



Liberty Utilities®

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September 4, 2019

Leslie Palmer
Director, Safety and Enforcement
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA, 94102

Dear Mr. Palmer:

In accordance with Ordering Paragraph 3 of California Public Utilities Commission (CPUC) Decision (D.) 19-05-042, Liberty Utilities (CalPeco Electric) LLC respectfully submits its first progress report on the implementation of the guidelines set forth in Appendix A.

If you have any questions, please do not hesitate to call.

Sincerely,

/s/ Daniel W. Marsh

Daniel W. Marsh
Manager, Rates and Regulatory Affairs
Liberty Utilities (CalPeco Electric) LLC

Enclosures

cc: Anthony Noll, SED
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Liberty Utilities®

(U 933-E)

Adopted De-Energization Guidelines Progress Report

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Adopted De-Energization Guidelines Progress Report

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I.

COMPLIANCE STATUS

A. Overview

Pursuant to Decision (“D.”) 19-05-042 in Rulemaking (“R.”) 18-12-005, Liberty Utilities (CalPeco Electric) LLC (“Liberty CalPeco”) hereby submits this Progress Report on the Adopted De-Energization Guidelines (“Report”) to the Safety and Enforcement Division (“SED”) of the California Public Utilities Commission (“CPUC”). This Report describes Liberty CalPeco’s progress in implementing the newly adopted guidelines to help mitigate wildfires in its service territory by de-energizing the system during heightened threat periods.

This Report is organized to address each guideline sequentially, as presented in D.19-05-042. This Report documents current processes and discusses actions taken, or planned to be taken, to comply with the newly adopted de-energization guidelines.

B. Communication

Liberty CalPeco has worked to educate the public about Public Safety Power Shutoff (“PSPS”) events and procedures, including how to be informed before, during, and after a PSPS, and how to prepare for a potential PSPS. Liberty CalPeco monitors fire weather forecasts and has developed an alert system to notify the appropriate personnel when established fire weather thresholds may be exceeded.

In 2019, Liberty CalPeco retained REAX Engineering to conduct a study to recommend thresholds for proactive de-energization of overhead electrical utilities in PSPS zones. Liberty CalPeco has divided its service territory into approximately 40 proactive de-energization zones (“PDZs”) that serve to section the system by circuit(s) and/or protective devices that serve as isolation points in the event of a PSPS event. Each PDZ is assigned by location, circuit(s), critical facilities, number of customers, and geographic terrain to easily identify affected de-energization zones and surrounding areas. Liberty CalPeco’s Event Team includes the Vice President of Operations, Communications Manager, Wildfire Prevention Manager, and GIS and Field Managers. Once a particular PDZ is forecast to reach or exceed de-energization thresholds, Liberty CalPeco will send alerts, and the Event Team will meet to plan for a potential PSPS event.

When there is the potential for a PSPS to be called, the Event Team will begin compiling customer data and review operational planning procedures. The information gathered will be

promptly packaged and sent to Liberty CalPeco's Steering Committee for immediate discussion with the Event Team. The Steering Committee includes the company presidents and senior representatives from risk management, law, and corporate communications. This group will discuss logistics and risk exposure for the affected area(s), as well as next steps in the event the wildfire risk is elevated to high.

The Event Team will continue to plan for the possible PSPS event with regular meetings until the risk subsides or a PSPS event is called. In addition to monitoring the situation, the Event Team will refine operations and communications planning for the potential PSPS event. Operations representatives will meet with field operations representatives to determine logistics and details for the PSPS event, including identifying circuits affected, assigning crews and supervision, identifying vegetation management work in the area, and planning for patrols prior, during, and after the event.

Communications will compile a list of contacts from the affected PDZs and notify critical facilities via email, text, and the Liberty CalPeco website. With even moderate risk of potential wildfire, communications with potentially affected parties will increase. Notifications to state and local agencies, first responders, and critical care facilities will include general information on the situation, location of PDZs, customer count, and estimated impact to the surrounding areas. Liberty CalPeco's website will provide updates to include points of contact by customer class to provide support in the event of an imminent wildfire.

Liberty CalPeco has embarked on the following efforts to educate its customers and the community:

- Created multiple informational documents distributed to customers and community partners;¹
- Created a wildfire mitigation and PSPS section on the Liberty CalPeco website at <http://libertyutilities.com/wildfiresafety/>;
- Participated in and/or held panel discussions, workshops, and planning meetings with partners and the public;²
- Posted educational information regarding the PSPS and wildfire mitigation on social media; and
- Sent PSPS information directly to Liberty CalPeco's customer email database.

¹ Examples of these materials are attached as Appendix A.

² A list of meetings held and scheduled is attached as Appendix B.

In addition, Liberty CalPeco has created guidelines regarding communication to customers and partners in advance of a potential PSPS event, ahead of a planned PSPS event, and during and after a PSPS event.³

C. Advanced Notice

Liberty CalPeco will work to provide as much advanced notification as possible to customers who will be affected by a PSPS, and Liberty CalPeco plans to provide even more advanced warning of a PSPS to public safety partners, local utilities, and critical infrastructure, even before a PSPS event is imminent. In order to avoid desensitization of the public, advanced notice to customers will be provided in a shorter timeframe and only when a PSPS event is likely. Under these considerations, Liberty CalPeco has developed the following notification guidelines:

- Up to eight days in advance – cities, counties, emergency services (public safety partners), regional utilities, cell tower operators, and critical facilities.
- Up to 72 hours in advance – medical baseline or medically sensitive patients, and cities, counties, emergency services (public safety partners), regional utilities, cell tower operators, and critical facilities.
- Up to 48 hours in advance – all affected or potentially affected customers, public safety partners, CPUC, and the media.
- Up to 24 hours in advance – all affected or potentially affected customers, public safety partners, CPUC and the media.
- Immediately before de-energization – all affected or potentially affected customers, public safety partners, CPUC and the media.
- During the PSPS Event – all affected or potentially affected customers, public safety partners, CPUC, and the media.
- At the conclusion of the PSPS Event – all affected or potentially affected customers, public safety partners, CPUC, and the media.

D. Notification Responsibility

Liberty CalPeco is aware of the importance of a unified voice and coordinated efforts with local emergency systems and agencies regarding any significant power outage or emergency. For

³ Liberty CalPeco's Outage Communication Strategy is attached as Appendix C.

this reason, Liberty CalPeco has held meetings with these partners to strengthen such cooperation leading up to, and during, a PSPS event. Attached as Appendix B is a list of meetings held and scheduled.

As the decision-maker of a PSPS event, Liberty CalPeco will lead the communication effort and outreach. Liberty CalPeco will be clear with its public safety partners receiving the most advanced notification when the information is intended to be public. When notifications are intended to be public, Liberty CalPeco will provide clear messaging and request that each partner and media outlet assist in the distribution of the same information and messaging.

Liberty CalPeco knows how important it is that customers and communities understand what a PSPS is, why it may be utilized, and how best to be prepared should one occur. As discussed above, Liberty CalPeco has embarked on a system-wide outreach and awareness campaign to help customers and partners understand and prepare for a PSPS event.

E. Notification Information

Liberty CalPeco supports the concept of two types of notification: (1) advanced outreach and awareness and (2) PSPS event notification and information. Although the primary efforts to educate and prepare the public on how best to handle a PSPS event are focused in advance of wildfire season, Liberty CalPeco will continue to provide critical information regarding how best to endure a PSPS event, including but not limited to options for medically sensitive customers, how to prevent refrigeration spoilage, tools and resources to have on hand, and back up generation. Critical tips and safety measures will also be communicated prior to and during a PSPS event.

1. Advanced Outreach and Education

Liberty CalPeco has worked to build and maintain strong relationships with public safety partners, critical facilities, community-based organizations and other public safety partners. To date, Liberty CalPeco has built a contact database of more than 200 entities representing public safety, critical infrastructure, government officials, and others, spanning all seven counties in Liberty CalPeco's service territory.⁴

⁴ A list of Public Safety Partner Contacts by county is attached as Appendix D.

a) Public Safety Partners and Critical Facilities

In partnership with REAX Engineering, Liberty CalPeco is developing a set of criteria and estimated thresholds that may trigger a PSPS event. Once this study is finalized, Liberty CalPeco will make it available to all public safety partners, local and state agencies, and critical facilities to help them monitor and prepare for a potential PSPS event. Liberty CalPeco has also installed 10 weather stations to augment the existing weather stations in the service territory and has made the information from these stations available to the National Weather Service, partners, and the general public. Liberty CalPeco weather station data and locations can be viewed at <https://liberty.westernweathergroup.com/>.

b) Other Customers

Liberty CalPeco has incorporated information regarding how to prepare for a prolonged loss of power in its existing outreach materials. Appendix A contains examples of these media and customer outreach materials. Materials and information specific to preparation for a prolonged power outage are in development. In creating these materials, Liberty CalPeco has consulted examples from the large California investor-owned electric utilities, as well as solicited input from county OES and CalFire.

Liberty CalPeco is working to create scripted de-energization templates in partnership with local and state public safety partners to be used leading up to, during and after a PSPS event. These templates are in development.

2. Preceding Notification

In advance of a PSPS event, Liberty CalPeco will provide specific information to public safety partners, including the boundaries of the PSPS event, the circuits to be de-energized, information regarding customers within the PSPS boundaries (including the number of medical baseline customers), the estimated start time of the PSPS event, the estimated length of the PSPS event, and estimated power restoration timelines. When possible, Liberty CalPeco will also make geospatial data available to public safety partners, including GIS and/or boundary maps.

a) Public Safety Partners

Liberty CalPeco will provide public safety partners at the time of first notification preceding a PSPS event information regarding the upcoming PSPS event, including estimated start time of the event, estimated duration of the event, and estimated time to full restoration. The electric investor-

owned utilities must use the previously established contact channels developed in advance of the 2019 wildfire season and should strive to provide contact according to the timeframes adopted in these guidelines. The electric investor-owned utilities must provide the number of medical baseline customers in the impacted area to first/emergency responders and/or local jurisdictions. Once a PSPS area has been identified, Liberty CalPeco will generate customer list and flag green cross customers within the PSPS area using GIS and outage management software.

b) All Other Customers

Liberty CalPeco will work with local public safety partners to communicate with all other customers that a PSPS event is possible, the estimated start time of the PSPS event, the estimated length of the PSPS event (which may be communicated as a range), and the estimated time to power restoration, which may be communicated as a range. Communications shall state when the customer can next expect communication about the PSPS event.

Communication, consistent with best practices articulated in the California Alert and Warning Guidelines, must answer five key recipient questions:

- (1) Who is the source of the warning;
- (2) What is the threat?
- (3) Does this affect my location?
- (4) What should I do? And
- (5) What is the expected duration of the event?

Communications must also point customers toward education and outreach materials disseminated in advance of the 2019 wildfire season.

Liberty CalPeco will provide up-to-date information, including a depiction of the boundary of the PSPS event, on the libertyutilities.com homepage and a dedicated PSPS webpage regarding the PSPS event. Liberty CalPeco, in partnership with local public safety partners, will establish and communicate a 24-hour means of contact that customers may use to ask questions or seek information.

F. Communication Methods

Liberty CalPeco is aware of the California Alert and Warning Guidelines, which state that “people rarely act on a single warning message alone. To be effective, warnings should be delivered in various formats via various media, both to increase reliability of warning delivery and to provide a sense of corroboration that will encourage recipients to take protective actions.”

Liberty CalPeco, in cooperation with its public safety partners, is prepared to provide messaging in multiple formats and from multiple distribution points. Liberty CalPeco will communicate frequently using the following strategies:

- Direct Messaging to customer database via text, email and voice utilizing the Everbridge platform (also used by many state and local governments and emergency agencies);
- Social media;
- The libertyutilities.com website;
- Public service announcements to all local and regional media; and
- Template notifications to public safety, city, state, and county officials for re-distribution via their communication channels.

G. Communication: Before and During Events

During meetings and workshops, Liberty CalPeco’s public safety partners have requested notification of a potential PSPS event early and often regardless of the probability of the event actually occurring. The public safety partners also understand and agree that coordination of the public release of such notifications is critically important to reduce confusion, unify the message, and not create unnecessary fear or anxiety.

Liberty CalPeco has committed to providing public safety partners as much advance notification as possible, even for potential PSPS events that have a low probability chance of occurring. Liberty CalPeco and its public safety partners have agreed to work together, as needed, to notify medically sensitive or at risk customers at a target time frame of 72 hours prior to a PSPS event and will coordinate the notification of the general public at a target time frame of 48 hours prior to a PSPS event.

Liberty CalPeco will follow the principles of Standardized Emergency Management System (“SEMS”) in the notification process. Consistent with SEMS 100, Liberty CalPeco is responsible for contacting local public safety officials in impacted jurisdictions prior to and during a PSPS event. Liberty CalPeco will communicate an impending PSPS event to local and state officials. Liberty CalPeco will work with public safety partners to disseminate information in formats and through processes that are used by public safety partners during other emergencies, including developing notification messaging consistent with the California Alert and Warning Guidelines. Liberty CalPeco has partnered with local and state public safety partners to develop notification strategies for all

customer groups that comport with the best practices articulated in the California Statewide Alert and Warning Guidelines.

Liberty CalPeco has partnered with local jurisdictions, CalOES, and CAL FIRE to develop a comprehensive, coordinated, and cohesive notification framework including, but not limited to, Liberty CalPeco providing notification to public safety partners, and public safety partners providing secondary or supplemental notification to the general public. Liberty CalPeco retains responsibility for notification of affected customers.

Liberty CalPeco, in partnership with local and state public safety partners, is continuing to develop notification strategies for access and functional needs (“AFN”) populations up to and including in-person notification. Liberty CalPeco will develop a coordinated positive/affirmative notification strategy with public safety partners for pre-designated AFN populations. Liberty CalPeco will attempt to identify pre-designated AFN populations in coordination with public safety partners whenever possible and will include customers on medical baseline tariffs that are dependent upon electricity for the provision of life-sustaining services.

H. Coordination with Responders

PSPS events require coordination with CalOES, CAL FIRE, and local jurisdictions to determine the most appropriate formation and staffing of EOCs. Liberty CalPeco is working to implement an effective communications strategy with its public safety partners when power is shut off because loss of power may impact standard forms of communication. The Commission has adopted the following guidelines:

- If requested by the local jurisdiction, the electric investor-owned utilities must embed a liaison officer at the local or county EOC. When requested, the utility must embed a liaison officer at the State Operations Center for the purpose of assessing and integrating wildfire threat data for decision-making. The liaison officers must be empowered to provide rapid and accurate information from the utilities. To ensure consistency of response across jurisdictions, the electric investor-owned utilities should have a designated lead with decision-making authority located at the utility’s EOC with whom embedded liaisons can communicate in real-time to obtain the most up-to-date information. This requirement does not preclude the utilities from developing a centralized communication structure that is amenable to both the utility and local jurisdictions to provide real-time coordination and situation awareness.

- Currently, the electric investor-owned utilities form an EOC during each PSPS event. The electric investor-owned utilities must invite representatives from CalOES, water infrastructure providers, and communication service providers. In the alternative, the utilities may develop a mutually agreeable communications structure with water infrastructure providers and communication service providers in lieu of holding seats in its EOC.

Liberty CalPeco will work with local jurisdictions to determine if a PSPS event will trigger the activation of the local jurisdiction's EOC. If the local or county jurisdiction activates its EOC as a result of a Liberty CalPeco PSPS event, Liberty CalPeco will embed a liaison officer at the local EOC. Liberty CalPeco will also embed a liaison officer at the State Operations Center upon request from CalOES.

During a PSPS event, Liberty CalPeco will form its own EOC and will invite and hold seats for CalOES and local or county OES representatives. Seats will also be held for affected water infrastructure providers and communication service providers unless a mutually agreeable communications structure is in place.

I. Requests to Delay and Re-Energization

Liberty CalPeco has not received any requests to delay de-energization. Requests to delay de-energization will be evaluated on a case-by-case basis, and requests will be analyzed to determine how a delay in de-energization will impact public safety. Liberty CalPeco will only respond to de-energization delay requests from public safety partners.

During a Liberty CalPeco-initiated PSPS event, it is possible that a non-utility-related emergency may arise, such as a non-utility-caused wildfire that occurs in a de-energized area, which would require the use of water for firefighting purposes. These circumstances may require an emergency service provider, such as a fire department, to request that critical facilities be re-energized in order to address the emergency situation. Liberty CalPeco will evaluate requests for re-energization and determine if the consequences of de-energization outweigh the benefits (*i.e.*, inability to fight an active fire due to low water pressure). Liberty CalPeco will need to inspect de-energized lines prior to re-energization. Some of these scenarios were discussed in meetings listed in Appendix B.

J. De-Energization of Transmission Lines

Liberty CalPeco owns circuits that operate at a transmission or sub-transmission voltage class, but these circuits serve a distribution purpose. These transmission and sub-transmission lines are not used to transmit power across a region or to other interconnections and are only used to serve customers within Liberty CalPeco’s service territory. Protocols have not been developed because there are no other stakeholders affected by the de-energization of Liberty CalPeco transmission lines.

Liberty CalPeco complies with North American Electric Reliability Corporation (“NERC”) and Federal Energy Regulatory Commission (“FERC”) requirements where applicable. Because Liberty CalPeco does not have a Bulk Electric System, most NERC/FERC requirements do not apply. De-energization of transmission lines would only affect Liberty CalPeco customers, and, therefore, coordination with CalOES, CAL FIRE, and local jurisdictional public safety partners will follow the same protocols for a PSPS event at the distribution level.

There is a possibility that NV Energy, Liberty CalPeco’s electric provider, may de-energize transmission lines that supply Liberty CalPeco’s service territory, which has the potential to impact a large number of customers. NV Energy has notified Liberty CalPeco, in addition to Truckee Donner Public Utilities District (“TDPUD”), Plumas-Sierra Rural Electric Cooperative (“PSREC”), and other public safety partners of a potential transmission PSPS event. Meetings with affected utilities and public safety partners were held the following dates and locations:

- July 8th, 2019 at Town of Truckee office;
- July 15th, 2019 at Town of Truckee office; and
- July 24th, 2019 at Truckee Donner Public Utilities District office.

In the event that NV Energy de-energizes transmission lines that supply electricity to Liberty CalPeco, Liberty CalPeco will follow the prescribed de-energization guidelines to coordinate with public safety partners, and communicate with the general public.

K. Reporting

Liberty CalPeco has had one PSPS event to date on November 21, 2018. Attached as Appendix E is the report of the event provided to the CPUC. This report followed the guidelines described in Resolution ESRB-8:

- i. Explanation of the decision to shut off power,
- ii. Factors considered in the decision to shut off power,

- iii. PSPS event details,
- iv. Number of affected customers,
- v. Wind-related damage,
- vi. Customer notifications and mitigations, and
- vii. Other information.

For future PSPS events, Liberty CalPeco will continue to follow the requirements of Resolution ESRB-8 and the guidelines set forth in Decision 19-05-042 for post-event reporting. Additionally, Liberty CalPeco will refer to SDG&E's November 11-16, 2018 de-energization report, issued on December 4, 2018, as a reporting template until the Commission adopts a standard reporting template for utilities to for utilities to follow.

Appendix A

Marketing Media and Outreach Materials

INFRASTRUCTURE HARDENING

Infrastructure hardening is an ongoing system infrastructure improvement and replacement process aimed at lowering the potential of fires sparked by electric infrastructure. These improvements will require several years to implement and will include some of the following projects:

COVERED CONDUCTORS

Covered conductors, or wires, are encased in layers of insulation to protect them when energized. Although bare wires have traditionally been used in California as a reliable, cost-effective solution, Liberty Utilities will be replacing bare conductors with covered conductors in high fire risk areas to reduce wildfire risk.

POLE LOAD TESTING & REPLACEMENT

Liberty Utilities understands that failing poles pose safety, reliability and fire risks. To prevent pole failure, Liberty Utilities is accelerating the testing and replacement of poles systemwide.

FUSE REPLACEMENT

Conventional fuses, when operated, expel hot particles and gases, which can start fires. In contrast, current limiting fuses, traditionally used for protecting "equipment," expel no materials and provide for a high level of reliability. In order to mitigate the risk of wildfire, Liberty Utilities proposes to replace conventional fuses with current limiting fuses on much of its system over the coming years.

REPLACEMENT OF BROCKWAY SUBSTATION

The Brockway Substation in Kings Beach is a 60-year-old facility that was constructed with wooden poles and cross arms and obsolete oil-circuit breakers. This facility has been deemed a fire hazard and is scheduled to be decommissioned and replaced.

UNDERGROUNDING

Liberty Utilities continues to underground sections of the power grid and will do so for the next few years.



Liberty Utilities®

WILDFIRE MITIGATION PLAN

WHAT YOU NEED TO KNOW

Liberty Utilities is taking precautionary steps to protect the community from wildfires by implementing a robust wildfire mitigation plan. The best way to stay informed about power shutoffs, vegetation management and system upgrades is to ensure your personal contact information Liberty Utilities has on file is up-to-date.

To update your contact information, customers can:



1-800-782-2506:



LibertyUtilities.com

Catastrophic wildfires have become all too common in California. To mitigate the risk of wildfires in the communities we serve, Liberty Utilities is taking aggressive steps to keep you and your family safe.

As seen in Paradise, Calif., a single spark can quickly turn into a fire capable of wiping an entire community off the map.

Liberty Utilities is acutely aware of the significant fire risk in the Lake Tahoe Basin and surrounding forested areas that make up its service territory. Drought and bark beetle infestation have devastated portions of our local forest, slowly suffocating the life out of the trees that dot our landscape. These dying trees now serve as ideal fuel for the wildfires that threaten our community's safety.

There are measures we can take to protect the local community from the threat of wildfire, which is why Liberty Utilities recently implemented a wildfire mitigation plan that was developed to address local factors that could put our region at risk.

LOCAL AND RESPONSIVE. WE CARE.

The spark of a wildfire can come from a cigarette butt, a campfire or even electric infrastructure. It is impossible to predict when or where a wildfire may start, but certain factors such as an evolving climate, dry forests and high wind conditions have most of the Golden State on high alert.

Here are a few steps Liberty Utilities is taking to protect you and your family:

VEGETATION MANAGEMENT

INSPECTION

Liberty Utilities' crews are deployed year-round throughout the region to inspect trees and vegetation in the vicinity of power lines. In order to comply with state law and safety best practices, any trees or branches that have grown too close to power lines will be trimmed or removed to mitigate any wildfire risk.

The majority of the tree and vegetation management work is executed from May through October, but work continues through the winter months and can include the daunting task of removing vegetation debris after snow storms.

Liberty Utilities has increased its vegetation management program investment from

\$2.3 M TO \$4 M
ANNUALLY

to ensure all trees and vegetation near power lines are trimmed or removed within the appropriate time frame.

REMOVAL & NOTIFICATION

When trees are identified for trimming, crews are instructed to prune branches and vegetation back to a minimum of 12 feet from the high voltage power lines to ensure adequate clearance is maintained over the maintenance cycle period. Crews will additionally identify any trees for removal that are dead, diseased or structurally unsound, despite being within the acceptable clearance zone, if they have the potential to fall on power lines.

When trees need to be removed, Liberty Utilities and its contractors will notify the property owner prior to starting work via a doorhanger.

Customers should never attempt to conduct the tree trimming activities themselves, due to the risk of coming in contact with power lines during the process.

Liberty Utilities offers complimentary tree-trimming services to customers who believe a tree or branch may be hazardous to nearby electric infrastructure. If you spot a tree or branch you feel may be a hazard, submit a tree trimming request at LibertyUtilities.com or



Call 530-546-1787



PUBLIC SAFETY POWER SHUTOFF

A Public Safety Power Shutoff (PSPS) is the process by which an electric utility may proactively turn off power in certain areas when and where weather conditions create a high wildfire risk. The implementation of a PSPS, which is becoming more and more frequent, is supported by the State of California as a safety best practice.

WEATHER & ENVIRONMENTAL CONDITIONS

Liberty Utilities has deployed weather stations throughout the local service area, and will collaborate with fire experts at Reax Engineering and the National Weather Service in Reno, Nevada, and local fire officials to monitor local weather conditions.



PUBLIC SAFETY POWER SHUTOFF CRITERIA

While no single factor will drive a Public Safety Power Shutoff, some factors include:

- ✓ RED FLAG WARNING
- ✓ LOW HUMIDITY
- ✓ DRY FUEL CONDITIONS
- ✓ FORECAST SUSTAINED WINDS & GUSTS
- ✓ HEAT/TEMPERATURE

NOTIFICATION

In the event that a PSPS is a possibility, Liberty Utilities will alert customers, local government and safety agencies of the potential need to shut off power and keep the community apprised as weather conditions evolve. Customers are encouraged to follow the utility on Twitter (@LibertyUtil_CA) and Facebook (@LibertyUtilitiesLT) to receive timely updates on power outages, planned or unplanned.

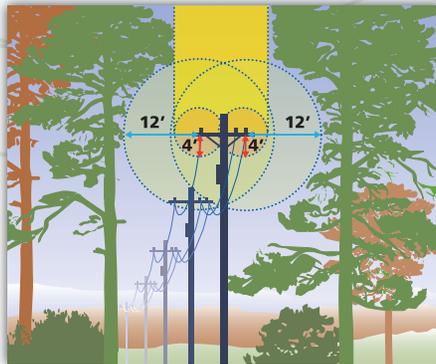
Community Wildfire Safety Program

Vegetation Management

Liberty Utilities' crews are deployed year-round throughout the region to inspect trees and vegetation in the vicinity of power lines. In order to comply with state law and safety best practices, any trees or branches that have grown too close to power lines will be trimmed or removed to mitigate any wildfire risk.

Liberty Utilities' vegetation management crews canvas the entire service area on a pre-planned rotation. The majority of the tree and vegetation management work is executed from May through October, but work continues through the winter months and can include the daunting task of removing vegetation debris after storms.

When trees are identified for trimming, crews are instructed to prune branches and vegetation back to a minimum of 12 feet from the power lines to ensure adequate



“...any trees or branches that have grown too close to power lines will be trimmed or removed to mitigate any wildfire risk”.

clearance is maintained over the maintenance cycle period. Hazard trees—which are often dead, diseased or structurally unsound—are also identified for removal. These trees can be far away from the power line, but have the potential to fall into the power line due to their related defects. When trees need to be removed, Liberty Utilities and its contractors follow a notification process so that the property owner is aware of the work prior to its completion.

In addition to the routine vegetation maintenance program, Liberty Utilities has an emergency program to immediately remove trees that are an imminent threat to infrastructure. Throughout the Lake Tahoe region, Liberty Utilities has increased its vegetation management program investment from \$2.5 to \$4 million annually to ensure all trees and vegetation near power lines are trimmed or removed within the appropriate timeframe.

Tree trimming and removal services performed by Liberty Utilities are done at no cost to the property owner. Limbs, slash and brush will be chipped and hauled or broadcasted on-site. The remaining wood (trunk of the tree) will be left with the property owner.

If you have any questions about Liberty Utilities' Vegetation Management Program or would like to report a tree/vegetation you feel may be a hazard, please call [530-546-1787](tel:530-546-1787).

De-energization

De-energization is the process by which an electric utility may proactively turn the power off in certain areas when and where weather conditions create a high fire risk. The practice of de-energization, which is becoming more and more frequent, is encouraged by the California Public Utility Commission (CPUC) as a safety best practice.

“The practice of de-energization, which is becoming more and more frequent...”

Liberty Utilities will be deploying weather stations throughout the local service area, and will collaborate with the National Weather Service in Reno, NV, and local fire officials to monitor local weather conditions. Specific weather conditions that could trigger a de-energization event are humidity or

extreme wind gusts. In addition to Liberty Utilities' outbound messaging and website information, Liberty Utilities encourages the public to follow the utility on **Twitter** via [@LibertyUtil_CA](https://twitter.com/LibertyUtil_CA) or **Facebook** via [@LibertyUtilitiesLT](https://www.facebook.com/LibertyUtilitiesLT) where they can also get information on power outages, planned or unplanned. Once the need to de-energize has been decided, Liberty Utilities will work with its media, public safety and government partners to communicate the details of the planned outage and prepare the public.

www.libertyutilities.com

 [@LibertyUtilitiesLT](https://www.facebook.com/LibertyUtilitiesLT)

 [Twitter@LibertyUtil_CA](https://twitter.com/LibertyUtil_CA)



Liberty Utilities[®]

Each and every season in the Tahoe region is uniquely special, and that's why our area is a world-class destination. Travelers from around the globe flock to our region to ski in the winter, enjoy the lake in the summer, and partake in outdoor activities during the beautiful spring and fall seasons.

But there is one emerging season that threatens it all – wildfire season.

Catastrophic wildfires have become all too common in California. In 2018, our state saw its deadliest and most destructive wildfire season on record, with a total of 8,527 fires burning an area of nearly 2 million acres and resulting in more than 100 fatalities.

It is imperative now more than ever to implement safety measures to protect our vulnerable communities. That is why Liberty Utilities is taking action to protect you and your family from the risk of wildfires related to electric infrastructure. This includes potentially implementing Public Safety Power Shutoffs to temporarily turn off power when weather conditions present an increased fire risk.

Here's What You Need to Know:

Public Safety Power Shutoff, or PSPS, is a safety procedure utilized by electric utilities to proactively turn off power when and where weather conditions create a high wildfire risk. Liberty Utilities utilizes weather stations throughout the local service area and collaborates with a fire and weather scientific consultant, the National Weather Service in Reno, Nevada, and local fire officials to monitor the local weather conditions and evaluate when a PSPS is required to limit wildfire risk.

While no single factor will drive a PSPS, some factors include:

- **Red Flag Warnings** – Issued by the National Weather Service to alert of the onset, or possible onset, of critical weather or dry conditions that would lead to swift increases in wildfire activity.
- **Low Humidity Levels** – Potential fuels are more likely to ignite when there is a lower amount of water vapor in the air.
- **Forecast Sustained Winds & Gusts** – High winds can result in several factors that may result cause a fire to ignite. Sustained winds can also cause the fire to spread and even throw embers into the air and create additional fires.
- **Dry Fuel Conditions** – Trees and other vegetation act as fuel for wildfires. Fuels with low moisture levels ignite easily and spread rapidly as no heat energy is wasted trying to drive water out of the fuel.
- **24/7/365 Monitoring** – Liberty Utilities installed 10 weather stations throughout high risk locations in our service area. Additionally, we are supported by around-the-clock monitoring service Reax Engineering and the National Weather Service.

How We Will Notify Customers

In the event that a PSPS is a possibility, Liberty Utilities will alert customers, local government and safety agencies of the potential need to shut off power and keep the community apprised as weather conditions evolve.

Liberty Utilities will attempt to contact customers through calls, texts and emails using the contact information on file. We will also post notices on LibertyUtilities.com and via our Facebook (@LibertyUtilitiesLT) and Twitter (@LibertyUtil_CA) channels.

Wildfire conditions can escalate quickly. Liberty Utilities will always attempt to alert the community at least 48 hours in advance of a potential PSPS; however, quickly developing conditions could warrant an immediate shutdown with little notice.

How You Can Prepare:

Liberty Utilities is working tirelessly to educate and prepare our customers and community for the risk of wildfires and potential implementation of a PSPS, but we need your help. Customers should consider the following to ensure their homes, businesses and families are prepared:

- Call 1-800-782-2506 to confirm your contact information is up-to-date and ensure you receive future alerts.
- Plan for medical needs that may be impacted by a power shutoff, including medications that need refrigeration or devices that require power. Be sure to register any medical-related energy needs at 800-375-7412.
- Create an emergency kit including flashlights, batteries, first aid supplies and maps of the local area. For additional emergency kit necessities, consult Ready.gov.
- Store non-perishable foods and water to support your family for a minimum of 48 hours.

Liberty Utilities' top priority is the safety of customers and our communities, and we will take every action to keep our beautiful region safe from the risk of wildfire. To learn more about our wildfire mitigation programs, customers are encouraged to call 800-782-2506 or visit LibertyUtilities.com.

We appreciate the community's understanding and cooperation, as we take action to keep the area safe from wildfires.

Local and Responsive. We Care.

Catastrophic wildfires have become all too common in California. As we saw last year in Paradise, a single spark can quickly turn into a fire capable of wiping an entire community off the map.

That spark can come from a cigarette butt, a camp fire or even electric infrastructure. It is impossible to predict when or where a wildfire may start, but certain factors such as an evolving climate, dry forests and high wind conditions have most of the Golden State on high alert.

Liberty Utilities is acutely aware of the significant fire risk in the Lake Tahoe Basin and surrounding forested areas that make up its service territory. Drought and bark beetle infestation have devastated portions of our local forest, slowly suffocating the life out of the trees that dot our landscape. It's ironic, but the same trees that once supplied our region with life-essential oxygen now serve as an ideal fuel for the wildfires that threaten our community's safety.

There are efforts we can take to protect the local community from the threat of wildfire, which is why Liberty Utilities recently implemented a 78-page wildfire mitigation plan that was developed to address local factors that could put the region at risk.

Here are a few of the steps Liberty Utilities is taking to protect you and your family:

Vegetation Management.

Not all trees are dead or dying. Mature, picturesque trees are still among the many features that make the greater Lake Tahoe region beautiful and feel like home. However, those same majestic trees can also threaten the safety of the community if they aren't properly maintained and come in contact with power lines or electric infrastructure.

Liberty Utilities' crews are deployed year-round throughout the region to inspect trees and vegetation in the vicinity of power lines. In order to comply with state law and safety best practices, any trees or branches that have grown too close to power lines will be trimmed or removed to mitigate any wildfire risk.

Liberty Utilities' vegetation management crews canvas the entire service area on planned three-year rotation. The majority of the tree and vegetation management work is executed from May through October, but work continues through the winter months and can include the daunting task of removing vegetation debris after storms.

Liberty Utilities has an aggressive tree-trimming clearance standard. When trees are identified for trimming, crews are instructed to prune branches and vegetation back to a minimum of 12 feet from the power lines to ensure adequate clearance is maintained over the three-year maintenance cycle period. Hazard trees—which are often dead, diseased or structurally unsound—are also identified for removal. These trees can be far away from the power line, but have the potential to fall into the power line due to their related defects. When trees need to be removed, Liberty Utilities and its contractors follow a notification process so that the property owner is aware of the work prior to its completion.

Tree trimming and removal services performed by Liberty Utilities are done at no cost to the property owner. Limbs, slash and brush will be chipped and hauled or broadcasted on-site. The remaining wood (trunk of the tree) will be left with the property owner.

In addition to the routine vegetation maintenance program, Liberty Utilities has an emergency program to immediately remove trees that are an imminent threat to infrastructure. Throughout the Lake Tahoe region, Liberty Utilities has increased its vegetation management program investment from \$2.5 to \$4 million annually to ensure all trees and vegetation near power lines are trimmed or removed within the appropriate timeframe.

An aggressive vegetation management program is very important in the Lake Tahoe region, where we live in the shadows of hundreds of thousands of mature trees. In fact, many areas have been designated a “Very High Fire Hazard Severity Zone” by CAL FIRE, meaning our region is especially vulnerable to wildfire.

If you have any questions about Liberty Utilities’ vegetation management program or would like to report a tree/vegetation you feel may be a hazard, please call 1-800-782-2506.

De-energization

De-energization is the process by which an electric utility may proactively turn the power off in certain areas when and where weather conditions create a high fire risk. The practice of de-energization, which is becoming more and more frequent, is encouraged by the California Public Utility Commission (CPUC) as a safety best practice.

“Liberty Utilities has only de-energized once thus far, last November a couple of days before Thanksgiving,” said Travis Johnson, VP of Operations for Liberty Utilities. “The idea of turning off peoples’ power on purpose goes against everything that we in the electric utility industry have ever been taught. That being said, we recognize that it is necessary and appropriate at times in order to reduce a fire risk.”

Liberty Utilities will be deploying weather stations throughout the local service area, and will collaborate with the National Weather Service in Reno, NV, and local fire officials to monitor local weather conditions. Specific weather conditions that could trigger a de-energization event are humidity or extreme wind gusts.

“It is likely that we will be employing de-energization more often during the dry months this summer and going forward to further mitigate fire risk,” said Kurt Althof, Communications Manager for Liberty Utilities. “We are encouraging all of our customers to ensure their contact information, such as phone numbers and emails, are up-to-date on their account, so that we can provide customers with as much warning as possible prior to a planned de-energization event.”

In addition to Liberty Utilities’ outbound messaging and website information, Liberty Utilities encourages the public to follow the utility on Twitter via @LibertyUtil_CA or Facebook via @LibertyUtilitiesLT where they can also get information on power outages, planned or unplanned. Once the need to de-energize has been decided, Liberty Utilities will work with its media, public safety and government partners to communicate the details of the planned outage and prepare the public.

Infrastructure Hardening

Infrastructure hardening is an ongoing system infrastructure improvement and replacement process aimed at lowering the potential of fires sparked by electric infrastructure. These improvements will require several years to implement, and will include some of the following projects:

1. **Replacing conductors (wires) with covered conductors.** Covered conductors encase the wires in layers of insulation to protect them when energized. Although bare wires have traditionally been used in California as a reliable cost-effective solution, it is prudent to replace bare conductors with covered conductors in high fire risk areas.
2. **Pole load testing and replacement, as needed.** Liberty Utilities understands that failing poles pose safety, reliability and fire risks, and will work to accelerate the testing and replacement of poles throughout the region.
3. **Fuse replacements.** Conventional fuses, when operated, expel hot particles and gases, which can start fires. In contrast, current limiting fuses that traditionally were used for protecting “equipment” expel no materials, limits the available fault current and, in many cases, can reduce the duration of faults. The use of both conventional and current limiting fuses provides for a high level of reliability. In order to mitigate the risk of wildfire, Liberty Utilities proposes to replace conventional fuses with current limiting fuses on much of its system over the coming years.
4. **Replacement of the Brockway Substation in Kings Beach.** The Brockway Substation is a 60-year-old facility that was constructed with wooden poles and cross arms and obsolete oil-circuit breakers. This facility has been deemed a fire hazard and is scheduled to be decommissioned and replaced.

In addition to some of the above infrastructure hardening projects, Liberty Utilities will continue to work on undergrounding sections of power grid in the coming years.

What You Need to Know

Liberty Utilities is taking precautionary steps to protect the community from wildfires by implementing a robust mitigation plan. The best way to stay informed about de-energization, vegetation management, and system upgrades is to ensure the personal contact information Liberty Utilities has on file is up-to-date. Consider following Liberty Utilities on one or both of its social media platforms, Twitter via @LibertyUtil_CA or Facebook via @LibertyUtilitiesLT, and bookmark the Liberty Utilities webpage.

Liberty Utilities is committed to the safety of customers and the communities it serves. To learn more, customers are encouraged visit LibertyUtilities.com or call the utility directly at 1-800-782-2506.

Liberty Utilities – Local and Responsive. We Care.

Appendix B

WFMP Meetings and Events 2019

Liberty CalPeco WFMP Meetings and Events

Date	Event	Lead Agency	Location	Key Attendees	Event Description
4/24/2019	Truckee Town Hall - Wildfire	Town of Truckee	Alder Creek Middle School. Truckee, Ca.	Truckee: Mayor, Fire Chief, CHP, Police Chief, USFS Mgmt, CA State Parks Mgmnt, Public	Town Hall and Panel Discussion. Liberty Utilities participated on the panel and addressed questions related to Wildfire Mitigation and PSPS
5/7/2019	Alpine Biomass Council Meeting	Alpine Biomass Council	Turtle Rock Community Park. Markleeville, Ca	Alpine Biomass Council Members, Alpine County Board of Supervisors, Calfire, California Tahoe Conservancy, California State Parks, USFS.	Presentation regarding Power Line Resilience Corridor partnership. Liberty Q&A regarding wildfire mitigation and PSPS.
6/5/2019	PSPS Partner Agency Workshop	Liberty	North Tahoe Event Center. Kings Beach, Ca.	Regional: Fire Chiefs, Utility Directors, Sheriffs, Hospital Mgrs, County and State OES	Coordination meeting with all Public Safety Partners in Liberty Utilities' service territory to discuss Wildfire Mitigation Plan and PSPS Program.
6/6/2019	Wilder Than Wild - Panel Discussion	North Tahoe FPD	Homewood Mountain Resort. Homewood, Ca	North Tahoe Fire Protection District, Placer County OES, Placer County Sheriff, Fire Safe Council, Public	Community event with viewing of Wilder Than Wild (documentary about wildfire) and panel discussion with Liberty Utilities, Calfire, local fire, sherrif, county OES, and Fire Safe Council. Liberty Utilities addressed questions from the public regarding PSPS and Wildfire Mitigation.
6/6/2019	Antelope Valley Regional Planning Advisory Committee Meeting	Antelope Valley Regional Planning Advisory Committee	Antelope Valley Community Center. Walker, Ca.	County Supervisor, County Mgmnt, Fire Chief, Public	Liberty presentation regarding Wildfire Mitigation Plan and PSPS plan and communication. Q&A.
6/13/2019	Wilder Than Wild - Panel Discussion	North Tahoe FPD	North Tahoe Event Center. Kings Beach, Ca.	North Tahoe Fire Protection District, Placer County OES, Placer County Sheriff, Fire Safe Council, Public	Community event with viewing of Wilder Than Wild (documentary about wildfire) and panel discussion with Liberty Utilities, Calfire, local fire, sherrif, county OES, and Fire Safe Council. Liberty Utilities addressed questions from the public regarding PSPS and Wildfire Mitigation.
6/17/2019	Presentation to Alpine County Staff/Health and Human Serv	Liberty	Alpine County Office. Markleeville, Ca.	County Health and Human Services Staff	Liberty Utilities presentation regarding PSPS communication and decision making. Discussion regarding preferred communication from Alpine County partners.
6/19/2019	Presentation to El Dorado County SO, Court and Jail	Liberty	El Dorado County Courthouse. South Lake Tahoe, Ca.	Sheriff, Court Mangaer, Jail/Facility Manager	Liberty Utilities presentation regarding PSPS communication and decision making. Discussion regarding preferred communication from Alpine County partners.
6/21/2019	Alpine County Town Hall	Alpine County	Turtle Rock Community Park. Markleeville, Ca	Alpine County Sheriff, Calfire, Butte County Sheriff, Citizens of Alpine County.	Town Hall with Presentation and Q&A from Liberty Utilities regarding Wildfire Mitigation and PSPS
6/28/2019	Wilder Than Wild - Panel Discussion	Fire Safe Council	Taylor Creek Visitor Center. South Lake Tahoe, Ca.	County OES, Sheriff, Fire Safe Council, Public	Community event with viewing of Wilder Than Wild (documentary about wildfire) and panel discussion with Liberty Utilities, Calfire, local fire, sherrif, county OES, and Fire Safe Council. Liberty Utilities addressed questions from the public regarding PSPS and Wildfire Mitigation.
7/1/2019	Presentation to the South Tahoe Soroptimist Club	Liberty	Harveys Casino. Stateline, NV.	Community Leaders	Liberty presentation regarding Wildfire Mitigation Plan and PSPS plan and communication. Q&A.

Liberty CalPeco WFMP Meetings and Events

Date	Event	Lead Agency	Location	Key Attendees	Event Description
7/8/2019	PSPS Meeting w/ Liberty Utilities and NV Energy	Town of Truckee	Town of Truckee Offices. Truckee, Ca	Truckee: Fire Chief, CHP, Police Chief, Sheriff, Truckee Utilities Managers, NV Energy	Presentation from NV Energy on their Public Safety Outage Management Program. Discussion with Public Safety Partners on potential widespread outage caused by NV Energy transmission de-energization. Follow-up meeting with utilities and Public Safety Partners affected by transmission de-energization from NV Energy. Potential to lose power to Liberty's North Lake Tahoe Service Territory and all of Truckee Donner Public Utilities District.
7/15/2019	PSPS Planning Meeting	Town of Truckee	Town of Truckee Offices. Truckee, Ca	Truckee: Fire Chief, CHP, Police Chief, Sheriff, Truckee Utilities Managers, NV Energy	Presentation to Alpine County Board of Supervisors from Electric Utilities (PG&E and Liberty Utilities) on Wildfire Mitigation Plan and PSPS program. Q&A from Board of Supervisors.
7/16/2019	Alpine County Board of Supervisors Meeting	Alpine County	Alpine County Office. Markleeville, Ca.	County Board of Supervisors, Public	Presentation to Placer County Board of Supervisors from Liberty Utilities on Wildfire Mitigation Plan and PSPS program. Q&A from Board of Supervisors.
7/22/2019	Placer County Board of Supervisors Meeting	Placer County	North Tahoe Event Center. Kings Beach, Ca.	County Board of Supervisors, Public	Follow-up meeting with NV Energy for planning and communication regarding NV Energy Transmission de-energization. Additional discussion regarding Liberty Utilities PSPS program.
7/24/2019	PSPS Planning Meeting	Town of Truckee	Truckee Donner Public Utilities District Office. Truckee, Ca.	Truckee: Fire Chief, CHP, Police Chief, Sheriff, Truckee Utilities Managers, NV Energy	Joint presentation from Liberty Utilities and Truckee Donner Public Utilities District regarding Wildfire Mitigation Plan and PSPS. Q&A session.
8/22/2019	PSPS Presentation - Truckee Rotary	Truckee Rotary Club	Truckee Rec Center. Truckee, Ca.	Local Community Rotarians. South Lake Tahoe Region: Fire Chiefs, Utility Directors, Sheriffs, Hospital Mgrs, County and State OES	Coordination meeting with all Public Safety Partners in the South Tahoe area of Liberty Utilities' service territory to discuss Wildfire Mitigation Plan and PSPS Program.
9/16/2019	PSPS Partner Agency Workshop	Liberty	South Lake Tahoe Fire Dept	Liberty Management and Staff	Training exercise around a mock PSPS event
10/15/2019	Internal Table Top Exercise	Liberty	Liberty Office		
11/12/2019	Partner Agency Table Top Exercise	Liberty	City of SLT Fire Department		Training exercise around an emergency outage as a PSPS event

Appendix C

PSPS Communication Plan

Liberty Utilities Outage Communication Strategy – PSPS

In the event of a public safety power shutoff (PSPS), Liberty Utilities will communicate with government/agency partners and the public/customers.

City/County, OES offices, critical infrastructure, CPUC and agency partners will receive the earliest notification, up to 8 days in advance when possible. These contacts will continue to receive updates as the outage event nears or whenever conditions or details change. Communications are executed by text, email, and phone calls. (Medical baseline customers will be notified 72 hours in advance as well)

48 hours before the planned outage, **ALL** affected customers will receive direct text, email, and/or voice message notification via the Everbridge system. Liberty's social media accounts and website will also be updated with outage information. City/County, OES offices, critical infrastructure, CPUC and agency partners will also receive updates at the 48 hour mark. Local website, radio, newspapers, and TV media will be notified and request that they broadcast the public service announcement (PSA)

Updates to **ALL** will be directly communicated 24 hours in advance and right before the outage commences as appropriate.

During the outage, updates will be sent directly to customers, the media, and posted to social media accounts and the Liberty Utilities' website as updates are available or situations change.

Once the outage has concluded a final update will be sent directly to customers, the media, and posted to social media accounts and the Liberty Utilities' website with a request that any customers still out of power notify Liberty Utilities.

Communication Channels:

Liberty Utilities website: Libertyutilities.com

Liberty Utilities Social Media:

- Twitter @LibertyUtil_CA
- Facebook @LibertyUtilitiesLT

Media Included but not limited to:

- SouthTahoeNow.com
- Tahoetopica.com
- Sierra Sun
- Tahoe Daily Tribune
- KTKR radio
- KRLT Radio
- NPR
- Reno/Sacramento local TV stations

Appendix D

Public Safety Partner Contacts

Eldorado County (SLT)

Title/Dept.

Emergency Preparedness & Response
Emergency Medical Services
Lieutenant
Sergeant
Deputy
Deputy
Deputy
Communications Director
PIO (SLT area)
Emergency Medical Coordinator
Supervisor, District 5
Dispatch
Court Operations
Sheriff's Office/Correctional
Building Operations Supervisor
Dir of Facilities, TTUSD
Coord. Maint, TTUSD
Sheriff
Fire Chief, NTFPD
Operations Chief, NTFPD
Fire Marshal, NTFPD
PIO, NTFPD
Dir of Facilities, TTUSD
Coord. Maint, TTUSD
STPUD On Call Line
Ops Manager
Sergeant
Lieutenant
Court Asst. CEO
Court Supervisor
Court Administrative Asst.
Presiding Judge
Facilities Management
Facilities Operations Supv.
Court Operations Manager
Probation Supervisor
Cell Tower Engineer
Cell Tower Engineer
Cell Tower Engineer
Executive Director of Business Services
Superintendent Chief Learning Officer
Director of Transportation
Director of Food Service
Technology Supervisor
Director of Technology

Agency

El Dorado County
El Dorado County
El Dorado County Sheriff
El Dorado County
California Highway Patrol
Barton Hospital
El Dorado County
Truckee Tahoe Unified School Dist.
Truckee Tahoe Unified School Dist.
El Dorado County
North Tahoe Fire Protection Dist.
Truckee Tahoe Unified School Dist.
Truckee Tahoe Unified School Dist.
South Tahoe PUD
South Tahoe PUD
El Dorado County Sheriff
El Dorado County Sheriff
El Dorado County
Verizon
AT&T
AT&T
Truckee Tahoe Unified School Dist.
Truckee Tahoe Unified School Dist.

Mono County (Topaz, Walker, Coleville)

Title/Dept.	Agency
Asst. CAO	Mono County
Sheriff's Office	Mono County
Fire Chief	Antelope Valley Fire
Asst. Fire Chief	Antelope Valley Fire
MWTC Asst. Fire Chief	Mountain Warfare Training Center
MCMWTC	Mountain Warfare Training Center
Mono County District Supervisor	Mono County
Maint Dir	Eastern Sierra Unified School Dist
Sheriff's Office	Mono County
Acting CAO	Mono County
Emergency Services	Mono County
PIO	Mono County
Social Services	Mono County
Social Services	Mono County
Social Services	Mono County

Nevada County

Title/Dept.

PIO
Administrative Analyst
Captain
Chief of Police
EMS Coordinator
PIO Truckee Police
Town Manager
Director of Public Works
Fire Chief
Dir of Facilities
Maintenance Coordinator
OES, Director
PIO & Asst. General Manganer
24 hour Line
Director of Facilities Management
EOC Coordinator/Facilities Management
House Supervisor/Nursing Admin
Water Superintendent
Water Operations Foreman
Water On-Call Operator
Electric Utility Director
Electric Operations Mgr.
Electric Eng. Mgr
Electric On-Call Lineman
Division Chief Operations
Fire Marshall
Battalion Chief
Battalion Chief
Battalion Chief
Battalion Chief / PIO
Prevention / PIO
Emergency Services Coordinator
Police Chief
Support Services Manager
Chief's Assistant
General Manager
District Engineer
Superintendent
Senior Engineer
Lift Station Supervisor
On-Call Phone
Truckee Airport
Business Services
Cell Tower Engineer

Agency

Nevada County
Nevada County
Nevada County
Town of Truckee
Truckee Fire Protection Dist.
Truckee Tahoe Unified School Dist.
Truckee Tahoe Unified School Dist.
Nevada County
Truckee Donner PUD
Nevada County
Tahoe Forest Hospital
Tahoe Forest Hospital
Tahoe Forest Hospital
Truckee Donner PUD
Truckee Fire Protection Dist.
Town of Truckee
Town of Truckee
Town of Truckee
Town of Truckee
Truckee Sanitation Dist.
Truckee Tahoe Airport Dist.
Truckee Tahoe Unified School Dist.
Verison

Nevada County

Title/Dept.

Ops Manager
Chief Operator
Engineering & safety Manager
Maintenance Manager
IT Manager
Executive Director of Business Services
Superintendent Chief Learning Officer
Director of Transportation
Director of Food Service
Technology Supervisor
Director of Technology

Agency

Tahoe Truckee Sanitation Agency
Truckee Tahoe Unified School Dist.
Truckee Tahoe Unified School Dist.

Placer County

Title/Dept.

PIO
Emergency Svs Coordinator
Communications & Public Affairs Manager
Assistant Director, OES
Field Rep, District 5
Emergency Program Mgr
Dispatch Svs. Mgr
Truckee Fire Chief
Supervisor, District 5
PC Sherrif Lt.
Police Lt.
Police Captain
CEO office manager
Chief of Police
EMS Coordinator
PIO Truckee Police
Town Manager
Director of Public Works
Fire Chief
CHP Truckee PIO
Fire Chief Northstar
Division Chief, Northstar
Northstar PSD Dist Engineer
Northstar CSD Mangaer
Dir of Facilities
Maintenance Coordinator
Fire Chief
Operations Chief
Fire Marshal
PIO
Deputy Director/Facilities Management
Building Maintenance Superintendent
Administrative Lt., Tahoe Station
Dispatch
Fire Chief
Ops Manager
Director of Facilities Management
EOC Coordinator/Facilities Management
House Supervisor/Nursing Admin
Water Superintendent
Water Operations Foreman
Water On-Call Operator
Electric Utility Director
Electric Operations Mgr.

Agency

Placer County
Placer County
Placer County
Placer County
Placer County
Placer County
Truckee Fire Protection Dist.
Placer County
Placer County
Placer County
Placer County
Placer County
Town of Truckee
Highway Patrol
Northstar CSD
Northstar CSD
Northstar CSD
Northstar CSD
Truckee Tahoe Unified School Dist.
Truckee Tahoe Unified School Dist.
North Tahoe Fire Protection Dist.
Placer County
Placer County
Placer County
Placer County Sheriff
Squaw Valley PSD
Squaw Valley PSD
Tahoe Forest Hospital
Tahoe Forest Hospital
Tahoe Forest Hospital
Truckee Donner PUD
Truckee Donner PUD
Truckee Donner PUD
Truckee Donner PUD
Truckee Donner PUD

Placer County

Title/Dept.

Electric Eng. Mgr
Electric On-Call Lineman
Division Chief Operations
Fire Marshall
Battalion Chief
Battalion Chief
Battalion Chief
Battalion Chief / PIO
Prevention / PIO
Emergency Services Coordinator
Police Chief
Support Services Manager
Chief's Assistant
General Manager
District Engineer
Superintendent
Senior Engineer
Lift Station Supervisor
On-Call Phone
Director of Aviation
Business Services
Dist. Engineer
Communications Manganer
Director of Public Health
Operations Manager
Cell Towers Engineer
Director of Operations
Operations Manager
Executive Director of Business Services
Superintendent Chief Learning Officer
Director of Transportation
Director of Food Service
Technology Supervisor
Director of Technology

Agency

Truckee Donner PUD
Truckee Donner PUD
Truckee Fire Protection Dist.
Town of Truckee
Town of Truckee
Town of Truckee
Truckee Sanitation Dist.
Truckee Airport Dist.
Truckee Tahoe Unified School Dist.
North Tahoe PUD
Placer County
Placer County
Squaw Valley Resort
Verizon
Squaw Valley Resort
Squaw Valley Resort
Truckee Tahoe Unified School Dist.
Truckee Tahoe Unified School Dist.

Plumas County (Portola)

Title/Dept.	Agency
Sheriff's Office	Plumas County
Asst. Chief	Plumas County
Facilities Manager	Eastern Plumas District Hospital
Dir. Pub Works	City of Portola
Fire Chief	Plumas County
Mayor	City of Portola
President/CEO	Eastern Plumas District Hospital

Sierra County (Loyalton)

Title/Dept.	Agency
Emergency Manager	Sierra County
OES Director	Sierra County
Fire Chief	Sierra County
Sheriff	Sierra County
Public Health	Sierra County
Sheriff's Office	Sierra County
Loyalton Fire Dept.	City of Loyalton
Loyalton Fire Chief	City of Loyalton

State of California

Title/Dept.

OES Coord

PIO, Calfire

Assist Chief, Cal Fire

CPUC

Agency

State of California

State of California

State of California

State of California

Appendix E

November 2018 De-Energization Report

**Liberty Utilities (CalPeco Electric) LLC (“Liberty CalPeco”) Report on the
November 21, 2018 De-Energization Event**

Decision to Cut Off Power

Liberty CalPeco staff received weather reports from the National Weather Service (“NWS”) indicating a storm was approaching with high winds, and the conditions warranted a Fire Weather Watch. This was the first significant storm of the season, and the local vegetation had not received enough precipitation to reduce the high fire danger.

The focus of the Public Safety Power Shut-off (“PSPS”) was on maximum line exposure versus minimal customer disruption. Liberty CalPeco determined that two transmission circuits could be de-energized safely without dropping load to customers. Additionally, some distribution laterals in the South Tahoe area that primarily service unoccupied cabins that had been gated off for the winter could be de-energized with minimal customer disruption. Combined, approximately 50 miles of line exposure were reduced, which impacted approximately 30 occupied homes.

The de-energized circuits (625 line, 111 line, 3400 laterals) were to be restored as soon as they could be patrolled and the area had received enough precipitation to alleviate the fire danger. It was anticipated to be a 10-hour outage based on the weather forecast.

Factors Considered

The NWS reports indicated wind speeds would reach 50-60 mph, with ridges experiencing 70-90 mph gusts, humidity in the 25-35% range, and temperatures around 50°. The area had not received any appreciable amount of precipitation in several weeks, and the vegetation was extremely dry. The routes of the two transmission circuits cross heavily-forested ridges with difficult access in rugged terrain.

Liberty CalPeco was concerned about repairs that needed to be accomplished on the 111 line prior to the storm. The repairs had been scheduled, but would not be completed until early December 2018 due to access, helicopter availability, and the ability to switch out the line. There were no repair concerns regarding the 625 line; however, with two strong sources into Kings Beach and Tahoe City, the 625 line could be de-energized without impact to customers.

The 3400 circuit laterals reside in rugged terrain that experienced a similar scenario in October 2016, which resulted in the Emerald fire. The Emerald fire event started during an early season storm when the fire danger was still high. In both the Emerald fire and the circumstances leading into this PSPS event, weather forecasts called for significant wind preceding the rain and snow. The PSPS event targeted laterals where most of the service locations were summer cabins that are unoccupied through winter, and the access roads are gated. Liberty CalPeco’s focus was on selecting as many line miles as possible while minimizing customer disruption.

PSPS Event Details

The PSPS event began at 12:00 PM on November 21, 2018 and lasted until 3:00 PM that afternoon. The wind and storm impacts did not develop to the extent forecast. Liberty CalPeco staff determined that the fire danger had passed, and the decision was made to restore all circuits.

Figure 1 identifies the location of the 111 Line in South Lake Tahoe, CA. This circuit runs through rugged wooded terrain south of the city of South Lake Tahoe. This is one of the two 120 kV sources to South Lake Tahoe. De-energizing this circuit reduced fire exposure and did not impact service to any Liberty CalPeco customers.

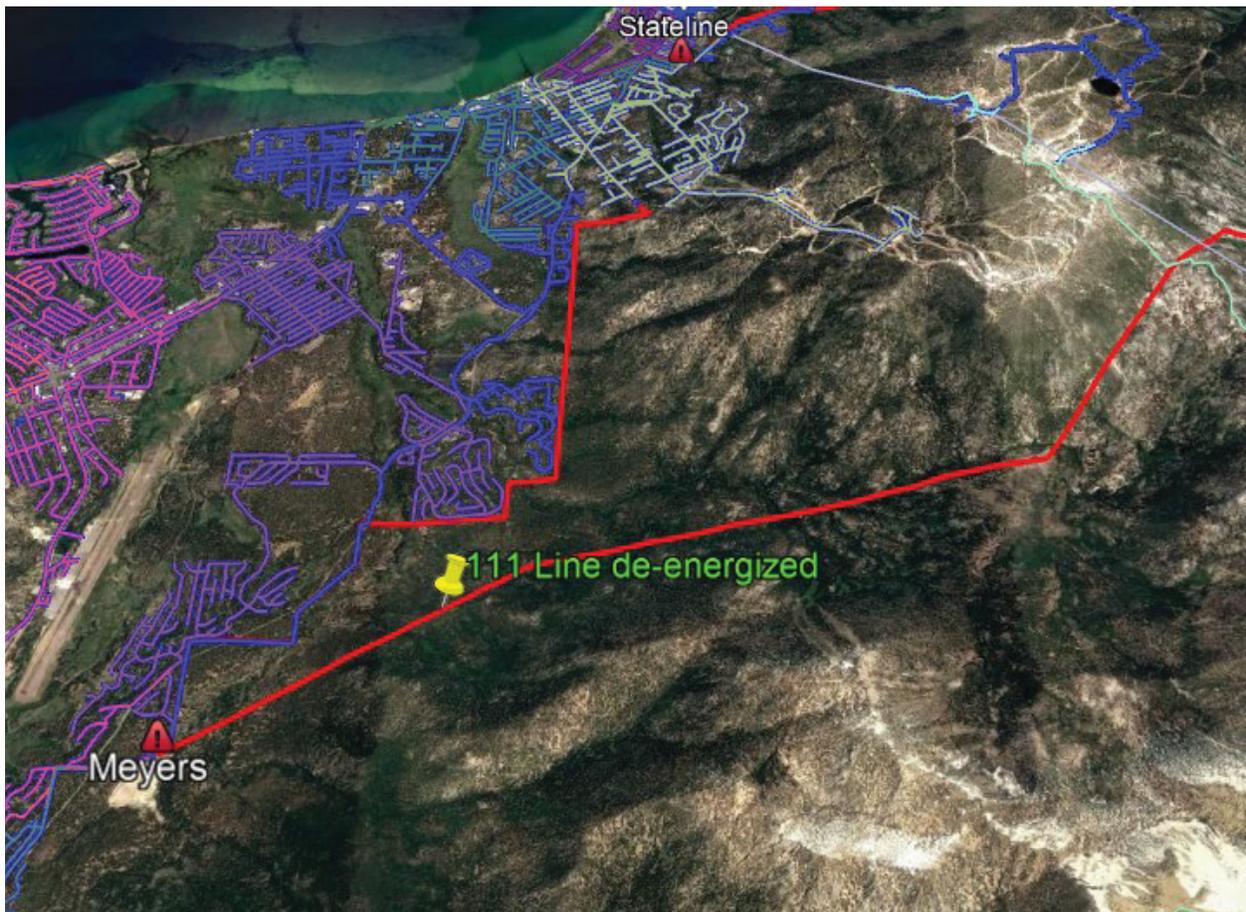


Figure 1 identifies the 111 Line which was de-energized as part of the PSPS on November 21, 2018.

Figure 2 identifies the location of the 625 Line between Kings Beach and Tahoe City, CA. This circuit runs through rugged wooded terrain with high elevations, which are difficult to patrol without helicopter. This is a 60 kV line that completes a sub-transmission loop around north Tahoe. De-energizing this circuit reduced fire exposure and did not impact service to any Liberty CalPeco customers.



Figure 2 identifies the 625 Line which was de-energized as part of the PSPS on November 21, 2018.

Figure 3 identifies the location of the 3400 circuit laterals in South Lake Tahoe, CA. These four laterals were de-energized due to the difficult access, elevated fire risk, recent fire history, and limited impact to customers.

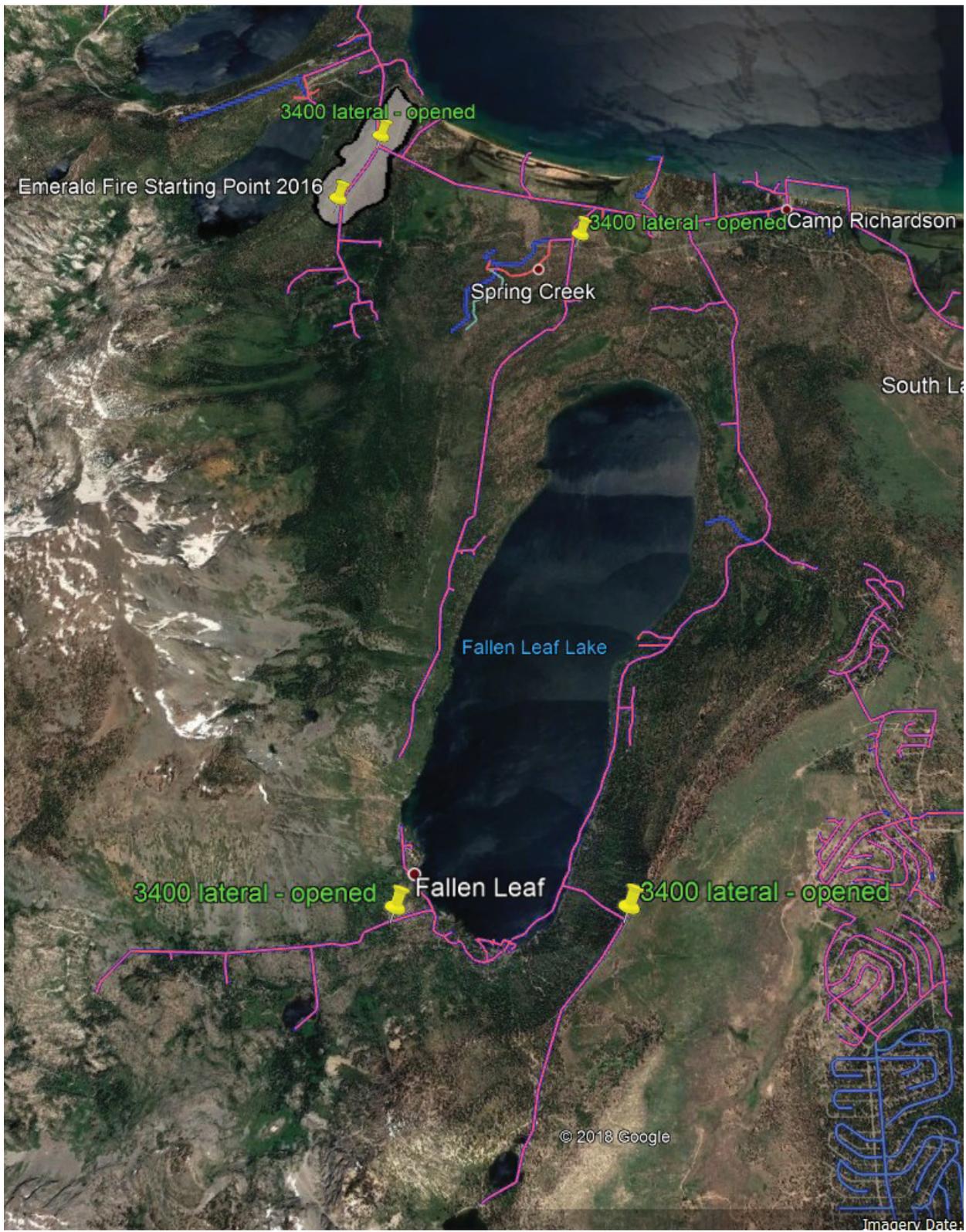


Figure 3 identifies the four specific 3400 circuit laterals which were de-energized as part of the PSPS on November 21, 2018.

Customers Affected

The 30 affected customers are categorized below:

- 29 residential (occupied)
- 0 medical baseline
- 1 commercial
- 0 other

Wind-Related Damage in PSPS Event Areas

Three structures along the 111 line had broken crossarms and bracing prior to the PSPS event. Once the decision was made to restore all circuits, patrols along the de-energized lines were conducted. No additional damage was noted on any of the circuits and restoration proceeded.

Customer Notifications and Mitigations

At 2:47pm on November 20, 2018, Liberty CalPeco deployed a cascading notification via our Everbridge software to 176 customers in the affected areas, and nine customers not included in the Everbridge notification received a phone call by customer service representatives.

The cascading notification process used by the Everbridge software attempts to reach customers by any and all contact information available in their account including email, voice, and text or SMS message until a customer indicates they have received the message.

After notifications were sent, customer service received approximately six phone calls by concerned customers seeking additional information. In all of these cases the customers understood the reasoning and accepted the inconvenience.

One formal written complaint was received.

Other Information

Please see Attachment 1, which provides a NWS weather briefing report that includes relevant details to Liberty CalPeco's PSPS decision.

Additionally, Figure 4 provides the Fire Threat map adopted by the CPUC on January 19, 2018. This map indicates that the 111 line is located in the Tier 3 area for extreme fire danger while the 625 line and 3400 circuit laterals are in the Tier 2 area.

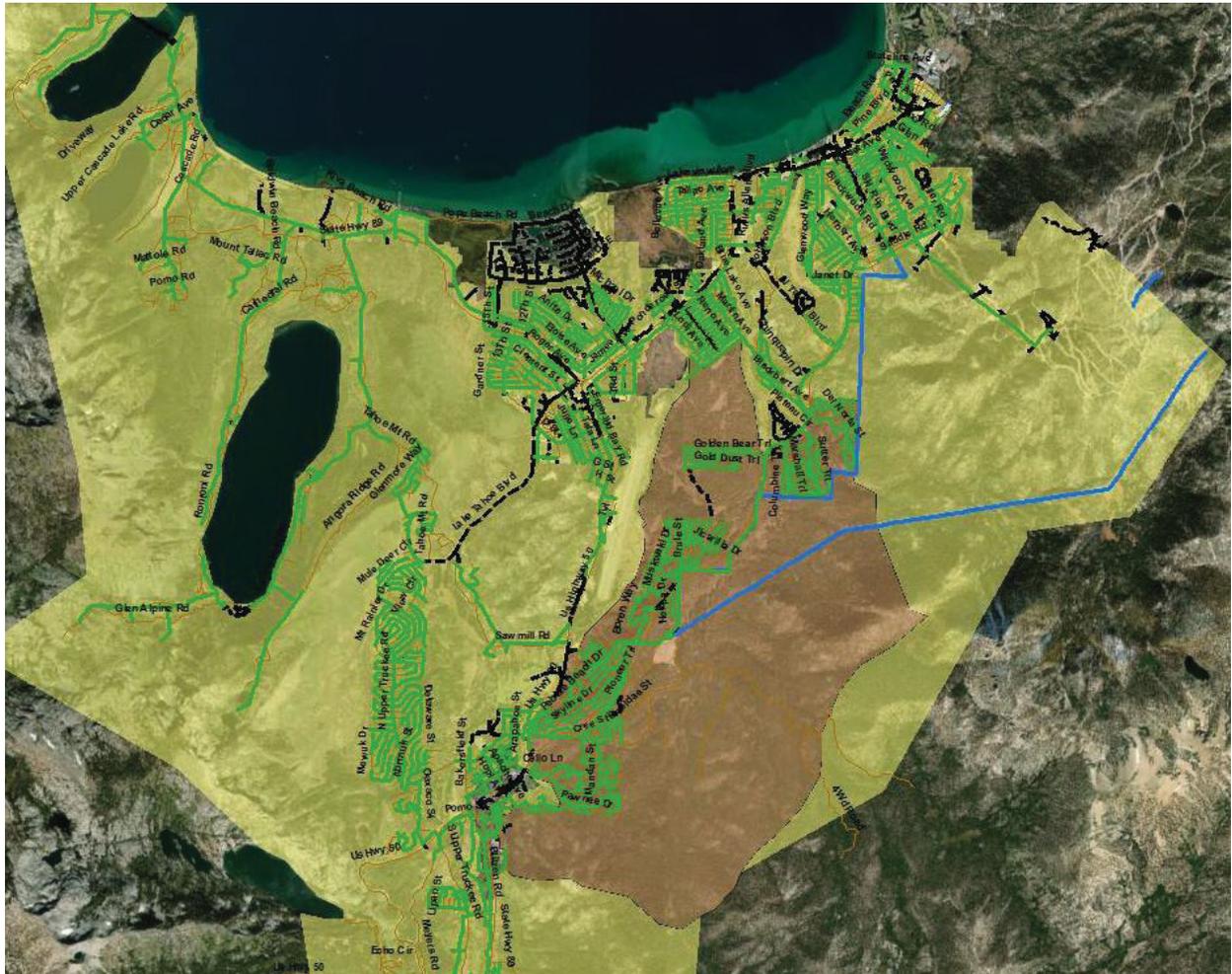
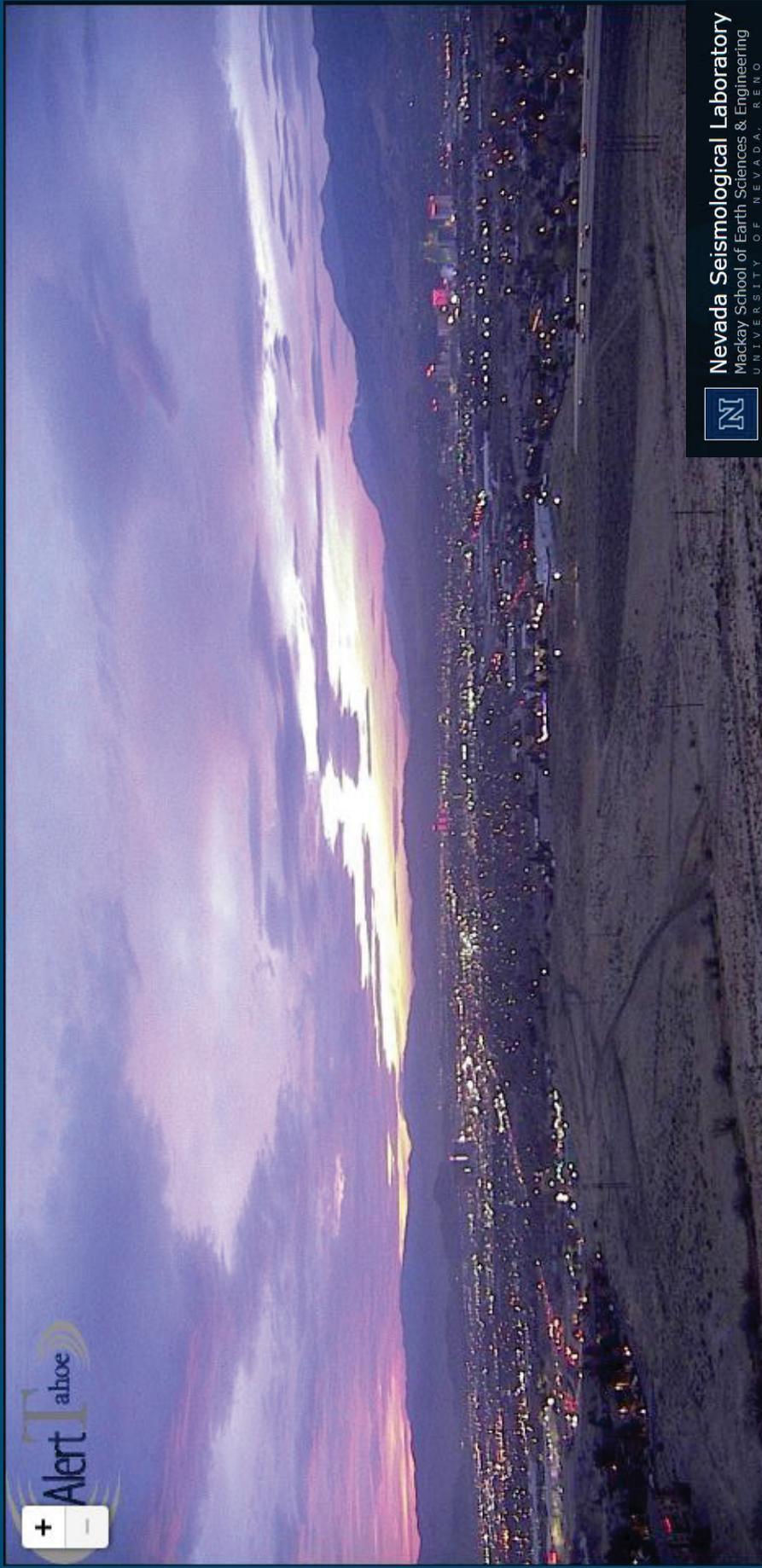


Figure 4 illustrates Tiers 2 and 3 of the Fire Threat Map which was adopted by the CPUC on January 19, 2018. A significant portion of the 111 Line is located within Tier 3.

Attachment 1

National Weather Service Briefing

Winter is Knocking at the Door - And wants to stay



Nevada Seismological Laboratory
Mackay School of Earth Sciences & Engineering
UNIVERSITY OF NEVADA, RENO

What You Need to Know Up-Front



Key Points

- Modest storms with **Thanksgiving holiday travel impacts Wed-Fri**. Rain/snow threat Wednesday, Rain, snow and wind Thursday PM - Friday. **Worst travel impacts likely late Wednesday afternoon-Wednesday night in the Sierra.** Have an alternate travel plan.
- Windy today, further ramping up speeds Thursday. **Strong, potentially damaging winds are looking more likely for Friday with gusts 50-70 mph**, locally higher in wind prone locations.
- If we don't receive a wetting rain by Wednesday night, we could have fire weather concerns late Thursday into Friday.



Important Changes



- Winds continue to look stronger Thursday and especially Friday.
- **Fire Weather Watch for Friday (contingent on lack of wetting rains tonight)**
- Long range forecast (end of next week-ish) is looking to stay active with more storms probable.

How much has the forecast changed?

No changes

Moderate changes

Lots of changes



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Situational Awareness - When Should I Freakout?

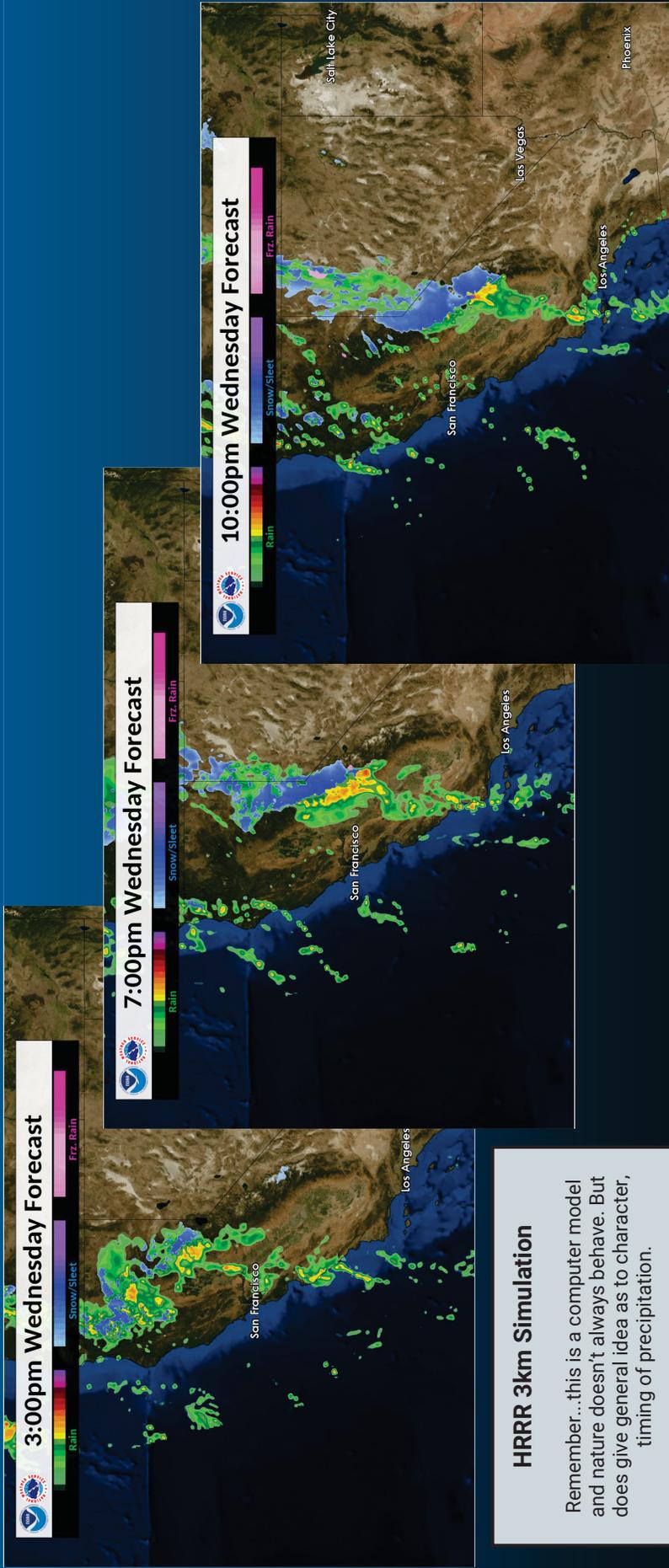
NWS Reno 7-14 Day Scan for Unusual Upcoming Weather across the Eastern Sierra and Western Nevada

	Wed 11/21	Thur 11/22	Fri 11/23	Sat 11/24	Sun 11/25	Mon 11/26	Tue 11/27	W2 11/28-12/3
Wind (travel, rec, property impacts)	Gusty S-SW 20-35 mph. 50-60 mph gusts ridges	SW wind gusts 35-55 mph. 70-90 mph gusts ridges.	Strong W-SW winds Turbulence, blowing dust, travel restrictions. Valleys gusts 60+ mph, ~100mph Sierra Ridges.		Lighter Winds.			
Snow (travel, rec impacts)	Sierra: Periods of rain and snow. Travel Delays possible NV Valleys: Rain Wed Evening and perhaps Friday			Additional rain/snow showers. Nothing significant.		No snow expected.		Continued stormy pattern looking more likely for the second half of next week. Initial estimate is ...
Flooding (flash floods, river flooding)				No concerns here.				
Unusual Cold or Heat (health impacts)				Nothing unusually warm or cold.				
Fire Weather (wind and low humidity, lightning starts, big plume days)	None. Periods of gusty winds with rain/snow in the forecast.	Breezy W-SW winds Thu. Winds start increasing, but moisture should too.	Strong W-SW winds Fri. Could be a significant concern if there is no wetting rain Wednesday.			None.		
Air Quality (big smoke plumes, air stagnation)				None.				Should be fine

What Does This Mean? Integrates impacts and confidence

No worries	Low freakoutness	Moderate freakoutness	High freakoutness	Really bad

Forecast Radar Rapidly deteriorating travel in the Sierra tonight



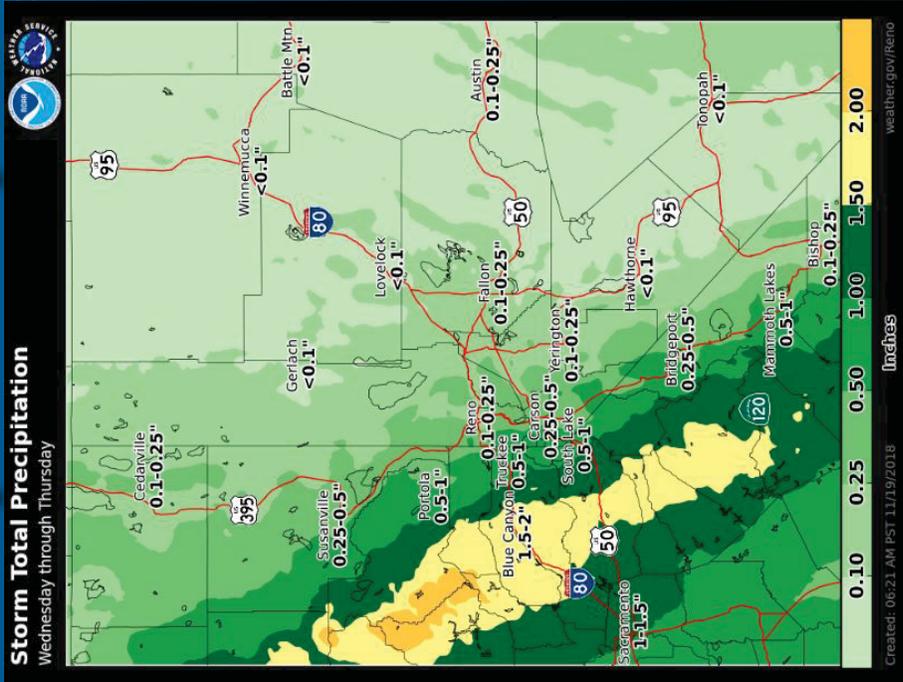
HRRR 3km Simulation

Remember...this is a computer model and nature doesn't always behave. But does give general idea as to character, timing of precipitation.



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Anticipated Liquid Precip Totals (Middle of the Road Forecast)

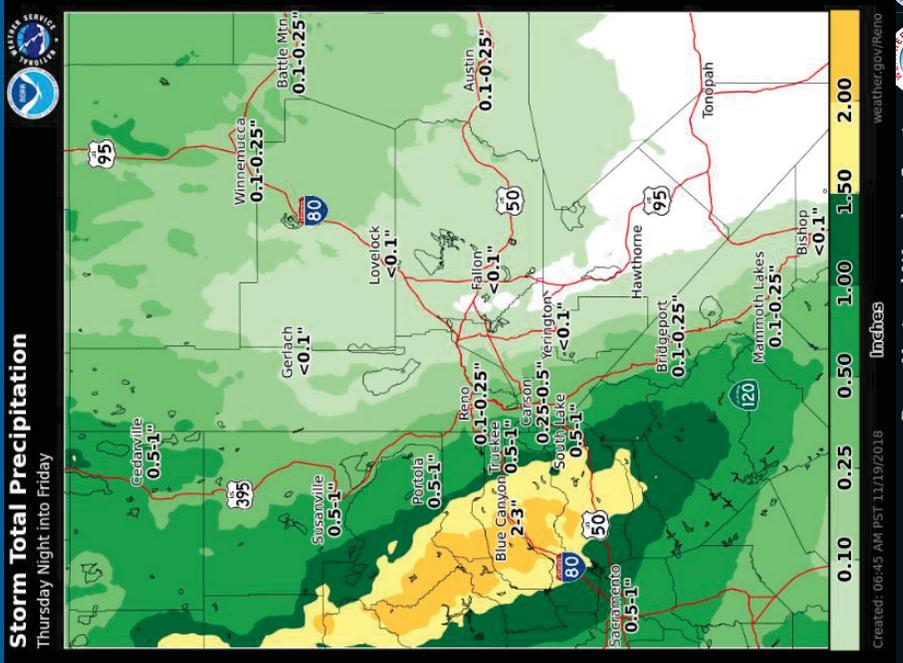


Two Distinct Storms -

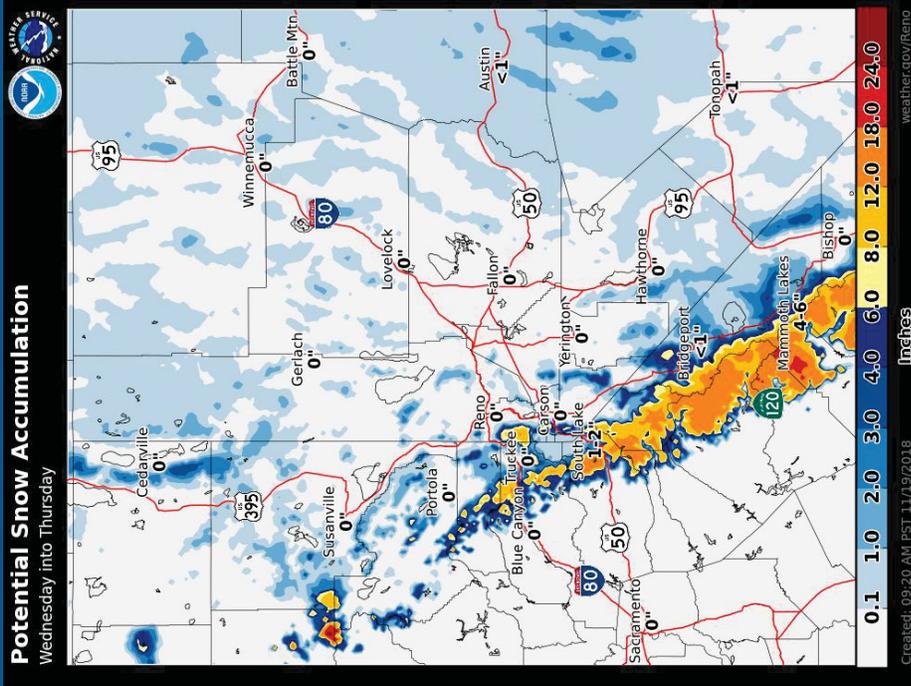
First storm this afternoon-tonight. Precip will lighten Thanksgiving Day in Sierra and NE CA, and likely stop in Wrn NV.

Second storm Thanksgiving night into Friday.

Lower confidence for precip from second storm in Wrn NV.

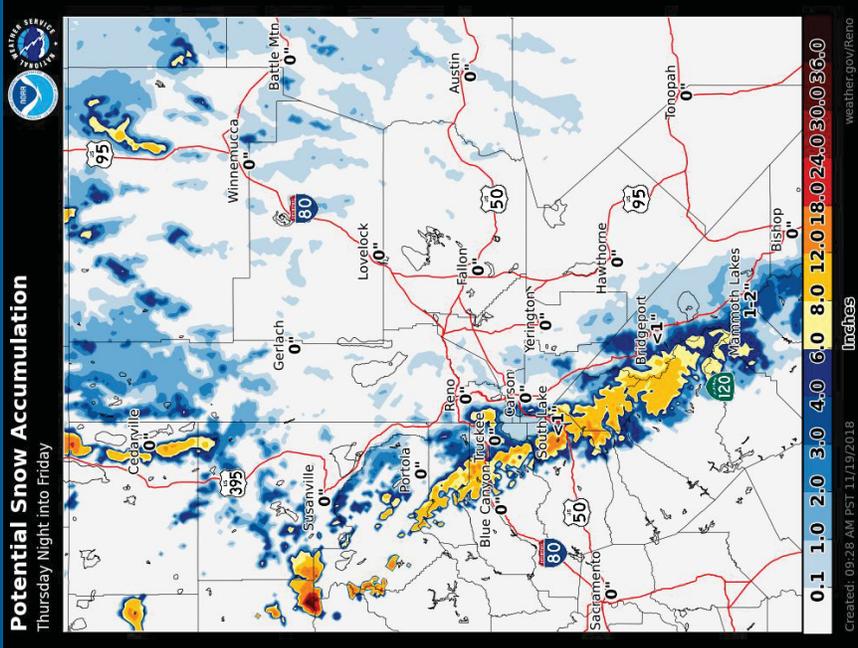


Anticipated Snow Accumulation (A middle of the road 50/50 approach)

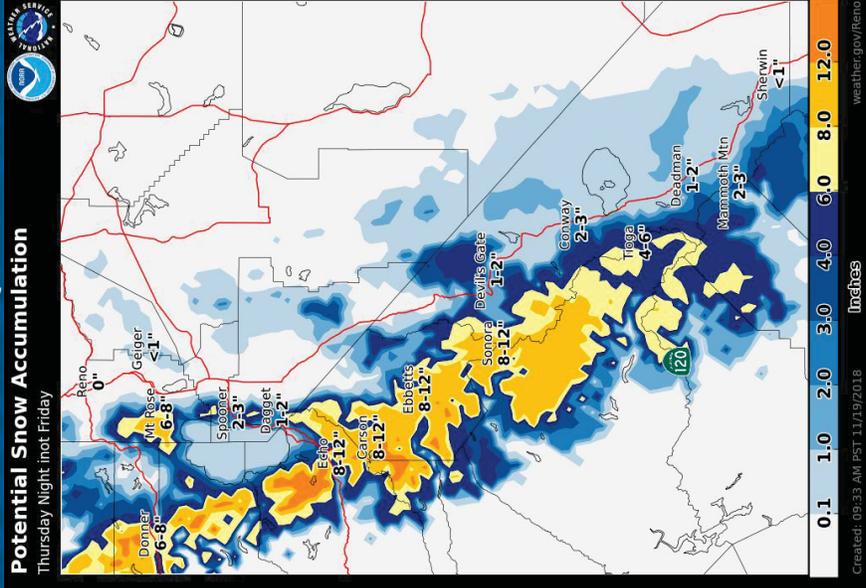
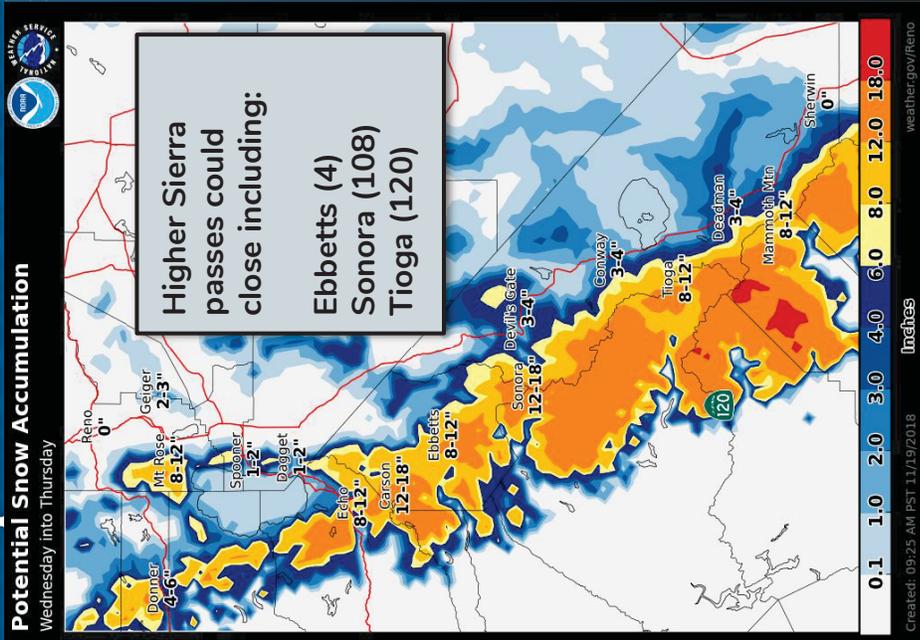


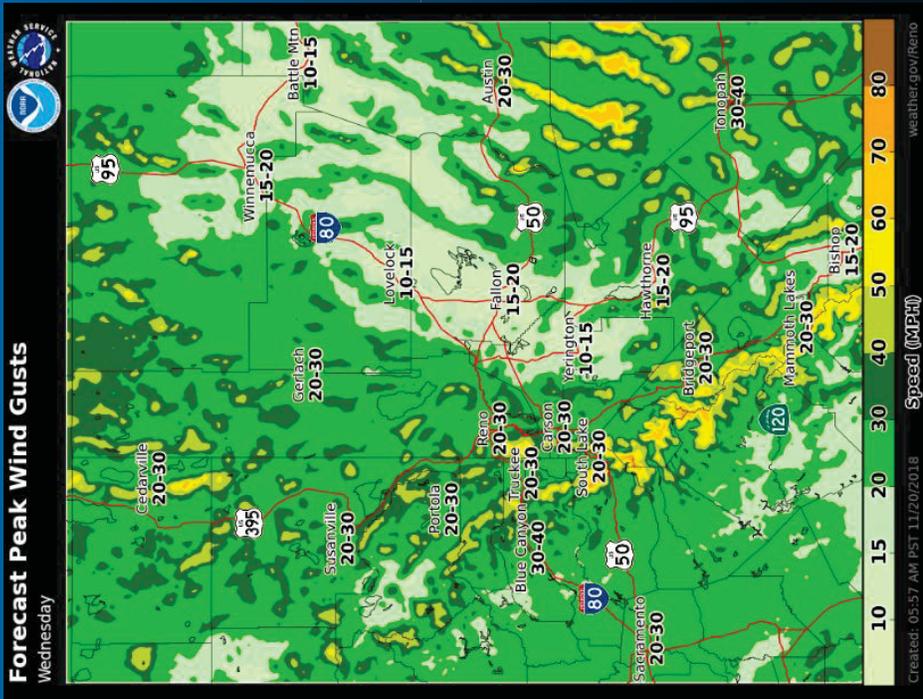
Greatest uncertainty in accumulation is the 6000-7000 foot range due to variable snow levels through the two storms.

Should be all snow above 7500-8000 feet.



Anticipated Snow Accumulation - Sierra Focus (Middle of the road)





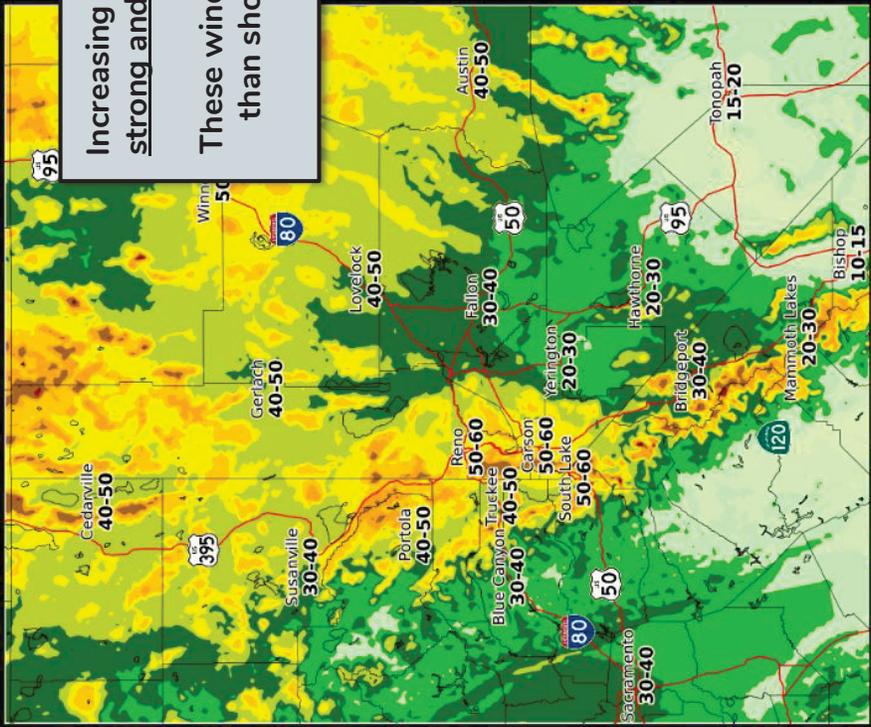
Peak Winds- Wednesday & Thursday

Wednesday - South to Southwest in direction. (Favorable for low level wind shear at KRNO)

Thursday - Southwest to west in direction. Stronger across ridges.

Potential Peak Wind Gusts

Friday morning through afternoon



Created: 06:30 AM PST 11/20/2018

Speed (MPH)

weather.gov/Reno

Peak winds Friday morning through afternoon

Increasing confidence in a period of strong and damaging winds Friday.

These wind speeds could be higher than shown, especially in wind prone areas

Looking like a classic downslope event:

Air travel - turbulence, mountain waves, wind shear.

Ground travel - restrictions for high profile vehicles.

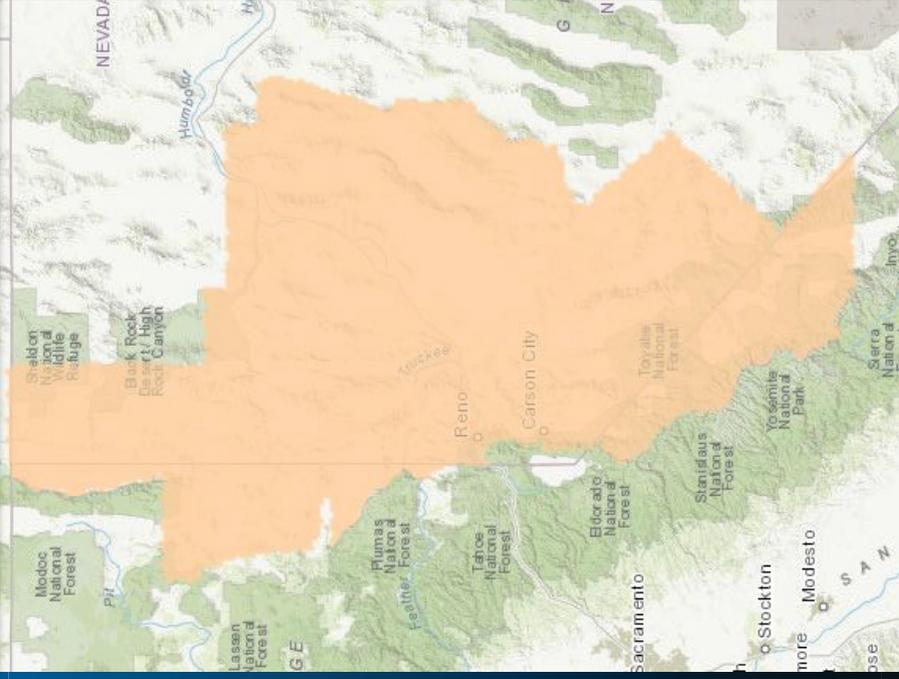
Dangerously choppy lakes.

Wind Prone locations could see gusts up to 70+ mph.



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Fire Weather Watch area



Fire Weather Watch Friday

Very Strong Winds and moderate humidity:

South-southwest winds 20 to 35 mph with gusts of 50 to 70 mph.

Humidity 25-35 percent.

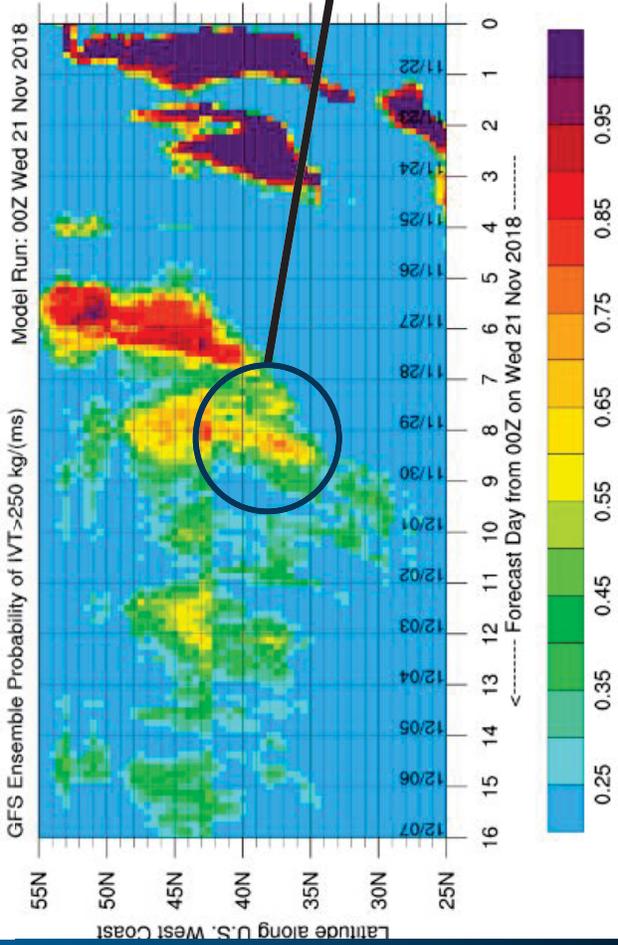
Duration of 4 to 8 hours.

Fire concerns are contingent on rainfall Wednesday night. If solid wetting rains fall Wednesday night, fire weather concerns will be much lower.



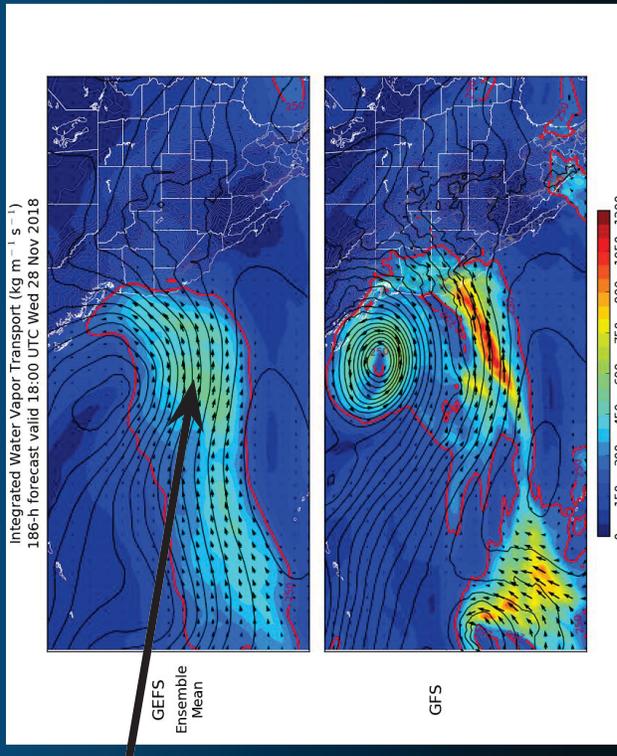
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Atmospheric River Outlook - More Winter Weather Probable



Main Message

Lots of details to ironed out, but more active weather is looking 'more likely than not' for the end of next with another atmospheric river approaching the west coast.



What Is This?

Chart above shows percent of simulations with atmospheric river landfall at coastline. Times are in GMT/UTC, 8 hours ahead of PST. **High percent = higher confidence.**

Source - cw3e.ucsd.edu



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