		LOG BEGINS JULY 3, 2025.	LOG BEGING Liberty 2026-2028 Base WMP Discovery Log	NS JULY 3, 2025.							
Last Updated: 8/14/2025 Count Party Name DR Set # Data Request	Question No. Question ID	Question On 1 Regarding Vegetation Management Inspection Targets:	Responses	Requestor	Date Received	Final Date Due	Date Sent	Links Number of Attachments A	Attachment Links NDA Required?	WMP Section	Category Subcatego
1 OEIS 1 OEIS-P-WMP_2025-Liberty-001	1 1 OEIS-001-Q01	Q01. Regarding Vegetation Management Inspection Targets: In Table 4-1 of its 2026-2028 WMP, Liberty reports 1,476.9 circuit miles of overhead distribution lines and 32.89 circuit miles of transmission lines, totaling 1,509.79 combined circuit miles of distribution and transmission overhead lines. In Table 9-2, Liberty provides a three-year total of 660 circuit miles for its "Vegetation Management Program – Detailed" Liberty lists the "Inspection Type" as "Transmission and Distribution," "Area Inspected" as "Territory," and "Frequency" as "Three-year cycle." In the same table, for "Vegetation Management Program – Detailed" Liberty lists the "Inspection Type" as "Territory," and "Frequency" as "Annual." a. Does the "Three Year Total" target for "Vegetation Management Program – Detailed" include all overhead circuit miles in Liberty's territory? i. If yes, explain the different number of circuit miles reported in Table 4-1 and the "Three Year Total" target for "Vegetation Management Program – Detailed." ii. If not, explain why the targets do not cover all overhead distribution circuit miles in Liberty's territory during the three-year cycle. b. Does the "Cumulative Quarterly Target, 2026 Q4" for "Vegetation Management Program – LiDAR" include all overhead circuit miles in Liberty's territory? i. If yes, explain the different number of circuit miles reported in Table 4-1 and the "Cumulative Quarterly Target, 2026 Q4" for "Vegetation Management Program – LiDAR" include all overhead circuit miles in Liberty's territory? ii. If not, explain the different number of circuit miles reported in Table 4-1 and the "Cumulative Quarterly Target, 2026 Q4" target for "Vegetation Management Program – LiDAR." iii. If not, explain the circuit miles reported in Table 4-1 and the "Cumulative Quarterly Target, 2026 Q4" target for "Vegetation Management Program – LiDAR."	a. The target unit for detailed inspections is miles inspected of overhead primary distribution and transmission voltage classes (12kV-25kV, and 60kV-120kV). The target does not include the secondary voltage class distribution lines that are included in Table 4-1. The total miles of overhead primary distribution and transmission circuits is approximately 700 miles. Liberty intends to complete detailed inspections on one third of its overhead primary distribution and transmission system per year. Liberty also inspects secondary lines along its primary distribution system. These secondary line inspections are not included in the target. b. The target unit for LiDAR inspections is miles inspected of overhead primary distribution and transmission voltage classes (12kV-25kV, and 60kV-120kV). The target does not include the secondary voltage class distribution lines that are included in Table 4-1. The total miles of overhead primary distribution and transmission circuits is approximately 700 miles. Liberty intends to complete LiDAR inspections of the total overhead primary distribution and transmission system annually.	Jessica McHale	7/1/2025	7/7/2025	7/7/2025	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty-001.pdf	No	9	Vegetation Management and Inspections
1 OEIS 1 OEIS-P-WMP_2025-Liberty-001	1 2 OEIS-001-Q02	Q02. Regarding Vegetation Management Procedures: a. Provide the most recent versions of the following procedures documents: i. Vegetation Management Plan (VM-02) ii. Hazard Tree Management Plan (VM-03) iii. Post Work Verification Procedure (VM-04) iv. Vegetation Threat Procedure (VM-05) v. Vegetation Management Notification and Refusal Resolution Policy (VM-06) vi. Vegetation Management Inspection Manual (VM-07)	a. Refer to attachments "Liberty Response_DR-001-Q02i-vi" and "Liberty Response_DR-001-Q02vii."	Jessica McHale	7/1/2025	7/7/2025	7/7/2025	https://california.libertyutilities.com/uploads/Liberty%20Res ponse%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty- 001.pdf	No	9	Vegetation Management and Inspections
1 OEIS 1 OEIS-P-WMP_2025-Liberty-001	1 3 OEIS-001-Q03	Q03. Regarding Liberty's Pole Clearing Target (WMP-VM-VFM-01): a. On page 170 of its 2026-2028 WMP, Liberty sets annual targets in 2026, 2027, and 2028 of 4,900 poles. On page 182 of its 2026-2028 WMP, Liberty states "[t]here are approximately 4,900 poles that require clearing on an annual basis in SRA and FRA Of the 4,900 poles targeted for pole clearing, specify how many of those poles: i. Are required to be cleared under Public Resources Code (PRC) 4292 (i.e., poles in the SRA). ii. Are not required to be cleared under PRC 4292 (i.e., poles not in the SRA). b. For any poles not subject to PRC 4292, identify the applicable governing standards and/or Liberty's standard operating procedures that require those poles to be cleared. c. On page 170 of its 2026-2028 WMP, Liberty sets annual targets in 2026, 2027, and 2028 of 4,900 poles. On page 209 of its 2023-2025 Base WMP, Liberty set annual targets in 2023, 2024, and 2025 of 4,960 poles. Provide justification and details of planned or completed activities which support that the volume of pole clearing work required during Liberty's 2026-2028 WMP cycle will decrease by 60 poles.	i. Of the approximately 4,900 poles targeted for pole clearing, approximately 4,500 are required to be cleared under Public Resources Code (PRC) 4292. ii. Of the approximately 4,900 poles targeted for pole clearing, approximately 450 are not required to be cleared under Public Resources Code (PRC) 4292. b. The applicable standard that requires Liberty to clear those poles not subject to PRC 4292 is outlined in the Liberty 2026-2028 Wildfire Mitigation Plan, Section 9.4.1. c. Liberty underted its applied planting target to 4,900 to account for fluctuations in poles from application poles and system ungrades.	Jessica McHale	7/1/2025	7/7/2025	7/7/2025	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty-001.pdf	No	9	Vegetation Management and Inspections
		Q04. Regarding Liberty's Wood and Slash Management Target (WMP-VM-VFM-02): On page 280 of its 2026–2028 Base WMP, Liberty sets annual wood and slash management targets of 280 acres for each year: 2026, 2027, and 2028. On page 183, Liberty states, "Liberty has implemented a Fuel Management Program as a precautionary measure, where feasible, to reduce wildfire risks by removing wood and treating brush and slash after vegetation maintenance is performed. Additional treatments that reduce surface fuels from previous activities and those that further reduce fuel loads are also implemented."	i. Wood and slash management is a component of tree removal work and is dependent upon trees identified in the field during ground-based inspections requiring mitigation, and landowner preference for wood removal. Liberty calculates acres treated based off completed work orders with cleanup methods of 100% removal or cutting wood rounds into firewood lengths. Typically, if work occurs on a residential lot less than 0.25 acres the entire lot size is counted. For larger parcels where wood and slash management work occurs, Liberty calculates the acres treated based on the length of the right-of-way for the span. In instances where wood and slash is treated on more than one tree at a location, Liberty counts the acres for that location only once. Liberty has averaged about 3,350 tree removals per year since 2023 with 51% involving wood management post tree work. To determine its annual target, Liberty forecasts approximate acres treated based off historical numbers. 1. Diameter classes of woody vegetation treated are as follows: • R1: 4.0" < 12" DBH • R2: 12.0" < 24" DBH • R3: 24" < 36" DBH • R4: 36" < 48" DBH					https://california.lihortuutilitios.com/uploads/Lihortu%/20.Pos			
1 OEIS 1 OEIS-P-WMP_2025-Liberty-001	1 4 OEIS-001-Q04		• R5: 48" DBH and greater ii. Liberty is unable to forecast the number of acres treated for projects where vegetation material is not generated through its own vegetation management activities. However, Liberty actively develops and manages additional fuel management projects through defined scopes of work and detailed specifications. These projects are implemented in coordination with agency partners and landowners, with acreage calculated based on the specific project footprint. Liberty primarily takes an opportunistic approach, collaborating with local stakeholders to support or contribute to fuel reduction efforts that align with its operational priorities. Liberty will also continue to support the U.S. Forest Service's Forest Resiliency Corridors projects located adjacent to Liberty's infrastructure. 1. Diameter classes of woody vegetation treated are as follows: 8R: <4.0" DBH R1: 4.0" < 12" DBH R2: 12.0" < 24" DBH R3: 24" < 36" DBH R5: 48" DBH and greater	Jessica McHale	7/1/2025	7/7/2025	7/7/2025	https://california.libertyutilities.com/uploads/Liberty%20Res ponse%20to%20DR%20No.%200EIS-P-WMP 2025-Liberty- 001.pdf	No	9	Vegetation Management and Inspections
1 OEIS 1 OEIS-P-WMP_2025-Liberty-001	1 5 OEIS-001-Q05	this assessment and integrate any extreme scenarios into its risk modeling. b. On page 62 of Liberty's 2026-2028 Base WMP, in Table 5-4 Liberty Summary of Extreme-Event Scenarios, Liberty includes the "Impact of climate change on long-term weather and vegetation conditions that impact fire behavior." Provide the timeframe for	a. Currently, Liberty does not have a timeline of when it intends to complete the assessment and integrate the extreme scenarios into its risk model. The assessment of extreme or high uncertainty scenarios is solely dependent on Technosylva's prioritization of such modeling efforts and because these types of scenarios are difficult to model, Liberty does not have timeline b. Currently, Liberty does not plan to evaluate climate change in its risk modeling framework.	Jessica McHale	7/1/2025	7/7/2025	7/7/2025	https://california.libertyutilities.com/uploads/Liberty%20Res ponse%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty- 001.pdf	No	5	Risk Methodology and Assessment
1 OEIS 1 OEIS-P-WMP_2025-Liberty-001 1 OEIS 1 OEIS-P-WMP 2025-Liberty-001		climate change being evaluated (e.g., 30-year forecast). Q06. Regarding Top-Risk Circuits: On pages 71-72 of its 2026-2028 WMP, Liberty discusses and provides its top risk-contributing circuits, shown in Table 5-6 Liberty Top-Risk Circuits. a. Provide the total overall utility risk score used to calculate whether a circuit qualified as at least 1% of the total overall utility risk score represented within the table, as described on page 71. b. Provide the total number of circuits evaluated within Liberty's service territory. Q07. Regarding Risk Reduction for Top Circuits: a. Provide an updated version of Table 6-5 Summary of Risk Reduction for Top Circuits (Liberty's 2026-2028 WMP, pages 103-104) via Excel with the following additional columns: i. 2026 Grid Hardening Planned (circuit mileage) iii. 2027 Grid Hardening Planned (circuit mileage) iii. 2028 Grid Hardening Planned (circuit mileage)	a. 0.02659407 b. 60 a. Refer to attachment: "Liberty Response_DR-001-Q07" b. Grid hardening refers to all WMP initiative activities included in Section 8.2 of Liberty's 2026-2028 Base WMP and includes covered conductor. Because grid hardening refers to all WMP initiative activities included in Section 8.2, overall grid hardening is	Jessica McHale Jessica McHale	7/1/2025 7/1/2025	7/7/2025	7/7/2025 7/7/2025	https://california.libertyutilities.com/uploads/Liberty%20Res ponse%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty- 001.pdf https://california.libertyutilities.com/uploads/Liberty%20Res ponse%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty- 1	No	5	Risk Methodology and Assessment Risk Methodology and Assessment
2 OEIS 2 OEIS-P-WMP_2025-Liberty-002		iv. 2026 Covered Conductor Planned (circuit mileage) v. 2027 Covered Conductor Planned (circuit mileage) vi. 2028 Covered Conductor Planned (circuit mileage) vi. 2028 Covered Conductor Planned (circuit mileage) b. Identify whether "grid hardening" includes covered conductor for the circuit mileages provided. Regarding Liberty's Compliance Audit Program Objective and Sampling Statistics: On page 199 of its 2026-2028 Base WMP, Liberty states that "Compliance Audits are performed by qualified vendors." However, on page 200 Liberty does not include its qualified vendor Compliance Audit in Table 9-20. Similarly, on page 201 Liberty does not include its qualified vendor Compliance Audit in Table 9-21. a. Complete the table below to describe the program objective for Liberty's qualified vendor Compliance Audit.	not measured in circuit mileage (e.g., example targets include the number of tree attachment removals, the number of fuse replacements).	Jessica McHale	7/3/2025	7/9/2025	7/9/2025	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty-002.pdf	No	9	Vegetation Management and Inspections
2 OEIS 2 OEIS-P-WMP_2025-Liberty-002	2 OEIS-002-Q02	a. Provide a list of the criteria that generate the Compliance Audit pass rate (e.g., regulation clearance distance [RCD], ANSI A300 standards, pre-inspector work accuracy, tree crew work accuracy, etc.). i. If multiple criteria generate the Compliance Audit pass rate, explain how Liberty weights each criterion to calculate the pass rate.	Compliance Audit Criteria Description I in Population Within each span that has been evaluated from the sample size, the count of trees that have been pruned and/or trees that are expected to encroach into the regulated clearance distances within 3 years. Trees within Regulated Clearance Distance Count of trees that are located within regulated clearance distances (4' for 12kv - 60kV, 10' for 120kV) within the evaluated sample. The number of trees located within regulated clearance distance during the compliance audit is measured against the total population of trees within the sample to determine the compliance rate.	Jessica McHale	7/3/2025	7/9/2025	7/9/2025	https://california.libertyutilities.com/uploads/Liberty%20Res ponse%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty- 002.pdf	No	9	Vegetation Management and Inspections
2 OEIS 2 OEIS-P-WMP_2025-Liberty-002	2 3 OEIS-002-Q03	Regarding Margin of Error and Confidence Level for Quality Control of Detailed Inspections: On page 201 of its 2026-2028 Base WMP, Liberty does not include a confidence level or margin of error (MOE) for its audit of Detailed Inspections. Provide the following for Liberty's Audit of Detailed Inspections, or provide an explanation why it cannot be provided: a. The confidence level. b. The margin of error	Due to the small number of units, applying standard statistical parameters (e.g., 95% confidence level, 5% margin of error) results in disproportionately large sample sizes. To maintain efficiency and adequate oversight, a 33% sample size was applied for Detailed Inspections. This percentage aligns with the proportion used for Completed Tree Work.	Jessica McHale	7/3/2025	7/9/2025	7/9/2025	https://california.libertyutilities.com/uploads/Liberty%20Res ponse%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty- 002.pdf	No	9	Vegetation Management and Inspections
2 OEIS 2 OEIS-P-WMP_2025-Liberty-002	2 4 OEIS-002-Q04	Regarding Quality Control Pass Rate Calculations: On pages 204-205 of its 2026-2028 Base WMP, Liberty lists multiple conditions that it averages to produce a final quality control pass rate for either a "single tree" or a "single pole." On page 201 of its 2026-2028 Base WMP, Liberty indicates that the "Population/Sample Unit" for its quality control audit of "Completed Tree Work" and "Detailed Inspections" is "Annual Circuit Miles." a. Describe how Liberty calculates the quality control pass rate at the "annual circuit mile" level (i.e., indicate if the pass rate target is the average of all individual tree or pole pass rates, if the target pass rate is the average of each circuit mile's pass rate, or if	The pass rate is calculated as the average of all condition scores for the sample units evaluated within each QC work type. See Section 9.11.4, Table 9-24, 9-25, 9-26, 9-27, and 9-28 of Liberty's 2026-2028 WMP.	Jessica McHale	7/3/2025	7/9/2025	7/9/2025	https://california.libertyutilities.com/uploads/Liberty%20Res ponse%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty- 002.pdf	No	9	Vegetation Management and Inspections
2 OEIS 2 OEIS-P-WMP_2025-Liberty-002	2 5 OEIS-002-Q05	Liberty calculates the target pass rate using another method). Regarding Workforce Relevant Educational Requirements: On page 210 of its 2026-2028 Base WMP, Liberty states that it requires a "bachelor's degree or equivalent" for Vegetation Management Supervisor, and System Arborist/Forester roles. Liberty does not indicate that it has education requirements for any otle vegetation management roles. a. Does Liberty require relevant education for any positions other than Vegetation Management Supervisor and System Arborist/Forester (e.g., degrees in Forestry, Environmental Science, Natural Resources, Biology, etc.)?	ther Generally, Liberty's minimum educational requirement for internal vegetation management positions is a bachelor's degree or equivalent. Relevant work experience may be an exception to the minimum educational requirement for these positions. All other vegetation management roles are staffed through contracted vendors, as those positions are technical in nature.	Jessica McHale	7/3/2025	7/9/2025	7/9/2025	https://california.libertyutilities.com/uploads/Liberty%20Res ponse%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty-	No	9	Vegetation Management and Inspections
		i. For positions with educational requirements, indicate each position and the level of education Liberty requires. ii. For positions without educational requirements, indicate each position and describe why these positions do not have minimum educational requirements Regarding Eagle Rock Analytics Report: In Liberty's response to area for continued improvement LU-23-18 "Weather Station Optimization" Liberty indicated it has "engaged Eagle Rock Analytics to perform a weather station optimization analysis for its system to evaluate how well the network captures the diversity of climate conditions within Liberty's territory."						https://california.libertyutilities.com/uploads/Liberty%20Res			
2 OEIS 2 OEIS-P-WMP_2025-Liberty-002	2 6 OEIS-002-Q06	In Data Request OEIS-P-WMP_2024-LU-003 (Question 01), Liberty stated that it expected to receive the Weather Station Optimization final analysis from Eagle Rock Analytics by the end of 2024, and that, "Liberty will provide the final analysis in its next WI submission or in response to stakeholder request." a. Provide the Weather Station Optimization report from Eagle Rock Analytics.	The results of the analysis performed by Eagle Rock Analytics were provided in the form of GIS data. Please refer to attachments: "Liberty Response_DR-002-Q06.i" and "Liberty Response_DR-002-Q06.ii" for the weather station optimization analysis. a.	Jessica McHale	7/3/2025	7/9/2025	7/9/2025	ponse%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty- 002.pdf	No	Appendix D, Section 10	Areas for Continued Improvement, Situational Awareness and Forecasting
2 OEIS 2 OEIS-P-WMP_2025-Liberty-002	2 7 OEIS-002-Q07	Regarding Risk Reduction Values Presented in Table 8-1: a. Some risk reduction values are presented as negative, implying an increase in risk within the service territory. i. Explain if the intent was for these values not to include a negative sign ii. Or clarify why these values have a negative sign b. All risk reductions percentages reported in Table 8-1 should be at a service territory level and should represent how much impact an activity has that year on its service territory. Are the risk reduction values reported in Table 8-1 calculated at a service territory level or circuit/segment level? c. Explain why the anticipated risk reduction for certain activities, such as covered conductor installation, appears to remain constant (e.g., 0.3%) over multiple years despite varying annual circuit mile targets. d. Provide calculations in an Excel file of each calculated risk reduction per year and per activity.	i. The negative values presented in the risk reduction results are outputs from the risk model and reflect statistically non-significant changes in risk. These values do not indicate an actual increase in risk but rather result from the inherent variability in the simulation process. ii. The model, developed by Direxyon, employs a stochastic simulation methodology. This approach incorporates randomness to account for uncertainty in future outcomes. Each scenario is simulated 100 times, and in each iteration, the probability of a risk event is randomly selected at the segment level. This process generates a distribution of risk values for each investment scenario. Negative values may occur when the investment level is insufficient to produce a consistent and measurable reduction in risk across all simulated futures. In such cases, small improvements may be obscured by the variability introduced through random sampling. As a result, the average risk reduction may appear negative, even though the initiative does not increase risk. Instead, the model is indicating that the effect is not statistically distinguishable from zero. When all initiatives are simulated in combination, the cumulative investment demonstrates a clear and consistent reduction in risk. However, when initiatives are evaluated individually, their isolated impact at the service territory level may be too small to register as statistically significant within the model's variability. Increasing the number of simulation iterations could reduce this variability, as the average risk values tend to converge with more runs. b. The risk reduction values reported in Table 8-1 are calculated at a service territory level. c. Risk reduction was calculated and reported in Table 8-1 as a three-year average over the 2026-2028 Wildfire Mitigation Plan. d. Please refer to attachment "Liberty Response_DR-002-Q07" for the results of the simulations of each calculated risk reduction per year and per activity. Additional information regarding calculations is pro	Jessica McHale	7/3/2025	7/9/2025	7/9/2025	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty-002.pdf	No	5	Risk Methodology and Assessment
			 a. i. The 3.3 circuit miles of traditional overhead hardening planned will consist of targeted rebuilds of existing overhead electric distribution lines in high fire threat districts (HFTDs). The scope of work includes: Replacement of aging or undersized poles with stronger poles rated for higher wind and loading conditions. Replacement of aged, damaged, or inadequate hardware such as insulators, crossarms, brackets, fuses, and arrestors. 								
		Regarding Traditional Overhead Hardening (WMP-GDOM-GH-05): On page 123 of its 2026-2028 Base WMP, Liberty states, "Traditional overhead hardening typically includes installation of stronger poles, modern conductor, shorter spans, increased phase spacing, reduced sag, and hardware upgrades such as brackets, crossarms, insulators, fuses, and arrestors." Additionally, in Table 8-1, Liberty's three-year target for its traditional overhead hardening activity is 3.3 circuit miles. a. Provide a complete description of the scope of work planned for the 3.3 circuit miles of this activity. i. What percentage of these miles will replace existing bare wire conductor?	• Installation of modern conductor (ACSR) to replace aging conductor. • Shortening of spans, where feasible, to reduce mechanical stress and potential conductor slap.								
OEIS 2 OEIS-P-WMP_2025-Liberty-002	2 8 OEIS-002-Q08	ii. Explain what "modern conductor" means, and how this conductor differs from the existing conductor being replaced. iii. Explain how covered conductor differs from "modern conductor." Include a description of the insulation Liberty uses for covered conductor. b. Additionally, on page 124 of its 2026-2028 Base WMP, Liberty states that "traditional overhead hardening remains a cost-effective and versatile approach, particularly in areas where forest density or terrain constraints make covered conductor or undergrounding less feasible." i. Explain why it is not feasible to replace the existing bare wire conductor with covered conductor in these locations. c. Lastly, in its response to ACI LU-23B-06 (Effectiveness of Sensitive Relay Profile ["SRP"] and Traditional Hardening), Liberty noted "Normal Replacement Baseline" as a project (Appendix D, Table 1-2: Comparison of Risk Calculations). i. Explain how "Normal Replacement Baseline" is the same or different compared to traditional overhead hardening activity.	ii. "Modern conductor" refers to bare wire conductor that meets current electrical and mechanical standards for strength, ampacity, and durability. Liberty's standard is ACSR. iii. Covered conductor is ACSR tree wire with a polyethylene jacket. This jacket helps reduce ignition risk from wire slap and incidental vegetation contact, but it is not considered insulated by NESC, and standard spacing requirements still apply. In contrast, "modern conductor" refers to bare ACSR (as described above) that meets the current standards for strength, corrosion resistance, and ampacity, but has no outer jacket. Liberty uses both types, depending on site conditions. b. i. Covered conductor is typically used in dense forest areas where it's not feasible to widen crossarms or interset poles, due to environmental constraints, such as steep terrain, limited access, or hard granite. In these areas, the added jacket on covered conductor helps reduce ignition risk from vegetation contact or wire slap. If there is space to widen crossarms and safely interset poles, Liberty uses traditional overhead hardening with modern bare conductor. This approach offers similar risk reduction as covered conductor but is more efficient to install and more cost effective. c. i. The Normal Replacement Baseline is part of Liberty's broader resiliency program and refers to isolated pole and equipment replacements driven by asset condition assessments or inspections. These are typically reactive or maintenance-driven and do not include full line rebuilds.	Jessica McHale	7/3/2025	7/9/2025	7/9/2025	https://california.libertyutilities.com/uploads/Liberty%20Res ponse%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty- 002.pdf	No	8	Grid Design, Operations, and Maintenance
2 OEIS 2 OEIS-P-WMP_2025-Liberty-002	2 9 OEIS-002-Q09	Regarding Emerging Grid Hardening Technology Installations and Pilot Progress: On page 125 of its 2026-2028 Base WMP, Liberty states that it "is not currently piloting additional grid hardening technologies and at this time does not have new emerging technologies to report in its 2026-2028 WMP." a. What additional grid hardening technologies, if any, were considered for piloting and why did Liberty decide not to pursue them for piloting?	In contrast, Traditional Overhead Hardening consists of planned projects that target specific high-fire-risk areas identified through Liberty's risk analysis. These projects involve replacing conductor identified as needing replacement, along with structural upgrades such as pole intersets, reconductoring, crossarm widening, and hardware replacement. Currently, Liberty is not piloting or evaluating specific emerging grid hardening technologies. As a smaller utility with limited resources, Liberty leverages research and pilot results from larger IOUs to inform the future adoption of technologies. Liberty actively participates in joint IOU calls and working groups to stay aligned with proven, cost-effective technologies.	Jessica McHale	7/3/2025	7/9/2025	7/9/2025	https://california.libertyutilities.com/uploads/Liberty%20Res ponse%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty- 002.pdf	No	8	Grid Design, Operations, and Maintenance
		On page 118 of its 2026-2028 Base WMP, Liberty states that "when a conductor is covered, it is assumed that the Probability of Ignition (POI) calculated by Technosylva is reduced to account for the effectiveness of the mitigation strategy. For bare conductors, the electrical fire probability remains equal to the POI provided by Technosylva. For covered conductor, the POI is reduced by 50% based on the assumed effectiveness of the activity." On page 119 of its 2026-2028 Base WMP, Liberty provides cause-specific reductions used in the model (i.e. "60% reduction in corrosion-related failures," "20% reduction in lightning-related failures," etc.). a. How was the 50% POI reduction determined? i. Provide an explanation and documentation to support this reduction percentage. iv. "70% reduction in animal-related failures"	a. Liberty assumed a 50% reduction in the Probability of Ignition (POI) for covered conductor in its 2026–2028 Wildfire Mitigation Plan based on a combination of factors, including subject matter expertise, joint IOU working groups, and industry research. This assumption reflects a conservative estimate of mitigation effectiveness, consistent with findings from the Joint IOU Covered Conductor Effectiveness Workstream, which included lab testing, field data, and SME input. Additional supporting references include: TDWorld: Covered Conductor – A Wildfire Mitigation Solution					https://california.libertyutilities.com/uploads/Liberty%20Res			
2 OEIS 2 OEIS-P-WMP_2025-Liberty-002	2 10 OEIS-002-Q10	v. "75% reduction in tree-related failures" vi. "40% reduction in unknown causes" b. Explain how each of the following cause-specific reductions were determined. For each reduction percentage listed below, provide explanations and documentation to support these figures: i. "60% reduction in corrosion-related failures" ii. "20% reduction in lightning-related failures" iii. "10% reduction in mechanical failures"	• Edison: Insulated Wires Help Reduce Wildfire Risk • Marmon Utility: Wildfire Mitigation with Aerial Covered Conductor • IIT Kharagpur: High Voltage Lab – Covered Conductor Behavior While some sources suggest higher ignition reduction potential, Liberty selected a conservative 50% reduction to avoid overestimating mitigation benefits in its risk model. b. The explanations and documentation to support each of the reductions listed are provided in Section 8.1, Annex 1: Conductor Failure model and vegetation of the Phase 3-Implementation of DIREXYON Suite and WMP Support (2025) Final Report.	Jessica McHale	7/3/2025	7/9/2025	7/9/2025	ponse%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty- 002.pdf	No	8	Grid Design, Operations, and Maintenance
2 OEIS 2 OEIS-P-WMP_2025-Liberty-002	2 11 OEIS-002-Q11	Regarding Fire Risk Maps: On pages 68-69 of its 2026-2028 Base WMP, Liberty provided Figures 5-4 and 5-5 showing Fire Risk Maps. a. Provide higher quality and high-resolution files as a PDF for Figures 5-4 and 5-5 that clearly show the differentiated sections on the maps. Regarding Unplanned Distribution System Outages from Jan 1, 2023, to Dec 31, 2024: a. From January 1, 2023, to December 31, 2024, provide the following:	Refer to attachment "Liberty Response_DR-002-Q11" i. Refer to attachment: "Liberty Response_DR-003-Q01.i"	Jessica McHale	7/3/2025	7/9/2025	7/9/2025	https://california.libertyutilities.com/uploads/Liberty%20Res ponse%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty- 002.pdf	No	5	Risk Methodology and Assessment
3 OEIS 3 OEIS-P-WMP_2025-Liberty-003	3 1 OEIS-003-Q01	i. A list and description of each distinct cause code attributed to an unplanned distribution outage.1 ii. The average number of distribution poles in Liberty's service territory. iii. The total number of unplanned distribution outages in Liberty's service territory. iv. The number of unplanned distribution outages caused by vegetation contact. 1. Provide the number of unplanned distribution outages caused by vegetation contact during major event days. v. The number of unplanned distribution outages caused by equipment failure. 1. Provide the number of unplanned distribution outages caused by equipment failure during major event days. vi. In an Excel file attachment(s), provide the data Liberty used to determine the number of outages in tabular form.	ii. 25,000 iii. 634 iv. 105 a. 6 v. 213 a. 2 vi. Refer to attachments: "Liberty Response_DR-003-Q01.vi(1)" and "Liberty Response_DR-003-Q01.vi(2)" a. Figure 5-2 presents a conceptual overview of the Risk-Based Decision-Making Framework, which includes Asset Failure Risk, Fire Risk, and PSPS Risk. Section 5.2.2.3 defines Utility Risk as the average of Fire Risk and PSPS Risk. Asset Failure Risk is not	Jessica McHale	7/8/2025	7/11/2024	7/16/20	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty-003.pdf	No	8	Grid Design, Operations, and Maintenance
3 OEIS 3 OEIS-P-WMP_2025-Liberty-003	3 2 OEIS-003-Q02	Liberty's risk modeling. i. Describe the differences depicted, and why such differences exist. ii. Which figure more accurately depicts Liberty's risk modeling framework?	included in the utility risk formula, because its effects are already embedded in the components of Fire Risk and PSPS Risk. Asset Failure Risk is a supporting diagnostic tool, used to identify and prioritize mitigations that reduce Fire or PSPS Risk. b. Figure 5-2 is broader and is a depiction of how Asset Failure Risk is a supporting diagnostic tool. Asset Failure Risk is used to support decision making for identifying and prioritizing mitigations that reduce Fire Risk or PSPS Risk. The figure in the DIREXYON Report is focused on the simulation logic, where Asset Failure Risk is not a standalone output but a driver of failure probabilities. i. Asset Failure Risk is a foundational input, not a final output in the Utility Risk formula. The two figures reflect different layers of the same framework. Figure 5-2 of the WMP is a strategic overview outlining the full RBDM Framework. Figure 3 of the DIREXYON Report is more precise when considering computational modeling and simulation logic. ii. Both figures are accurate, but for different purposes. Figure 5-2 of the WMP is more accurate for understanding the full strategic framework, including how Asset Failure Risk informs mitigation planning. Figure 3 of the DIREXYON Report is more accurate for understanding the computational model used to generate risk scores.	Jessica McHale	7/8/2025	7/11/2024	7/16/20	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty-003.pdf	No	5	Risk Methodology and Assessment
3 OEIS 3 OEIS-P-WMP_2025-Liberty-003	3 OEIS-003-Q03	Regarding Probability of Ignition: On page 43 of Liberty's 2026-2028 Base WMP, POI is noted as synonymous with "burn likelihood" and "WL," which Energy Safety assumes stands for Wildfire Likelihood. However, on page 64 of Liberty's 2026-2028 Base WMP, the WL row of the table sat the Probability of Ignition is an input. On page 43 of Liberty's 2026-2028 Base WMP, the "Probability of Fire" (POF) is equated with "WC," which Energy Safety assumes stands for Wildfire Consequence. a. Provide clarification on the difference between POI and WL, as used in Liberty's WMP. b. Clarify if the POI calculated by Technosylva is derived from the APF (probability of asset failure) and weather sampling from Technosylva (mentioned in the Direxyon report, Appendix B1, page 22). c. Describe why scaling of the POF (formula from Liberty's 2026-2028 Base WMP, page 44) is based on the 80th percentile of the POF.	a. Probability of Ignition (POI) is derived from Technosylva FireSight. POI represents the likelihood that an ignition source, such as a failed asset, will result in a fire requiring suppression. It is a static metric calculated at specific ignition points. Wildfire Likelihood (WL) is a Direxyon Risk Asset Tool (DRAT) module that incorporates POI as an input to the WL module. WL also incorporates condition modifiers to produce a refined asset-specific version of POI that is adjusted for asset conditions and status of mitigation actions. b. The POI from Technosylva is not derived from Probability of Asset Failure. c. The scaling of POF is based on the 80th percentile of POF to increase the sample size of events that could occur. Liberty made the decision to make the risk model less risk adverse to show POF on a slightly broader spectrum to magnify risk. This decision was made for reasons due to the small pool of data relating to utility caused ignitions in Liberty's service territory.	Jessica McHale	7/8/2025	7/11/2024	7/16/20	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty-003.pdf	No	5	Risk Methodology and Assessment
3 OEIS 3 OEIS-P-WMP_2025-Liberty-003	3 4 OEIS-003-Q04	On page 114 of Liberty's 2026-2028 Base WMP, the 2026 target for SRP implementation in the HFRA is listed as 100%. SRP is not currently included in the Utility Risk total but is included in a separate Outage Program total. a. Clarify if that means SRP has already been implemented in 2025. b. Explain why SRP risk was not included in Utility Risk at this time. c. Is Liberty planning on including SRP risk in future iterations of its risk modeling? i. If so, provide an approximate timeline for when Liberty plans to have this completed. ii. If not, describe why not, including any existing roadblocks.	a. 100% of circuits will have SRP implemented by the end of 2025. b. SRP (Sensitive Relay Profile) risk is included in Liberty's Utility Risk calculation, though it is not labeled explicitly as "SRP risk." Instead, it is represented as EPSS (Enhanced Powerline Safety Settings) availability within the PSPS Likelihood module of the DIREXYON Risk Assessment Tool (DRAT). In the model, SRP is treated as a conditional circuit-level characteristic and is integrated into Utility Risk through its influence on PSPS Likelihood. c. SRP is already included in Liberty's risk modeling. a. The approach of averaging the PSPS and Wildfire risk was chosen to provide equal weighting for balanced risk representation. It was determined that both PSPS and Wildfire risks are critical and should be treated with equal importance in Liberty's risk framework. Averaging the two prevents either risk type from disproportionately dominating the Utility Risk score. Because the two risks are calculated using different models and metrics, averaging provides a normalized Utility Risk score on a consistent scale, making it easier to compare across circuits and initiatives. Summing the scores could result in inflated values that exceed the intended scale of the model, especially since both components are already scaled independently. This would reduce the	Jessica McHale	7/8/2025	7/11/2024	7/16/20	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty-003.pdf	No	8	Grid Design, Operations, and Maintenance
3 OEIS 3 OEIS-P-WMP_2025-Liberty-003	3 5 OEIS-003-Q05	Regarding Risk Equations: a. On page 10 of the Direxyon report (Appendix B1), it describes how SMEs decided that PSPS and Wildfire should be each weighted 50% so that the final risk score ends up being the average. Explain why the PSPS and Wildfire risk scores are averaged instead of summed. b. On page 47 of Liberty's 2026-2028 Base WMP, the consequence scores are described as averages. Explain why the Wildfire and PSPS consequence scores for each attribute are averaged instead of summed. c. Page 45 of Liberty's 2026-2028 Base WMP lists the PEDS Outage likelihood equation. Provide a calculation example for this equation. d. Explain why Liberty uses a PSPS safety factor of 1.5e-9 deaths per 30 minutes Customer Minutes Interrupted (CMI) (Liberty's 2026-2028 Base WMP, page 47). e. Describe how the PSPS Safety Multiplier equation was developed (Liberty's 2026-2028 Base WMP, page 47). f. On page 30 of the Direxyon report (Appendix B1) and page 47 of Liberty's 2026-2028 Base WMP, the formula for reliability consequence includes a "Customer Count." Clarify if this count is per circuit or total service territory count.	interpretability and usability of the risk scores in prioritization and planning. b. The average is taken to normalize to a common scale from 0 to 1 so that the metrics can be implemented into the total risk without any circuit disproportionally influencing the final score. c. The formula for PEDS Outage Likelihood is: 1-(1-(Avg APF x Probability of 95th Percentile Weather))Count of Assets A sample calculation using hypothetical values is: • Average Probability of 95th Percentile Weather = 0.02 • Probability of 95th Percentile Weather = 0.05 • Count of Assets on the Circuit = 50 1-(1-(.02 x .05))50 = 0.0488 d. Liberty uses a PSPS safety factor of 1.5×10 ⁻⁹ fatalities per 30 minutes of Customer Minutes Interrupted (CMI) to quantify the safety consequence of PSPS events in its Multi-Attribute Value Function (MAVF) model. The safety factor reflects the statistical likelihood of fatality due to power outages, particularly for vulnerable populations such as medical baseline or critical infrastructure customers. The safety factor enables Liberty to incorporate human impact into its PSPS risk modeling in a consistent, data-driven manner. It supports the calculation of expected fatalities as part of the safety attribute in the MAVF framework, which is then combined with reliability and financial impacts to produce a normalized risk score. e. The PSPS safety multiplier equation was developed for Liberty by Arup, a risk modeling consultant, using their expertise in infrastructure resilience and quantitative risk assessment. The multiplier was designed using industry best practices and research on outage-related health impacts. It is consistent with values used by other California lOUs and aligns with the CPUC's Safety Model Assessment Proceeding (S-MAP) guidance, which requires utilities to quantify risk using standardized, comparable metrics.	Jessica McHale	7/8/2025	7/11/2024	7/16/20	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty-003.pdf	No	5	Risk Methodology and Assessment
3 OEIS 3 OEIS-P-WMP_2025-Liberty-003	3 6 OEIS-003-Q06	i. If so, provide a plan or timeline for how Liberty will shift to estimating fatalities in the wildfire safety consequence. ii. If not, explain why, including how such impacts are captured within Liberty's current risk assessment methodologies.	f. The "Customer Count" used in the reliability consequence formula on page 47 of Liberty's 2026–2028 Base WMP and page 30 of the DIREXYON report refers to the customer count at the circuit level. a. Liberty uses a linear approach of 1 fatality per 260 buildings structures destroyed in its MAVF model. i. Liberty is not currently planning to estimate fatalities based on population impact. ii. Fatalities are estimated using a linear multiplier applied to the number of structures destroyed within the wildfire simulation footprint. There is no plan or timeline to shift to a population-based fatality estimation method. The population impact metric is used to inform consequence severity but is not used directly in the fatality calculation.	Jessica McHale	7/8/2025	7/11/2024	7/16/20	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty-003.pdf	No	5	Risk Methodology and Assessment
3 OEIS 3 OEIS-P-WMP_2025-Liberty-003	3 7 OEIS-003-Q07	Regarding Risk Spend Efficiency: On page 50 of Liberty's 2026-2028 Base WMP, the Risk spend efficiency is listed as APF*ACF. a. Is the ACF the same as the consequence described on page 36 of the Direxyon report? i. If not, describe how the two differ. b. Describe why this consequence calculation is used for the risk spend efficiency instead of the wildfire consequence. Regarding Vegetation Risk:	a. Yes b. Liberty uses Consequence of Failure (ACF) in its Risk Spend Efficiency (RSE) calculation rather than wildfire consequence because RSE is designed to evaluate the cost-effectiveness of asset-level mitigations. This consequence is localized and asset-specific, making it appropriate for evaluating individual mitigation actions. In contrast, wildfire consequence is derived from fire simulation models and reflects system-level impacts, which are not directly attributable to a single asset. a. Within DRAT, the term "asset type" is used to describe items that are calculated into the risk score through a separate module. Vegetation is one of these modules allowing it to be analyzed using the same methodology as traditional utility assets. Although vegetation is not a utility asset it is treated as such in towns of increasing equipment, and the contraction is not a utility asset.		7/8/2025	7/11/2024	7/16/20	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty-003.pdf https://california.libertyutilities.com/uploads/Liberty%20Res	No	5	Risk Methodology and Assessment
3 OEIS 3 OEIS-P-WMP_2025-Liberty-003	3 8 OEIS-003-Q08	On page 79 of Liberty's 2026-2028 Base WMP, it states that "DRAT incorporates vegetation as a separate asset." a. Describe how vegetation is seen as an "asset" that has a "quantified risk score." Regarding Judgmental Sampling for Vegetation Management Quality Control Audits: On page 2 of its Post Work Verification Procedure, Liberty indicates that "QC inspections for VM are based on judgmental sampling and not 100% inspection. Judgment is used to prioritize QC resource allocation based on risk."	vegetation is not a utility asset, it is treated as such in terms of inspection, maintenance, and its potential to degrade system reliability. Each vegetation segment is assigned a risk score based on factors like proximity to energized equipment, tree density, and historical inspection and maintenance data. This score incorporates the likelihood of vegetation contacting electrical infrastructure, the probability of ignition under given conditions, and the potential consequences of an ignition. By quantifying vegetation-related wildfire risk in this way, Liberty can effectively prioritize mitigation efforts, assess the impact of vegetation management initiatives, and support cost-efficiency analyses for vegetation management strategies. a. QC inspections are assigned to the QC contractor by Liberty Vegetation Management upon work completion or completion of a reasonable work sample size prior to the planned QC inspection. Liberty considers various factors when QC work packages are assigned including project schedule and timing of work, region, circuit, population (number of trees, poles, or work orders), local known conditions, vegetation characteristics, HFTD, vendor trends and performance, circuit and section mileage, type of review, and other factors. is considered Table Months of the property of the		7/8/2025	7/11/2024	7/16/20	ponse%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty- 003.pdf	No	5	Risk Methodology and Assessment
4 OEIS 4 OEIS-P-WMP_2025-Liberty-004	4 1 OEIS-004-Q01	a. When performing judgmental sampling, what factors make it more or less likely that a specific tree, circuit mile, or pole will be selected to audit for QC? Provide a detailed description of the process of Liberty's judgmental sampling for each of the following activities Liberty audits: i. Completed Tree Work ii. Detailed Inspections iii. Hazard Tree Work iv. Pole Clearing b. Stratified random sampling ensures that a sample is representative even if it comes from a non-uniform population (e.g., when there are unequal miles within each HFTD Tier, or if one tree crew performs more work than another). Explain why Liberty uses judgmental sampling as opposed to stratified random sampling.	ii. Detailed Inspections – Liberty assigns QC of Detailed Inspections of circuits, sections of circuits, or a reasonable work sample size that are completed by vegetation management inspections. QC of Detailed Inspections occur through the calendar year. QC of Detailed Inspections are assigned based on the criteria described above. All spans and work orders created by VM inspectors in the QC sample are evaluated. iii. Hazard Tree Work – Liberty assigns QC of Hazard Tree Work of completed Fall-In Mitigation work. Liberty assigns entire circuits, or sections of circuits, for QC based on the criteria described above. Completed work orders for trees removed for the Fall-In Mitigation initiative are evaluated. iv. Pole Clearing – Liberty assigns QC of Pole Clearing throughout the service territory based on the criteria described above. It is producted random sampling of completed pole clearing work as needed.	Jessica McHale	7/11/2025	7/16/2025	7/16/20	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty-004.pdf	No	9	Vegetation Management and Inspections
4 OEIS 4 OEIS-P-WMP_2025-Liberty-004	4 2 OEIS-004-Q02	Regarding Quality Control Sample Units: On page 201 of its 2026-2028 Base WMP, Liberty indicates that the "Population/Sample Unit" for "Completed Tree Work" and "Detailed Inspections" is "Annual Circuit Miles." On page 204, Liberty indicates the "Sample Unit" for "Completed Tree Work" and "Detailed Inspections" is a "Single Tree." On page 204 Liberty lists "Completed Tree Work Criteria," and on pages 204 and 205 Liberty lists "VM Detailed Inspections Criteria." It is unclear how "criteria," "Single Tree[s]," and "Annual Circuit Miles" generate p rates that Liberty will compare to the "Target Pass Rate[s]" it includes in "Table 9-21: Vegetation Management QA and QC Activity Targets." a. Provide an example calculation showing all steps of how Liberty calculates audit pass rates using criteria, single trees, and annual circuit miles. Provide separate example calculations for each of the following activities being audited: i. Completed Tree Work ii. VMA Detailed Inspections		Jessica McHale	7/11/2025	7/16/2025	7/16/20	https://california.libertyutilities.com/uploads/Liberty%20Res ponse%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty- 004.pdf	No	9	Vegetation Management and Inspections
4 OEIS 4 OEIS-P-WMP_2025-Liberty-004	4 3 OEIS-004-Q03	ii. VM Detailed Inspections Regarding Annual Substation Defensible Space Inspections: On page 234 of its 2023–2025 Base WMP, Liberty states that "a minimum of two site visits will occur per facility, per year." On page 186 of its 2026–2028 Base WMP, Liberty states that "generally, two site visits will occur per facility, per year." a. Explain why Liberty changes its commitment to inspect substations for defensible space from "a minimum of two site visits" per year to "generally, two site visits" per year. b. Describe factors that would contribute to substation inspections occurring: i. Less often than two times per year. ii. More often or equal to two times per year.	a. Liberty conducts defensible space inspections on each substation annually, with the goal of two site visits per year. While this is the intended schedule, Liberty determined it is necessary to account for factors outside of its control that can impact its ability to inspect and perform the substation treatment. b. Contributing factors. i. Factors such as weather, access issues, and operational constraints can contribute to substation inspections being conducted less than twice per year. ii. Liberty does not plan to perform substation defensible space inspections more frequently than twice a year.	Jessica McHale	7/11/2025	7/16/2025	7/16/20	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty-004.pdf	No	9	Vegetation Management and Inspections
		Regarding Annual LiDAR Inspections of Overhead Distribution and Transmission System In its response to OEIS-P-WMP_2025-Liberty-001, question 01, Liberty states that it "intends to complete LiDAR inspections of the total overhead primary distribution and transmission system annually." a. What type of raw and processed data are provided to Liberty by this process? (ex. Point cloud data, orthoimagery, geospatial vector data, inspection reports) b. What type of analysis outputs are provided to Liberty by this process? (ex. Vegetation encroachment distance, clearance violation counts per span, growth rate projections, risk scoring layers integrating vegetation, asset condition, and terrain) c. How is LiDAR data integrated with Liberty's GIS system?	a. LiDAR data provided: • LiDAR point cloud in .las format • ESRI database o Conductor vectors with locations displayed with cartographic properties representing conductor position relative to tower/poles o Rectified structure and span locations o Vegetation segmentation attributed with clearance detections (fall-in, grow-in analysis) • Satellite Imagery Tree Health Monitoring • Point Cloud data • Software b. Locations of poles, structures and conductor vectors are identified and used to analyze adjacent vegetation. Wire vectors are created from the LiDAR point cloud, stringing a curved vector from points on the structure or pole. Vegetation at six feet and above ground level is segmented to represent tree crowns, with each tree assigned a unique Tree ID. Deliverables include tree-top points for all trees and vegetation polygons for detection trees. Vegetation clearance analysis identifies vegetation that may grow into or fall onto transmission or distribution conductors. It uses tree height data, catenary models, and voltage-specific clearance thresholds to categorize the encroachments and fall-ins. Proprietary software calculates radial clearance distances from each point in the feature-coded point cloud. Reporting includes fall-ins within a 300-foot corridor and grow-ins/overhangs within a 100-foot ROW. (See response for tables).					https://california.libertyutilities.com/uploads/Liberty%20Res			
4 OEIS 4 OEIS-P-WMP_2025-Liberty-004	4 4 OEIS-004-Q04	d. Does Liberty's vegetation management and/or inspection systems ingest LiDAR data directly? e. How is LiDAR data incorporated into Liberty's Probability of Ignition (POI) or Probability of Consequence (POC) models? f. Does Liberty use LiDAR derived growth models to project future encroachments or work needs? g. What department owns and governs the LiDAR data internally within Liberty? (e.g., Vegetation, IT, Asset Management, a cross-functional group) h. How long is LiDAR data retained, and what is Liberty's plan for historical comparison or trend analysis? i. Are third-party vendors involved in LiDAR data analysis, and if so, how is data integrity validated?	Liberty uses satellite imagery to monitor tree health along power lines. Through analysis of satellite imagery over time, changes in vegetation health are detected through annual measurements are compared to a baseline from the initial analysis to identify deviations, which are then aggregated by span and classified into high, medium, or low vegetation stress levels. The results are processed into heat maps that visually highlight areas of concern. Updates are provided semi-annually or on a circuit-by-circuit basis as needed. c. LiDAR data is used to conflate Liberty's GIS data to update spatial locations of assets as needed. d. LiDAR data is not ingested directly into Liberty databases or work management systems. LiDAR data is imported into FieldNote (VM work management software) annually. Work orders created in FieldNote from LiDAR data are ingested into Liberty's database e. LiDAR derived vegetation data is used to assess tree density, vegetation proximity to conductors and poles, and fall-in and grow-in risk zones. These inputs feed into condition modifiers in the DIREXYON model, which adjust the Probability of Failure (APF) and Probability of Ignition (POI). LiDAR data is also used to forecast vegetation-related failures at the segment level. The LiDAR data is not directly used in calculating POC, which is derived from Technosylva FireSight. f. Liberty does not use growth models to project future encroachments or work needs. g. Liberty's Vegetation Program owns the LiDAR data. h. Historical LiDAR data is retained indefinitely. Liberty has been using LiDAR data to analyze change detection and encroachment reduction aggregated at circuit, voltage, or regional levels. i. Liberty works with NV5 Geospatial for LiDAR data analysis. NV5 performs comprehensive data validation to verify deliverables meet project specifications. This includes validation of point and pulse densities, data coverage, and calibration using optimal GNSS configurations for sensor, IMU, and base station calculations. Logs and SBET traje	Jessica McHale	7/11/2025	7/16/2025	7/16/20	ponse%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty- 004.pdf	No No	9	Vegetation Management and Inspections
5 OEIS 5 OEIS-P-WMP_2025-Liberty-005	5 1 OEIS-005-Q01	Regarding wildfire and outage program risk: a. Provide the name, wildfire risk, outage program risk, and length (in circuit miles), of each circuit in Liberty's system in the following format: (TABLE)	See DR attachment for table response. The Stateline 2200 undergrounding project is a loggery project that originated during a prior WMR cycle. It is not part of the 2026-2028 WMR, as confirmed by Table 8.1. Liberty will be so evaluating this project based on undated risk modeling recults from the	Jessica McHale	7/15/2025	7/18/2025	7/18/20	https://california.libertyutilities.com/uploads/Liberty%20Res ponse%20to%20DR%20No.%200EIS-P-WMP 2025-Liberty- 005.pdf	No	5	Risk Methodology and Assessment
6 CPUC - SPD 6 SPD-LIB-WMP2026-001	1 SPD-001-Q01	In its GRC, Liberty proposed undergrounding 0.4 miles on the Stateline 2300 circuit in 2026. This work is currently not reflected in Table 8-1 of the 2026-28 Base WMP. Is the undergrounding proposed in Liberty's GRC on the Stateline 2300 circuit ongoin work from a previous WMP? Explain. a. Since Liberty does not intend to include undergrounding in the 2026-2028 Base WMP, how is it intending to shift budget resources to address Outage Program Risk? Provide an explanation of how Liberty calculated the three Activity Effectiveness (i.e. Overall Risk, Wildfire Risk and Outage Program Risk) values in Table 6-4.	The Stateline 2300 undergrounding project is a legacy project that originated during a prior WMP cycle. It is not part of the 2026–2028 WMP, as confirmed by Table 8-1. Liberty will be re-evaluating this project based on updated risk modeling results from the Direxyon Risk Assessment Tool ("DRAT") Phase 3 analysis, which indicate that other mitigation strategies may be more cost-effective than undergrounding that section of line. a. Liberty is reallocating resources toward mitigations that demonstrate higher risk spend efficiency, such as overhead facility hardening, covered conductor installation, expulsion fuse replacement, distribution pole replacements, and vegetation management activities.		7/11/2025	7/17/2025	7/17/20	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20SPD-LIB-WMP2026-001.pdf	No	8	Grid Design, Operations, and Maintenance
6 CPUC - SPD 6 SPD-LIB-WMP2026-001	2 SPD-001-Q02	a. Provide a detailed step-by-step explanation of how Liberty calculated these three values for: i. & rid monitoring systems ii. Equipment settings to reduce wildfire risk iii. Expulsion fuse replacement iv. Distribution pole replacements and reinforcements v. Indergrounding of electric lines and/or equipment vi. Covered conductor installation b. Provide all supporting workpapers that Liberty used to arrive at the 18 values calculated in response to Question 2a.	a. All the Activities are calculated the same. The differential average aggregated risk score of each scenario ran based on the budget amount. ((Baseline Risk – Scenario Risk) / Baseline Risk) = Activity Effectiveness b. Refer to attachment: "Liberty Response_DR-SPD-001-Q2.b." c. A positive activity effectiveness of wildfire risk is shown due to the small amount of work being conducted in terms of the entire network. Therefore, the risk reduction effects of undergrounding are not noticeable at the system level until a point in time where enough underground has been done to influence the overall wildfire risk of the system. d. A positive activity effectiveness of wildfire risk is shown due to the small amount of work being conducted in terms of the entire network. Therefore, the risk reduction effects of covered conductor are not noticeable at the system level until a point in time where enough covered conductor has been done to influence the overall wildfire risk of the system.		7/11/2025	7/17/2025	7/17/20	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20SPD-LIB-WMP2026-001.pdf	No	6	Wildfire Mitigation Strategy Development
6 CPUC - SPD 6 SPD-LIB-WMP2026-001	3 SPD-001-Q03	c. Explain why undergrounding exhibits a positive activity effectiveness for wildfire risk. d. Explain why covered conductor exhibits a positive activity effectiveness for outage program risk. In its response to Area of Continued Improvement (ACI) LU-23B-06, Liberty argues that "Traditional overhead hardening in combination with SRP provides the best Risk Spend Efficiency when compared to covered conductor and undergrounding." a. In Table 1-2 of ACI LU-23B-06, explain how the "Benefit" field was calculated. b. Explain why does Table 1-2 presents "Benefit", but Table 1-3 in ACI LU-25U-04 presents "Benefit (%) / Cost (Million \$)". c. Eiberty indicates that traditional hardening in combination with System Relay Profile (SRP) provides the highest benefit of any mitigation. Table 8-1 states that Liberty will be doing 3.3 miles of traditional hardening. How many of these 3.3 miles will also be	a. Benefit is calculated as (Percent Difference in Fire Risk)/(Total Budget/1000000) b. Both tables show benefit as risk impact per million dollars spent. e c. 3.3 miles	Konstantin Lavor	7/11/2025	7/17/2025	7/17/20	https://california.libertyutilities.com/uploads/Liberty%20Res	No	Appendix D	Areas for Continued Improvement
		enabled with SRP? i. This new 2026-2028 target of traditional hardening is nearly three times less than was targeted during the 2023-2025 WMP (9.5 miles). Considering that traditional hardening in combination with SRP provides the highest benefit, why has Liberty reduce traditional hardening in its 2026-2028 Base WMP?	i. Liberty's targets best represent an optimized plan given available resources. Doing more pole replacements and other targeted grid hardening initiatives, as opposed to full line rebuilds, addresses more risk across a broader portion of the system. This approach reflects the best available information and resource allocation at the time of establishing the target.	Konstantin Lavor	7/11/2025	7/17/2025	7/17/20	ponse%20to%20DR%20No.%20SPD-LIB-WMP2026-001.pdf	INO	лүрениіх D	
6 CPUC - SPD 6 SPD-LIB-WMP2026-001	4 SPD-001-Q04	distribution pole replacements and reinforcements in its 2026-2028 Base WMP? Liberty estimates that the reliability impact of the PSPS risk is equivalent to 4.234 million Customer Minutes of Interruption (CMI). The two formulas used to arrive at this value CMI=PSPS Consequence-Reliability and Customer Count-Importation * Average PSPS Duration (Minute)= CMI.	a. Consequence-Reliability is the reliability impact of a PSPS event based on CMI during a PSPS event. b. Importation means the imported customer count to the model.	Konstantin Lavor	7/11/2025	7/17/2025	7/17/20	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20SPD-LIB-WMP2026-001.pdf https://california.libertyutilities.com/uploads/Liberty%20Res	No	8	Grid Design, Operations, and Maintenance
6 CPUC - SPD 6 SPD-LIB-WMP2026-001	5 SPD-001-Q05	 a. In the first formula, explain what is meant by PSPS Consequence-Reliability. b. In the second formula, explain what is meant by Importation. c. In the second formula, explain how Liberty calculated Average PSPS Duration (Minute). d. Provide all datasets used to arrive at the calculation of 4.234 million CMI. On page 47 of the 2026-2028 Base WMP, Liberty estimates that the financial impact of each customer minute interrupted due to PSPS at \$0.17/CMI. 	c. The average PSPS duration minutes is based on historical PSPS event durations and SME input. d. The 4.234 million CMI is an example of the model producing a consequence score affecting 3,317 customers for 1,276 minutes. The data to provide this is created from the risk model and is not an input to the model. Due to the stochastic nature of the model, this is one of many possible outputs of iterations from a simulation. Since this metric is an output of the model, the input data does not directly correlate with input datasets. a. Liberty's valuation of \$0.17 per Customer Minute Interrupted ("CMI") for PSPS events is based on its financial consequence modeling developed in collaboration with Arup. This figure reflects a blended Value of Lost Load ("VoLL") estimate for regular	Konstantin Lavor	7/11/2025	7/17/2025	7/17/20	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20SPD-LIB-WMP2026-001.pdf https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20SPD-LIB-WMP2026-001.pdf	No	5	Risk Methodology and Assessment
6 CPUC - SPD 6 SPD-LIB-WMP2026-001		On page 47 of the 2026-2028 Base WMP, Liberty estimates that the financial impact of each customer minute interrupted due to PSPS at \$0.17/CMI. a. Explain how does Liberty arrive at this value of \$0.17/CMI. i. Provide all datasets and workpapers that support this valuation. On page 48, Liberty also estimates that the financial impact of each customer minute interrupted due to SRP at \$0.17/CMI. a. Does Liberty use the same method to estimate to estimate the financial impact of SRP as it does for PSPS (see Question 6a.)?	a. Liberty's valuation of \$0.17 per Customer Minute Interrupted ("CMI") for PSPS events is based on its financial consequence modeling developed in collaboration with Arup. This figure reflects a blended Value of Lost Load ("VoLL") estimate for regular customers and aligns with assumptions used in Liberty's MAVF and financial models. It is consistent with industry benchmarks and is used to quantify the economic impact of PSPS events in Liberty's risk-spend efficiency and cost-benefit analyses. i. Refer to attachment: "Liberty Response_Arup_DR-SPD-001-Q6." a. Yes i. Liberty uses the same valuation method for SRP as it does for PSPS, because the consequence is based on the customer impact of an outage, not the cause. Whether an outage is triggered by a PSPS event or by SRP, the economic effect on customers is the	Konstantin Lavor	7/11/2025	7/17/2025	7/17/20	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20SPD-LIB-WMP2026-001.pdf https://california.libertyutilities.com/uploads/Liberty%20Responses/	No	5	Risk Methodology and Assessment
6 CPUC - SPD 6 SPD-LIB-WMP2026-001		i. If so, explain why. ii. If not, explain how the methods differ and provide all datasets and workpapers that were used to support the valuation of financial impact for SRP. Provide the datasets that were used to create Table 6-1. This must be presented at the circuit segment level for all four circuits found in Table 6-1. This should include the following variables based on Figure 5-2: a. Deverall Utility Risk b. Wildfire Risk c. Probability of Fire i. Probability of Ignition ii. Probability of Asset Failure iii. Probability Outage	i. Liberty uses the same valuation method for SRP as it does for PSPS, because the consequence is based on the customer impact of an outage, not the cause. Whether an outage is triggered by a PSPS event or by SRP, the economic effect on customers is the same; therefore, the financial impact per Customer Minute Interrupted ("CMI") remains consistent at \$0.17/CMI. ii. N/A	Konstantin Lavor	7/11/2025	7/17/2025	7/17/20	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20SPD-LIB-WMP2026-001.pdf	No No	5	Risk Methodology and Assessment
6 CPUC - SPD 6 SPD-LIB-WMP2026-001	8 SPD-001-Q08	d.Bonsequence of Fire i. Bopulation Impact ii. Bcres burned iii. Buildings Destroyed e.BSPS Risk f.BSPS Likelihood i. Brobability of High Wind Gusts ii. Brobability of High FFWI iii. SRP Availability g.BSPS Consequence i. Safety	Refer to attachment: "Liberty Response_DR-SPD-001-Q8.xlsx"		7/11/2025	7/17/2025	7/17/20	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20SPD-LIB-WMP2026-001.pdf	No	6	Wildfire Mitigation Strategy Development
		ii. Beliability iii. Einancial		Konstantin Lavor							

			On page 86 of the 2026-2028 Base WMP, Liberty notes that Table 6-1 includes circuits contributing greater than or equal to 1% of Overall Utility Risk. According to Liberty's Quarterly Data Reports, the TAH7200 circuit is in HFTD Tier 2 and represents about					https://california.libertyutilities.com/uploads/Liberty%20Res	<u> </u>		
CPUC - SPD 6	SPD-LIB-WMP2026-001	9 SPD-001-Q09	0.42% (~8.8 miles total) of Liberty's grid. SPD calculated that this circuit experienced 14 unplanned outages, representing over 3.1M in CMI in 2024 and the first 3 months of 2025 (15 months total). a.Explain how Liberty determined that TAH7200 exhibits no wildfire ignition risk or outage program risk. On page 49 of the 2026-2028 Base WMP, Liberty indicates that Utility Risk ("UR") is calculated using the formula: (PSPS Risk + Fire Risk)/2 = UR	a. Liberty did not calculate zero wildfire ignition risk or outage program risk. The Utility Risk is less than 1% of the overall utility risk so Liberty did not exhibit the risk for TAH7200. a. The average is taken to normalize to a common scale from 0 to 1 so that the metrics can be implemented into the total risk without any circuit disproportionally influencing the final score. b. Outage Program Risk is a separate module of risk that is brought into PSPS Risk as well.	Konstantin Lavor	7/11/2025	7/17/2025	7/17/2025 https://camorma.nbertyutintes.com/uploads/Elberty/2010es/ponse%20to%20DR%20No.%20SPD-LIB-WMP2026-001.pdf	No	6	Wildfire Mitigation Strategy Development
CPUC - SPD 6	SPD-LIB-WMP2026-001	10 SPD-001-Q10	a. Explain why Liberty divides the sum of PSPS Risk and Fire Risk by two. b. Explain why Liberty only includes the PSPS Risk portion of Outage Program Risk when calculating Utility Risk. c. Explain why in the formula of Outage Program Risk Liberty divides the sum of SRP Outage Risk and PSPS Risk by two. d. Does Asset Failure Risk contribute to the calculation of Utility Risk?	c. The average is taken to normalize to a common scale from 0 to 1 so that the metrics can be implemented into the total risk without any circuit disproportionally influencing the final score. d. Yes i. The Probability of Asset Failure is brought into Wildfire Likelihood which falls under the Fire Risk Module.		7/11/2025	7/17/2025	7/17/2025 https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20SPD-LIB-WMP2026-001.pdf	No	5	Risk Methodology and Assessment
			i. If so, explain how. ii. If not, explain why not. iii. Explain why Figure 5-2 shows Asset Failure Risk contributing to Utility Risk, but the formula on page 49 does not include Asset Failure Risk.	ii. N/A iii. Figure 5-2 presents a conceptual overview of the Risk-Based Decision-Making Framework, which includes Asset Failure Risk, Fire Risk, and PSPS Risk. Asset Failure Risk is not included in the utility risk formula, because its effects are already embedded in components of Fire Risk. Asset Failure Risk is a supporting diagnostic tool, used to identify and prioritize mitigations that reduce Utility Risk. Figure 5-2 is a broader depiction of how Asset Failure Risk informs decision making. The formula for utility risk maccurately reflects the computational model used to generate risk scores.				ponse/s20to/s2051//s2010-/s2031-5-2-15-vvviii 2020-001.pdi			
			In response to ACI LU-25U-06, Liberty states that it conducted 0.1 miles of fixed wing drone infrared inspections on its transmission assets. a. Provide data of exactly where these inspections happened, and include the following: i. Dircuit Segment ID	a. i. Circuit Segment ID (1) 228240, (2) 228241 & (3) 291034 ii. Circuit ID 640 & 187	TROMOVALION DAVOI						
CPUC - SPD 6	SPD-LIB-WMP2026-001	11 SPD-001-Q11	ii. Øircuit ID iii. Patitude iv. Pongitude	iii. Latitude (1) 38.954584, (2) 38.954934, (3)39.281760, iv. Longitude (1) -119.938700, (2) -119.938450, (3)-120.109919 v. Date -11/29/2023		7/11/2025	7/17/2025	7/17/2025 https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20SPD-LIB-WMP2026-001.pdf	No	Appendix D	Areas for Continued Improvement
			v. Date vi. Dost b. Explain why Liberty does not plan to conduct additional infrared inspections during the 2026-2028 WMP cycle.	vi. Cost -\$17,580 b. Liberty did not include this task as a planned event in the 2026-2028 WMP due to the updated GO165 Detail and Patrol inspection procedures. Liberty purchased an IR camera in 2024 to update its internal drone program. In the event there are concer of overheating, this technology will be included in the detailed inspection of the 120kv pot heads or a standalone maintenance activity for structures supporting 120kv pot heads. Detailed Condition Code Checklist:	rns Konstantin Lavor						
				Detailed Condition Code Checklist: • Clearance • Conductor Issue • Crossarm Braces Falling Off							
				 Crossarm Needs Replacing Foreign Objects on Poles Ground Wire Damaged/Missing 							
				 Ground Molding Damaged/Missing Guys/Guards Broken/Loose Hardware Issue 							
				 High Voltage Sign Problem Idle hardware Lid/Door Inoperable 		7 (4.4 (9.9.9.7)	7 (4 7 (9 9 9 7	https://california.libertyutilities.com/uploads/Liberty%20Res			
CPUC - SPD 6	SPD-LIB-WMP2026-001	12 SPD-001-Q12	Provide a copy of Liberty's procedures/checklist(s) for conducting detailed inspections of distribution electric lines and equipment (WMP-GDOM-Al-01) and patrol inspections of distribution electric lines and equipment (WMP-GDOM-Al-03).	 Insulators Need Replacing Missing Bolt Covers Oil Leaks Tagging /Labels 		7/11/2025	//1//2025	ponse%20to%20DR%20No.%20SPD-LIB-WMP2026-001.pdf	No	8	Grid Design, Operations, and Maintenance
				Underground Inaccessible Work Space/Climbing Space Equipment Arm							
				Patrol Condition Code Checklist: • Conductor Issue, Crossarm Needs Replacing • Guys/Guards Broken/Loose							
				 Insulators Need Replacing Oil Leaks Work Space/Climbing Space 	V on stantin Layen						
			Provide a dataset of all detailed inspections of distribution electric lines and equipment (WMP-GDOM-AI-01) and patrol inspections of distribution electric lines and equipment (WMP-GDOM-AI-03) that were conducted from 2023-2025. The dataset at a minimum must include: a. In spection ID	• Equipment Arm	Konstantin Lavor						
			b.@ircuit Segment ID c.@ircuit ID d.@oltage					https://salifornia.lib.orty.utilities.com/uploads/Lib.orty/9/20Des			
CPUC - SPD 6	SPD-LIB-WMP2026-001	13 SPD-001-Q13	e.Start Point Latitude f.Start Point Longitude g.End Point Latitude	Refer to attachment: "Liberty Response_DR-SPD-001-Q13."		7/11/2025	7/17/2025	7/17/2025 https://caimorma.inscrity.utilitics.com/uploads/Eliscity/azorics/ponse%20to%20DR%20No.%20SPD-LIB-WMP2026-001.pdf	No	8	Grid Design, Operations, and Maintenance
			h.End Point Longitude i.Date j.Cost k.Detailed Findings		Konstantin Lavor						
			Liberty reports negative or statistically non-significant risk reduction values for most activities in Table 8-1. Liberty states that these values "[indicate] that the effect is not statistically distinguishable from zero."1 Furthermore, Liberty states that "when initiatives are evaluated individually, their isolated impact at the service territory level may be too small to register as statistically significant within the model's variability. Increasing the number of simulation iterations could reduce this variability, as the average with more runs."2	a. More stochastic modeling iterations would increase the processing time and expense while not changing the results of the model, only resulting in less variation between the minimum and maximum values without changing the mean.	Konstantin Lavoi						
OEIS 7	OEIS-P-WMP_2025-Liberty-006	1 OEIS-006-Q01	a. Provide a detailed explanation of why Liberty did not increase the number of simulation iterations in its model to address the non-significant risk reduction values. b. What quality assurance or validation steps did Liberty take to calibrate the Direxyon model outputs against the following: i. historical wildfire ignitions	b. Liberty responds as follows: i. Liberty utilizes Technosylva. Technosylva uses a wide range of data available to them and performs their own validation and quality assurance. This data is used widely in the industry. ii. Direxyon performs industry research and gathers SME input when creating the models and associated outputs. iii. Standard industry weather is used to model potential future PSPS events, and the results are checked against historic PSPS events.	Jessica McHale	7/18/2025	7/23/2025	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty-	No	5	Risk Methodology and Assessment
			ii. wildfire mitigation effectiveness iii. PSPS events iv. operational performance data	iv. Liberty considers specific utility asset data as inputs to the model. In a combined effort, Liberty and Direxyon validate the input data and associate the decision trees to real life situations through SME validations. Liberty is currently working on a process validate the outputs. v. Liberty participates in the risk modeling working group, the joint mitigation effectiveness working group, and attends electric utility weather and analytics summits each year.	as to			<u>006.par</u>			
			v. peer utilities	Modeling Assumptions: Refer to sections 2.2.1 and 2.2.2 of Appendix B, Attachment 1 of Liberty's 2026-2028 WMP ("Direxyon report") for more details on calculation. The value of 73.7% represents reduction in utility risk, which is an average of 'PSPS R and 'Fire Risk.'	tisk'						
				 SRP has a significant effect in reducing both PSPS and Outage risk (approximately 9% for outage program risk). There is not normalization between PSPS Risk and Fire Risk in the Utility Risk calculation. On average, PSPS risk is much higher than Fire Risk. In 2025, PSPS risk average is approximately 0.0055 while Fire risk is approximately 0.0000175806. 							
			Liberty claims a 73.7% wildfire rick reduction from CDD implementation in Table 0.4 of the 2020 2020 MM/s	• SRP risk is not included in Utility Risk, which would explain the outlier. Liberty can include Outage Program Risk in the Utility Risk calculation, which would capture the risk from SRP outages in the Utility Risk calculation as well. For derivation, validation, and variables, refer to part c. below. b. No, DRAT does not have access to that data.							
OEIS 7	OEIS-P-WMP_2025-Liberty-006	2 OEIS-006-Q02	Liberty claims a 73.7% wildfire risk reduction from SRP implementation in Table 8-1 of its 2026-2028 WMP. a. Provide a detailed explanation of how this value was derived, including modeling assumptions, variables, and validation steps. b. Was this value validated with historical performance data or peer utility benchmarks? c. Wildfire risk reduction values depend on the effectiveness of the activity. What is the wildfire risk reduction effectiveness for SRP implementation?	c. 3.14% from 2025 to 2028. i. Modeling Assumptions: Refer to sections 2.2.1 and 2.2.2 of the Direxyon report for more details on calculation. DRAT assumes that when SRP is enabled, it will be triggered when a failure happens. If Liberty enables SRP for 14 days, during these 14 days an asset fails, SRP will trigger an outage for the whole circuit. Additional assumptions:	, if Jessica McHale	7/18/2025	7/23/2025	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty-	No	5,8	Risk Methodology and Assessment, Grid Design, Operations, and Maintenance
			c. Wildfire risk reduction values depend on the effectiveness of the activity. What is the wildfire risk reduction effectiveness for SRP implementation? i. Provide a detailed explanation of how the effectiveness of SRP implementation was derived, including modeling assumptions, variables, and validation steps. ii. Was this value validated with historical performance data or peer utility benchmarks?	Additional assumptions: • The complete circuit is affected, not just a section of it. • All assets have a POI of 0. This value could be modified for future simulations based on feedback. How was this value derived: To calculate the effectiveness of SRP, DRAT compares the average risk over the years of a simulation Baseline (assuming SRP is enabled) and another simulation (assuming SRP is disabled). See Direxyon report section 3.2.				<u>006.pdf</u>			TVI GITT CET GITT C
				How was this value derived: To calculate the effectiveness of SRP, DRAT compares the average risk over the years of a simulation Baseline (assuming SRP is enabled) and another simulation (assuming SRP is disabled). See Direxyon report section 3.2. Validation Steps: DRAT validates the calculation inside its application to confirm that the arithmetic is working correctly. Validation of business logic is based on Liberty's SME review. Variables: Refer to sections 2.2.1 and 2.2.2 of the Direxyon report for details on calculation. The main variables are:							
				 Probability of failure of all assets impact the probability of triggering SRP event All Technosylva data will affect the consequences impact and the probability of ignition The Direxyon report details the data and all assumptions taken into the consequence calculation 							
			In Section 8.2 of Liberty's 2026–2028 WMP, Liberty provides a series of tables reporting "Fire Risk Scores" for various grid hardening initiatives. However, the WMP does not clearly define how these "Fire Risk Scores" are derived, what they represent quantitatively, or how they relate to the utility's overall wildfire risk modeling framework described in Appendix B (Direxyon) and Section 5.	ii. No, DRAT doesn't have access to those numbers.							
OEIS 7	OEIS-P-WMP_2025-Liberty-006	3 OEIS-006-Q03	a. Describe the methodology used to calculate these Fire Risk Scores. b. Are these Fire Risk Scores tied directly to the outputs of Liberty's wildfire risk model (e.g., probability × consequence), or are they independently assigned for planning purposes? i. If independent, explain how these scores are validated or calibrated against Liberty's broader risk modeling framework.	a. Fire Risk scores are derived from the Fire Risk calculations in Section 5 of Liberty's 2026-2028 WMP. Fire Risk Score are calculated through the use of a stochastic model. This model runs simulations based on particular mitigation inputs. b. The outputs are tied to Liberty's wildfire risk score model by calculating the benefit of a mitigation related to Liberty's baseline risk score. c. Refer to Liberty's response to question 9 Regarding the Direxyon report's associated documents.	Jessica McHale	7/18/2025	7/23/2025	7/25/2025 https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty-006.pdf	No	5, 8	Risk Methodology and Assessment, Grid Design, Operations, and Maintenance
OEIS 7	OEIS-P-WMP_2025-Liberty-006	4 OEIS-006-Q04	c. Provide any supporting documentation, internal guidance, or data dictionaries used to develop or interpret Fire Risk Scores. Provide the number of distribution and transmission miles broken down by HFTD Tier 2 and HFTD Tier 3, in the table below, that will remain unhardened by the end of 2026. (See request for table template)	See response for tables.	Jessica McHale	7/18/2025	7/23/2025	https://california.libertyutilities.com/uploads/Liberty%20Res ponse%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty-	No	4, 8	Overview of Service Territory, Grid Design, Operations, and Maintenance
				a. Refer to attachment: "Liberty Response_DR-006-Q05.pdf." This document provides comparisons of utility risk, fire risk, and outage program risk between two projects: covered conductor (Scenario 14919) and traditional overhead hardening (Scenario 14920). The Mean Difference percentage of each scenario render similar risk reduction results.				<u>006.pdf</u>			
			Liberty's scope of work for traditional overhead hardening includes replacing the existing bare wire with a new bare conductor, and it states that "this approach offers similar risk reduction as covered conductor but is more efficient to install and more cos effective." 3 However, in Section 8.2.5 of its WMP, Liberty states that it "did not simulate a scenario in its risk model for traditional overhead hardening" 4 even though Liberty states that its "risk model is now operational, [and] projects can be analyzed wit multiple initiatives at the circuit/circuit segment level to calculate impact of traditional overhead hardening projects on wildfire risk." 5	c. Liberty's target represents an optimized plan given available resources and reflects the best available information and resource allocation at the time of establishing the target. i. The target was developed using Subject Matter Expert input including practic				https://california.libertyutilities.com/uploads/Liberty%20Res			Diela Mathadalam, and Assassant Crid Desire. On systic as and
OEIS 7	OEIS-P-WMP_2025-Liberty-006	5 OEIS-006-Q05	a. Provide supporting documents and calculations that render similar risk reduction when hardening a circuit with new bare conductor compared to covered conductor. b. Explain why Liberty did not simulate a scenario in its risk model for traditional overhead hardening. c. How did Liberty determine its circuit miles target for this activity if it did not simulate a scenario in its risk model? i. What method did Liberty use to determine its target?	field experience, engineering judgment, and budget and resource constraints ii. Appendix D – LU-23B-06: Discussion of traditional hardening effectiveness and comparison to other mitigations. Direxyon Phase 3 Report: Provides context for prioritization of initiatives, even though traditional hardening was not directly simulated.	Jessica McHale	7/18/2025	7/23/2025	7/25/2025 ponse%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty- 006.pdf	No	5,8	Risk Methodology and Assessment, Grid Design, Operations, and Maintenance
			ii. If it was determined through subject matter expert (SME) input, provide a list of supporting documents and assumptions.	Asset Condition Assessments: Field inspection data and maintenance records Engineering Standards and Design Criteria: Used to identify segments suitable for overhead rebuild projects. Permitting and Shovel Readiness: Projects are selected based on feasibility of implementation, including permitting timelines, environmental constraints, and construction readiness.							
OEIS 7	OEIS-P-WMP_2025-Liberty-006	6 OEIS-006-Q06	On page 125 of Liberty 2026-2028 WMP, Liberty states that it "considers the use of microgrids as an alternative in all applicable projects and has experienced success with Liberty's Sagehen microgrid." a. Provide Liberty's current findings on possible locations within its service territory that could benefit from line removal and microgrids.	Budget and Workforce Constraints: Considered in setting achievable targets. Liberty does not have any planned microgrid projects for the 2026-2028 WMP cycle and therefore does not have findings on possible microgrid locations within its service territory.	Jessica McHale	7/18/2025	7/23/2025	https://california.libertyutilities.com/uploads/Liberty%20Res ponse%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty- 006.pdf	No	8	Grid Design, Operations, and Maintenance
OEIS 7	OEIS-P-WMP_2025-Liberty-006	7 OEIS-006-Q07	On page 131 of Liberty 2026-2028 WMP, Liberty states that "it is assumed that 25% of the network consists of grey wire." a. Explain how this assumption was derived. b. Explain how Liberty conducted a system inventory or sampling effort to verify this assumption.	a. Liberty's SMEs have an estimation of the amount of grey wire in the system. b. Liberty's efforts to conduct a system inventory to gather the amount data about the system was not specifically directed at acquiring information about secondary wire. Liberty captures the grey wire that is replaced in the system through the Fulcrum	Jessica McHale	7/18/2025	7/23/2025	https://california.libertyutilities.com/uploads/Liberty%20Res ponse%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty-	No	8	Grid Design, Operations, and Maintenance
OEIS 7	OEIS-P-WMP_2025-Liberty-006	8 OEIS-006-Q08	i. If Liberty has not conducted a system inventory or sampling effort to verify this, please describe Liberty's plan to validate this assumption. On page 38 of Attachment B1 in its 2026-2028 WMP, Liberty states that "the replacement cost for a tree attachment is set at \$18,000, based on the average cost outlined in the initiative document, which reports a total cost of \$1,100,000 for 60 replacements."	application. At this time, there is effort planned to perform a field survey to validate this assumption. a. Refer to the table below for a breakdown of the cost estimate for basic tree attachment removal. There may be variation in cost components depending on the complexity of an individual project. The average cost reported in Liberty's 2026-2028 WMP verived from averaging historical cost data, not from a project level estimate. See Response for table b. The average cost reported in Liberty's 2026-2028 WMP was derived from averaging historical cost data, and not from a project level estimate. Liberty do		7 /19 /2025	7/22/2025	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty-	No	E 9	Risk Methodology and Assessment, Grid Design, Operations, and
UEIS 7	OEIS-P-WIVIP_2025-Liberty-006	8 OEIS-006-Q08	a. Provide a detailed breakdown of this cost estimate, including but not limited to labor, equipment, materials, and overhead. b. How does Liberty ensure this unit cost is reasonable and in line with peer utilities? On page 1 of Attachment B1 in its 2026-2028 WMP, Direxyon lists associated documents to its report. Submit copies of:	not benchmark these specific costs against those of peer utilities.	Jes Jessica ivicinale	7/18/2025	7/25/2025	7/25/2025 polise%20t0%20DR%20N0.%20OEIS-P-WWIP 2025-Liberty- 006.pdf	NO .	5, 6	Maintenance
OEIS 7	OEIS-P-WMP_2025-Liberty-006	9 OEIS-006-Q09	a. 2025-2028 WMP Targets and Budgets.xlsx (in Excel Format) b. comparisons_fire_score.pdf c. comparisons_outage_program_risk.pdf	Refer to attachment: "Liberty Response_DR-006-Q09.i.xlsx" for the excel file "2026-2028 WMP Targets and Budgets" referenced in Liberty's WMP. Refer to attachment: "Liberty Response_DR-006-Q09.ii.pdf" for the "comparisons fire score," "comparisons outage program risk," and "comparisons utility risk" files referenced in Liberty's WMP.	Jessica McHale	7/18/2025	7/23/2025	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty-006.pdf	No	5	Risk Methodology and Assessment
OEIS 7	OEIS-P-WMP_2025-Liberty-006	10 OEIS-006-Q10	d. comparisons_utility_risk.pdf In Liberty's 2026-2028 base WMP, Figure 6-2 shows the Projected Overall Service Territory Risk. a. Explain how Liberty calculated the risk shown in this figure, including why Liberty took that approach. b. Explain why the risk increases between some of the years within this figure.	a. In conjunction with Direxyon, Liberty utilizes a stochastic modeling approach to calculate and attribute risk in the model. Liberty utilizes this approach so that a variety of causes and outcomes would be accounted for in its risk analysis. b. The variations in risk between some of the years is attributable to the stochastic approach as it captures different outcomes for each iteration of a simulation.	Jessica McHale	7/18/2025	7/23/2025	https://california.libertyutilities.com/uploads/Liberty%20Res 7/25/2025 ponse%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty-	No	6	Wildfire Mitigation Strategy Development
JEIS ,	32.3 1 WWII _2323 Eliseity 333	10 S215 GGG Q15	c. Describe how Liberty validated the risk model output when generating this figure.	c. Liberty used industry research and SME inputs to validate the model approach. Liberty is working towards being able to validate outputs more frequently to further the enhancement and development of its modeling capabilities.	3c33ica ivici iaic	,,10,2029	,,,23,2023	006.pdf			Whathe Magazion Strategy Development
OFIS 8	OEIS-P-WMP_2025-Liberty-007	1 OEIS-007-Q01	On pages 256-257 of its 2026-2028 Base WMP, Liberty refers to actions being taken during or after "significant events" or involving a "significant number of customers," but the term "significant" is not defined. i. Define "significant events" as used in this context.	i. On page 257 of Liberty's 2026-2028 Base WMP, Liberty states: "City and county officials, OES offices, critical infrastructure, CPUC, and agency partners will receive the earliest notifications of a "significant" planned or potentially planned outage, up to eduys in advance, when possible." In this context, significant is not defined by specific thresholds. Liberty's customer team determines if an outage requires communication with city and county officials and agency partners, based on factors including the number of customers impacted, outage duration, and potential customer support needs (e.g., warming centers during winter storms).	Jossica McHalo	7/25/2025	7/30/2025	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty-	No	11	Emergency Preparedness, Collaboration, and Public Awareness
OLIS 8	OLIS-F-WIMF_2023-LIBERTY-007	1 OLIS-007-Q01	ii. Define "significant number of customers" as used in this context.	ii. On page 256 of Liberty's 2026-2028 Base WMP, Liberty states: "During a major outage or emergency that affects a significant number of customers, an email is sent to personnel, agencies, and media to provide information, detail, and status of the out In this context, significant is not defined by specific thresholds. Liberty's communications and customer teams determine if an outage or emergency requires communication to agency partners and the media, based on factors including outage duration, potential customer support needs, and regulatory requirements (e.g. Public Safety Power Shutoff events).		7/23/2023	7/30/2023	007.pdf		11	Linergency Prepareuriess, Collaboration, and Public Awareness
OEIS 8	OEIS-P-WMP_2025-Liberty-007	2 OEIS-007-Q02	a. On page 245 of its 2026-2028 Base WMP, Liberty refers to a "Corporate Emergency Management Plan." Provide a copy of Liberty's Corporate Emergency Management Plan.	Refer to attachment "Liberty Response_DR-007-Q02.pdf"	Jessica McHale	7/25/2025	7/30/2025	https://california.libertyutilities.com/uploads/Liberty%20Res ponse%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty- 1	No	11	Emergency Preparedness, Collaboration, and Public Awareness
				The purpose of the Liberty restoration plan is to minimize the risks inherent in a long service interruption to a variety of customer types, including medical baseline customers. Service restoration is considered a priority throughout Liberty's entire service territory. Service restoration is unique for each emergency event and restoration prioritization is influenced by multiple factors that include safety, accessibility, availability of repair parts, availability of personnel, etc. The Liberty CEMP identifies general restoration prioritization guidelines, but allows for the Incident Commander, or designee, to alter priorities according to the circumstances of the emergency and in coordination with essential load customer and government agencies. Refer to attachment				<u>007.pdf</u>			
				"Liberty Response_DR-007-Q02.pdf." Protocols, policies, and procedures: • Damage Assessment: The designated Incident Commander is responsible for determining how damage assessment will be best achieved for the specific emergency. The Incident Commander may delegate the responsibility, or a portion of the responsibility.							
				the manager(s) or other qualified individual(s) or retain this responsibility. Detailed procedures are provided in the Liberty CEMP pages 18-19, paragraph 6 subparagraphs a through g. • Service restoration: All critical infrastructure in the Liberty Service Territory is prioritized for restoration in our mapping system. In general, restoration will proceed in this order: i. Radial transmission and substations.							
				ii. Distribution circuits with essential customers, such as health care facilities, iii. utilities, public safety, governmental facilities, and lifeline customers. iv. Circuits with the greatest number of customers.							
OEIS 8	OEIS-P-WMP_2025-Liberty-007	3 OEIS-007-Q03	On page 255 of its 2026-2028 Base WMP, Liberty states that its "plan to restore customers during emergencies is described in Section 11.2.1." Upon review, this section does not include such detail. Provide a detailed description of Liberty's plan to restore customers' power during emergencies.	v. Primary taps, followed by secondary lines. vi. Individual services that are accessible and serviceable can be addressed Below is the priority list of Liberty's essential customers. Priority assumes circuits, equipment, and services are accessible and repairable.	Jessica McHale	7/25/2025	7/30/2025	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty-	No	11	Emergency Preparedness, Collaboration, and Public Awareness
				 Health Care Facilities i. Primary care hospitals Utility Services/Districts i. Public utility districts ii. Telecommunications 				<u>007.par</u>			
				iii. Water and water treatment facilities iv. Pipeline • Public Safety Agencies							
				i. Public safety dispatch centers ii. Law enforcement facilities/holding facilities iii. Fire operations facilities							
				iv. Transportation equipment and facilities • Government facilities i. Green Cross and Lifeline customers							
OEIS 8	OEIS-P-WMP_2025-Liberty-007	4 OEIS-007-Q04	On page 250 of its 2026-2028 Base WMP, Liberty references a "PSPS Playbook" as part of its emergency preparedness process. Provide a copy of Liberty's PSPS Playbook.	Refer to attachment "Liberty Response_DR-007-Q04."	Jessica McHale	7/25/2025	7/30/2025	https://california.libertyutilities.com/uploads/Liberty%20Res ponse%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty-	No	11	Emergency Preparedness, Collaboration, and Public Awareness
OEIS 8	OEIS-P-WMP_2025-Liberty-007	5 OEIS-007-Q05	On pages 204 through 205 of its 2026-2028 Base WMP, Liberty includes Table 9-24, which lists quality control pass rate sample units, and Tables 9-25 through 9-28, which list quality control "Pass / Fail" criteria. On page 211 of its 2026-2028 Base WMP Liberty includes Table 9-32, which lists the number of internal vegetation management employees with credentials or certifications. All six tables include a "Work Type" column header, but "Work Type" is not applicable to all items in Tables 9-25 through 9 and Table 9-32.		Jessica McHale	7/25/2025	7/30/2025	007.pdf https://california.libertyutilities.com/uploads/Liberty%20Res ponse%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty-	No	9	Vegetation Management and Inspections
o			and Table 9-32. a. Please provide Tables 9-25 through 9-28 and Table 9-32 with a more suitable and descriptive column header than "Work Type." On page 211 of its 2026-2028 Base WMP, Liberty indicates in "Table 9-32: Liberty VM Credentials or Certifications" that 100% of its "Internal VM Full-Time Employees" are ISA Certified Arborists. In the "Number" column of Table 9-32, Liberty indicates the second provided in the "Number" column of Table 9-32 require a denominator of 7 to achieve their associated percentage in the		55.5	, ,	.,55,2025	007.pdf https://california.libertyutilities.com/uploads/Liberty%20Res			
OEIS 8	OEIS-P-WMP_2025-Liberty-007	6 OEIS-007-Q06	has 6 ISA Certified Arborists. This suggests Liberty has 6 Internal VM Full-Time Employees (i.e., 6/6 * 100 = 100%). However, all other values in the "Number" column of Table 9-32 require a denominator of 7 to achieve their associated percentage in the "Percentage" column (e.g., 1/7 * 100 = 14%, 5/7 * 100 = 71%, and 6/7 * 100 = 85%). a. Provide the total number of Liberty internal full-time vegetation management employees. In response to Question 04 of Data Request OEIS-P-WMP_2025-Liberty-001, Liberty states, "Liberty has averaged about 3,350 tree removals per year since 2023 with 51% involving wood management post tree work." Additionally, on page 184 of its 2026	Liberty has seven internal full-time employees in vegetation management. See response for table.	Jessica McHale	7/25/2025	7/30/2025	7/30/2025 ponse%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty- 007.pdf	No	9	Vegetation Management and Inspections
OEIS 8	OEIS-P-WMP_2025-Liberty-007	7 OEIS-007-Q07	In response to Question 04 of Data Request OEIS-P-WMP_2025-Liberty-001, Liberty states, "Liberty states, "Liberty has averaged about 3,350 tree removals per year since 2023 with 51% involving wood management post tree work." Additionally, on page 184 of its 2026 2028 Base WMP, Liberty states, "All limbs, brush and debris located within 100 feet of equipment accessible roads shall be chipped and broadcasted or chipped and hauled off-site. When brush and limbs cannot be chipped and broadcasted or chipped hauled off-site, the clean-up method may be lop-and-scatter or otherwise specified." a. Provide the percentage of wood and slash management work, since 2023, that was completed using the following methods:	a. i. Chip and broadcast – 3.71%	Jessica McHale	7/25/2025	7/30/2025	https://california.libertyutilities.com/uploads/Liberty%20Res 7/30/2025 ponse%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty-	No	9	Vegetation Management and Inspections
			i. Chip and broadcast ii. Chip and haul off-site iii. Lop-and-scatter	ii. Chip and haul off-site – 71.44% iii. Lop-and-scatter – 10.3%			,	<u>007.pdf</u>			
			a. Regarding OEIS Data Request 6, Question 4 parts b and c: i. Provide the percentage of PSPS risk influenced by EPSS/PEDS/SRP. ii. In the utility risk equation in Section 5.2.2.3 (Liberty 2026-2028 Base WMP,	a. Liberty is not clear what OEIS data request is being referenced in this question. OEIS Data Request 6, Question 4 requests the miles for traditional hardening completed among the HFTD zones. Furthermore, OEIS Data Request 6, Question 4 does not have part b or c. Despite the question not being clear, Liberty will attempt to respond below. i. There is no difference between EPSS and SRP in Liberty's risk modeling. The only PEDS in the model is EPSS; captured as one strategy in the model. Liberty can add different types of PEDS to the model, but currently only EPSS (or SRP) exist. Comparing the				https://california.libertyutilities.com/uploads/Liberty%20Res			
OEIS 9	OEIS-P-WMP_2025-Liberty-008	1 OEIS-008-Q01	p. 49), is "PSPS Risk" used for determining Utility Risk equivalent to "Outage Program Risk"? If not, explain why Outage Program Risk is not used. b. Regarding OEIS Data Request 6, Questions 5 parts c and e: i. Provide units for the PEDS likelihood equation inputs and provide units for the final output.	simulation with and without SRP, there is a difference of 66% for 2025 (when circuits are weighted by conductor length) or 75% (average value). The percentage varies from year to year because EPSS risk can change based on asset health. ii. No, because it was not specified when the logic was created for the model. b. Liberty is not clear which OEIS Data Request is being referenced in this question. OEIS Data Request 6, Question 5, part c explains how Liberty determined is circuit miles target for traditional overhead hardening and is not related to the PSPS multiplier	Jessica McHale	8/1/2025	8/6/2025	8/6/2025 ponse%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty- 008.pdf	No	5	Risk Methodology and Assessment
			ii. Provide the documentation for how Arup developed the PSPS multiplier equation.	equation developed by Arup. Furthermore, there is no OEIS Data Request 6, Question 5, part e. The value in the WMP table is an average of all iterations simulated. Since Liberty is looking at the first simulated year, the principal difference between iteration is principally due to the variation in all distributions, random value picked, and strategy applied below for an example of one iteration:							
			a. Provide a step-by-step example demonstration for how risk is calculated for one of the top circuits in Table 5-6 on page 72 of Liberty's 2026-2028 Base WMP.	Simulation for future reference • Id: 13994 • Iteration: 1 • Year: 2025				https://california.libertyutilities.com/uploads/Liberty%20Res			
OEIS 9	OEIS-P-WMP_2025-Liberty-008	2 OEIS-008-Q02	b. Explain why Fuse Type is a top risk contributor for each of the top risk circuits in Table 5-6 on page 72 of Liberty's 2026-2028 Base WMP. i. Explain how this is related to the Expulsion Fuse Replacements described in Section 8.2.12.2. ii. Explain how this is related to the "Weibull distribution with age dimension" described on page 20 of the Direxyon report	• circuit: CEM41 Step 1 : PSPS • The probability of having at least one event of high wind during the high EEW/Ldays	Jessica McHale	8/1/2025	8/6/2025	8/6/2025 ponse%20to%20DR%20No.%20OEIS-P-WMP 2025-Liberty- 008.pdf	No	5	Risk Methodology and Assessment
				• The probability of having at least one event of high wind during the high FFWI days. o This probability between is calculated using the weather station data (see Direxyon report). o This table is imported in the platform with the number of FFWI days wind gust probability. (See response for tables) • The probability of having high wind during a high FFWI day (refer to Direxyon report included in Appendix B of Liberty's 2026-2028) WMMP for more details). Since these values were produced. Liberty has made improvements to the model.	Base						
OEIS 10	OEIS-P-WMP_2025-Liberty-009	1 OEIS-009-Q01	a. How many circuit miles of idle transmission lines does Liberty currently have located within the HFTD and HFRA? b. Do any of these idle-deenergized transmission lines run parallel to and in close proximity (within 1,000 feet) with energized transmission lines? i. If so, provide the number of circuit miles, and describe the spacing characteristics and location of each instance.	a. Liberty does not have idle transmission lines located within its service territory. b. N/A c. N/A	Jessica McHale	8/12/2025	8/15/2025	https://california.libertyutilities.com/uploads/Liberty%20Res 8/15/2025 ponse%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty-	No	8	Grid Design, Operations, and Maintenance
. 10	ENGLLY-003	SEIS 003-Q01	c. Provide a preliminary estimate of idle transmission line miles planned for removal between 2026 and 2028. d. Provide Liberty's latest findings or studies on whether idle transmission lines present a potential induction risk that could result in unintended energization. e. Describe any procedures, policies, or future planned projects to mitigate the ignition risk of idle transmission lines that Liberty is considering. a. Liberty reported that the PSPS probability for circuit CEM41 is 12% in its response to OEIS-P-WMP_2025-Liberty-008 Question 02. However, the step-by-step calculation provided on page 367 of Liberty's 2026-2028 Base WMP (Appendix B) demonstrates.	d. Liberty does not have any findings or studies. e. N/A f. For this request, Liberty defines idle transmission lines as transmission infrastructure that is deenergized and not currently in use for power transmission but has not been formally decommissioned or abandoned. These lines may be retained for potent itself. The difference in reported values is attributable to a change in methodology that took place when Liberty was writing its 2026-2028 Base WMP. The reported PSPS probability for CEM41 of 12% was produced under Liberty's previous methodology for P		.,, -	, -5, 2025	009.pdf		·	_ , ,
OEIS 11	OEIS-P-WMP_2025-Liberty-010	1 OEIS-010-Q01	that the calculated PSPS probability is 40.53% (or 4.5% with SRP). i. Provide an explanation regarding the inconsistencies between these reported values for PSPS probability for circuit CEM41. ii. Explain how Liberty determined the PSPS probability of 12% for circuit CEM41.	probability: (Problematic wind gust probability (PSPS) x (FFWI_50-54 + FFWI_55-59 + FFWI_60-64 x FFWI_65-69 + FFWI_70-PLUS)) ÷ 100 = Probability of PSPS The components containing "FFWI" represent the number of days with a Fosberg Fire Weather Index between the listed values. For example, FFWI_50-54 = the number of days with an FFWI between 50 and 54.	Jessica McHale	8/22/2025	8/27/2025	https://california.libertyutilities.com/uploads/Liberty%20Response%20to%20DR%20No.%20OEIS-P-WMP_2025-Liberty-	No	5	Risk Methodology and Assessment
			b. Provide a detailed explanation of why the wildfire risk and PSPS risk reported in the OEIS-P-WMP_2025-Liberty-008 Question 02 response differs from the wildfire risk and outage program risks provided in Table 5-6 of Liberty's 2026-2028 Base WMP for circuit CEM41. C. Table 5-6 of Liberty's WMP shows that circuit MEV3400 has the highest overall utility risk, and that the overall risk is being driven by the calculated outage program risk.					<u>010.pdf</u>			