Liberty
933 Eloise Avenue
South Lake Tahoe, CA 96150
Tel: 800-782-2506
Fax: 530-544-4811

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DATA REQUEST RESPONSE
LIBERTY UTILITIES (LIBERTY)

Data Request No.:	OEIS-P-WMP_2026-Liberty-002
Requesting Party:	Office of Energy Infrastructure Safety
Originator:	Jessica McHale, Wildfire Safety Analyst Jessica.McHale@energysafety.ca.gov
cc:	Dakota Smith Dakota.Smith@energysafety.ca.gov Steve Kerr Steve.Kerr@energysafety.ca.gov Jolynne Flores Jolynne.Flores@energysafety.ca.gov Paul Ramstad Paul.Ramstad@energysafety.ca.gov Colin Lang Colin.Lang@energysafety.ca.gov Andie Biggs Andie.Biggs@energysafety.ca.gov Will Dundon Will.Dundon@energysafety.ca.gov Alex Weissman Alex.Weissman@energysafety.ca.gov
Date Received:	September 11, 2026
Due Date:	September 16, 2026
Subject:	Q01. Regarding Liberty's 2027 Pole Clearing Target Q02. Regarding Liberty's Historical Outage Data Q03. Regarding Table 6-4: Summary of Risk Reduction for Top Circuits Q04. Regarding Table 5-5: Liberty Top-Risk Circuits Q05. Regarding WMP Expenditures Q06. Regarding Outage Program Risk Q07. Regarding IWRMC Survey Results Q08. Regarding Mitigation Selection Using Risk Model Outputs

Q01. Regarding Liberty's 2027 Pole Clearing Target:

On page 215 of its 2027 Base WMP R0,[1] Liberty indicated that it will clear 4,500 poles pursuant to Public Resources Code section 4292 (PRC 4292). On page 163 of its 2026-2028 Base WMP R1 (Clean),[2] Liberty also indicated it would clear 4,500 poles pursuant to PRC 4292.

a. List the number of poles and towers subject to PRC 4292 in Liberty's service territory.
   i. If this number is different than 4,500, explain why.
b. Does Liberty anticipate the number of pole and towers subject to PRC 4292 will change in 2027?
   i. If yes, by how much will the number increase or decrease?
c. List and describe the factors Liberty considers when deciding whether to install non-exempt or exempt equipment (e.g., cost, resource availability).

Response:

a. Liberty's current inventory includes 4,521 poles subject to PRC 4292.
   i. Liberty established its target of 4,500 poles requiring clearing for PRC 4292 to reflect normal changes to Liberty's asset inventory resulting from infrastructure upgrades, pole replacements, new construction, and ongoing asset management activities. For planning and reporting purposes, Liberty rounded the annual work target to 4,500.
b. Yes. Liberty anticipates that the number of poles subject to PRC 4292 may change over time due to system modifications, including pole replacements, line extensions, system hardening projects, new business, and other infrastructure upgrades.
   i. Liberty is currently in the process of reviewing and evaluating the number of newly identified poles that may be subject to PRC 4292 requirements. This includes verification of newly identified subject poles, review of poles classified as exempt or supporting no equipment identified during pole-clearing inspections, evaluation of QAQC findings, general data governance and review, and asset data conflation.

      While this evaluation remains ongoing, Liberty preliminarily estimates that the poles subject to PRC 4292 may increase by approximately 4% (about 180 poles). Liberty will continue to refine the future pole clearing inventory as validation activities are completed.

[1] Liberty 2027 Base WMP R0, published Aug. 31, 2026, URL: (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=61181&docket=WMP-LU&shareable=true).
[2] Liberty 2026-2028 Base WMP R1 (Clean), published Dec. 4, 2025, URL: (https://efiling.energysafety.ca.gov/eFiling/Getfile.aspx?fileid=59813&docket=2026-2028-Base-WMPs&shareable=true).

c. Liberty's standard practice is to install exempt equipment wherever an approved exempt alternative exists within Liberty's engineering standards. Non-exempt equipment is installed only where no approved exempt alternative can meet the functional requirements of the application while maintaining compliance with Liberty's construction and safety standards.

Q02. Regarding Liberty's Historical Outage Data:

On page 36 of its 2027 Base WMP, Liberty states that it is using "four years of Liberty's historical outage data to estimate the likelihood of an outage on each feeder."

a. Why is Liberty only using the past four years within its risk methodology data set?
b. How many outages has Liberty recorded in the past four years?
c. What actions has Liberty taken to expand upon its outage data set?

Response:

a. Liberty is using the past four years in its risk methodology data set because Liberty focused its analysis of historical outages to the date range of its updated outage management system. See response to (c) for a discussion of integrating outage records from Liberty's previous outage management system.
b. The initial dataset of outage records 3,473 outages. See Technical Appendix B (section "Outage and Ignition Data Methodology").
c. Liberty is investigating outage records back to 2018, pre-dating the change of outage management systems. Geo-referencing and pinpointing the coordinates of these outage records takes additional analytical work to match records to locations using address information or asset ID information. In addition, mapping these records to risk drivers and risk sub-drivers requires different logic than the current analytical workstream. A key benefit of a larger dataset of outage records is improved training and precision of the probability of failure model.

Q03. Regarding Table 6-4: Summary of Risk Reduction for Top Circuits:

a. Provide a version of Table 6-4 (pp. 141-142) via Excel with the following additional columns:
   i. Overall Utility Risk Reduction from PSPS ($)
   ii. Overall Utility Risk Reduction from SRP ($)
   iii. Overall 2027 Utility Risk Reduction from Grid Hardening ($)
   iv. Overall 2027 Utility Risk Reduction from Covered Conductor ($)
   v. Overall 2027 Utility Risk Reduction from Pole Replacement ($)

b. In Table 6-4, "Detailed inspections" is only listed as a 2027 activity for circuit MEY34000 (p. 141).
   i. Do any other circuits have detailed inspections planned for 2027?
   ii. Are there any other types of inspections planned in 2027 for the circuits in Table 6-4?
   iii. If yes to either or both (i) and (ii), provide a corrected version of Table 6-4 to reflect which circuits have detailed and additional inspections planned for 2027

Response:

a. See attachment "DR-002-Q03.a.Table 6-4 Risk reduction by mitigation.xlsx."
b.
   i. Yes, see attachment "DR-002-Q03.b Table 6-4 Circuit List Planned Inspections.xlsx."
   ii. Yes, see attachment "DR-002-Q03.b Table 6-4 Circuit List Planned Inspections.xlsx."
   iii. See attachment "DR-002-Q03.b Table 6-4 Circuit List Planned Inspections.xlsx."

Q04. Regarding Table 5-5: Liberty Top-Risk Circuits:

a. In Table 5-5, circuits TAH5201, TAH7300, and KBH5200 each have an outage program risk score that is over 40% of the overall utility risk score, at 42.9%, 51.0%, and 42.7% respectively.
   i. Provide an explanation for the relatively high outage program risk for these circuits.
   ii. How has the relatively high outage program risk impacted decision-making when determining mitigations for these circuits?
b. Circuit 640 has an outage program risk score of 0.
   i. Provide an explanation for why this circuit has no outage program risk.

Response:

a.
   i. As described in the 2027 WMP, Liberty's outage program risk is primarily based on PSPS risk. Liberty's PSPS likelihood module is relatively coarse, projecting these three circuits respectively would experience a PSPS event once every two years. These three circuits face high outage program risk shares because they are relatively long circuits serving many residential and commercial customers across Tahoe City, the west shore of Lake Tahoe, and Dollar Point. In contrast, modeled wildfire risk is relatively low for each of the three circuits, because Technosylva wildfire simulations limit the fire spread potential in these areas. The circuits are immediately adjacent to the

lake shore, may receive substantial annual snowfall, and typically see higher fuel moistures than portions of Liberty's service territory further away from the Sierra Nevada crest. Nevertheless, wildfire risk remains a concern for these three circuits due to factors not currently captured well in Technosylva wildfire consequence outputs, including egress and potential future tree mortality events.

ii. At present, Liberty's risk model prioritizes circuits and mitigation choices based on the sum of wildfire and outage program risk denominated in dollars. The advantage of doing so is that wildfire and outage risk can be expressed in common units, and mitigations that address one or both risk types can be evaluated on a common basis. In other words, Liberty's current risk model does not uniquely treat circuits with high proportions of outage program risk differently than ones with low proportions of outage program risk. Liberty targets the sum of wildfire and outage program risk. Going forward, as Liberty builds out the capabilities of the risk model to potentially factor in how hardening activities may influence PSPS and SRP decisions, then mitigations that are more effective at addressing outage program risk would likely be favored for TAH7300, TAH5201, and KBH5200. In addition, Liberty is assessing pilot locations for grid monitoring devices (i.e., Gridscope), which provide measurable outage program risk reductions.

b. Circuit 640 is a transmission-level circuit. When de-energized, load served by 640 can be met through alternative transmission-level sources. Thus, Liberty's PSPS risk model assumes no PSPS outage risk is introduced when 640 is proactively de-energized.

Q05. Regarding WMP Expenditures:

a. In Table 3-3 of its 2027 Base WMP, Liberty states that the projected spend on WMP expenditures is $44,924. Liberty does not include expenditures related to mitigation activities included in this WMP, for example, expenditures related to Overhead Hardening with Covered Conductor, in this total.
   i. List the expenses that are included in this total expenditure.
   ii. Why are other expenditures related to mitigation activities included in this WMP not included?

Response:

a. Energy Safety's premise to this question is incorrect. Liberty's stated expenditures in Table 3-3 of Liberty's 2027 Base WMP do include all expenditures related to mitigation activities in the 2027 WMP. As directed in Energy Safety's guidelines for Section 3.6, and as specified in Table 3-3 of Liberty's 2027 Base WMP, Liberty presented its projected

expenditures in thousands $USD. Thus, Liberty's projected 2027 WMP expenditures is $44,924,100 and not $44,924.

i. Liberty provides all 2027 WMP expenditures in Table 11 of its annual WMP submission: "Liberty_2027-WMP_R0."

ii. N/A.

Q06. Regarding Outage Program Risk:

a. On page 41 of its 2027 Base WMP, Liberty states that, "Outage program risk is primarily based on PSPS risk."

i. Explain what factors other than PSPS risk (if any) contribute to Liberty's outage program risk in Liberty's current risk modeling methodology.

ii. If there are no other factors, confirm that outage program is currently based solely on PSPS risk.

Response:

a.

i. Liberty's risk model architecture (2027 WMP Figure 5-1) shows that outage program risk is based on the sum of PSPS risk and PEDS risk denominated in dollars. However, as noted in the figure, Liberty's PEDS risk model is currently under development. As discussed in 2027 WMP Table 5-6, quantification of PEDS outage program risk is a high-priority item of Liberty's risk assessment improvement plan. Liberty provided a preliminary estimate of outage program risk associated with Liberty's SRP program in 2027 WMP Section 5.2.2.2. See the corresponding section for the preliminary estimate and interpretation relative to estimated wildfire and PSPS risk.

ii. As discussed in Liberty's 2027 WMP (see for example, 2027 WMP Sections 5.2.2.2 and 5.2.2.3, 2027 WMP Tables 5-6 and 6-3, and 2027 WMP Appendix D Section 1.1), Liberty's estimate of outage program risk is based on quantified PSPS risk. As discussed in 2027 WMP Table 5-6, quantification of PEDS outage program risk is a high-priority item of Liberty's risk assessment improvement plan.

Q07. Regarding IWRMC Survey Results:

a. On page 118 of its 2027 Base WMP, Liberty states that it, "calculates maturity adjustments using IWRMC survey results related to PSPS and equipment settings categories. The maturity adjustments are approximately 80% yielding effectiveness parameters for PSPS and SRP of 0.75 and 0.56, respectively."

i. Provide a narrative description of the IWRMC survey. Describe who completed

the survey and when it was completed. Provide survey questions and results, as applicable.

ii. Provide a narrative description of how Liberty determined the maturity adjustment of 80%.

Response:

a.

i. The mission of the International Wildfire Risk Mitigation Consortium (IWRMC) is to establish and facilitate a system of working and networking channels between members of the global utility community to support ongoing sharing of data, information, technology, and practices, and proactively address the wildfire issues through learning, innovation, analysis, assessment, and collaboration. The IWRMC is led by a utility executive steering group and consists of member utilities in nineteen states and provinces from the United States, Canada, and Australia.

The IWRMC Wildfire Risk Mitigation Maturity Model Survey is a comprehensive self-assessment tool designed to evaluate how effectively an electric utility identifies, manages, and reduces wildfire risk. The survey examines the maturity of the utility's key capabilities across nine categories: (A) Risk Mapping and Simulation; (B) Situational Awareness and Forecasting; (C) Grid Design and System Hardening; (D) Asset Management and Inspections; (E) Vegetation Management and Inspection; (F) Grid Operations and Protocols; (G) Resource Allocation Methodology; (H) Emergency Planning and Preparedness; and (I) Stakeholder Cooperation and Community Engagement.

Within these categories, the survey evaluates the extent to which wildfire risk management practices are formalized, consistently implemented, supported by data and analytical tools, integrated across organizational functions, and subject to review and continuous improvement. Survey results allow participating utilities to evaluate their current capabilities, identify potential areas for improvement, and benchmark their practices against those of other participating utilities. The version of the maturity model used by Liberty was last revised on October 6, 2025, and included survey results from thirty participating companies.

Liberty completed the IWRMC Maturity Model survey on December 30, 2025. The survey was completed by Liberty's internal subject matter experts,

with each subject matter expert providing responses for the categories and capabilities for their respective areas of responsibility and technical expertise. Liberty used the resulting scores to inform the maturity adjustments applied to the effectiveness estimates for its PSPS and Sensitive Relay Profile (SRP) mitigations. For the IWRMC Maturity Model survey questions see attachment "DR-002-Q07 IWRMC Maturity Model_ CONFIDENTIAL.xlsx". The applicable results are provided in attachment "DR-002-Q07 Maturity Model Results_ CONFIDENTIAL.xlsx".

ii. To calculate the maturity adjustment, Liberty identified IWMRC survey questions related to (F) Grid Operations and Protocols and (B) Situational Awareness and Forecasting. Within the two categories, Liberty identified survey questions that specifically related to Liberty's PSPS program, SRP program, and weather forecasting capabilities. Using the survey responses, Liberty calculated average scores for PSPS and SRP programs, and Liberty used the average scores to derive the maturity-adjusted mitigation effectiveness values for PSPS and SRP. While the survey responses provide a quantitative method of estimating maturity, there remains a degree of subjectivity and uncertainty when relying on survey responses to calculate a maturity factor.

Q08. Regarding Mitigation Selection Using Risk Model Outputs:

a. On page 110 of its 2027 Base WMP, Liberty states, "Overhead hardening with covered conductor and undergrounding are the two key mitigations that Liberty currently evaluates in its benefit-cost analysis."

i. Explain how Liberty currently uses risk model outputs to inform any mitigation activity selection, prioritization, or scheduling other than overhead hardening with covered conductor and undergrounding.

Response:

a.

i. While Liberty's current risk model only calculates benefit-cost ratios for overhead hardening with covered conductor and undergrounding, Liberty uses risk model outputs more broadly to inform risk mitigation activities. For example, the risk model informs locations of pilot grid monitoring devices (Gridscope), fuse replacements, and pole replacements. As noted in Liberty's risk assessment improvement plan (2027 WMP Table 5-6), Liberty is prioritizing benefit-cost ratio quantification for such mitigations (i.e., fuse replacement).