LOG BEGINS JULY 3, 2025

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Liberty 2026-2028 Base WMP Discovery Log

Log updated 8/14/2025																				
Log Count	Data Name	DR Set #	Date Request	Question No.	Question ID	Question	Response	Responder	Date Received	Final Due Date	Date Sent	Links	Number of Attachments	Attachment Info	Data Required?	WMP Section	Category	Subcategory
1	OIS	1	OIS-P WMP_2025-Liberty-001	1	OIS-001-001	Q01. Regarding Vegetation Management Inspection Targets: • Provide the total number of miles to be inspected for all circuit miles of overhead distribution lines and 52.85 circuit miles of transmission line, totaling 1,035.70 combined circuit miles of distribution and transmission overhead lines. In Table 9-2, Liberty provides a three-year total of 900 circuit miles for its "Vegetation Management Inspection Program - Detailed" and reports a cumulative quarterly target for 2026-Q4 of 700 circuit miles for its "Vegetation Management Program – LiDAR." In Table 9-2 of its 2026-2028 WMP, the "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 – LiDAR," Liberty lists the "Inspection Type" as "Distribution," "Area Inspected" as "Territory," and "Frequency" as "Annual." • Does the "Three-Year Total" target for "Vegetation Management Program – Detailed" include all overhead circuit miles in Liberty's territory? • If yes, explain the different number of circuit miles reported in Table 9-2 and the "Three-Year Total" target for "Vegetation Management Program – Detailed." • If no, provide the total number of overhead circuit miles in Liberty's territory and explain why this number is different. • Does the "Cumulative Quarterly Target, 2026-Q4" for "Vegetation Management Program – LiDAR" include all overhead circuit miles in Liberty's territory? • If yes, explain the different number of circuit miles reported in Table 9-2 and the "Cumulative Quarterly Target, 2026-Q4" target for "Vegetation Management Program – LiDAR." • If no, provide the total number of miles of overhead circuit miles there are annual LiDAR targets.	In the target sort for detailed inspections is miles inspected of overhead primary distribution and transmission voltage classes (115kV-230kV and 60kV-115kV). The target does not include the secondary voltage class distribution lines that are included in Table 9-2 and are inspected through the vegetation management program. Liberty's 2026 Base WMP does not include the secondary voltage class distribution lines that are included in the target. Liberty's quarterly lines along its primary distribution system. These secondary lines inspections are not included in the target. The target sort for LiDAR inspections is miles inspected of overhead primary distribution and transmission voltage classes (12kV-25kV and 60kV-115kV). The target does not include the secondary voltage class distribution lines that are included in Table 9-2. 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://liberty-utilities.box.com/s/qwk5c7j3ed7ir5j7l0ie eeyxq0ldq2l0/folder/321092296 3423			No	9	Vegetation Management and Inspections	
1	OIS	1	OIS-P WMP_2025-Liberty-001	2	OIS-001-002	Q02. Regarding Vegetation Management Procedures: • Provide the most recent versions of the following procedures documents: o Vegetation Management Plan (VM-01) o Hazard Tree Management Plan (VM-02) o Post Work Verification Procedure (VM-04) o Work Execution Procedure (VM-05) o Vegetation Management Notification and Refusal Resolution Policy (VM-06) o Vegetation Management Inspection Manual (VM-07) • Provide a brief description of each.	a. Refer to attachments "Liberty Response_DR-001-Q02-1" and "Liberty Response_DR-001-Q02-2."	Jessica McHale	7/1/2025	7/7/2025	7/7/2025	https://liberty-utilities.box.com/s/qwk5c7j3ed7ir5j7l0ie eeyxq0ldq2l0/folder/321092296 3423	2		No	9	Vegetation Management and Inspections	
1	OIS	1	OIS-P WMP_2025-Liberty-001	3	OIS-001-003	Q03. Regarding Liberty Pole Clearing Target (WMP-VM-09): 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." Provide the following information: a. Are required to be cleared under Public Resources Code (PRC) 4292 (i.e., poles in the SRA); b. Are not required to be cleared under PRC 4292 (i.e., poles not in the SRA); c. Are required to be cleared under PRC 4293 (i.e., poles in the vicinity of overhead conductors and/or Liberty's standard operating procedures that require those poles to be cleared. • On page 170 of its 2026-2028 WMP, Liberty sets annual targets in 2026, 2027, and 2028 of 4,900 poles. On page 184 of its 2026-2028 WMP, Liberty set annual targets in 2023, 2024, and 2025 of 4,940 poles. Provide justification and details on planned or completed activities which support that the volume of pole clearing work required during Liberty's 2026-2028 WMP cycle will decrease by 50 poles.	a. Of the approximately 4,900 poles targeted for pole clearing, approximately 4,100 are required to be cleared under Public Resources Code (PRC) 4292. b. Of the approximately 4,900 poles targeted for pole clearing, approximately 450 are not required to be cleared under Public Resources Code (PRC) 4292. c. Approximately 350 of the approximately 4,900 poles targeted for pole clearing are required to be cleared under PRC 4293 due to being in the vicinity of overhead conductors and/or Liberty's standard operating procedures that require those poles to be cleared. Refer to Section 9.4.1. c. Liberty updated its annual pole clearing target to 4,900 to account for fluctuations in poles from ongoing pole replacement work and system upgrades.	Jessica McHale	7/1/2025	7/7/2025	7/7/2025	https://liberty-utilities.box.com/s/qwk5c7j3ed7ir5j7l0ie eeyxq0ldq2l0/folder/321092296 3423			No	9	Vegetation Management and Inspections	
1	OIS	1	OIS-P WMP_2025-Liberty-001	4	OIS-001-004	Q04. Regarding Liberty's Wood and Slash Management Target (WMP-VM-09V-01): On page 180 of its 2026-2028 Base WMP, Liberty sets annual wood and slash management targets of 240 acres for each year 2026, 2027, and 2028. On page 183, Liberty states, "Liberty has implemented a fuel Management Program as a proactive, risk-based approach 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." a. Provide an outline that describes how Liberty plans to complete vegetation management work to meet its 240 acre annual wood and slash management target. The outline must include: 1. Specific activities that will be performed to meet the wood and slash management target, including vegetation management activities. 2. Specify the diameter classes of woody vegetation to be treated under these activities and describe how each diameter class will be treated. 3. The number of acres that Liberty will perform additional fuel management work on and total material that was not generated by Liberty's own vegetation management activities. 1. Specify the diameter classes of woody vegetation to be treated under these activities and describe how each diameter class will be treated	Jessica McHale	7/1/2025	7/7/2025	7/7/2025	https://liberty-utilities.box.com/s/qwk5c7j3ed7ir5j7l0ie eeyxq0ldq2l0/folder/321092296 3423			No	9	Vegetation Management and Inspections	
1	OIS	1	OIS-P WMP_2025-Liberty-001	5	OIS-001-005	Q05. Regarding Extreme Event Scenarios: a. On page 61 of Liberty's 2026-2028 WMP, Liberty states that it is "assessing the ability of Firelight to account for extreme or high uncertainty scenarios." Provide the timeline, including milestones and associated dates, for when Liberty intends to complete this assessment and integrate any extreme scenarios into its risk modeling. b. Table 5-1 of Liberty's 2026-2028 WMP and Table 5-1 of 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 timeline for when Liberty will integrate this impact into its risk modeling framework.	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 risk modeling efforts and because these types of scenarios are difficult to model, Liberty does not have timeline. b. Currently, Liberty does not plan to educate climate change in its risk modeling framework.	Jessica McHale	7/1/2025	7/7/2025	7/7/2025	https://liberty-utilities.box.com/s/qwk5c7j3ed7ir5j7l0ie eeyxq0ldq2l0/folder/321092296 3423			No	5	Risk Methodology and Assessment	
1	OIS	1	OIS-P WMP_2025-Liberty-001	6	OIS-001-006	Q06. Regarding Tree Risk Classes: • Provide the number of vegetation clearance discovered and proximity to tree risk contributing circuits, shown in Table 6-3, Liberty Tree Risk Classes. • Provide the total vegetation clearance discovered and proximity to tree risk contributing circuits, shown in Table 6-3, Liberty Tree Risk Classes. • Provide the total number of circuits evaluated within Liberty's service territory. Q07. Regarding Pole Replacement Tree Risk Circuits: • Provide the following in Table 6-4, Summary of Pole Replacement for Top Circuits (Liberty's 2026-2028 WMP, pages 103-104) via Excel with the following additional columns: o 2026 Grid Hardening Planned Circuit Mileage o 2027 Grid Hardening Planned Circuit Mileage o 2028 Grid Hardening Planned Circuit Mileage o 2026 Covered Conductor Planned Circuit Mileage o 2027 Covered Conductor Planned Circuit Mileage o 2028 Covered Conductor Planned Circuit Mileage • Identify whether "grid hardening" includes covered conductor for the circuit mileage provided.	a. 1.61635987 b. 0.5 c. 0.5 Refer to attachment "Liberty Response_DR-001-Q07." a. Grid hardening refers to all WMP initiative activity 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 not measured in circuit miles (e.g., avoided miles) include the number of line attachment removals, the number of fuse replacements).	Jessica McHale	7/1/2025	7/7/2025	7/7/2025	https://liberty-utilities.box.com/s/qwk5c7j3ed7ir5j7l0ie eeyxq0ldq2l0/folder/321092296 3423	1		No	5	Risk Methodology and Assessment	
2	OIS	2	OIS-P WMP_2025-Liberty-001	1	OIS-002-001	Regarding Liberty's Compliance Audit Program Objective and Sampling Statistics: • In Table 2-1, Liberty lists the "Compliance Audit Program Objective." 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. • Complete the table below to describe the program objective for Liberty's qualified vendor Compliance Audit. • Complete the table below to provide sampling statistics for Liberty's qualified vendor Compliance Audit. Regarding Liberty's Compliance Audit Pass Rate Calculation: • In Table 2-2, Liberty lists the "Compliance Audit Pass Rate." Liberty states "As described in Section 9.11.1, Liberty uses the results of the external Compliance Audit as a metric to provide reasonable assurance that work is being completed as assigned and/or prescribed and complaints with applicable regulations." • 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.). • If multiple criteria generate the Compliance Audit pass rate, explain how Liberty weights each criterion to calculate the pass rate.	See DR response for tables. Compliance Audit Criteria Description Pass Rate Refers 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. Tree within Regulated Clearance Distance Tree within Liberty's Vegetation Management regulated clearance distances (4' for 12kv - 60kV, 10' for 115kV) within the evaluated sample. The number of tree located within regulated clearance distances during the compliance audit. A measured variance distance during the compliance audit. Measured variance of tree within the sample to determine the compliance rate.	Jessica McHale	7/8/2025	7/8/2025	7/8/2025	https://liberty-utilities.box.com/s/qwk5c7j3ed7ir5j7l0ie eeyxq0ldq2l0/folder/321092296 3423			No	9	Vegetation Management and Inspections	
2	OIS	2	OIS-P WMP_2025-Liberty-001	2	OIS-002-002	Regarding Margin of Error and Confidence Level for Quality Control of Detailed Inspections: • On page 51 of its 2026-2028 Base WMP, Liberty states (we include confidence level in 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: o The confidence level o The MOE • Identify whether "pole clearance" includes covered conductor for the circuit mileage provided.	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 10% sample size was applied for Detailed Inspections. This percentage aligns with the proportion used for Completed Tree Work.	Jessica McHale	7/8/2025	7/8/2025	7/8/2025	https://liberty-utilities.box.com/s/qwk5c7j3ed7ir5j7l0ie eeyxq0ldq2l0/folder/321092296 3423			No	9	Vegetation Management and Inspections	
2	OIS	2	OIS-P WMP_2025-Liberty-001	3	OIS-002-003	Regarding Quality Control Pass Rate Calculations: On page 204-205 of its 2026-2028 Base WMP, Liberty lists multiple conditions that it assigns to produce a final quality control pass rate after a "single tree" or a "inadequate." On page 205 of its 2026-2028 Base WMP, Liberty indicates that the "Pass/Fail Criteria" is "Pass" if the "Average Quality Control Score" is greater than or equal to the "Pass Threshold." • Describe how Liberty calculates the quality control pass rate of the "annual circuit rate" field (i.e., indicate if Liberty uses logic to the average of all individual trees or pass/fail rate, or the target pass rate is the average of each circuit rate's pass rate, or if Liberty calculates the target pass rate using another method). • Provide an example calculation showing all steps of how Liberty calculates audit pass rate using single trees, single lines, and annual circuit rates. Provide separate examples calculations for each of the following activities being audited: o Completed Tree Work o Vegetation Management Inspections	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	7/8/2025	7/8/2025	7/8/2025	https://liberty-utilities.box.com/s/qwk5c7j3ed7ir5j7l0ie eeyxq0ldq2l0/folder/321092296 3423			No	9	Vegetation Management and Inspections	
2	OIS	2	OIS-P WMP_2025-Liberty-001	4	OIS-002-004	Regarding Liberty's Vegetation Management Quality Control Audits: • In Table 2-3, Liberty lists "Vegetation Management Quality Control Audits" as 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. • Complete the table below to describe the program objective for Liberty's qualified vendor Compliance Audit. • Complete the table below to provide sampling statistics for Liberty's qualified vendor Compliance Audit.	Compliance Audit Criteria Description Pass Rate Refers 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. Tree within Regulated Clearance Distance Tree within Liberty's Vegetation Management regulated clearance distances (4' for 12kv - 60kV, 10' for 115kV) within the evaluated sample. The number of tree located within regulated clearance distances during the compliance audit. A measured variance distance during the compliance audit. Measured variance of tree within the sample to determine the compliance rate.	Jessica McHale	7/8/2025	7/8/2025	7/8/2025	https://liberty-utilities.box.com/s/qwk5c7j3ed7ir5j7l0ie eeyxq0ldq2l0/folder/321092296 3423			No	9	Vegetation Management and Inspections	
2	OIS	2	OIS-P WMP_2025-Liberty-001	5	OIS-002-005	Regarding Inspection Intervals: • In Table 2-4, Liberty lists "Inspection Intervals." Liberty states that "Inspections/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. • Complete the table below to describe the program objective for Liberty's qualified vendor Compliance Audit. • Complete the table below to provide sampling statistics for Liberty's qualified vendor Compliance Audit.	See DR response for tables.	Jessica McHale	7/8/2025	7/8/2025	7/8/2025	https://liberty-utilities.box.com/s/qwk5c7j3ed7ir5j7l0ie eeyxq0ldq2l0/folder/321092296 3423			No	9	Vegetation Management and Inspections	
2	OIS	2	OIS-P WMP_2025-Liberty-001	6	OIS-002-006	Regarding Liberty's Compliance Audit Pass Rate Calculation: • In Table 2-5, Liberty lists the "Compliance Audit Pass Rate." Liberty states "As described in Section 9.11.1, Liberty uses the results of the external Compliance Audit as a metric to provide reasonable assurance that work is being completed as assigned and/or prescribed and complaints with applicable regulations." • 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.). • If multiple criteria generate the Compliance Audit pass rate, explain how Liberty weights each criterion to calculate the pass rate.	Compliance Audit Criteria Description Pass Rate Refers 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. Tree within Regulated Clearance Distance Tree within Liberty's Vegetation Management regulated clearance distances (4' for 12kv - 60kV, 10' for 115kV) within the evaluated sample. The number of tree located within regulated clearance distances during the compliance audit. A measured variance distance during the compliance audit. Measured variance of tree within the sample to determine the compliance rate.	Jessica McHale	7/8/2025	7/8/2025	7/8/2025	https://liberty-utilities.box.com/s/qwk5c7j3ed7ir5j7l0ie eeyxq0ldq2l0/folder/321092296 3423			No	9	Vegetation Management and Inspections	
2	OIS	2	OIS-P WMP_2025-Liberty-001	7	OIS-002-007	Regarding Liberty's Vegetation Management Quality Control Audits: On page 201 of its 2026-2028 Base WMP, Liberty states that the "Inspections/Audits Unit" for "Completed Tree Work" and "Detailed Inspections" is "Annual Circuit Mile." 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," and "Annual Circuit Mile" generate the "Quality Control Score." Provide a table that describes how the "Quality Control Score" is calculated for each of the following activities: • Provide an example calculation showing all steps of how Liberty calculates audit pass rate using single trees, single lines, and annual circuit miles. Provide separate examples calculations for each of the following activities being audited: o Completed Tree Work o Vegetation Management Inspections	a. Liberty uses the criteria in Table 9-25, Table 9-26, Table 9-27, and Table 9-28 when evaluating pass rates for each Work Type. The pass rates are averaged for all conditions evaluated. (See response for tables)	Jessica McHale	7/11/2025	7/16/2025	7/16/2025	https://liberty-utilities.box.com/s/qwk5c7j3ed7ir5j7l0ie eeyxq0ldq2l0/folder/321092296 3423			No	9	Vegetation Management and Inspections	
2	OIS	2	OIS-P WMP_2025-Liberty-001	8	OIS-002-008	Regarding Vegetation Risk: On page 78 of Liberty's 2026-2028 Base WMP, it states that "[WM] incorporates vegetation as a corporate asset." • Describe how vegetation is seen as an "asset" that has a "consistent risk score."	a. Liberty conducts defensible space inspections on each subcategory 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 execute the inspection timeliness: b. Contributing factors: i. Factors such as weather, access issues, and operational constraints can contribute to vegetation inspections being conducted less than twice per year. c. Liberty does not plan to perform vegetation defensible space inspections more frequently than twice a year.	Jessica McHale	7/11/2025	7/16/2025	7/16/2025	https://liberty-utilities.box.com/s/qwk5c7j3ed7ir5j7l0ie eeyxq0ldq2l0/folder/321092296 3423			No	9	Vegetation Management and Inspections	
2	OIS	2	OIS-P WMP_2025-Liberty-001	9	OIS-002-009	Regarding Emerging Grid Hardening Technology Installations and Pilot Program: On page 115 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, insulators, and crossarms. Liberty's 2026-2028 WMP includes the following emerging technologies for traditional overhead hardening activity 1.3.1 circuit miles. • Provide a complete description of the scope of work planned for the 1.3.1 circuit miles of this activity. • What percentage of these miles will replace existing bare wire conductor? • Provide a complete description of the scope of work planned for the 1.3.1 circuit miles of this activity from the existing conductor being replaced. • Explain how covered conductor differs from "modern conductor." Include a description of the insulation Liberty uses for covered conductor. b. Additionally, on page 114 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 impractical." • Explain why it is not feasible to replace the existing bare wire conductors with covered conductor in these locations. • Lastly, in its response to ACI 22-8B-06 (Effectiveness of Service Relay Profile ("SRP") and Traditional Hardening), Liberty noted "Normal Replacement Baseline" as a project (Appendix D, Table 1-2: Comparison of Risk Calculations). • Explain how "Normal Replacement Baseline" is the same or different compared to traditional overhead hardening activity.	Jessica McHale	7/8/2025	7/8/2025	7/8/2025	https://liberty-utilities.box.com/s/qwk5c7j3ed7ir5j7l0ie eeyxq0ldq2l0/folder/321092296 3423			No	8	Grid Design, Operations, and Maintenance	
2	OIS	2	OIS-P WMP_2025-Liberty-001	10	OIS-002-010	Regarding Emerging Grid Hardening Technology Installations and Pilot Program: On page 115 of its 2026-2028 Base WMP, Liberty states "Traditional overhead hardening remains a cost-effective and versatile approach, particularly in areas where forest density or terrain constraints make covered conductor or undergrounding impractical." • Explain why it is not feasible to replace the existing bare wire conductors with covered conductor in these locations. • Lastly, in its response to ACI 22-8B-06 (Effectiveness of Service Relay Profile ("SRP") and Traditional Hardening), Liberty noted "Normal Replacement Baseline" as a project (Appendix D, Table 1-2: Comparison of Risk Calculations). • Explain how "Normal Replacement Baseline" is the same or different compared to traditional overhead hardening activity.	Jessica McHale	7/8/2025	7/8/2025	7/8/2025	https://liberty-utilities.box.com/s/qwk5c7j3ed7ir5j7l0ie eeyxq0ldq2l0/folder/321092296 3423			No	8	Grid Design, Operations, and Maintenance	
2	OIS	2	OIS-P WMP_2025-Liberty-001	11	OIS-002-011	Regarding Total Utility Risk: • On page 61 of Liberty's 2026-2028 Base WMP and page 7 of the Dimension report (Attachment B1), there are two figures depicting the components of total Utility Risk. • Explain why Figure 5-2 - WMP Framework (Liberty's Base 2026-2028 WMP, page 61) includes an additional "Asset Failure Risk" while the Utility Risk calculation in Section 5.2.2.3 (Liberty's Base 2026-2028 WMP, page 69) does not include that risk. • Explain why Figure 5-2 - WMP Framework (Liberty's Base 2026-2028 WMP, page 61) and Figure 5: Overview of the Risk Framework for Liberty Utilities in DIMENSION (Attachment B1, Dimension Report, page 7) seem to be depicting different frameworks for Utility Risk. • Describe the differences depicted, and why such differences exist. • Which figure more accurately depicts Liberty's risk modeling framework?	Refer to attachment "Liberty Response_DR-001-Q11"	Jessica McHale	7/8/2025	7/8/2025	7/8/2025	https://liberty-utilities.box.com/s/qwk5c7j3ed7ir5j7l0ie eeyxq0ldq2l0/folder/321092296 3423			No	5	Risk Methodology and Assessment	
2	OIS	2	OIS-P WMP_2025-Liberty-001	12	OIS-002-012	Regarding Wildfire Consequence: • On page 64 of its 2026-2028 Base WMP, Liberty provided Figures 5-4 and 5-5 showing Fire Risk Maps. • Provide higher quality and high resolution file or a PDF for Figure 5-5 and 5-5 that clearly show the differential centers on the maps. Regarding Fire Risk Modeling (Liberty's 2026-2028 Base WMP, Section 5.2.2.1): • From January 1, 2021, to December 31, 2024, provide the following: o A list and description of each distinct cause code attributed to an unplanned distribution outage. o The total number of unplanned distribution outages caused by each cause code. o The total number of unplanned distribution outages in Liberty's service territory. o The number of unplanned distribution outages caused by vegetation contact. o The number of unplanned distribution outages caused by equipment failure. o Provide the number of unplanned distribution outages caused by equipment failure during major event days. • Is an Excel file attachment a possible means with Liberty used to determine the number of outages in Table 5-1.	Refer to attachment "Liberty Response_DR-001-Q12"	Jessica McHale	7/8/2025	7/8/2025	7/8/2025	https://liberty-utilities.box.com/s/qwk5c7j3ed7ir5j7l0ie eeyxq0ldq2l0/folder/321092296 3423			No	5	Risk Methodology and Assessment	
3	OIS	3	OIS-P WMP_2025-Liberty-001	1	OIS-003-001	Regarding Total Utility Risk: • On page 61 of Liberty's 2026-2028 Base WMP and page 7 of the Dimension report (Attachment B1), there are two figures depicting the components of total Utility Risk. • Explain why Figure 5-2 - WMP Framework (Liberty's Base 2026-2028 WMP, page 61) includes an additional "Asset Failure Risk" while the Utility Risk calculation in Section 5.2.2.3 (Liberty's Base 2026-2028 WMP, page 69) does not include that risk. • Explain why Figure 5-2 - WMP Framework (Liberty's Base 2026-2028 WMP, page 61) and Figure 5: Overview of the Risk Framework for Liberty Utilities in DIMENSION (Attachment B1, Dimension Report, page 7) seem to be depicting different frameworks for Utility Risk. • Describe the differences depicted, and why such differences exist. • Which figure more accurately depicts Liberty's risk modeling framework?	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 averaged Fire Risk and PSPS Risk. Asset Failure Risk is not included in the utility risk formula, because its effects are already embedded in the consequences of Fire Risk and PSPS Risk. 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 DIMENSION Report is more precise when considering computational modeling and simulation logic. Figure 5-2 is a broader and 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 DIMENSION Report is more precise when considering computational modeling and simulation logic. 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 Risk Framework. Figure 5: Overview of the Risk Framework for Liberty Utilities in DIMENSION (Attachment B1, Dimension Report, page 7) zooms in on the Risk Modeling Framework, including how Asset Failure Risk informs mitigation planning. Figure 5 of the DIMENSION Report is more accurate for understanding the full strategic framework, including how Asset Failure Risk informs mitigation planning. Figure 5 of the DIMENSION Report is more accurate for understanding the computational model used to generate risk scores. 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 5 of the DIMENSION Report is more accurate for	Jessica McHale	7/8/2025	7/11/2025	7/16/2025	https://liberty-utilities.box.com/s/qwk5c7j3ed7ir5j7l0ie eeyxq0ldq2l0/folder/321092296 3423			No	5	Risk Methodology and Assessment	
3	OIS	3	OIS-P WMP_2025-Liberty-001	2	OIS-003-002	Regarding Fire Risk: • Figure 5-2 - WMP Framework (Liberty's Base 2026-2028 WMP, page 61) includes an additional "Asset Failure Risk" while the Utility Risk calculation in Section 5.2.2.3 (Liberty's Base 2026-2028 WMP, page 69) does not include that risk. • Explain why Figure 5-2 - WMP Framework (Liberty's Base 2026-2028 WMP, page 61) and Figure 5: Overview of the Risk Framework for Liberty Utilities in DIMENSION (Attachment B1, Dimension Report, page 7) seem to be depicting different frameworks for Utility Risk. • Describe the differences depicted, and why such differences exist. • Which figure more accurately depicts Liberty's risk modeling framework?	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 averaged Fire Risk and PSPS Risk. Asset Failure Risk is not included in the utility risk formula, because its effects are already embedded in the consequences of Fire Risk and PSPS Risk. 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 DIMENSION Report is more precise when considering computational modeling and simulation logic. Figure 5-2 is a broader and 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 DIMENSION Report is more precise when considering computational modeling and simulation logic. 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 Risk Framework. Figure 5: Overview of the Risk Framework for Liberty Utilities in DIMENSION (Attachment B1, Dimension Report, page 7) zooms in on the Risk Modeling Framework, including how Asset Failure Risk informs mitigation planning. Figure 5 of the DIMENSION Report is more accurate for understanding the full strategic framework, including how Asset Failure Risk informs mitigation planning. Figure 5 of the DIMENSION Report is more accurate for understanding the computational model used to generate risk scores. 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 5 of the DIMENSION Report is more accurate for	Jessica McHale	7/8/2025	7/11/2025	7/16/2025	https://liberty-utilities.box.com/s/qwk5c7j3ed7ir5j7l0ie eeyxq0ldq2l0/folder/321092296 3423			No	5	Risk Methodology and Assessment	
3	OIS	3	OIS-P WMP_2025-Liberty-001	3	OIS-003-003	Regarding Fire Risk: • Figure 5-2 - WMP Framework (Liberty's Base 2026-2028 WMP, page 61) includes an additional "Asset Failure Risk" while the Utility Risk calculation in Section 5.2.2.3 (Liberty's Base 2026-2028 WMP, page 69) does not include that risk. • Explain why Figure 5-2 - WMP Framework (Liberty's Base 2026-2028 WMP, page 61) and Figure 5: Overview of the Risk Framework for Liberty Utilities in DIMENSION (Attachment B1, Dimension Report, page 7) seem to be depicting different frameworks for Utility Risk. • Describe the differences depicted, and why such differences exist. • Which figure more accurately depicts Liberty's risk modeling framework?	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 averaged Fire Risk and PSPS Risk. Asset Failure Risk is not included in the utility risk formula, because its effects are already embedded in the consequences of Fire Risk and PSPS Risk. 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 DIMENSION Report is more precise when considering computational modeling and simulation logic. Figure 5-2 is a broader and 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 DIMENSION Report is more precise when considering computational modeling and simulation logic. 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 Risk Framework. Figure 5: Overview of the Risk Framework for Liberty Utilities in DIMENSION (Attachment B1, Dimension Report, page 7) zooms in on the Risk Modeling Framework, including how Asset Failure Risk informs mitigation planning. Figure 5 of the DIMENSION Report is more accurate for understanding the full strategic framework, including how Asset Failure Risk informs mitigation planning. Figure 5 of the DIMENSION Report is more accurate for understanding the computational model used to generate risk scores. 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 5 of the DIMENSION Report is more accurate for	Jessica McHale	7/8/2025	7/11/2025	7/16/2025	https://liberty-utilities.box.com/s/qwk5c7j3ed7ir5j7l0ie eeyxq0ldq2l0/folder/321092296 3423			No	5	Risk Methodology and Assessment	
3	OIS	3	OIS-P WMP_2025-Liberty-001	4	OIS-003-004	Regarding Fire Risk: • Figure 5-2 - WMP Framework (Liberty's Base 2026-2028 WMP, page 61) includes an additional "Asset Failure Risk" while the Utility Risk calculation in Section 5.2.2.3 (Liberty's Base 2026-2028 WMP, page 69) does not include that risk. • Explain why Figure 5-2 - WMP Framework (Liberty's Base 2026-2028 WMP, page 61) and Figure 5: Overview of the Risk Framework for Liberty Utilities in DIMENSION (Attachment B1, Dimension Report, page 7) seem to be depicting different frameworks for Utility Risk. • Describe the differences depicted, and why such differences exist. • Which figure more accurately depicts Liberty's risk modeling

4	CPUC - SPD	4	SPD-LIB-WMP2020-001	9	SPD-001-Q09	On page 69 of the 2019-2020 Base WMP, Liberty notes that Table 5-1 includes circuits contributing greater than or equal to 1% of Overall Utility Risk. According to Liberty's Quarterly Data Reports, the TWI7200 circuit is in HFTD Tier 2 and represents about 0.96% of Liberty's overall risk and 1.2% of Liberty's wildfire risk. Provide a list of all circuits in HFTD Tier 2 and HFTD Tier 3 that represent at least 0.5% of Liberty's overall risk or 1% of Liberty's wildfire risk and provide the following information for each circuit: a. Provide the circuit name and circuit number b. Provide the circuit's Wildfire Risk Score, Wildfire Consequence Score, and Wildfire Risk Score c. Provide the circuit's Wildfire Mitigation Plan Initiatives and the initiative's initial and completion dates	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 TWI7200.	Kumamoto Larrar	7/21/2021	7/27/2021	7/27/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf			No	6	Wildfire Mitigation Strategy Development	
4	CPUC - SPD	4	SPD-LIB-WMP2020-001	10	SPD-001-Q10	On page 69 of the 2019-2020 Base WMP, Liberty indicates that Utility Risk ("UR") is calculated using the formula: (Risk Reduction Value / Risk Reduction Cost) = UR. a. Explain why Liberty divides the cost of PSPS Risk and the Risk by two. b. Explain why Liberty does not divide the cost of Other Risks by two. Also, explain why Liberty divides Utility Risk. c. Explain why in Technical Change Program Risks Liberty divides the cost of SWP Outage Risk and PSPS Risk by two. d. Show Asset Failure Risks contribute to the calculation of Utility Risk? e. If not, why? f. If so, explain why not. g. Explain why Figure 5-2 shows Asset Failure Risks contributing to Utility Risk, but the formula on page 69 does not include Asset Failure Risks.	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. 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. No e. The Probability of Asset Failure is brought into Wildfire Likelihood which falls under the Fire Risk Module. f. N/A g. Figure 5-2 presents a conceptual overview of the Risk Assessment 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 the 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 more accurately reflects the conceptual model used in calculating risk scores.	Kumamoto Larrar	7/21/2021	7/27/2021	7/27/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf			No	5	Risk Methodology and Assessment	
4	CPUC - SPD	4	SPD-LIB-WMP2020-001	11	SPD-001-Q11	In response to ID-LU-01-06, Liberty states that it conducted 1.1 miles of bare wing drone infrared inspections on its transmission assets. a. Provide date of exactly where these inspections happened, and include the following: i. Circuit Name ii. Circuit ID iii. Latitude iv. Longitude v. Miles vi. Poles c. Explain why Liberty does not plan to conduct additional infrared inspections during the 2019-2020 WMP cycle.	a. Circuit Segment ID: (1:136344), (2:136342 & 1:2), (3:2224 b. Circuit ID: 1:2, 2, 3 c. Latitude:(1:38.0545864,-121.06 0545864,-121.06 745), b. Longitude:(1: -119.9308700, (1: -119.930450,-121.120-109919 c. Miles: 0.1, 0.6, 0.4 d. Poles: 117,1380 f. Liberty did not include this task as a planned event in the 2019-2020 WMP due to the updated GO165 Detail and Patrol inspection procedures. Liberty purchased 4K camera in 2024 to update its internal drone program. In the event there are concerns with equipment, Liberty will escalate in an incident inspection of the Utility and make or a maintenance work order for structures supporting Utility and Tower.	Kumamoto Larrar	7/21/2021	7/27/2021	7/27/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf			No	Appendix D	Areas for Continued Improvement	
4	CPUC - SPD	4	SPD-LIB-WMP2020-001	12	SPD-001-Q12	Provide a copy of Liberty's procedures/checklist(s) for conducting detailed inspections of distribution electric lines and equipment (WMP-GOOM-IA-01) and patrol inspections of distribution electric lines and equipment (WMP-GOOM-IA-03).	Detailed Inspection Checklist: •Clearance •Crossarm Loose •Crossarm Braces Falling Off •Crossarm Needs Replacing •Crossarm Broken/Split •Ground Wire Damaged/Missing •Ground Wedding Damaged/Missing •Hardware Loose/Missing •Hardware Cut •High Voltage Sign Problem •Insulator Cracked •Insulator Inoperable •Insulators Need Replacing •Pole Leaning •Pole Leaning •Tagging Labels •Transformer Inoperable •Work Space/Climbing Space •Equipment Loose •Equipment Needs Replacement •Conductor Loose, Concurrent Needs Replacing •Guy/Guards Broken/Loose •Guy/Guards Need Replacing •Oil Leaks •Work Space/Climbing Space •Equipment Loose	Kumamoto Larrar	7/21/2021	7/27/2021	7/27/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf			No	8	Grid Design, Operations, and Maintenance	
4	CPUC - SPD	4	SPD-LIB-WMP2020-001	13	SPD-001-Q13	Provide a dataset of all detailed inspections of distribution electric lines and equipment (WMP-GOOM-IA-01) and patrol inspections of distribution electric lines and equipment (WMP-GOOM-IA-03) that were conducted from 2015-2019. The dataset at a minimum must include: a. Date b.Circuit Segment ID c.Circuit ID d. Notes e.Start Point Latitude f.Start Point Longitude g.End Point Latitude h.End Point Longitude i.Miles j. Poles k.Detailed Findings	Refer to attachment "Liberty Response_DR-SPD-001-Q13.""	Kumamoto Larrar	7/21/2021	7/27/2021	7/27/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf	1		No	8	Grid Design, Operations, and Maintenance	
7	OIIS	7	OIIS-P-WMP_2021-Liberty-006	1	OIIS-006-Q01	Liberty states p.75 "Liberty's risk reduction from SRP implementation in Table 6-1 of its 2019-2020 WMP. a. Provide a detailed explanation of how the value was derived, including modeling assumptions, variables, and validation steps. b. Was this value validated with historical performance data or peer utility benchmarks? c. Was this value validated with SME input, and if so, provide a list of supporting documents. d. Provide a detailed explanation of how the effectiveness of SRP implementation was derived, including modeling assumptions, variables, and validation steps. e. Was this value validated with historical performance data or peer utility benchmarks?	a. Liberty's risk reduction from SRP implementation is calculated using the Bayesian Network (BN) model. Liberty's risk reduction effectiveness for SRP implementation is based on the Bayesian Network (BN) model outputs. Refer to sections 2.1.1 and 2.1.2 of the Emmayan report for more details on calculations. SMUT 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, if an recent fault, SRP will trigger an outage for the whole circuit. b. Not validated with historical data. c. The composite circuit is effectively not just a section of it. d. All assets have a POF of 0. The value could be modified for future simulations based on feedback. e. Liberty's risk reduction effectiveness for SRP implementation is based on the years of a simulation Baseline (assuming SRP is disabled) and another simulation (assuming SRP is disabled). See Emmayan report section 2.2. Validation Steps. SMUT validates the calculation inside its application to confirm that the aftermath is working correctly. Validation of business logic is based on Liberty's SME review. Variables. Refer to sections 2.1.2 and 2.2.2 of the Emmayan report for details on calculations.	Jessica Michale	7/14/2021	7/21/2021	7/21/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf			No	5, 8	Risk Methodology and Assessment, Grid Design, Operations, and Maintenance	
7	OIIS	7	OIIS-P-WMP_2021-Liberty-006	2	OIIS-006-Q02	Modeling Assumptions. Refer to sections 2.2.1 and 2.2.2 of Appendix B, Attachment 1 of Liberty's 2019-2020 WMP ("Emmayan report") for more details on calculation. The value of 73.7% represents reduction in utility risk, which is an average of "PSPS Risk" and "Fire". •Fire has a significant effect in reducing both PSPS and Outage risk (approximately 5% for outage program risk). •There is not correlation between PSPS Risk and Fire Risk in the Utility Risk calculation. •On average, PSPS risk is much higher than Fire Risk. In 2020, PSPS risk average is approximately 0.0052 while fire risk is approximately 0.00001-7.6856. •Fire risk is higher than PSPS risk in the Utility Risk calculation. Liberty can include Outage Program Risk in the Utility Risk calculation, which would capture the risk from SWP outages in the Utility Risk calculation as well. For simulation, validation, and variables, refer to part 1, below. b. No, SMUT does not have access to that data. c. Refer to part 1, below. Modeling Assumptions. Refer to sections 2.1.1 and 2.1.2 of the Emmayan report for more details on calculation. SMUT 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, if Variables. Refer to sections 2.2.2 and 2.2.3 of the Emmayan report for details on calculation. •Fire Risk •Probability of failure of assets impact the probability of triggering SRP event. •All Technical data will affect the consequence impact and the probability of ignition •Liberty's risk reduction effectiveness for SRP implementation. Refer to the Emmayan calculation b. No, SMUT doesn't have access to those numbers.	Jessica Michale	7/14/2021	7/21/2021	7/21/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf			No	5, 8	Risk Methodology and Assessment, Grid Design, Operations, and Maintenance	
7	OIIS	7	OIIS-P-WMP_2021-Liberty-006	3	OIIS-006-Q03	In Section 8.2 of Liberty's 2019-2020 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 and how they are calculated. Provide the following information regarding the Risk Modeling Framework described in Appendix B (Emmayan) and Section 5: 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 is consequence), or are they independently assigned for planning purposes? c. If the Fire Risk Scores are independently assigned, provide a detailed explanation of how they are derived. d. Provide any supporting documentation, internal guidance, or data dictionaries used to develop or interpret the Fire Risk Scores.	a. The Risk scores are derived from the Fire Risk calculations in Section 5 of Liberty's 2019-2020 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 8 Regarding the Emmayan report's associated documents.	Jessica Michale	7/14/2021	7/21/2021	7/21/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf			No	5, 8	Risk Methodology and Assessment, Grid Design, Operations, and Maintenance	
7	OIIS	7	OIIS-P-WMP_2021-Liberty-006	4	OIIS-006-Q04	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 Michale	7/14/2021	7/21/2021	7/21/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf			No	4, 8	Overview of Service Territory, Grid Design, Operations, and Maintenance	
7	OIIS	7	OIIS-P-WMP_2021-Liberty-006	5	OIIS-006-Q05	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 cost-effective to maintain." Liberty's 2021 WMP Update states that "Liberty has not been able to complete any covered conductor installations in its traditional overhead hardening." Even though Liberty states that its "risk reduction is similar to covered conductor, both projects can be paired with multiple initiatives at the circuit/circuit segment level to calculate impact of traditional overhead hardening projects as additive." a. Provide supporting documents and calculations that render similar risk reduction when hardening a circuit with new bare conductor compared to covered conductor. b. Provide a list of all circuits that Liberty has installed or is scheduled to install traditional overhead hardening. c. How did Liberty determine its circuit-mile target for this activity? If did not complete a comparable in its risk model? d. What method did Liberty use to determine its target? e. If it was determined through subject matter expert (SME) input, provide a list of supporting documents and assumptions.	a. Refer to attachment "Liberty Response_DR-SPD-001.pdf." This document provides comparisons of utility risk, fire risk, and outage program risk between two projects: covered conductor (Scenario 1#4135) and traditional overhead hardening (Scenario 1#4136). Refer to attachment "Liberty Response_DR-SPD-001.pdf." b. Liberty did not calculate a comparable risk model for traditional overhead hardening because when Liberty began developing scenarios to simulate its risk model, the target for traditional overhead hardening was zero. This target changed prior to finalizing the 2019-2020 WMP. Liberty did not have the opportunity to adequately model the scenario in the risk model prior to the submission of the WMP c. Liberty's target was based on a combination of subject matter expertise, historical data, and the best available information and resource allocation at the time of establishing the target. c The target was developed using Subject Matter Expert input including practical field experience, engineering judgment, and budget and resource constraints. d. Appendix D - I-13-2018-001 Discussion of traditional hardening effectiveness and comparison to other mitigations. e. Liberty's 2021 WMP Update provides a comparison of the risk reduction of the two projects. Through traditional hardening was not directly simulated. Asset Condition Assessments, Field inspection data and maintenance records Engineering Standards and Design Criteria Used to identify segments suitable for overhead rebuild projects. Field Constraints, Including but not limited to, Environmental Constraints, Difficulty of implementation, including permitting timelines, environmental constraints, and construction readiness. Budget and Workforce Constraints. Considered in setting a realistic target.	Jessica Michale	7/14/2021	7/21/2021	7/21/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf	1		No	5, 8	Risk Methodology and Assessment, Grid Design, Operations, and Maintenance	
7	OIIS	7	OIIS-P-WMP_2021-Liberty-006	6	OIIS-006-Q06	On page 115 of Liberty 2019-2020 WMP, Liberty states that it "simulates the use of microgrids as an alternative to all applicable projects and has experimental success with Liberty's Sugarloaf microgrid." a. Provide Liberty's current findings on possible locations within its service territory that could benefit from line removal and microgrids.	Liberty does not have any planned microgrid projects for the 2020-2026 WMP cycle and therefore does not have findings on possible microgrid locations within its service territory.	Jessica Michale	7/14/2021	7/21/2021	7/21/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf			No	8	Grid Design, Operations, and Maintenance	
7	OIIS	7	OIIS-P-WMP_2021-Liberty-006	7	OIIS-006-Q07	On page 121 of Liberty 2019-2020 WMP, Liberty states that "it is assumed that 21% of the network consists of grey wire." a. Provide the source of this assumption. b. Explain how Liberty conducted a system inventory or sampling effort to verify this assumption. c. If Liberty has not conducted a system inventory or sampling effort to verify this, please describe how Liberty's plan to validate this assumption.	a. Liberty's SMUG have an estimation of the amount of grey wire in the system. 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 Falcon application. At this time, there is effort planned to perform a field survey to validate this assumption.	Jessica Michale	7/14/2021	7/21/2021	7/21/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf			No	8	Grid Design, Operations, and Maintenance	
7	OIIS	7	OIIS-P-WMP_2021-Liberty-006	8	OIIS-006-Q08	a. Refer to the table below for a breakdown of the cost estimates for basic line attachment removal. There may be variation in cost components depending on the complexity of an individual project. The average cost reported in Liberty's 2019-2020 WMP was derived from averaging historical cost data, not from a project level estimate. See Response for table b. The average cost reported in Liberty's 2020-2026 WMP was derived from averaging historical cost data, and not from a project level estimate. Liberty does not have a breakdown of the cost components. b. Provide a detailed breakdown of the cost estimate, including but not limited to labor, equipment, materials, and overhead. c. Provide the number of attachments to be removed in 2021 and 2022.	a. Refer to attachment "Liberty Response_DR-SPD-001-Q08." The Excel file "2019-2026 WMP Targets and Budgets" referenced in Liberty's WMP. Refer to attachment: "Liberty Response_DR-SPD-001-Q08" for the "Comparison Pie Lines," "Comparison outage program mi," and "Comparison utility risk" files referenced in Liberty's WMP.	Jessica Michale	7/14/2021	7/21/2021	7/21/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf			No	5, 8	Risk Methodology and Assessment	
7	OIIS	7	OIIS-P-WMP_2021-Liberty-006	9	OIIS-006-Q09	a. Provide a list of attachments to the 2019-2020 WMP, Appendix D, Emmayan report, and Section 5 (Risk Modeling Framework) and Section 8 (Initiatives) that are Liberty's 2021 WMP Targets and Budgets.xlsx (in Excel format). b. Provide a list of attachments to the 2021 WMP Update. c. Compliance_Outage_program_10-Year.pdf d. Comparison_utility_risk.pdf	Refer to attachment: "Liberty Response_DR-SPD-001-Q09."	Jessica Michale	7/14/2021	7/21/2021	7/21/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf	2		No	5	Risk Methodology and Assessment	
7	OIIS	7	OIIS-P-WMP_2021-Liberty-006	10	OIIS-006-Q10	a. In Liberty's 2019-2020 Base WMP, Figure 6-2 shows the Proposed 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 increase between some of the years within this figure. c. Describe how Liberty validated the risk model output when generating this figure.	a. In conjunction with Emmayan, Liberty utilizes a stochastic modeling approach to calculate and attribute risk to 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. c. Liberty and 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.	Jessica Michale	7/14/2021	7/21/2021	7/21/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf			No	6	Wildfire Mitigation Strategy Development	
8	OIIS	8	OIIS-P-WMP_2021-Liberty-007	1	OIIS-007-Q01	On page 230-237 of its 2019-2020 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. a. Provide a definition of "significant event." b. Define "significant number of customers" as used in this context.	On page 237 of Liberty's 2019-2020 Base WMP, Liberty states "City and county officials, DOE officials, critical infrastructure, CPUC, and agency partners will receive the written notifications of a "significant" planned or potentially planned outage, up to eight days 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). b. Liberty's 2021 WMP Update states that "Liberty's Emergency Management Team determines if a significant number of customers, an email is sent to personnel, agencies, and media with a specific information, detail, and status of the outage." In this context, significant is not defined by specific thresholds. Liberty's communication 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).	Jessica Michale	7/21/2021	7/26/2021	7/26/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf			No	11	Emergency Preparedness, Collaboration, and Public Awareness	
8	OIIS	8	OIIS-P-WMP_2021-Liberty-007	2	OIIS-007-Q02	a. On page 245 of its 2019-2020 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 Michale	7/21/2021	7/26/2021	7/26/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf	1		No	11	Emergency Preparedness, Collaboration, and Public Awareness	
8	OIIS	8	OIIS-P-WMP_2021-Liberty-007	3	OIIS-007-Q03	On page 235 of its 2019-2020 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.	The principal that Liberty recognizes 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 priorities. Refer to attachment "Liberty Response_DR-007-Q03.pdf" Protocols, policies, and procedures: Liberty's Incident Commander. The 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, to the manager(s) or other qualified individual(s) or retain the responsibility. Detailed procedures are provided in the Liberty CEMP pages 18-19, paragraph 3 subparagraph 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: a. Transmission circuits b. Distribution circuits with essential customers, such as health care facilities, c. utilities, public safety, governmental facilities, and lifeline customers d. Critical infrastructure customers e. Primary loss, followed by secondary loss a. Individual services that are accessible and serviceable can be addressed Priorities for restoration of Liberty's essential customers. Priority accurate circuits, equipment, and services are accessible and repairable. Health Care Facilities - Primary care hospitals - Emergency departments / Public safety districts b. Telecommunications a. Water and water treatment facilities b. Fire Stations c. Public Safety Agencies - Public safety dispatch centers d. Wastewater treatment/pumping facilities e. Fire operations facilities b. Transportation equipment and facilities - Government facilities - Shelter Cross and Lifeline customers	Jessica Michale	7/21/2021	7/26/2021	7/26/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf			No	11	Emergency Preparedness, Collaboration, and Public Awareness	
8	OIIS	8	OIIS-P-WMP_2021-Liberty-007	4	OIIS-007-Q04	On page 230 of its 2019-2020 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 Michale	7/21/2021	7/26/2021	7/26/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf	1		No	11	Emergency Preparedness, Collaboration, and Public Awareness	
8	OIIS	8	OIIS-P-WMP_2021-Liberty-007	5	OIIS-007-Q05	On pages 224 through 225 of its 2019-2020 Base WMP, Liberty includes Table 5-15, which lists quality control pass rate sample units, and Table 5-21 through 5-28, which list quality control "Fail / Fail" criteria. On page 211 of its 2019-2020 Base WMP, Liberty includes Table 5-11, which lists the number of internal vegetation management employees with credentials or certifications, who as labeled, includes a "Work Type" column heading. See "Work Type" in Table 5-21 through 5-28 and Table 5-11. a. Please provide Tables 5-21 through 5-28 and Table 5-11 with a more suitable and descriptive column header than "Work Type."	See response for tables.	Jessica Michale	7/21/2021	7/26/2021	7/26/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf			No	9	Vegetation Management and Inspections	
8	OIIS	8	OIIS-P-WMP_2021-Liberty-007	6	OIIS-007-Q06	In Table 5-11 of Liberty's 2019-2020 Base WMP, Liberty includes a column titled "Number" and a column titled "Percentage." Table 5-11 includes a row for "General VM Full Time Employees" and 94 Certified Arborists. In the "Number" column of Table 5-11 Liberty indicates that it has 0 "General VM Full Time Employees" and 94 Certified Arborists. This suggests Liberty has 0 Internal VM Full Time Employees (i.e., 0/0 * 100 = 100%). However, all other values in the "Number" column of Table 5-11 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 so 0 / 7 * 100 = 0%). a. Explain why Liberty's Internal VM Full Time Employees is 0 and not 7.	Liberty has seven internal full-time employees in vegetation management. See response for table.	Jessica Michale	7/21/2021	7/26/2021	7/26/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf			No	9	Vegetation Management and Inspections	
8	OIIS	8	OIIS-P-WMP_2021-Liberty-007	7	OIIS-007-Q07	In response to Question 7b of Data Request OIIS-P_WMP_2021-Liberty-005, Liberty states, "Liberty has averaged about 3,550 tree removals per year since 2013 with 11% involving wood management (cut tree work." Additionally, on page 226 of its 2019-2020 Base WMP, Liberty states, "All limbs, brush and debris located within 165 feet of equipment accessible roads, shall be chipped and broadcasted or chipped and hauled off site. All limbs, brush and debris cannot be chipped and broadcasted or chipped and hauled off site shall be cut into lengths no longer than 4 feet." a. Provide the percentage of wood and slash management work, since 2013, that was completed using the following methods: i. Chip and broadcast ii. Chip and haul off iii. Cut and scatter	1. Chip and broadcast: ~1.71% 2. Chip and haul off: ~96.58% iii. Cut and scatter: ~1.71%	Jessica Michale	7/21/2021	7/26/2021	7/26/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf			No	9	Vegetation Management and Inspections	
9	OIIS	9	OIIS-P-WMP_2021-Liberty-008	1	OIIS-008-Q01	a. Regarding OIIS Data Request 6, Question 4 parts b and c: i. Provide the percentage of PSPS risk influenced by OPSPREADSHEET. ii. Provide the percentage of PSPS risk influenced by the 2019-2020 Base WMP. iii. Why 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 OIIS Data Request 6, Questions 1 parts c and e: i. Provide the documentation for how Asset Failure Risk contributes to Utility Risk for the Fire output. ii. Provide the documentation for how Asset Failure Risk contributes to Utility Risk for the PSPS output.	a. Liberty is not clear what OIIS data request is being referenced in this question. OIIS Data Request 6, Question 4 requests the index for traditional hardening completed among the HFTD zones. Furthermore, OIIS Data Request 6, Question 4 does not have a part b or c. Despite the question not being clear, Liberty will attempt to respond below. i. Liberty's Risk Assessment Framework (RAF) does not include a percentage of PSPS risk. Liberty does model is SPOS / spacout as one strategy in the model. Liberty can add different types of PSOS to the model, but currently only SPOS (or SWP) exist. Comparing the simulation with and without SWP, there is a difference of 0.05 for 2021 (when circuits are weighted by conductor length) or 7.5% (average value). The percentage varies from year to year because SPOS risk can change based on asset health. ii. No, because it was not specified when the logic was created for the model. iii. Liberty's Risk Assessment Framework (RAF) does not include a percentage of PSPS risk. Furthermore, OIIS 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 equation developed by Anja. Furthermore, there is no OIIS Data Request 6, Question 5, part b.	Jessica Michale	8/5/2021	8/8/2021	8/8/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf			No	5	Risk Methodology and Assessment	
9	OIIS	9	OIIS-P-WMP_2021-Liberty-008	2	OIIS-008-Q02	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 2019-2028 Base WMP. b. Explain why Asset Type is a top risk contributor for each of the top risk circuits in Table 5-6 on page 72 of Liberty's 2019-2028 Base WMP. c. Explain how this is related to the Equipment Age Replacements described in Section 8.2.2.2. a. Explain how this is related to the "Method distribution with age dimension" described on page 20 of the Emmayan report	The value in the WMP table is an average of all locations simulated. Since Liberty is looking at the first simulated year, the principal difference between location is principally due to the variation in all distributions, random value picked, and strategy applied. See simulation for future reference Variables: •Id: 14994 •Circuit: 2 •Year: 2021 •Circuit: 2D661 •Risk: 0. •The probability of having at least one event of high wind during the high PFM days. c. This probability between is calculated using the weather station data (see Emmayan report). •This factor is responsible in the calculation with the number of PFM days and grid probability. (See response for tables) • The probability of having high wind during a high PFM day (refer to Emmayan report included in Appendix B of Liberty's 2019-2028 Base	Jessica Michale	8/5/2021	8/8/2021	8/8/2021	https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1_Liberty_Response_Q001-Q009_WMP2020_001.pdf			No	5	Risk Methodology and Assessment	
10	OIIS	10	OIIS-P-WMP_2021-Liberty-009	1	OIIS-009-Q01	a. How many circuit miles of all transmission lines does Liberty currently have located within the HFTD and HFRA? b. Provide a list of all transmission lines that are located within the HFTD and HFRA, including the name of each unique transmission line? c. If so, provide the number of circuit miles, and describe the capacity characteristics and location of each instance. d. Provide a preliminary estimate of ofle transmission line miles planned for removal between 2020 and 2028. e. Describe any procedures, policies, or future planned projects to mitigate the ignition risk of ofle transmission lines that Liberty is considering.		Jessica Michale	8/12/2021	8/15/2021		https://California-Startup-Office.com/uploads/1/5e4e5c5298e1e0ac0b20d0f0/2020_Wildfire_Mitigation_Plan_Data_Request_Set_1