilibrium follows an inverse logarithmic path.

Use of the equilibrium moisture-content concept makes it possible to estimate whether fuel moisture is increasing or decreasing under a particular environmental situation, and the relative moisture stress in the direction of equilibrium. This by itself, however, is a poor indicator of the quantitative rate of moisture-content change. To it, we must also add the effect of size or thickness of the fuel in question.

Timelag Principle



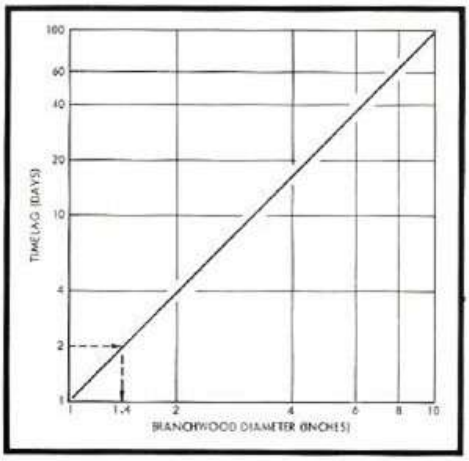
Drying curve of 2-inch layer of litter in an environment for which the equilibrium moisture content is 5.5 percent.

One method of expressing adsorption and drying rates based on both equilibrium moisture content and fuel characteristics makes use of the **timelag principle**, common to a variety of natural phenomena. According to this principle, the approach to equilibrium values from moisture contents either above or below equilibrium follows a logarithmic rather than a straight-line path as long as liquid water is not present on the surface of the fuels.

If a fuel is exposed in an atmosphere of constant temperature and humidity, the time required for it to reach equilibrium may be divided into periods in which the moisture change will be the fraction (1—1/e)~ 0.63 of the departure from equilibrium. The symbol, e, is the base of natural logarithms, 2.7183. Under standard conditions, defined as constant 80°F. temperature and 20 percent relative humidity, the duration of these time periods is a property of the fuel and is referred to as the **timelag period**. Although the successive time-lag periods for a particular fuel are not exactly equal, the timelag principle is a useful method of expressing fuel-moisture responses if average timelag periods are used.

To illustrate the moisture response, let us assume that a fuel with a moisture content of 28 percent is exposed in an environment in which the equilibrium moisture content is 5.5 percent. The difference is 22.5 percent. At the end of the first timelag period, this difference would be reduced 0.63 x 22.5, or about 14.2 percent. The moisture content of this fuel would then be 28 —14.2, or 13.8 percent. Similarly, at the end of the second timelag period the moisture content would be reduced to about 8.6 percent, and so on. The moisture content at the end of five or six timelag periods very closely approximates the equilibrium moisture content.

The average timelag period varies with the size and other factors of fuels. For extremely fine fuels the average period may be a matter of minutes, while for logs it ranges upward to many days. Using the timelag principle, we can describe various fuels—irrespective of type, weight, size, shape, compactness, or other physical features—as having an average timelag period of 1 hour, 2 days, 30 days, and so on. Dead branchwood 2 inches in diameter, for example, has an average timelag period of about 4 days. Logs 6 inches in diameter have an average timelag period of about 36 days. A 2-inch litter bed with an average timelag period of 2 days can be considered the equivalent, in moisture response characteristics, of dead branchwood (about 1.4 inches in diameter) having a similar timelag period if there is no significant moisture exchange between the litter and the soil.

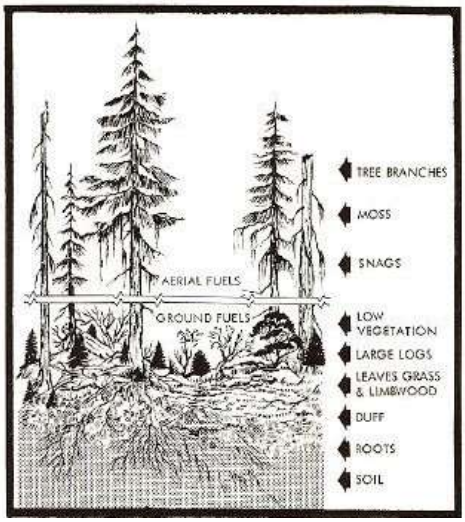


The average timelag period of branchwood and logs varies with the fuel diameter. Other fuels may be compared with these. A 2-inch litter bed with an average timelag period of 2 days, for example, may be considered the equivalent of 1.4-inch dead branchwood having the same average timelag period.

Thus far we have been discussing the moisture behavior of homogenous fuel components exposed to uniform atmospheric conditions. These conditions are never uniform for long. Except for very fine material, it is rare that even one component is really near equilibrium. Most wildland dead fuels consist of such a variety of components that it is impossible for the whole fuel complex to be at equilibrium moisture content at any one time. Nevertheless, a working knowledge of equilibrium moisture-content processes and fuel timelag differences permits one to make useful estimates of current fuel-moisture trends.

Aerial and Ground Fuels

Two types of dead fuel are of particular interest. Dead foliage, twigs, and branches still attached to living vegetation or otherwise suspended above ground respond to precipitation and subsequent atmospheric conditions mainly as individual components according to their respective kinds and sizes. Detached components, forming more-or-less prone fuel beds on the forest floor, often undergo much more complex fuel-moisture changes.



Aerial fuels respond to precipitation and atmospheric conditions as individual components, according to their respective kinds and sizes. Fuels on the ground

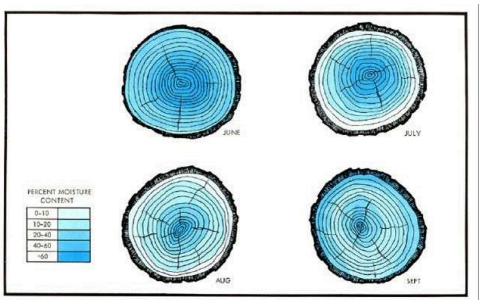
Types of forest floor coverings vary widely depending on the nature of the forest and climatic region. In areas of rapid decomposition, the surface may be covered with only 1 or 2 year's accumulation of dead foliage and a few twigs. At the other extreme, there may be many years of accumulated foliage, branches, and logs consisting of all degrees of preservation and decay from the top downward to, and mixed with, the mineral soil. There is tremendous variety between these extremes. The common feature of all, however, is that **only the upper surface is exposed to the free air** while the lower surface is in contact with the soil.

There is one moisture gradient between the fuel and the air, another between the fuel and the soil, and still another between the top and bottom of the fuel bed itself. In deep and compact fuel beds, air circulation in the lower layers may be nearly nonexistent. Precipitation soaking down through the fuel into the soil may then produce relative humidities near 100 percent at the lower levels, and this can persist for appreciable times. Subsequent drying starts at the top and works downward. In deep fuels, it is not uncommon for the surface layer to become quite

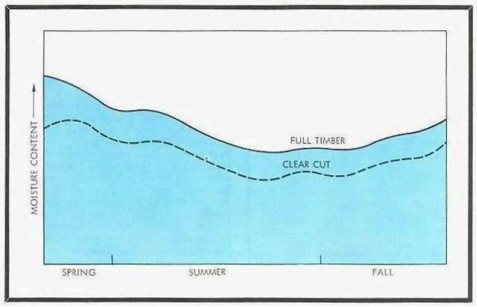
tend to become compacted and have more complex moisture changes.

flammable while lower layers are still soaking wet. Here, the moisture gradient is upward.

Reverse gradients also occur after prolonged drying, resulting in the topsoil and lower duff becoming powder dry. Then morning dew on the surface, high relative humidity, or a light shower may cause a downward moisture gradient.



A large log, wet from winter precipitation, dries through the summer from the outside in. In the fall, as rains begin and temperatures and humidities moderate, the process is reversed and the log begins to take on moisture from the outside in.



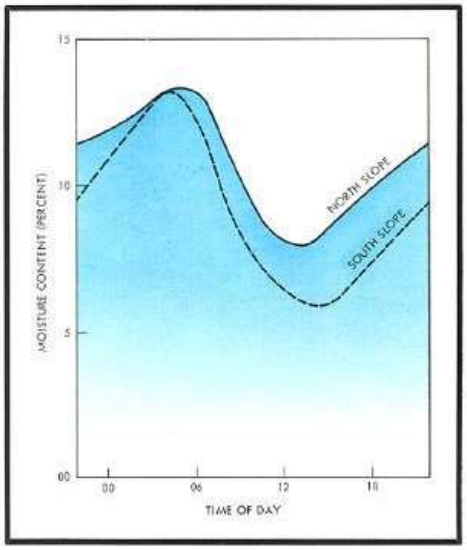
Logs under a forest canopy remain more moist through the season than those exposed to the sun and wind. These curves are 13 – year averages for large logs of 6-, 12-, and 18-inch diameters.

These changes in upward and downward moisture gradients are common in most compacted fuel beds. In some situations, they may even be part of the diurnal cycle of moisture change in response to diurnal changes in temperature and relative humidity. This is particularly true in open forest stands where much of the surface littler is exposed to direct radiant cooling to the sky at night.

The amount of fuel available for combustion is often determined by these interior moisture gradients. In some cases, for example, fire may only skim lightly over the surface; in others, the entire dead-fuel volume may contribute to the total heat output of the fire.

Effects of Canopy, Clouds, Exposure, Elevation, Wind

During clear weather, fuel-bed surfaces exposed to full midday sum may reach temperatures as high as 160°F. or more. Not only does this greatly increase the bound-water vapor pressure, but it also warms the air near the surface and reduces relative humidity. The combination often results in surface fuel moistures 4 to 8 percent below those in adjacent shaded areas. Similarly at night, cooling of these exposed fuel surfaces may cause dew to form on them, while it does not form under the tree canopy. Surface fuel moistures and accompanying changes in moisture gradients are thus commonly much greater, and at the same time much more spotty, in open forest stands than under forests having closed-crown canopies. Clouds also tend to reduce the diurnal extremes in fuel moisture.



Fuel moistures are affected by aspect. Except for the early morning hours, fuel moistures will be lower throughout the day on south slopes than on north

North-facing slopes do not receive as intense surface heating as level ground and south exposures, so they do not reach the same minimum daytime moistures. The highest temperatures and lowest fuel moistures are usually found on southwest slopes in the afternoon. In mountain topography, night temperatures above the nighttime inversion level ordinarily do not cool to the dew point; therefore, surface fuel moistures do not become as high as those at lower elevations.

Earlier in this section, we emphasized the effect of wind on fuel drying by preventing a rise in vapor pressure adjacent to the fuel. But moderate or strong winds may affect surface temperatures of fuels in the open and thereby influence surface fuel moisture. During daytime heating, wind may replace the warm air layers immediately adjacent to fuel surfaces with cooler air. This in turn raises the relative humidity in that area and lowers the fuel-surface temperature. Fuel drying is thereby reduced. At night, turbulent mixing may prevent surface air temperatures from reaching the dew point, thus restricting the increase of surface fuel moisture.

Foehn winds are frequently referred to as drying winds because they are so often accompanied by rapid drying of forest fuels. In the case of the foehn, it is warm and

slopes. Southwest slopes usually have the lowest afternoon fuel moistures.

extremely dry air that is responsible for desiccation. The important role of the wind here is to keep that warm, dry air flowing at a rapid rate so that it does not become moist by contact with the surface either by day or night. The reverse is true, of course, when moist winds blow over dry fuels. They bring in a continuous supply of moisture to maintain a pressure gradient favorable for fuel-moisture increase. In all of these moisture-exchange processes, it should be remembered that wind has quite varied and complex effects on fuel-moisture regimes.

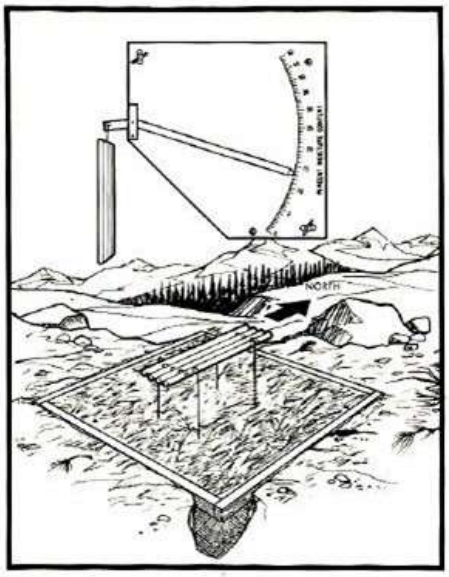
Slash

Slash from thinning or harvest cutting of coniferous forests is a special and often particularly **hazardous kind of dead fuel**. Often, it is flammable from the time it is cut, but it is particularly hazardous if added to significant quantities of flammable dead fuels already on the ground. As the slash dries, it becomes more and more flammable. The slash of different species dries at different rates, and within species the drying rates depend on degree of shading, season of cutting, weather, and size of material. Needles and twigs dry faster on lopped than on unlopped slash. Within a matter of weeks, however, it is not necessary to consider slash needle and twig moisture different from that of older dead fuels. Stems, of course, require longer periods of seasoning to approach the fuel moisture of their older counterparts.

Estimating Dead Fuel Moisture

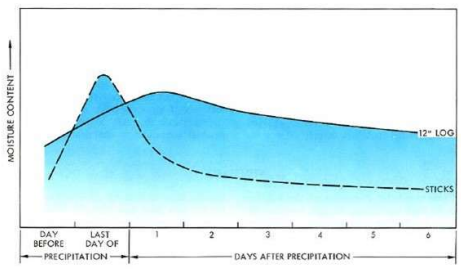
The moisture content of dead fuels cannot be measured conveniently in the field. For fire-control purposes, it is usually estimated indirectly by various methods. Very fine, dead fuels such as cured fine grass, certain lichens and mosses, well-aerated needles and hardwood leaves, and the surface layer of larger fuels may be in approximate equilibrium with their immediate environments. Except after rain, a reasonably accurate estimate of their moisture content, and therefore their flammability, may be obtained from the equilibrium moisture content corresponding to the immediately surrounding air temperature and humidity. But, even here, it helps to know whether the moisture content is rising or falling.

A method used in some regions to estimate the moisture content of medium-sized fuels is to determine the moisture content of **fuel-moisture indicator sticks**. A set of sticks consists of four 1/2- inch ponderosa pine sapwood dowels spaced 1/4 inch apart on two 3/16-inch dowels. The 1/2 –inch dowels are approximately 20 inches long. Each set is carefully adjusted to weigh 100 grams when ovendry. The sticks are exposed 10 inches above a litter bed in the open on wire brackets. They are weighed at least once every day, and their moisture contents are computed from their known dry weights. Scales calibrated to read directly in percent moisture content are available.



Fuel-moisture indicator sticks of the ‘1/2-inch size are used to estimate th. moisture content of dead fuels of comparable size. They are exposed on a wire rock 10 inches above a bed of litter. By weighing them, their moisture content can be obtained.

The indicated moisture represents the cumulative effects of past changing weather factors on these standardized fuel simulators over a period of time preceding the observation. These indicated values may be modified by current weather or other factors when necessary to more closely approximate actual field conditions. Other systems and devices may also be used as weather integrators in lieu of moisture indicator stick weights.



The moisture content of larger fuels is usually estimated from systematic observations of precipitation and some indicator of daily drying conditions, such as maximum temperatures and day length, or the moisture-content trends of indicator sticks referred to above. From empirical relationships involving amounts of precipitation, number of days without precipitation, and daily drying conditions, the moisture content of large fuels can be estimated.

Measurements of the moisture contents of different sizes of fuels before, during, and after precipitation show that larger fuels, such as logs, are slow to react to both wetting and drying.

Mixtures of Living and Dead Fuels

We have noted that somewhat different processes govern the changes in moisture contents of living plant foliage and those of dead forest fuels. It is also significant that the upper flammability limit of most dead fuels under ordinary field conditions is about 25-30 percent moisture content. The living foliage of many evergreen trees and shrubs may burn well with moisture contents of over 100 percent, probably because of volatile oils released, but usually some intermixed dead fuels are necessary to maintain combustion. The different moisture contents in intermixed living and dead fuels do not always rise and fall in the same pattern. They must be evaluated separately to determine the flammability of the complex as a whole at any given time.

The manner in which living and dead fuel mixtures may augment or oppose each other depends somewhat on the nature of the local fire weather in relation to the growing season. A brief dry spell during a period of new leaf development and growth may cause intermixed dead fuels to become reasonably dry. They do not burn briskly, however, because much of the heat needed for fire propagation is absorbed by the succulent foliage. If such a dry spell occurs after the foliage reaches maturity, or when the foliage is dormant, flammability of the complex may become high to extreme.

Areas with a distinct summer dry season tend to have a more or less regular seasonal pattern of foliage and dead-fuel moisture variation. In such areas, it is common for foliage moisture to start increasing about the time dead fuels begin to dry, reaching a maximum in late spring or early summer. During this period, increasing foliage moisture largely offsets the effects of continued drying of the associated dead fuels. By mid or late summer, however, the foliage has reached the flammability point. Beyond this time, continued foliage moisture decreases, coupled with seasonal cumulative drying of larger dead fuels and deep litter beds, produce increasing flammability until fall rains begin.

Differences among species, total and relative amounts of living and dead fuels, their interrelationships in space, as well as vagaries in weather and growing seasons, occur in infinite variety. Hence, evaluation of the current flammability of most live-dead fuel complexes requires local appraisal and interpretation based on experienced judgment.

One of the most difficult situations to evaluate is that brought about by drought resulting from consecutive years of deficient precipitation. Such periods of persistent drought occur in all forest regions at irregular intervals, often many years apart. Both living and dead fuels are adversely affected. Both old and new living foliage will be abnormally deficient in moisture. The ratio of attached dead twigs and branches will increase markedly. Large logs may become dry enough to burn to a white ash residue. Stumps and their roots may become dry enough to burn deep into the ground. Thus, the flammability of both living and dead fuels will increase, and at the same time the ratio of dead to live fuel increases. The gradual trend in rising fire danger is subtle, but it has a pronounced accumulative effect. This slow trend usually is not adequately recognized by routine methods of computing fire danger, and special efforts must be made to keep aware of the gradual accumulative changes in flammability.

Summary

From this brief discussion of the weather effects on fuel moistures, we can see that the processes involved in moisture content changes are very complex. Living plants and dead fuels respond quite differently to weather changes. The moisture content of a living plant is closely related to its physiology. The major variations in moisture are seasonal in nature, although shorter term variations are also brought about by extreme heat and drought. Dead fuels absorb moisture through physical contact with liquid water such as rain and dew and adsorb water vapor from the atmosphere. The drying of dead fuels is accomplished by evaporation.

Under suitable drying conditions, first the free water in the cellular spaces evaporates; then the bound water held to the cell walls evaporates and is absorbed by the atmosphere. The nature of the drying and wetting processes of dead fuels is such that the moisture content of these fuels is strongly affected by weather changes. These moisture contents are influenced by precipitation, air moisture, air and surface temperatures, wind, and cloudiness, as well as by fuel factors such as surface to volume ratio, compactness, and arrangement.

We have now completed our discussion of the individual fire-weather elements and their effect on the moisture content of forest fuels. In the **final chapter**, we will learn how fire weather varies from one region to another over the North American Continent.

ATTACHMENT 31

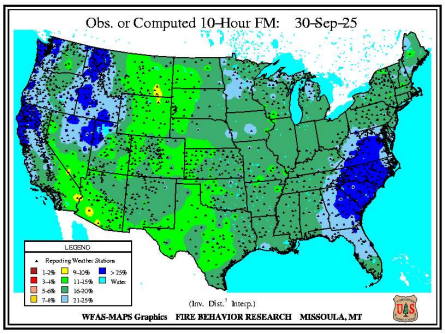
National Oceanic and Air Administration, "Dead Fuel Moisture." https://www.ncei.noaa.gov/access/monitoring/dyk/deadfuelmoisture

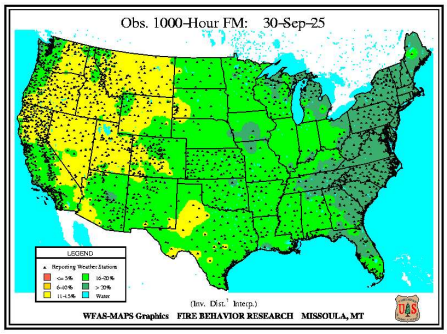
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Dead Fuel Moisture





The fuel moisture index is a tool that is widely used to understand the fire potential for locations across the country. Fuel moisture is a measure of the amount of water in a fuel (vegetation) available to a fire, and is expressed as a percent of the dry weight of that specific fuel. For example, if a fuel were totally dry, the fuel moisture content would be zero percent. Fuel moisture is dependent upon both environmental conditions (such as weather, local topography, and length of day) and vegetation characteristics. When fuel moisture content is high, fires do not ignite readily, or at all, because heat energy has to be used to evaporate and drive water from the plant before it can burn. When the fuel moisture content is low, fires start easily and will spread rapidly - all of the heat energy goes directly into the burning flame itself. When the fuel moisture content is less than 30 percent, that fuel is essentially considered to be dead. Dead fuels respond solely to current environmental conditions and are critical in determining fire potential. The dead fuel moisture threshold (10–hour, 100–hour, or 1,000–hour), called a time lag, is based upon how long it would take for 2/3 of the dead fuel to respond to atmospheric moisture. Small fuels (less than 1/4 inch in diameter), such as grass, leaves, and mulch respond more quickly to changes in the atmospheric moisture content, and take 10 hours to adjust to moist/dry conditions. Larger fuels lose or gain moisture less rapidly through time. Fuels that are 3 inches to 8 inches in diameter, such as dead fallen trees and brush piles can take up to 1,000 hours to adjust to moist conditions, and are represented by the 1,000–hour dead fuel moisture index.

1,000+ hour fuels do not burn easily, but if they do burn, they will generate extreme heat often causing dangerous fire behavior conditions.

Definition of the Dead Fuel Moisture Time Lag Classes

Time Lag	Fuel Size	Determination
10–hour	0.25 to 1 inch diameter	Computed from observation time temperature, humidity, and cloudiness. Can also be an observed value, from a standard set of fuel sticks that are weighed as part of the fire weather observation.
100–hour	1 to 3 inches diameter	Computed from 24–hour average conditions composed of day length, hours of rain, and daily temperature/humidity ranges.
1000–hour	3 to 8 inches diameter	Computed from a 7–day average conditions composed of day length, hours of rain, and daily temperature/humidity ranges.

Check out the Wildand Fire Assessment System for additional information.