

**Liberty 2023 WMP Discovery Log**

| Count | Party Name   | DR Set # | Data Request                    | Question No. | Question ID   | Question   | Response   | Requestor   | Date Received | Final Date Due | Date Sent | Links   | Number of Attachments | Attachment Links | NDA Required? | WMP Section        | Category   | Subcategory  |
|-------|--------------|----------|---------------------------------|--------------|---------------|--|--|-------------|---------------|----------------|-----------|---|-----------------------|------------------|---------------|--------------------|--|--------------|
| 1     | CalAdvocates | 1        | CalAdvocates-Liberty-2023WMP-01 | 1            | CalAdv-01-1.1 | Please provide a copy of each WMP-related document, submission, or report you submit to the Office of Energy Infrastructure Safety (Energy Safety) in 2023 that is related to your WMP. Provide the copy to Cal Advocates within one business day of the document's submission to Energy Safety. If you have submitted the document to Energy Safety in 2023 prior to this data request, please provide a copy as soon as possible and no later than 10 business days from the issuance of this data request. This request is limited to materials or documents that (1) are related to work plans, initiative targets, risk models, risk spend efficiency (RSE) calculations, or WMP change orders, and (2) are provided to Energy Safety to provide additional details or context concerning information or statements in your WMP (and any subsequent revisions or change orders affecting your WMP).   | Refer to attachment: "2023-03-06_Liberty_2023_WMP-RO" for Liberty's 2023 WMP pre-submission, as submitted to OES on March 6, 2023. Additionally, Liberty attempted to provide CalAdvocates with copies of its Q4 2022 Quarterly Data Report ("QDR") files on February 1, 2023. However, due to technical issues with the CPUC Kiewit platform, Liberty was not able to provide copies of these files until February 9, 2023.   | Aaron Louie | 2/24/2023     | N/A            | 3/8/2023  | <a href="#">CalAdvocates-Liberty-2023WMP-01_Liberty_Response-03082023.pdf@berkeleyliberty.com</a> | 1                     |                  |               | WMP Pre-Submission | Administrative   | N/A          |
| 1     | CalAdvocates | 1        | CalAdvocates-Liberty-2023WMP-01 | 2            | CalAdv-01-1.2 | Please provide a copy of your WMP pre-submission within two business days of its submission to Energy Safety.  | Refer to attachment: "2023-03-06_Liberty_2023_WMP_RO_Public" for Liberty's 2023 WMP pre-submission.  | Aaron Louie | 2/24/2023     | N/A            | 3/8/2023  | <a href="#">CalAdvocates-Liberty-2023WMP-01_Liberty_Response-03082023.pdf@berkeleyliberty.com</a> | 1                     |                  |               | WMP Pre-Submission | Administrative   | N/A          |
| 1     | CalAdvocates | 1        | CalAdvocates-Liberty-2023WMP-01 | 3            | CalAdv-01-1.3 | Please provide a copy of all documents or files that are referenced in your WMP Quarterly Data Reports and submitted to Energy Safety (including but not limited to all PDFs, spatial data files, non-spatial data files, and confidential attachments) on the same business day that the documents is sent to Energy Safety.  | Liberty attempted to provide CalAdvocates with copies of its Q4 2022 QDR files on February 1, 2023. However, due to technical issues with the CPUC Kiewit platform, Liberty was not able to provide copies of these files until February 9, 2023.  | Aaron Louie | 2/24/2023     | N/A            | 3/8/2023  | <a href="#">CalAdvocates-Liberty-2023WMP-01_Liberty_Response-03082023.pdf@berkeleyliberty.com</a> | 1                     |                  |               | WMP Pre-Submission | Administrative   | N/A          |
| 1     | CalAdvocates | 1        | CalAdvocates-Liberty-2023WMP-01 | 4            | CalAdv-01-1.4 | Provide a copy of all your confidential responses to WMP discovery requests, on the same business day that you send the documents to the issuer of the discovery request. This includes: a) Confidential responses to WMP discovery requests issued by Energy Safety. b) Confidential responses to WMP discovery requests issued by other entities.  | Liberty will provide CalAdvocates with copies of responses to 2023 WMP discovery requests made by Energy Safety and other entities.  | Aaron Louie | 2/24/2023     | N/A            | 3/8/2023  | <a href="#">CalAdvocates-Liberty-2023WMP-01_Liberty_Response-03082023.pdf@berkeleyliberty.com</a> | 1                     |                  |               | WMP Pre-Submission | Administrative   | N/A          |
| 2     | CalAdvocates | 2        | CalAdvocates-Liberty-2023WMP-02 | 1            | CalAdv-02-2.1 | Please identify and provide a copy of all quality assurance or quality control (QA/QC) reports conducted by internal entities that were completed since January 1, 2022, and that examined any programs, initiatives, or strategies described in your 2022 WMP Update.   | For Vegetation Management programs, Liberty performs a post-work documentation review, or desktop review, of 100% of vegetation management invoices in order to confirm accuracy. If satisfactory, the invoices are approved in Liberty's work management system. If not satisfactory, the invoice and supporting documents are returned to the contractor for correction. The following files related to Liberty's Post-Work Verification Procedure ("PWV") desktop review is included in the Supporting Materials email for this data request response sent to CalAdvocates through the CPUC Kiewit platform: "2022 Liberty Internal Desktop Invoice Audit Tracker". Additionally, Liberty system arborists perform post-work field validations to confirm adherence to work specifications. This includes a review to determine whether (1) adequate clearance was achieved, (2) slash and debris removal was satisfactory, (3) the inventory of the work is accurate, and (4) pruning was completed per ANSI standards. Work that is determined to be unsatisfactory is reported to the contractor to be corrected. Liberty provided additional information regarding its vegetation management QA/QC procedures in Section 8.2.5 of its 2023 WMP pre-submission. Liberty is in the process of collecting QA/QC materials completed as part of its asset inspections (O&M) program in 2022. Liberty plans to provide this information to CalAdvocates by March 17, 2023. | Aaron Louie | 2/24/2023     | 3/10/2023      | 3/10/2023 | <a href="#">CalAdvocates-Liberty-2023WMP-02_Liberty_Response-03102023.pdf@berkeleyliberty.com</a> | 6                     |                  |               | 8                  | Grid Design, operations, and maintenance (8-1) Vegetation Management (8-2) | 8.1.6, 8.2.5 |
| 2     | CalAdvocates | 2        | CalAdvocates-Liberty-2023WMP-02 | 2            | CalAdv-02-2.2 | Provide an Excel table of all defects in the year 2022 found by Energy Safety's Compliance Branch (as rows) that includes the following information in separate columns: a) Associated circuit name b) Defect type c) Description of defect d) 2022 WMP initiative (from your 2022 WMP update) associated with defect e) Date that the defect was identified f) Date that the defect was corrected g) If the defect has not yet been corrected as of the issuance date of this data request, a brief explanation. h) Priority level of corresponding corrective tag i) Geographic latitude of defect in decimal degrees, truncated to seven decimal places j) Geographic longitude of defect in decimal degrees, truncated to seven decimal places   | Liberty did not receive any Notices of Defects from Energy Safety in 2022.   | Aaron Louie | 2/24/2023     | 3/10/2023      | 3/10/2023 | <a href="#">CalAdvocates-Liberty-2023WMP-02_Liberty_Response-03102023.pdf@berkeleyliberty.com</a> | 1                     |                  |               | 8                  | Grid Design, operations, and maintenance (8-1) Vegetation Management (8-2) | 8.1.6, 8.2.5 |
| 2     | CalAdvocates | 2        | CalAdvocates-Liberty-2023WMP-02 | 3            | CalAdv-02-2.3 | Provide an Excel table of all violations in the year 2022 found by Energy Safety's Compliance Branch (as rows) that includes the following information in separate columns: a) Associated circuit name b) Violation type c) Description of violation d) 2022 WMP initiative (from your 2022 WMP update) associated with violation e) Date that the violation was identified f) Date that the violation was corrected g) If the violation has not yet been corrected as of the issuance date of this data request, a brief explanation h) Priority level of corresponding corrective tag i) Geographic latitude of violation in decimal degrees, truncated to seven decimal places j) Geographic longitude of violation in decimal degrees, truncated to seven decimal places   | Liberty did not receive any Notices of Violations from Energy Safety in 2022.  | Aaron Louie | 2/24/2023     | 3/10/2023      | 3/10/2023 | <a href="#">CalAdvocates-Liberty-2023WMP-02_Liberty_Response-03102023.pdf@berkeleyliberty.com</a> | 1                     |                  |               | 12                 | Notices of Violation and Defect  | N/A          |
| 2     | CalAdvocates | 2        | CalAdvocates-Liberty-2023WMP-02 | 4            | CalAdv-02-2.4 | Provide an Excel table of all distribution circuits existing as of January 1, 2023 (as rows) that includes the following information in separate columns: a) Circuit name b) Circuit ID number c) Total circuit miles d) Circuit miles in Non-HTD Areas e) Circuit miles in Other HTD f) Circuit miles in HTD Tier 2 g) Circuit miles in HTD Tier 3 h) Circuit voltage i) Circuit SAIDI (System Average Interruption Duration Index) for 2021 j) Circuit SAIDI (System Average Interruption Duration Index) for 2022 k) Circuit SAIFI (System Average Interruption Frequency Index) for 2021 l) Circuit SAIFI (System Average Interruption Frequency Index) for 2022 m) Circuit MAIFI (Momentary Average Interruption Frequency Index) for 2021 n) Circuit MAIFI (Momentary Average Interruption Frequency Index) for 2022 o) Total customer-minutes of de-energization on the circuit due to PPS events in 2021 (sum of customer-minutes across all PPS events). p) Total customer-minutes of de-energization on the circuit due to PPS events in 2022 (sum of customer-minutes across all PPS events). q) Total customer-minutes of de-energization on the circuit due to fast-trip settings in 2021. r) Total customer-minutes of de-energization on the circuit due to fast-trip settings in 2022. s) Number of trees that were worked on for EWM in Non-HTD in 2021 t) Number of trees that were worked on for EWM in Non-HTD in 2022 u) Number of trees that were worked on for EWM in Other HTD in 2021 v) Number of trees that were worked on for EWM in Other HTD in 2022 w) Number of trees that were worked on for EWM in HTD Tier 2 in 2021 x) Number of trees that were worked on for EWM in HTD Tier 2 in 2022 y) Number of trees that were worked on for EWM in HTD Tier 3 in 2021 z) Number of trees that were worked on for EWM in HTD Tier 3 in 2022 | Refer to supporting file: "CalAdvocates-Liberty-2023WMP-03_Liberty Response Questions 1-4," Tab Q1 - Distribution.   | Aaron Louie | 2/24/2023     | 3/10/2023      | 3/10/2023 | <a href="#">CalAdvocates-Liberty-2023WMP-03_Liberty_Response-03102023.pdf@berkeleyliberty.com</a> | 1                     |                  |               | 12                 | Notices of Violation and Defect  | N/A          |
| 3     | CalAdvocates | 3        | CalAdvocates-Liberty-2023WMP-03 | 1            | CalAdv-03-1.1 | Provide an Excel table of all transmission circuits existing as of January 1, 2023 (as rows) that includes the following information in separate columns: a) Circuit name b) Circuit ID number c) Total circuit miles d) Circuit miles in Non-HTD Areas e) Circuit miles in Other HTD f) Circuit miles in HTD Tier 2 g) Circuit miles in HTD Tier 3 h) Circuit voltage i) Total customer-minutes of de-energization on the circuit due to PPS events in 2021 (sum of customer-minutes across all PPS events). j) Total customer-minutes of de-energization on the circuit due to PPS events in 2022 (sum of customer-minutes across all PPS events). k) Total customer-minutes of de-energization on the circuit due to fast-trip settings in 2021. l) Total customer-minutes of de-energization on the circuit due to fast-trip settings in 2022. m) Number of support structures replaced in Non-HTD in 2021 n) Number of support structures replaced in Non-HTD in 2022 o) Number of support structures replaced in Other HTD in 2021 p) Number of support structures replaced in Other HTD in 2022 q) Number of support structures replaced in HTD Tier 2 in 2021 r) Number of support structures replaced in HTD Tier 2 in 2022 s) Number of support structures replaced in HTD Tier 3 in 2021 t) Number of support structures replaced in HTD Tier 3 in 2022 u) Miles of LIDAR inspection in Non-HTD in 2021 v) Miles of LIDAR inspection in Non-HTD in 2022 w) Miles of LIDAR inspection in Other HTD in 2021 x) Miles of LIDAR inspection in Other HTD in 2022 y) Miles of LIDAR inspection in HTD Tier 2 in 2021 z) Miles of LIDAR inspection in HTD Tier 2 in 2022   | Refer to supporting file: "CalAdvocates-Liberty-2023WMP-03_Liberty Response Questions 1-4," Tab Q2 - Transmission.   | Aaron Louie | 2/24/2023     | 3/24/2023      | 3/29/2023 | <a href="#">CalAdvocates-Liberty-2023WMP-03_Liberty_Response-03292023.pdf@berkeleyliberty.com</a> | 1                     |                  |               | 5,6                | Electrical Infrastructure  | 5.2, 6.4.2   |
| 3     | CalAdvocates | 3        | CalAdvocates-Liberty-2023WMP-03 | 2            | CalAdv-03-1.2 | Provide an Excel table of all transmission circuits existing as of January 1, 2023 (as rows) that includes the following information in separate columns: a) Circuit name b) Circuit ID number c) Total circuit miles d) Circuit miles removed or decommissioned in Non-HTD Areas e) Circuit miles removed or decommissioned in Other HTD f) Circuit miles removed or decommissioned in HTD Tier 2 g) Circuit miles removed or decommissioned in HTD Tier 3 h) Reason(s) for removal or decommissioning.   | Refer to supporting file: "CalAdvocates-Liberty-2023WMP-03_Liberty Response Questions 1-4," Tab Q3 - Distribution Removals.  | Aaron Louie | 2/24/2023     | 3/24/2023      | 3/29/2023 | <a href="#">CalAdvocates-Liberty-2023WMP-03_Liberty_Response-03292023.pdf@berkeleyliberty.com</a> | 1                     |                  |               | 5,6                | Electrical Infrastructure  | 5.2, 6.4.3   |
| 3     | CalAdvocates | 3        | CalAdvocates-Liberty-2023WMP-03 | 3            | CalAdv-03-1.3 | Provide an Excel table of all transmission circuits existing as of January 1, 2022, that were removed or decommissioned in 2022, either partially or entirely (as rows). This includes permanent removal, removal of overhead lines that were moved underground, or overhead lines that were decommissioned but not physically removed. Include the following information in separate columns: a) Circuit name b) Circuit ID number c) Circuit miles removed or decommissioned in Non-HTD Areas d) Circuit miles removed or decommissioned in Other HTD e) Circuit miles removed or decommissioned in HTD Tier 2 f) Circuit miles removed or decommissioned in HTD Tier 3 g) Reason(s) for removal or decommissioning.   | Refer to supporting file: "CalAdvocates-Liberty-2023WMP-03_Liberty Response Questions 1-4," Tab Q4 - Transmission Removals.  | Aaron Louie | 2/24/2023     | 3/24/2023      | 3/29/2023 | <a href="#">CalAdvocates-Liberty-2023WMP-03_Liberty_Response-03292023.pdf@berkeleyliberty.com</a> | 1                     |                  |               | 8                  | Line Removal   | 8.1.2.9      |
| 3     | CalAdvocates | 3        | CalAdvocates-Liberty-2023WMP-03 | 4            | CalAdv-03-1.4 | For each WMP initiative listed below, please state how the modeled Wildfire Risk Scores for each circuit or circuit-segment influenced where you performed work in 2022. a) Vegetation management (VM) b) Covered conductor installation c) Undergrounding d) Distribution pole replacement e) Grid sectionalization f) Detailed inspections of distribution assets g) Detailed inspections of transmission assets h) Aerial inspections of distribution assets i) Aerial inspections of transmission assets j) LIDAR inspections of distribution assets k) LIDAR inspections of transmission assets   | Liberty did not perform overall wildfire risk scores at the circuit or circuit segment level that influenced where it performed work in 2022. Work performed in 2022 was planned using separate risk analysis, compliance requirements, and/or subject matter expertise. Liberty is evaluating the results of differing wildfire risk assessments at the circuit and/or circuit segment level to plan and prioritize where it performs future work in 2024. For additional information, refer to Section 6.7, Section 7.1.3, Section 7.1.4, and individual initiative subsections in Section 8 of Liberty's 2023 WMP pre-submission.   | Aaron Louie | 2/24/2023     | 3/24/2023      | 3/29/2023 | <a href="#">CalAdvocates-Liberty-2023WMP-03_Liberty_Response-03292023.pdf@berkeleyliberty.com</a> | 1                     |                  |               | 8                  | Line removal   | 8.1.2.9      |
| 3     | CalAdvocates | 3        | CalAdvocates-Liberty-2023WMP-03 | 5            | CalAdv-03-1.5 | For each WMP initiative listed below, please state how the modeled Wildfire Risk Scores for each circuit or circuit-segment influenced how work in 2022 was sequenced. a) VM b) Covered conductor installation c) Undergrounding d) Distribution pole replacement e) Grid sectionalization f) Detailed inspections of distribution assets g) Detailed inspections of transmission assets h) Aerial inspections of distribution assets i) Aerial inspections of transmission assets j) LIDAR inspections of distribution assets k) LIDAR inspections of transmission assets   | Liberty did not perform overall wildfire risk scores at the circuit or circuit segment level that influenced how work was sequenced in 2022. Work performed in 2022 was planned using separate risk analysis, compliance requirements, and/or subject matter expertise. Liberty is evaluating the results of differing wildfire risk assessments at the circuit and/or circuit segment level to plan and prioritize how future work is sequenced in 2024. For additional information, refer to Section 6.7, Section 7.1.3, Section 7.1.4, and individual initiative subsections in Section 8 of Liberty's 2023 WMP pre-submission.   | Aaron Louie | 2/24/2023     | 3/24/2023      | 3/29/2023 | <a href="#">CalAdvocates-Liberty-2023WMP-03_Liberty_Response-03292023.pdf@berkeleyliberty.com</a> | 1                     |                  |               | 6                  | Risk Scoring   | N/A          |
| 3     | CalAdvocates | 3        | CalAdvocates-Liberty-2023WMP-03 | 6            | CalAdv-03-1.6 | For each WMP initiative listed below, please state how the modeled Wildfire Risk Scores for each circuit or circuit-segment influenced where you plan to perform work in 2023. a) VM b) Covered conductor installation c) Undergrounding d) Distribution pole replacement e) Grid sectionalization f) Detailed inspections of distribution assets g) Detailed inspections of transmission assets h) Aerial inspections of distribution assets i) Aerial inspections of transmission assets j) LIDAR inspections of distribution assets k) LIDAR inspections of transmission assets   | Liberty did not perform overall wildfire risk scores at the circuit or circuit segment level that influenced where it performed work in 2023. Work performed in 2023 was planned using separate risk analysis, compliance requirements, and/or subject matter expertise. Liberty is evaluating the results of differing wildfire risk assessments at the circuit and/or circuit segment level to plan and prioritize where it performs future work in 2024. For additional information, refer to Section 6.7, Section 7.1.3, Section 7.1.4, and individual initiative subsections in Section 8 of Liberty's 2023 WMP pre-submission.   | Aaron Louie | 2/24/2023     | 3/24/2023      | 3/29/2023 | <a href="#">CalAdvocates-Liberty-2023WMP-03_Liberty_Response-03292023.pdf@berkeleyliberty.com</a> | 1                     |                  |               | 6                  | Risk Scoring   | N/A          |
| 3     | CalAdvocates | 3        | CalAdvocates-Liberty-2023WMP-03 | 7            | CalAdv-03-1.7 | For each WMP initiative listed below, please state how the modeled Wildfire Risk Scores for each circuit or circuit-segment influenced where you plan to perform work in 2023. a) VM b) Covered conductor installation c) Undergrounding d) Distribution pole replacement e) Grid sectionalization f) Detailed inspections of distribution assets g) Detailed inspections of transmission assets h) Aerial inspections of distribution assets i) Aerial inspections of transmission assets j) LIDAR inspections of distribution assets k) LIDAR inspections of transmission assets   | Liberty did not perform overall wildfire risk scores at the circuit or circuit segment level that influenced where it performed work in 2023. Work performed in 2023 was planned using separate risk analysis, compliance requirements, and/or subject matter expertise. Liberty is evaluating the results of differing wildfire risk assessments at the circuit and/or circuit segment level to plan and prioritize where it performs future work in 2024. For additional information, refer to Section 6.7, Section 7.1.3, Section 7.1.4, and individual initiative subsections in Section 8 of Liberty's 2023 WMP pre-submission.   | Aaron Louie | 2/24/2023     | 3/24/2023      | 3/29/2023 | <a href="#">CalAdvocates-Liberty-2023WMP-03_Liberty_Response-03292023.pdf@berkeleyliberty.com</a> | 1                     |                  |               | 6                  | Risk Scoring   | N/A          |



|              |   |                                 |   |   |  |   |                 |           |           |   |   |   |  |         |
|--------------|---|---------------------------------|---|---|--|---|-----------------|-----------|-----------|---|---|---|--|---------|
|              |   |                                 |   | Regarding your PSPS circuit modeling capabilities: a) Please describe your present circuit modeling capabilities with regard to PSPS decision-making ("PSPS circuit modeling capabilities") including what level of granularity they are able to determine how circuit hardening efforts or other changes to a line segment will affect PSPS thresholds. b) Please describe any improvements to the present PSPS circuit modeling capabilities that you expect to implement in 2023. c) Please describe any improvements to the present PSPS circuit modeling capabilities that you expect to implement in 2024. d) Please describe the expected state of your PSPS circuit modeling capabilities at the conclusion of the 2023-2025 WMP cycle. | a) Liberty's 2023 WMP section 6.2 includes the baseline PSPS risk analyses and assessment performed at the beginning of this year by circuit. The PSPS risk decision-making framework has not been developed and the model inputs currently do not incorporate grid hardening efforts and a static study. The decision-making framework would have to consider current PSPS methods affecting each circuit and any current PSPS mitigation controls in place would also need to be factored in and calculated separately to support any proposed changes to PSPS thresholds. This would result in a more refined baseline PSPS baseline risk assessment. Liberty does not have plans to track the performance of PSPS mitigations nor improve its current PSPS circuit model capabilities. Measuring PSPS risk reduction would require tracking circuit segments with PSPS mitigations observed such as covered conductors, installed Sensitive Relays, grid controls to divert electricity flow to other lines, and Microgrids at the specific GIS location in order to monitor and assess current PSPS thresholds and forecast outage events during fire season. Current data limitations and root causes of outage events are not monitored at the specific asset level. b) See response to Question 5, part (a). c) See response to Question 5, part (a). d) Liberty's 2023 WMP pre-submission Section 6.7 and Table 6-9 includes Liberty risk assessment improvement plan for 2023-2025, including Liberty's data ingestion of asset and vegetation performance tracking with real time data analytics to effectively measure risk reduction it relates to wildfire risk. Liberty could also integrate PSPS mitigation measures as part of its enterprise risk management solution. | Aaron Loue  | 2/24/2023       | 4/19/2023 | 4/26/2023 | CalAdvocatesLiberty-2023WMP-06_Liberty_Response-04262023.pdf (libertyutilities.com) |   |   |  |         |
| CalAdvocates | 6 | CalAdvocates-Liberty-2023WMP-06 | 5 | CalAdv-06-6.5   | Identify any ignitions in 2022 associated with assets where you had an existing corrective notification at the time of the ignition. Please provide a spreadsheet listing each such ignition (as rows) with the following information in separate columns: a) Unique Ignition ID b) Date of ignition c) Cause of ignition d) Type of asset associated with the ignition e) Acres burned f) Number of structures burned if any g) Number of injuries associated with ignition if any h) Asset ID of asset associated with ignition i) Circuit ID number of circuit associated with ignition j) Notification number(s) for the existing corrective notification on the asset in question k) Priority level of the existing corrective notification on the asset in question  | Liberty did not have any ignitions in 2022 associated with assets where it had an existing corrective notification at the time of the ignition  | Aaron Loue      | 2/24/2023 | 4/19/2023 | 4/26/2023   | CalAdvocatesLiberty-2023WMP-06_Liberty_Response-04262023.pdf (libertyutilities.com) | 6 | Risk Analysis Framework (6.2)                  | N/A     |
| CalAdvocates | 6 | CalAdvocates-Liberty-2023WMP-06 | 6 | CalAdv-06-6.6   | Page 55 of Liberty WMP states, "Liberty has not conducted a wildfire risk assessment using the 85th percentile consequence calculation." a) Why hasn't Liberty conducted a wildfire risk assessment using the 85th percentile consequence calculation? b) What other wildfire risk assessments has Liberty conducted instead?  | a) In its 2023 WMP, Liberty provides a map in Figure 5-11 showing its service territory overlaid with the Social Vulnerability Index (SVI) and its current Resilient Wildfire Risk Program. Liberty provides an additional map in Appendix C of its 2023 WMP showing the SVI distribution. Liberty's updated wildfire risk analysis in its 2023 WMP, and major roads. Due to increased risk modeling requirements in the Office of Energy Infrastructure Safety (OEIS) 2023-2025 WMP Technical Guidelines, Liberty did not have enough time to analyze the intersection of the SVI and the 85th percentile of wildfire consequence risk according to Liberty's updated wildfire risk modeling results. b) Refer to Section 6 of Liberty's 2023 WMP.   | Aaron Loue      | 2/24/2023 | 4/19/2023 | 4/26/2023   | CalAdvocatesLiberty-2023WMP-06_Liberty_Response-04262023.pdf (libertyutilities.com) | 8 | Grid Design, operations, and maintenance (8.1) | 8.1.2   |
| CalAdvocates | 7 | CalAdvocates-Liberty-2023WMP-07 | 1 | CalAdv-07-7.1   | Page 57 of Liberty's WMP states: Survey reports produced by CAL FIRE identified 10 sub-divisions in South Lake Tahoe with no secondary egress, and one with limited egress. These sub-divisions consist mostly of single-family homes on flat land, surrounded by grass, trees, brush, and timber. In Placer County, CAL FIRE identified 21 subdivisions with no secondary egress, and three with limited egress. These areas include a mix of single-family homes, townhomes, and duplexes surrounded by similar vegetation, but the topography varies from flat land to slopes, ridges, and canyons. All 33 subdivisions were categorized by CAL FIRE as "Very High" Fire Hazard Severity Zones. a) Do Liberty's PSPS and wildfire risk analyses consider whether a location has no secondary egress or limited egress? b) If the answer to part (a) is yes, please explain how your risk analyses address limited egress. c) What actions did Liberty take during the 2020-2022 WMP cycle to reduce wildfire risk for the subdivisions mentioned in the quote above? d) What actions does Liberty plan to take during the 2023-2025 WMP cycle to reduce wildfire risk for the subdivisions mentioned in the quote above?  | a) No. b) N/A. c) Liberty completed mitigation actions during the 2020-2022 WMP cycle in limited egress areas throughout its service territory. Mitigation actions were driven by existing decision-making processes and risk analysis that did not consider egress. For an example of mitigation actions completed during the 2020-2022 WMP cycle in limited egress areas, refer to supporting materials: "CalAdvocates-Liberty-2023WMP-07_Liberty_Response-05232023.pdf" d) During the 2023-2025 WMP cycle, Liberty will continue to perform mitigation work across its service territory. Mitigation actions will be driven by the decision-making processes and risk analyses detailed in Liberty's 2023 WMP and in subsequent WMP submissions. Liberty may consider incorporating limited egress into wildfire risk analysis in future years so that the risk can be quantified.   | Talal Harahsheh | 5/18/2023 | 5/23/2023 | 5/23/2023   | CalAdvocatesLiberty-2023WMP-07_Liberty_Response-05232023.pdf (libertyutilities.com) | 5 | Community Values at Risk (5.4)                 | 5.4.3.2 |
| CalAdvocates | 7 | CalAdvocates-Liberty-2023WMP-07 | 2 | CalAdv-07-7.2   | Page 60 of Liberty's WMP states, "Absentee landlords make notification requirements and coordination for O&M activities difficult, sometimes resulting in delayed activities or their cancellation entirely." a) Please describe what methods or strategies Liberty has adopted to alleviate the problem noted above. b) Please describe Liberty's method of maintaining accurate and up-to-date contact information for homeowners and renters in its service territory. c) Please describe Liberty's public communication strategy to inform homeowners and renters in its service territory when O&M activities are to be expected?   | a) Liberty uses a variety of methods for notifying customers of O&M activities: • Door hangers • Sign boards • Mailed letters or postcards • Social media posts • Email • Bill inserts • Everbridge text notification • Door to door in person notification attempts • Phone call notification attempts b) Customer Service Representatives (CSRs) are required to verify customer information including telephone number, email, and mailing address. This expectation is reviewed through the Call Quality Program in which "verifies customer information according to Liberty standards" is one component of the screenshot. c) Refer to Response 3a.   | Talal Harahsheh | 5/18/2023 | 5/23/2023 | 5/23/2023   | CalAdvocatesLiberty-2023WMP-07_Liberty_Response-05232023.pdf (libertyutilities.com) | 5 | Community Values at Risk (5.4)                 | 5.4.3.3 |
| CalAdvocates | 7 | CalAdvocates-Liberty-2023WMP-07 | 3 | CalAdv-07-7.3   | Page 60 of Liberty's WMP states, "Liberty is currently working with the [ Tahoe Regional Planning Agency] to update an existing memorandum of understanding ("MOU") for O&M activities to allow minor repairs, replacements and vegetation maintenance to be completed without agency review and approval." a) To date, has Liberty executed an updated memorandum of understanding with Tahoe Regional Planning Agency? b) If the answer to part (a) above is "no," please describe the status of developing an updated memorandum of understanding and the projected timeline to execute it.   | a) No. b) Liberty is in the process of executing an MOU with TRPA. The draft MOU is currently being reviewed by TRPA legal counsel and will then be sent back to Liberty for additional review.   | Talal Harahsheh | 5/18/2023 | 5/23/2023 | 5/23/2023   | CalAdvocatesLiberty-2023WMP-07_Liberty_Response-05232023.pdf (libertyutilities.com) | 5 | Community Values at Risk (5.4)                 | 5.4.5   |
| CalAdvocates | 7 | CalAdvocates-Liberty-2023WMP-07 | 4 | CalAdv-07-7.4   | Page 64 of Liberty's WMP states: Although the current approach provides significant advancements over earlier efforts, it was neither reasonable nor feasible to conduct all the calculations and analyses provided in the 2023-2025 Wildfire Mitigation Plan Technical Guidelines ("Technical Guidelines") prior to Liberty's 2023 WMP submission. Liberty, however, is committed to continuing to evolve and improve its risk modeling practices and intends to conduct the analyses and calculations described in the Technical Guidelines, to the extent possible, as part of future work. a) Please identify each calculation or analysis provided in the 2023-2025 WMP Technical Guidelines that Liberty has not yet conducted. b) For each item listed in response to part (a), identify the resource constraint(s) that hindered completion prior to Liberty's 2023 WMP submission. c) For each item listed in response to part (a), state when Liberty anticipates completing it.   | a) Refer to Liberty's 2023 WMP for the analysis that Liberty completed in advance of its 2023 WMP submission. Refer to the OEIS 2023-2025 Wildfire Mitigation Plan Technical Guidelines for the calculations and analyses provided in the guidelines. b) OEIS released its final 2023-2025 WMP Technical Guidelines on December 6, 2022. In late January 2023, Liberty executed an agreement with Technosys to provide wildfire risk analysis relating to "Wildfire Risk Reduction Model" ("WRM"). Liberty received its first analytics package with the results from WRM in late February 2023. Additionally, in late January 2023, Liberty signed a formal agreement with Dreyfus to pilot its asset risk decision making solution to be incorporated, in part, in Liberty's 2023 WMP. Liberty's 2023 WMP submission was submitted to OEIS on March 6, 2023. This time was a limiting factor in completing additional analyses contained in the OEIS 2023-2025 WMP Technical Guidelines. c) Liberty anticipates completing additional analyses contained in the OEIS 2023-2025 WMP Technical Guidelines during the 2023-2025 WMP cycle.   | Talal Harahsheh | 5/18/2023 | 5/23/2023 | 5/23/2023   | CalAdvocatesLiberty-2023WMP-07_Liberty_Response-05232023.pdf (libertyutilities.com) | 5 | Community Values at Risk (5.4)                 | 5.4.5   |
| CalAdvocates | 7 | CalAdvocates-Liberty-2023WMP-07 | 5 | CalAdv-07-7.5   | Page 70 of Liberty's WMP states that social vulnerability, physical vulnerability, and coping capabilities are not factors currently included in the wildfire risk analysis though Liberty intends to incorporate these factors in its future risk modeling process. a) When Liberty eventually incorporates the factor "physical vulnerability" within future wildfire risk analyses, what attributes/characteristics would Liberty utilize to define "physical vulnerability"? b) What data does Liberty currently maintain or collect to measure physical vulnerability? c) When Liberty eventually incorporates the factor "social vulnerability" within future wildfire risk analyses, what attributes/characteristics would Liberty utilize to define "social vulnerability"? d) What data does Liberty currently maintain or collect to measure social vulnerability?   | a) Liberty has not determined all attributes/characteristics it will utilize to define physical vulnerability. Liberty considers Medical Baseline (MBL) and some Access and Functional Needs (AFN) customers as physically vulnerable. In future wildfire risk analysis, Liberty can assign weights to different customer categories (i.e., AFN/MBL, Commercial, Residential, Critical Facilities) based on physical vulnerability. b) Liberty maintains a list of MBL customers and self-identified AFN customers. c) Liberty has not determined all attributes/characteristics it will utilize to define social vulnerability. Liberty considers some AFN customers as socially vulnerable (i.e., CARE customers). Additionally, in its 2023 WMP, Liberty provides a map in Figure 5-11 showing its service territory overlaid with the Social Vulnerability Index (SVI) and its current Resilient Wildfire Risk Program. Liberty provides an additional map in Appendix C of its 2023 WMP showing the SVI distribution. Liberty's updated wildfire risk analysis in its 2023 WMP, and major roads. d) Liberty maintains a list of self-identified AFN customers. Liberty also analyzed the Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry's Social Vulnerability Index dataset. | Talal Harahsheh | 5/18/2023 | 5/23/2023 | 5/23/2023   | CalAdvocatesLiberty-2023WMP-07_Liberty_Response-05232023.pdf (libertyutilities.com) | 6 | Risk Methodology and Assessment                | 6       |
| CalAdvocates | 7 | CalAdvocates-Liberty-2023WMP-07 | 6 | CalAdv-07-7.6   | Please provide an Excel sheet listing of each sustained outage that was caused by equipment failure for the period from 2020 to 2022 in any HTD area. A sustained outage is an outage that lasts for five or more minutes. The Excel sheet should list each outage as a row, with the following information in columns: a) ID number of the circuit affected. b) Name of the circuit affected. c) Date of the outage. d) Cause of the outage. e) Conductor type at the location where the fault occurred (e.g., overhead [OH] bare conductor, overhead covered conductor, underground [UG] cable). f) For all equipment failure outages, please state the specific type of failure (i.e., OH transformer failure, cross arm, UG transformer failure, cable failure, conductor failure etc.). g) The outage duration in minutes. h) Total number of customers impacted.   | Refer to supporting file: "CalAdvocates-Liberty-2023WMP-08_Liberty_Response-05232023.pdf"   | Talal Harahsheh | 5/18/2023 | 5/23/2023 | 5/23/2023   | CalAdvocatesLiberty-2023WMP-08_Liberty_Response-05232023.pdf (libertyutilities.com) | 6 | Risk Methodology and Assessment                | 6.2     |
| CalAdvocates | 8 | CalAdvocates-Liberty-2023WMP-08 | 1 | CalAdv-08-8.1   | Page 70 of Liberty's WMP states that social vulnerability is not a factor currently included in Liberty's wildfire risk analysis, though Liberty intends to incorporate it in its future risk modeling process. a) Please identify the constraint(s) that hindered the incorporation of social vulnerability prior to Liberty's 2023 WMP submission. b) State when Liberty anticipates being able to include social vulnerability as part of Liberty's risk modeling process. c) In which year of this WMP cycle does Liberty plan on being able to include social vulnerability in its future risk modeling process?  | a) With the final 2023 WMP technical guidelines issued approximately three months prior to submission of the 2023 WMP, Liberty was not able to incorporate social vulnerability into its 2023 WMP submission due to time constraints. b) Liberty plans to incorporate social vulnerability considerations in 2024 and report on this enhancement in its future WMP filings. c) See Response 3b.   | Talal Harahsheh | 5/18/2023 | 5/23/2023 | 5/25/2023   | CalAdvocatesLiberty-2023WMP-08_Liberty_Response-05252023.pdf (libertyutilities.com) | 8 | Grid Design, operations, and maintenance (8.1) |         |
| CalAdvocates | 9 | CalAdvocates-Liberty-2023WMP-09 | 1 | CalAdv-09-9.1   | Page 70 of Liberty's WMP states that physical vulnerability is not a factor currently included in Liberty's wildfire risk analysis, though Liberty intends to incorporate it in its future risk modeling process. a) Please identify the constraint(s) that hindered the incorporation of physical vulnerability prior to Liberty's 2023 WMP submission. b) State when Liberty anticipates being able to include physical vulnerability as part of Liberty's risk modeling process. c) In which year of this WMP cycle does Liberty plan on being able to include physical vulnerability in its future risk modeling process?  | a) Liberty's current fire science consultant, Dr. Chris Luterdorfer, has advised Liberty that there is currently no validated generalized methodology that relates physical characteristics of structures to their survivability in wildland fires. Put differently, it is Liberty's understanding that fragility curves to quantify a structure's probability of being damaged or destroyed in a fire based on its physical characteristics do not exist. b) Liberty intends to incorporate physical vulnerability into its risk modeling when generalized and validated fragility curves, or comparable approaches, have been developed and validated by the fire science community. c) See Response 2b.  | Talal Harahsheh | 5/26/2023 | 6/1/2023  | 6/1/2023  | CalAdvocatesLiberty-2023WMP-09_Liberty_Response-06012023.pdf (libertyutilities.com) | 6 | Risk Methodology and Assessment                | 6.2     |
| CalAdvocates | 9 | CalAdvocates-Liberty-2023WMP-09 | 2 | CalAdv-09-9.2   | Page 70 of Liberty's WMP states that coping capability is not a factor currently included in Liberty's wildfire risk analysis, though Liberty intends to incorporate it in its future risk modeling process. a) Please identify the constraint(s) that hindered the incorporation of coping capability prior to Liberty's 2023 WMP submission. b) State when Liberty anticipates being able to include coping capability as part of Liberty's risk modeling process. c) In which year of this WMP cycle does Liberty plan on being able to include coping capability in its future risk modeling process?  | a) With the WMP technical guidelines issued approximately 3 months prior to submission of the WMP completeness check, Liberty was not able to incorporate coping capacity into its 2023 WMP submission due to time constraints. b) Liberty plans to incorporate coping capacity in 2024 and report on this enhancement in its future WMP filings. c) See Response 3b.   | Talal Harahsheh | 5/26/2023 | 6/1/2023  | 6/1/2023  | CalAdvocatesLiberty-2023WMP-09_Liberty_Response-06012023.pdf (libertyutilities.com) | 6 | Risk Methodology and Assessment                | 6.2     |
| CalAdvocates | 9 | CalAdvocates-Liberty-2023WMP-09 | 3 | CalAdv-09-9.3   | Page 70 of Liberty's WMP states the following factors are included as part of Liberty's wildfire risk analysis: Equipment/assets, Topography, Weather, Vegetation, Climate change, Assets at risk, and Fire ignition and spread. Please explain how each of these factors impacts Liberty's quantification of risk at the circuit level. a) Equipment/assets b) Topography c) Weather d) Vegetation e) Climate change f) Assets at risk g) Fire ignition and spread  | a) Equipment/assets: GIS data are used to construct an ignition buffer surrounding Liberty's equipment and assets for use in fire spread modeling. b) Topography: Topography is an input to Liberty's fire spread modeling. c) Weather: Weather is an input to Liberty's fire spread modeling. d) Vegetation: Vegetation is an input to Liberty's fire spread modeling. e) Climate change: Liberty conducted climate-adjusted fire spread modeling. f) Assets at risk: Assets at risk are considered when quantifying fire consequence. g) Fire Ignition and Spread: A fire spread model that considers fire ignition and spread forms the basis of Liberty's fire risk modeling.   | Talal Harahsheh | 5/26/2023 | 6/1/2023  | 6/1/2023  | CalAdvocatesLiberty-2023WMP-09_Liberty_Response-06012023.pdf (libertyutilities.com) | 6 | Risk Methodology and Assessment                | 6.2     |
| CalAdvocates | 9 | CalAdvocates-Liberty-2023WMP-09 | 4 | CalAdv-09-9.4   | Page 70 of Liberty's WMP states the following factors are included as part of Liberty's wildfire risk analysis: Equipment/assets, Topography, Weather, Vegetation, Climate change, Assets at risk, and Fire ignition and spread. a) For each factor listed above, does Liberty have any review procedures in place to verify the accuracy of changes in the quantification of risk from one year to the next? b) If the answer to part (a) above is yes, please provide a description of how Liberty updates the quantification of risk for each factor listed each year. c) Please provide what data sources Liberty uses to verify change in the quantification of risk for each factor listed above.  | a) For the reasons stated below, no formal processes are currently in place to verify the accuracy of changes in the quantification of risk related to the following factors: • Equipment/assets: Liberty maintains internal GIS data for its equipment and assets. • Topography, weather, vegetation, climate change, assets at risk: Liberty is an end user – not a developer – of these datasets that serve as inputs to its fire spread modeling. In all cases, Liberty uses open source, widely used, and industry standard data developed by authoritative federal and state agencies. • Fire ignition and spread: Liberty uses a peer-reviewed open-source fire spread model for modeling ignition and spread. This same model is also used to forecast the spread of most large fires in the United States in real time under funding from the US Forest Service with its accuracy continuously being assessed and improved. b) N/A. c) N/A.  | Talal Harahsheh | 5/26/2023 | 6/1/2023  | 6/1/2023  | CalAdvocatesLiberty-2023WMP-09_Liberty_Response-06012023.pdf (libertyutilities.com) | 6 | Risk Methodology and Assessment                | 6.2     |
| CalAdvocates | 9 | CalAdvocates-Liberty-2023WMP-09 | 5 | CalAdv-09-9.5   | Page 71 of Liberty's WMP states that "Finally, Liberty also does not consider burn probability from fires caused by sources other than utilities as the Technical Guidelines." a) Please identify the constraint(s) that hindered the incorporation of burn probability from fires caused by sources other than utilities.   | Liberty's fire risk modeling currently addresses only fires caused by its infrastructure. Impacts from other fires to Liberty's system is a grid resiliency issue that Liberty may address in the future after its utility-caused fire risk modeling has matured.   | Talal Harahsheh | 5/26/2023 | 6/1/2023  | 6/1/2023  | CalAdvocatesLiberty-2023WMP-09_Liberty_Response-06012023.pdf (libertyutilities.com) | 6 | Risk Methodology and Assessment                | 6.2     |
| CalAdvocates | 9 | CalAdvocates-Liberty-2023WMP-09 | 6 | CalAdv-09-9.6   | Page 81 of Liberty's WMP states "Overall utility risk is calculated by circuit from wildfire risk and PSPS risk, with an 80% weight to wildfire risk and 20% to PSPS risk." a) Please explain how Liberty arrived at the above-mentioned specific weighting of wildfire risk and PSPS risk. b) Has Liberty consulted with any agencies, universities, research groups, or other entities on the calculation of the above-mentioned weighting of wildfire risk and PSPS risk? Please list those entities, if so.  | The sentence "Overall utility risk is calculated by circuit from wildfire risk and PSPS risk, with an 80% weight to wildfire risk and 20% to PSPS risk" contains a typographical error. It should read "Overall utility risk is calculated by summing wildfire risk and PSPS risk by circuit." The statement about 80/20 weighting was inadvertently left in Liberty's 2023 WMP from a previous draft.  | Talal Harahsheh | 5/26/2023 | 6/1/2023  | 6/1/2023  | CalAdvocatesLiberty-2023WMP-09_Liberty_Response-06012023.pdf (libertyutilities.com) | 6 | Risk Methodology and Assessment                | 6.2     |
| CalAdvocates | 9 | CalAdvocates-Liberty-2023WMP-09 | 7 | CalAdv-09-9.7   | Page 81 of Liberty's WMP states "Overall utility risk is calculated by circuit from wildfire risk and PSPS risk, with an 80% weight to wildfire risk and 20% to PSPS risk." a) Please explain how Liberty arrived at the above-mentioned specific weighting of wildfire risk and PSPS risk. b) Has Liberty consulted with any agencies, universities, research groups, or other entities on the calculation of the above-mentioned weighting of wildfire risk and PSPS risk? Please list those entities, if so.  | The sentence "Overall utility risk is calculated by summing wildfire risk and PSPS risk by circuit." The statement about 80/20 weighting was inadvertently left in Liberty's 2023 WMP from a previous draft.  | Talal Harahsheh | 5/26/2023 | 6/1/2023  | 6/1/2023  | CalAdvocatesLiberty-2023WMP-09_Liberty_Response-06012023.pdf (libertyutilities.com) | 6 | Risk Methodology and Assessment                | 6.2     |

|              |    |                                 |    |               |   |  |                |           |          |          |   |     |  |       |
|--------------|----|---------------------------------|----|---------------|---|--|----------------|-----------|----------|----------|---|-----|--|-------|
| CalAdvocates | 9  | CalAdvocates-Liberty-2023WMP-09 | 8  | CalAdv-09-8   | <p>Page 96 of Liberty's WMP presents Table 6-7, Liberty Top-Risk Circuits, which provides risk scores for Liberty's top 20 risk-contributing circuits. With this context:</p> <p>a) Does Liberty sequence its top risk circuit projects one by one according to the risk ranking or does Liberty work on multiple top risk circuit projects simultaneously?</p> <p>b) On how many of the top 20 risk-contributing circuits will Liberty complete grid design and system hardening projects for wildfire mitigation during the 2023-2025 WMP cycle?</p> <p>c) Does Liberty use estimates of expected risk reduction to determine the sequence of mitigation work conducted on its top risk circuits?</p> <p>d) If the answer to part (c) is no, why not?</p>   | <p>a) Liberty works on multiple circuits simultaneously.</p> <p>b) Liberty plans to conduct grid design and system hardening work on 16 of the top 20 risk-contributing circuits in 2023.</p> <p>c) No.</p> <p>d) As stated in Section 7.2.2.3 of its 2023 WMP, Liberty does not yet have sufficient information to calculate the risk reductions for top risk circuits and plans to develop an approach in 2023. Refer to Section 7.2.2.1 of Liberty's 2023 WMP for Liberty's estimated timeline to develop the baseline risk of assets falling in service given historic outage events by type to calculate the likelihood of the risk events in future with the planned mitigations corresponding to the events to estimate risk reduction.</p>   | Talal Harashsh | 5/26/2023 | 6/1/2023 | 6/1/2023 | CalAdvocates-Liberty-2023WMP-09_Liberty_Response_06012023.pdf (libertyvillages.com) | 6   | Risk Methodology and Assessment                | 6.4   |
| CalAdvocates | 9  | CalAdvocates-Liberty-2023WMP-09 | 9  | CalAdv-09-9   | <p>Page 96 of Liberty's WMP presents Table 6-7, Liberty Top-Risk Circuits, which provides risk scores for Liberty's top 20 risk-contributing circuits. Please provide an Excel table that supplements Table 6-7 with information about planned wildfire mitigation measures on each circuit during the 2023-2025 WMP cycle. Specifically, the table should address the following:</p> <p>a) Brief description of grid design and system hardening work planned for wildfire mitigation purposes in 2023-2025 (for example: 2.0 miles of undergrounding, 1.0 miles of covered conductor installation, and installation of 3 new reclosers on this circuit).</p> <p>b) The month and year when Liberty began project planning for the work identified in part (a).</p> <p>c) The month and year when Liberty began construction or plans to begin construction of the work identified in part (a).</p> <p>d) The month and year when Liberty currently plans to complete the project(s) identified in part (a).</p> <p>e) Brief description of other wildfire mitigation measures planned in 2023-2025.</p> <p>f) Timeline for completion of the work identified in the previous part.</p>  | <p>Refer to file: CalAdvocates-Liberty-2023WMP-09_Liberty_Response_Question_9</p>  | Talal Harashsh | 5/26/2023 | 6/1/2023 | 6/1/2023 | CalAdvocates-Liberty-2023WMP-09_Liberty_Response_06012023.pdf (libertyvillages.com) | 6   | Risk Methodology and Assessment                | 6.4   |
| CalAdvocates | 9  | CalAdvocates-Liberty-2023WMP-09 | 10 | CalAdv-09-10  | <p>Pages 104-105 of Liberty's WMP states:</p> <p>In late January 2023, Liberty signed a formal agreement with Dreyer to pilot its asset risk decision-making solution to be incorporated, in part, in this WMP. If the pilot is successful, the pilot asset type and protection effective decision-making tools. Liberty will continue building out the risk-informed decision-making tools for multiple assets to better plan future investments and repairs and maintenance plans given budget and resource constraints. Please describe the goals, analytical methods, and duration of the aforementioned pilot project by Dreyer.</p> <p>a) Describe the success criteria for the aforementioned Dreyer pilot project - in other words, what criteria is Liberty using to evaluate the success of the asset risk decision-making solution?</p> <p>b) Will the aforementioned pilot be completed by the end of 2023?</p> <p>c) If the answer to subpart (b) is "no," please state when Liberty expects the pilot to be complete.</p> <p>d) Please describe each specific way that Liberty anticipates utilizing the Dreyer tools to inform its 2023-2025 wildfire mitigation strategy.</p>   | <p>a) Refer to file: CalAdvocates-Liberty-2023WMP-09_Liberty_Response_Question_10a for the scope of work of the pilot project with Dreyer. Liberty provided data to Dreyer that included pole information and asset inspection information that was used to model in service risk for pole assets. The information included, but was not limited to, pole age, pole type, date of last inspection, GD 155 condition findings, vegetation LDMR clearance findings, and financial costs of inspection and repair/replacement. Data was also provided from Technosolve to model fire risk. Dreyer combined the findings from in service risk and fire risk to create an overall risk score for pole assets throughout Liberty's territory.</p> <p>b) The final 2023 WMP technical guidelines were issued approximately three months prior to submission of the 2023 WMP. During that time, Liberty met with a list of vendors that could potentially help reduce Liberty's risk profile. Dreyer was selected for this pilot project and the deliverables agreed upon were provided subsequent to the 2023 WMP filing. Liberty is actively in the process of evaluating the deliverables, adjusting model weighting, and familiarizing internal resources with the tool. Thus, evaluation criteria have not been fully developed at this time. Examples of evaluation criteria Liberty will consider are cost, accuracy of risk identification and model outputs, the feasibility of scenarios and the ability to operationalize model outputs. i) Yes<br/>ii) No<br/>iii) N/A</p> <p>c) Subsequent to evaluating Dreyer's modeling for pole assets, Liberty plans to operationalize outputs to inform decision-making. Liberty will continue working with Dreyer to run risk and financial scenarios that can inform decisions around which pole mitigations reduce risk compared to the costs of those mitigations. Moving forward, Liberty will consider including additional assets and other risk elements (i.e., conductor, vegetation, etc.).</p> | Talal Harashsh | 5/26/2023 | 6/1/2023 | 6/1/2023 | CalAdvocates-Liberty-2023WMP-09_Liberty_Response_06012023.pdf (libertyvillages.com) | 6   | Risk Methodology and Assessment                | 6.7   |
| CalAdvocates | 9  | CalAdvocates-Liberty-2023WMP-09 | 11 | CalAdv-09-11  | <p>Page 107 of Liberty's WMP states "Liberty's strategy development for this WMP did not utilize wildfire risk scores developed by Reax."</p> <p>a) Does Liberty plan on utilizing the wildfire risk scores developed by Reax to help plan future decisions regarding wildfire mitigation?</p> <p>b) If the answer to part (a) above is yes, when does Liberty plan on utilizing the wildfire risk scores developed by Reax?</p> <p>c) If the answer to part (a) above is no, please describe how Liberty's current approach will change with the utilization of the wildfire risk scores by Reax.</p> <p>d) If the answer to part (a) is no, please explain why Liberty will not utilize the wildfire risk scores by Reax to help plan future decisions regarding wildfire mitigation.</p>   | <p>a) Yes.</p> <p>b) Liberty plans on utilizing the wildfire risk scores developed by Reax in 2024.</p> <p>c) As stated in Section 7.1.4.2 of its 2023 WMP, Liberty plans to have a cohesive mitigation portfolio plan approach in its next WMP that incorporates data analytics and risk-informed decision-making assessment and monitoring to improve its overall risk reduction performance over time.</p> <p>d) N/A.</p>   | Talal Harashsh | 5/26/2023 | 6/1/2023 | 6/1/2023 | CalAdvocates-Liberty-2023WMP-09_Liberty_Response_06012023.pdf (libertyvillages.com) | 7   | Wildfire Mitigation Strategy Development       |       |
| CalAdvocates | 10 | CalAdvocates-Liberty-2023WMP-10 | 1  | CalAdv-10-1   | <p>On page 174 of its WMP, Liberty states that its 2022 target for Patrol Inspections of Distribution Electric Lines and Equipment was erroneously established at 706.3 miles, in place of its 2022 inspection target of 703 miles. Please respond to the following:</p> <p>a) Explain how Liberty mistakenly set a target of 706.3 miles. b) State the basis for why Liberty believes the target should have been closer to 503 miles (the annual Liberty was able to complete in 2022).</p> <p>c) Explain Liberty's process, procedure, or protocol for determining annual asset inspection targets for each type of inspection Liberty conducts.</p>   | <p>a) Liberty erroneously reported its target at the total overhead miles for its service territory. Liberty does not perform detailed inspections in areas where detailed inspections are being conducted and thus the target should have been a function of total overhead miles minus overhead inspection miles.</p> <p>b) Liberty's 2022 target of 503 miles for Patrol Inspections of Distribution Electric Lines and Equipment is a function of total overhead miles (706.3 miles) minus detailed inspections completed in 2022 on overhead miles (203.4 miles).</p> <p>c) Refer to Table 8-8 in Liberty's 2023 WMP for Liberty's asset inspection frequency, method and criteria.</p>   | Talal Harashsh | 5/26/2023 | 6/1/2023 | 6/1/2023 | CalAdvocates-Liberty-2023WMP-10_Liberty_Response_06022023.pdf (libertyvillages.com) | 8   | Grid Design, operations, and maintenance (8.1) | 8.1.3 |
| CalAdvocates | 10 | CalAdvocates-Liberty-2023WMP-10 | 2  | CalAdv-10-2   | <p>On page 174 of its WMP, Liberty states that it completed Quality Assurance and Quality Control (QA/QC) on 0.0044% of its detailed asset inspections in 2022, while Liberty's target was to QA/QC 0.0050% of the detailed asset inspections in 2022. Please respond to the following:</p> <p>a) How many individual asset inspections did Liberty conduct QA/QC on in 2022?</p> <p>b) Are both transmission and distribution detailed inspections included in the 0.0044% figure?</p> <p>c) If the answer to part (b) above is "no," please answer which type of detailed inspections is included in the 0.0044% figure.</p> <p>d) If the answer to part (b) above is "yes," please breakdown each type of detailed inspections is included in the 0.0044% figure.</p> <p>e) Please provide an Excel table of the QA/QC checks that Liberty completed on detailed asset inspections in 2022. Please list in the Excel sheet the following information in columns: the date of the original detailed inspection, the date QA/QC was performed, what type of asset was inspected, the result of the QA/QC check, and any follow-up remediation or inspections that Liberty took as a result of the QA/QC check.</p> <p>f) State the basis for Liberty's target of performing QA/QC on 0.0050% of detailed asset inspections in 2022.</p> <p>g) Explain why Liberty missed the 0.0050% QA/QC target in 2022.</p> | <p>a) The discrepancy is a typo. Liberty's QA/QC target for detailed asset inspections is 0.5%.</p> <p>b) N/A.</p> <p>c) N/A.</p> <p>d) 15 transmission (60 kV) and 9 distribution.</p> <p>e) Refer to file: CalAdvocates-Liberty-2023WMP-10_Liberty_Response_Question_2.</p> <p>f) Liberty targeted 0.5% of detailed inspections to its QA/QC target as a starting point for the program and plans to escalate this sampling size in 2023.</p> <p>g) Three of the 27 selected locations were inaccessible in December (when the QA/QC was completed) due to snow.</p>   | Talal Harashsh | 5/26/2023 | 6/1/2023 | 6/1/2023 | CalAdvocates-Liberty-2023WMP-10_Liberty_Response_06022023.pdf (libertyvillages.com) | 8   | Grid Design, operations, and maintenance (8.1) | 8.1.3 |
| CalAdvocates | 10 | CalAdvocates-Liberty-2023WMP-10 | 3  | CalAdv-10-3   | <p>On page 182 of its WMP, Liberty states that it implemented its asset inspection QA/QC in 2022 with a 0.5% sample of detailed inspections that were inspected by third-party inspectors. Minimal differences were noted by the third-party inspectors, who found only very minor infractions during the inspections. Differences were noted as follows:</p> <p>a) Please explain the apparent discrepancy between the targets stated on pages 174 and 182 for QA/QC of detailed asset inspections (0.005% on page 174 and 0.5% on page 182).</p> <p>b) If these two targets refer to different types of QA/QC activities, please provide a thorough description of each activity that identifies the similarities and differences.</p>  | <p>a) N/A.</p> <p>b) Six re-inspections noted minor differences.</p>   | Talal Harashsh | 5/26/2023 | 6/1/2023 | 6/1/2023 | CalAdvocates-Liberty-2023WMP-10_Liberty_Response_06022023.pdf (libertyvillages.com) | 8   | Grid Design, operations, and maintenance (8.1) | 8.1.6 |
| CalAdvocates | 10 | CalAdvocates-Liberty-2023WMP-10 | 4  | CalAdv-10-4   | <p>On page 182 of its WMP, Liberty states that it implemented its asset inspection QA/QC in 2022 with a 0.5% sample of detailed inspections that were inspected by third-party inspectors. Minimal differences were noted by the third-party inspectors, who found only very minor infractions during the inspections. Differences were noted as follows:</p> <p>a) How many third-party QA/QC checks were completed on detailed asset inspections in 2022?</p> <p>b) Of the checks included in the answer to part (a), how many checks noted "differences" between the initial inspections and the third-party QA/QC inspections?</p> <p>c) Please describe and provide examples of the "very minor infractions."</p>  | <p>a) Liberty halted its detailed inspections on January 1st, 2023, with the exception of detailed underground inspections due in 2023.</p> <p>b) 403 circuit miles.</p> <p>c) Liberty has not completed detailed inspections yet in 2023.</p> <p>d) Liberty is currently planning to resume its detailed inspections on January 1st, 2024.</p> <p>e) Liberty will remain in compliance with GD95 and 165.</p> <p>f) Yes.</p>  | Talal Harashsh | 5/26/2023 | 6/1/2023 | 6/1/2023 | CalAdvocates-Liberty-2023WMP-10_Liberty_Response_06022023.pdf (libertyvillages.com) | 8   | Grid Design, operations, and maintenance (8.1) | 8.1.6 |
| CalAdvocates | 10 | CalAdvocates-Liberty-2023WMP-10 | 5  | CalAdv-10-5   | <p>On page 183 of its WMP, Liberty states:</p> <p>As of May 1, 2023, Liberty has halted its detailed inspections in 2023 to eliminate its backlog of open work orders. Both contract crews and internal crews are working to expedite the process. Liberty also states that it "will halt its detailed inspections in order to catch up with its open maintenance work orders and resume detailed inspections in 2024."</p> <p>Please respond to the following:</p> <p>a) On what exact date in 2023 did Liberty halt its detailed inspections, as referenced in the above quote?</p> <p>b) What is Liberty's 2023 target for detailed asset inspections?</p> <p>c) How many detailed asset inspections has Liberty completed in 2023?</p> <p>d) Does Liberty intend to resume detailed asset inspections on a specific date in 2024 or will the resumption timing depend on how quickly Liberty is able to eliminate its backlog of open work orders? Please explain your response.</p> <p>e) Is Liberty currently in compliance with General Orders 95 and 165 regarding the frequency of detailed asset inspections?</p> <p>f) If Liberty conducts no detailed inspections for the remainder of 2023, will Liberty be in compliance with General Orders 95 and 165 on January 1, 2024?</p>   | <p>a) Liberty is halting its detailed overhead inspections in 2023 in order to avoid further overlap of infractions found in its 2020 system surveys and prioritize repairs to infractions found during the system survey.</p> <p>b) Liberty's full system survey completed in 2020 included all overhead lines that normally are inspected over a five-year period. Liberty will remain compliant during 2023 without completing any overhead detailed inspections.</p> <p>c) The safety risk of halting detailed overhead inspections in 2023 is minimal. In addition to previous inspections and repair work, Liberty will be monitoring its system as part of its 2023 Resilience Project which will impact 15 feeders, or one third of Liberty's circuits. Additionally, Liberty will continue to make repairs and replace poles across both Tier 2 and Tier 3 areas in its service territory in 2023.</p>  | Talal Harashsh | 5/26/2023 | 6/1/2023 | 6/1/2023 | CalAdvocates-Liberty-2023WMP-10_Liberty_Response_06022023.pdf (libertyvillages.com) | 8   | Grid Design, operations, and maintenance (8.1) | 8.1.7 |
| CalAdvocates | 10 | CalAdvocates-Liberty-2023WMP-10 | 6  | CalAdv-10-6   | <p>a) Describe Liberty's current staffing resources allocated to each of the following items under asset management, including but not limited to:</p> <p>1. Inspections</p> <p>2. Maintenance</p> <p>3. Resolution of open work orders and any other items not listed above.</p> <p>b) Please explain how Liberty's current staffing is sufficient or not sufficient to comply with regulatory requirements for asset management and inspection?</p> <p>c) How many open (unfiled) staff or contractor positions does Liberty have in the area of asset management and inspections? Please explain your response.</p> <p>d) How many filed staff or contractor positions in the area of asset management and inspections would Liberty consider to be "fully staffed"?</p> <p>e) Does Liberty intend to increase staffing (either with directly employed personnel or contractors) to increase capacity to perform asset management and inspections?</p> <p>f) If the answer to part (e) is yes, will the increase be temporary or permanent?</p> <p>g) If the answer to part (e) is yes, will the increase be based on creating new positions or filling current vacancies?</p>   | <p>a) Liberty's current staffing resources include:</p> <ul style="list-style-type: none"> <li>Inspections: Five internal inspectors and one contract inspector</li> <li>Maintenance: Four internal crews and three contract crews available</li> <li>Open work orders and other: Same as above plus five internal troubleshooters</li> </ul> <p>b) Liberty's current staffing has been sufficient to comply with regulatory requirements for asset management and inspection.</p> <p>c) Zero. Liberty is fully staffed with inspection resources and one contractor resource.</p> <p>d) Five internal staff and one contractor is currently considered fully staffed.</p> <p>e) No.</p> <p>f) N/A</p> <p>g) N/A</p>   | Talal Harashsh | 5/26/2023 | 6/1/2023 | 6/1/2023 | CalAdvocates-Liberty-2023WMP-10_Liberty_Response_06022023.pdf (libertyvillages.com) | N/A | N/A  | N/A   |
| CalAdvocates | 11 | CalAdvocates-Liberty-2023WMP-11 | 1  | CalAdv-11-1.1 | <p>Page 109 of Liberty's WMP states that "Liberty sought to separately strategize future risk model refinements and approaches by onboarding new vendors to help develop a formal risk model decision framework for Liberty."</p> <p>a) Are the "new vendors" that Liberty refers to above IBM and Dreyer?</p> <p>b) If the answer to part (a) above is no, please provide the name of the vendors and a description of how Liberty is utilizing each vendor to develop its formal risk model decision framework.</p>   | <p>a) Yes.</p> <p>b) N/A.</p>  | Talal Harashsh | 6/1/2023  | 6/6/2023 | 6/6/2023 | Liberty_Response_to_DR_CalAdvocates-Liberty-2023WMP-11.pdf (libertyvillages.com)    | 7   | Risk Evaluation (7.1)                          | 7.1.1 |
| CalAdvocates | 11 | CalAdvocates-Liberty-2023WMP-11 | 2  | CalAdv-11-1.2 | <p>Pages 109-110 discuss Liberty's risk evaluation process and how Liberty utilizes Figure 7-1: Risk Identification and Analysis for WMP. With this context:</p> <p>a) What is the total number of "discussion points" that Liberty will plot on Figure 7-1 while conducting its risk evaluation process?</p> <p>b) Please list all of the "discussion points" that Liberty will plot on Figure 7-1 as part of the risk identification and analysis.</p> <p>c) Please provide any documents generated from Liberty's risk evaluation process related to the Topaz circuit.</p> <p>d) Please provide any documents generated from Liberty's risk evaluation process related to the Muller circuit.</p> <p>e) Please provide any documents generated from Liberty's risk evaluation process related to the Meyers circuit.</p>  | <p>a) Liberty does not know the total number of discussion points that will be included in its risk evaluation process as Liberty advances its risk model decision framework.</p> <p>b) Examples of discussion points included in the risk evaluation process are:</p> <ul style="list-style-type: none"> <li>Identification of all risk events;</li> <li>Hazard of wildfire risk drivers;</li> <li>Impacts of significant weather (snow and wind) on asset degradation and health;</li> <li>Scenario analysis discussion; and</li> <li>How seasonality affects the planning of overhead system design and operations.</li> </ul> <p>c) Liberty does not have any documents generated from the process related to the Topaz circuit.</p> <p>d) Liberty does not have any documents generated from the process related to the Muller circuit.</p> <p>e) Liberty does not have any documents generated from the process related to the Meyers circuit.</p>   | Talal Harashsh | 6/1/2023  | 6/6/2023 | 6/6/2023 | Liberty_Response_to_DR_CalAdvocates-Liberty-2023WMP-11.pdf (libertyvillages.com)    | 7   | Risk Evaluation (7.1)                          | 7.1.1 |
| CalAdvocates | 11 | CalAdvocates-Liberty-2023WMP-11 | 3  | CalAdv-11-1.3 | <p>Pages 110-117 of Liberty's WMP identify the Topaz circuit as being in an area of elevated wildfire risk. Liberty also states that it did not assess risk drivers impacting the overall risk score and used older studies to support this WMP. With this context:</p> <p>a) Does Liberty have any system hardening mitigation work planned in 2023 for the Topaz circuit listed above? If the answer to part (a) above is yes, please identify the mitigation work selected for the circuit.</p> <p>b) If the answer to part (a) above is no, please explain why Liberty has chosen not to conduct mitigation work on this circuit in 2023.</p> <p>c) Does Liberty have any system hardening mitigation work planned in 2024 for the Topaz circuit listed above?</p> <p>d) If the answer to part (c) above is yes, please identify the mitigation work planned for 2024.</p>  | <p>a) Yes.</p> <p>b) Liberty is completing traditional overhead hardening on three projects in 2023. Those projects are Cunningham Lane, Eastside Lane, Larsen Lane. Liberty is also replacing or repairing various poles on this circuit to address needs found during system surveys.</p> <p>c) N/A.</p> <p>d) Yes.</p> <p>e) Liberty plans to complete approximately two miles of traditional overhead hardening in 2024. Those projects are still being determined. Liberty is also replacing or repairing various poles on this circuit to address needs found during system surveys.</p>   | Talal Harashsh | 6/1/2023  | 6/6/2023 | 6/6/2023 | Liberty_Response_to_DR_CalAdvocates-Liberty-2023WMP-11.pdf (libertyvillages.com)    | 7   | Risk Evaluation (7.1)                          | 7.1.3 |
| CalAdvocates | 11 | CalAdvocates-Liberty-2023WMP-11 | 4  | CalAdv-11-1.4 | <p>Pages 116-117 of Liberty's WMP identify the Muller circuit as being in an area of elevated wildfire risk. Liberty also states that it did not assess risk drivers impacting the overall risk score and used older studies to support this WMP. With this context:</p> <p>a) Does Liberty have any system hardening mitigation work planned in 2023 for the Muller circuit listed above?</p> <p>b) If the answer to part (a) above is yes, please identify the mitigation work selected for the circuit.</p> <p>c) If the answer to part (a) above is no, please explain why Liberty has chosen not to conduct mitigation work on this circuit in 2023.</p> <p>d) Does Liberty have any system hardening mitigation work planned in 2024 for the Muller circuit listed above?</p> <p>e) If the answer to part (d) above is yes, please identify the mitigation work planned for 2024.</p>   | <p>a) Yes.</p> <p>b) Liberty is replacing or repairing various poles on this circuit to address needs found during system surveys. Liberty is also planning to do some system hardening on this circuit. The first project will likely occur in 2023 but there is a possibility that it may be as soon as 2024.</p>  | Talal Harashsh | 6/1/2023  | 6/6/2023 | 6/6/2023 | Liberty_Response_to_DR_CalAdvocates-Liberty-2023WMP-11.pdf (libertyvillages.com)    | 7   | Risk Evaluation (7.1)                          | 7.1.3 |
| CalAdvocates | 11 | CalAdvocates-Liberty-2023WMP-11 | 5  | CalAdv-11-1.5 | <p>Pages 116-117 of Liberty's WMP identify the Meyers circuit as being in an area of elevated wildfire risk. Liberty also states that it did not assess risk drivers impacting the overall risk score and used older studies to support this WMP. With this context:</p> <p>a) Does Liberty have any system hardening mitigation work planned in 2023 for the Meyers circuit listed above?</p> <p>b) If the answer to part (a) above is yes, please identify the mitigation work selected for the circuit.</p> <p>c) If the answer to part (a) above is no, please explain why Liberty has chosen not to conduct mitigation work on this circuit in 2023.</p> <p>d) Does Liberty have any system hardening mitigation work planned in 2024 for the Meyers circuit listed above?</p> <p>e) If the answer to part (d) above is yes, please identify the mitigation work planned for 2024.</p>   | <p>a) Yes.</p> <p>b) Liberty is planning to complete two covered conductor projects on Meyers circuits in 2023. Those projects are Cello A (1.0 mile) and Cello B (0.9 mile). Liberty will also complete 1.1 miles of undergrounding on the Cascade Project. Liberty is also replacing or repairing various poles on these circuits to address needs found during system surveys.</p> <p>c) N/A.</p> <p>d) Yes.</p> <p>e) Liberty is planning to complete two covered conductor projects on Meyers circuits in 2023. Those projects are Fallen Leaf B (1.53 miles) and Angora (0.70 miles). The Angora Project includes a microgrid. Liberty is also replacing or repairing various poles on these circuits to address needs found during system surveys.</p>  | Talal Harashsh | 6/1/2023  | 6/6/2023 | 6/6/2023 | Liberty_Response_to_DR_CalAdvocates-Liberty-2023WMP-11.pdf (libertyvillages.com)    | 7   | Risk Evaluation (7.1)                          | 7.1.3 |
| CalAdvocates | 11 | CalAdvocates-Liberty-2023WMP-11 | 6  | CalAdv-11-1.6 | <p>Page 127 of Liberty's WMP states, "Liberty is currently evaluating wildfire risk results in consultation with its analytics team. Liberty has developed an interim mitigation strategy for its vegetation portfolio and plans to expand this strategy to incorporate assets in the future." When does Liberty anticipate it will have expanded its interim mitigation strategy to incorporate asset management measures, as referenced in the quote?</p>   | <p>During the 2023-2025 WMP cycle.</p>   | Talal Harashsh | 6/1/2023  | 6/6/2023 | 6/6/2023 | Liberty_Response_to_DR_CalAdvocates-Liberty-2023WMP-11.pdf (libertyvillages.com)    | 7   | Risk Evaluation (7.1)                          | 7.1.4 |

|              |    |                                 |   |                |  |   |                |           |           |           |  |   |  |         |
|--------------|----|---------------------------------|---|----------------|--|---|----------------|-----------|-----------|-----------|--|---|--|---------|
| CalAdvocates | 11 | CalAdvocates-Liberty-2023WMP-11 | 7 | CalAdv-11-11.7 | <p>Page 128 of Liberty's WMP states, "Liberty is actively planning and executing wildfire mitigation initiatives while developing its risk based decision-making process."</p> <p>a) Are any WMP activities or initiatives that Liberty is executing in 2023 based upon the abovementioned risk based decision-making process?</p> <p>b) If the answer to part (a) is yes, please explain which activities or initiatives in 2023 flow from the risk based decision-making process.</p> <p>c) If the answer to part (a) is no, please explain why not.</p>   | <p>a) No.<br/>b) N/A<br/>c) The abovementioned risk based decision-making process is not complete. Liberty used risk based principles and tools (i.e., Reax risk map) to inform decision-making.</p>  | Talal Harashsh | 6/1/2023  | 6/6/2023  | 6/6/2023  | Liberty Response to DR CalAdvocates-Liberty-2023WMP-11.pdf (libertyutilities.com)    | 7 | Risk Evaluation (7.1)                          | 7.1.4   |
| CalAdvocates | 11 | CalAdvocates-Liberty-2023WMP-11 | 8 | CalAdv-11-11.8 | <p>Page 135 of Liberty's WMP states:</p> <p>In conjunction with this study, Liberty also plans to assess the asset risk reduction and vegetation risk reduction at an operational performance level utilizing IBM's work management platform. IBM's Maximo asset health and predict solution that was customized for Liberty will integrate asset risk and detailed vegetation risk scores to help asset and vegetation managers better assess operational risk to plan and adjust work activities for significant weather event days, including elevated high fire risk days.</p> <p>a) Describe the success criteria for the abovementioned IBM Maximo project – in other words, what criteria is Liberty using to evaluate the accuracy of the asset and vegetation risk scores produced by IBM's Maximo platform?</p> <p>b) When (i.e., month and year) will the abovementioned platform be complete and operational?</p> <p>c) Please describe each specific way that Liberty anticipates utilizing the abovementioned IBM work management platform to inform its 2023-2025 wildfire mitigation strategy.</p>   | <p>a) Examples of evaluation criteria Liberty considered are cost, accuracy of risk identification and model outputs, system compatibility, the flexibility of scenarios and the ability to operationalize model outputs given available resources.<br/>b) Liberty has decided to not move forward with IBM's proposed solution at this time.<br/>c) Liberty has decided to not move forward with IBM's proposed solution at this time.</p>   | Talal Harashsh | 6/1/2023  | 6/6/2023  | 6/6/2023  | Liberty Response to DR CalAdvocates-Liberty-2023WMP-11.pdf (libertyutilities.com)    | 7 | Risk Evaluation (7.1)                          | 7.2.2   |
| CalAdvocates | 11 | CalAdvocates-Liberty-2023WMP-11 | 9 | CalAdv-11-11.9 | <p>Page 138 of Liberty's WMP states:</p> <p>Liberty's risk-informed decision-making framework is under development. Liberty's engineering, planning, and regulatory staff will need three to six months post-project/delivery of all risk studies to fully engage with internal subject matter experts to evaluate the results of the risk analyses.</p> <p>a) When (i.e., month and year) does Liberty expect the development (referenced in the quote above) of the risk-informed decision-making framework to be finished?</p> <p>b) When (i.e., month and year) does Liberty expect all risk studies to be delivered (as mentioned in the quote above)?</p> <p>c) Please estimate when (i.e., month and year) Liberty expects to be able to utilize the abovementioned risk-informed decision-making framework to scope planned system hardening projects for the future.</p> <p>d) Please describe how Liberty planned system hardening projects occurring in 2023.</p> <p>e) Please describe how Liberty planned or will plan system hardening projects that will start in 2024.</p>   | <p>a) Liberty plans to have an initial risk-informed decision-making framework for overhead assets by August 2023.<br/>b) Liberty does not know the timeline for when all risk studies will be delivered. Liberty's wildfire risk modeling is an ongoing process that is informed by the results of current risk studies (i.e., Technology modeling results, Reax modeling results, Drexon outputs, OES risk modeling guidelines, and collaborative discussions with stakeholders through processes such as the Risk Modeling Working Group.)<br/>c) Beginning in 2023.<br/>d) Liberty uses the Reax fire risk polygons and subject matter expert knowledge to target specific areas that have the highest wildfire risk or previous reliability or safety issues.<br/>e) Liberty will use the Reax fire risk polygons, its critical risk assessment, and subject matter expert knowledge to target specific areas that have the highest wildfire risk or previous reliability or safety issues.</p>  | Talal Harashsh | 6/1/2023  | 6/6/2023  | 6/6/2023  | Liberty Response to DR CalAdvocates-Liberty-2023WMP-11.pdf (libertyutilities.com)    | 7 | Risk Evaluation (7.1)                          | 7.2.3   |
| CalAdvocates | 12 | CalAdvocates-Liberty-2023WMP-12 | 1 | CalAdv-12-12.1 | <p>On pgs. 29-30 of its WMP, Liberty describes its actual WMP spends for the 2020-2022 cycle. Please provide a breakdown of the actual spends including at least the following categories:</p> <ul style="list-style-type: none"> <li>Risk assessment and modeling</li> <li>Grid design and system hardening</li> <li>Asset management and inspections</li> <li>Vegetation management and inspections</li> <li>Situational awareness and forecasting</li> </ul> <p>Other spending Please provide the breakdown in tabular format for each year, showing all the costs amounting to:</p> <p>a) \$33,333,000 for 2020,<br/>b) \$33,567,000 for 2021, and<br/>c) \$50,132,000 for 2022</p>  | <p>a) Refer to Liberty's Revised Q4 2022 WMP Quarterly Data Report (QDR) submitted to OEIS on March 8, 2023.<br/>b) See response 1a.<br/>c) See response 1b.</p>  | Talal Harashsh | 6/6/2023  | 6/9/2023  | 6/9/2023  | CalAdvocates-Liberty-2023WMP-12_Liberty Response_06092023.pdf (libertyutilities.com) | 4 | Proposed Expenditures (4.3)                    |         |
| CalAdvocates | 12 | CalAdvocates-Liberty-2023WMP-12 | 2 | CalAdv-12-12.2 | <p>On p. 30 of its WMP, Liberty describes its planned spends for the 2023-2025 WMP cycle. Please provide a breakdown of the described proposed expenditures including at least the following categories:</p> <ul style="list-style-type: none"> <li>Risk assessment and modeling</li> <li>Grid design and system hardening</li> <li>Asset management and inspections</li> <li>Vegetation management and inspections</li> <li>Situational awareness and forecasting</li> </ul> <p>Other spending Please provide the breakdown in tabular format for each year, showing all the costs amounting to:</p> <p>a) \$48,391,000 for 2023,<br/>b) \$54,180,000 for 2024, and<br/>c) \$55,078,000 for 2025</p>  | <p>a) Refer to Liberty's Revised Q4 2022 WMP Quarterly Data Report (QDR) submitted to OEIS on March 8, 2023.<br/>b) See response 2a.<br/>c) See response 2b.</p>  | Talal Harashsh | 6/6/2023  | 6/9/2023  | 6/9/2023  | CalAdvocates-Liberty-2023WMP-12_Liberty Response_06092023.pdf (libertyutilities.com) | 4 | Proposed Expenditures (4.3)                    |         |
| CalAdvocates | 12 | CalAdvocates-Liberty-2023WMP-12 | 3 | CalAdv-12-12.3 | <p>On pgs. 201-202 of its WMP, Liberty provides Table B-18: "Liberty Vegetation Inspections Targets by Year." Please explain why the row describing Liberty's Vegetation Targets by Year for the Initiative Activity "Program – UDM" is blank.</p>   | <p>The blank row in Table B-18 is a formatting error on the table carrying over from page 201 to page 202. There should only be one row for "Vegetation Management Inspection Program – UDM" and the relative activity row was inadvertently left up due to the page break.</p>   | Talal Harashsh | 6/6/2023  | 6/9/2023  | 6/9/2023  | CalAdvocates-Liberty-2023WMP-12_Liberty Response_06092023.pdf (libertyutilities.com) | 8 | Vegetation Management and Inspections (8.2)    | 8.2.1.2 |
| CalAdvocates | 12 | CalAdvocates-Liberty-2023WMP-12 | 4 | CalAdv-12-12.4 | <p>On p. 209 of its WMP, Liberty provides Figure B-4: "Liberty VM Inspection Overview."</p> <p>a) Please describe what steps Liberty takes if a customer refuses access to his or her property for either a vegetation inspection or a vegetation maintenance activity.</p> <p>b) Please provide any internal protocols, handbooks, or other documents that describe the actions Liberty takes if a customer refuses access to his or her property for either a vegetation inspection or a vegetation maintenance activity.</p>  | <p>a) Liberty VM field personnel are unable to perform their job function due to a customer refusing access, the refusal shall be documented in the VM system and on the Refusal Form document. If possible, the vegetation condition and vicinity to facilities should be photographed for reference and recordkeeping. Liberty VM field personnel (VM inspectors, VM workers) communicate the refusal as soon as possible to their immediate supervisor for resolution. Every effort should be made by the supervisor to contact the property owner, or authorized agent to understand the basis of the refusal and determine an appropriate course of action toward resolution and work completion. Any contact or attempt made to resolve the refusal shall be documented by the employee initiating resolution. The supervisor may need to consult with Liberty VM for support if resolution is unobtainable or for approval if there is a request outside of the normal scope of work that would facilitate completing work. Should attempts to reach a resolution with the refusing party be unsuccessful, Liberty may need to take further action by researching existing land or easement rights to be able to perform vegetation work. Liberty VM should attempt to exercise land and easement rights in order to perform the required work within the appropriate mitigation timeline. Liberty may be required to involve jurisdictional law enforcement to facilitate completing the required work necessary to comply with applicable laws and regulations. Law enforcement should be notified, or their presence requested, to facilitate gaining access or completing vegetation management work as needed. Liberty shall notify its Legal Department and Corporate Security team to advise on all hostile customers and take the necessary action to facilitate completing required work within the appropriate mitigation timeline through a court order or temporary restraining order.<br/>b) Liberty is in the process of developing its VM-06, Notification and Refusal Policy which provides guidance on interfacing with landowners including communication and notification processes, management of refusal scenarios, conflict resolution strategies, and the documentation of these processes through the lifecycle of identification and mitigation of required Vegetation Management work.</p> | Talal Harashsh | 6/6/2023  | 6/9/2023  | 6/9/2023  | CalAdvocates-Liberty-2023WMP-12_Liberty Response_06092023.pdf (libertyutilities.com) | 8 | Vegetation Management and Inspections (8.2)    | 8.2.2   |
| CalAdvocates | 12 | CalAdvocates-Liberty-2023WMP-12 | 5 | CalAdv-12-12.5 | <p>On p. 243 of its WMP, Liberty provides Table B-31: "Fast Due Vegetation Management Work Orders Categorized by Age."</p> <p>a) In this table, does "age" refer to days since the work order was first created or days since the work order's due date?</p> <p>b) Please explain why there are 2,588 past due work orders in HFTD Tier 2 Areas with ages of 181+ days.</p> <p>c) Please describe the actions Liberty is currently taking to address the 2,588 past due work orders in HFTD Tier 2 Areas with ages of 181+ days.</p> <p>d) When does Liberty expect that all of these 2,588 past due work orders in HFTD Tier 2 Areas with ages of 181+ days will be fully resolved? Please explain your response.</p>   | <p>a) Age refers to the date the work order was first created.<br/>b) Liberty defines how work orders are prioritized based on risk and how mitigation timeframes are identified based on observed field conditions in Section 8.2.6 of the 2023 WMP (page 240 – 241) and per its VM-05, Vegetation Threat Procedure. Liberty intends to complete work orders and mitigate identified tree conditions within the timeframes specified in its VM-05 based on the priority level of assigned to the vegetation work order at the time of inspection and describes this process on page 240-241 of the 2023 WMP.<br/>c) Of the 2,588 open work orders reported, 210 work orders remain open as of June 9th, 2023. 164 of the open work orders are on Capital improvement projects that is coordinated with Capital construction schedules. This work is currently in progress. 35 work orders on the "safer" fire resilient right-of-way project had maintenance deferred in late 2022 due to snow conditions and are planned to be completed in 2023. Liberty is in the process of evaluating the remaining 11 work orders to determine priority and requirements beyond standard operating procedures.<br/>d) Liberty expects to complete the remaining 164 work orders by the end of the third quarter in 2023.</p>   | Talal Harashsh | 6/6/2023  | 6/9/2023  | 6/9/2023  | CalAdvocates-Liberty-2023WMP-12_Liberty Response_06092023.pdf (libertyutilities.com) | 8 | Vegetation Management and Inspections (8.2)    | 8.2.6   |
| CalAdvocates | 13 | CalAdvocates-Liberty-2023WMP-13 | 1 | CalAdv-13-13.1 | <p>Request provide copies of the following documents:</p> <p>a) Corporate Emergency Management Plan (CEMP), dated April 27, 2022, referenced on p. 284 of your WMP</p> <p>b) Liberty Utilities Public Safety Power Shutoff Playbook, dated June 13, 2022, referenced on p. 284 of your WMP</p> <p>On p. 113 of its WMP, Liberty states: "NV Energy is the Transmission Owner for Liberty. A specific plan for communicating with NV Energy including the information to be provided is included in the Liberty CEMP."</p> <p>a) In NV Energy the same provider of electricity to Liberty's circuit?</p> <p>b) If the answer to part (a) is no, please list the circuits that NV Energy provides electricity to.</p> <p>c) Please describe Liberty's plan in the event of de-energization of its circuits by NV Energy.</p> <p>d) Has Liberty ever experienced any de-energizations (including, but not limited to PMS) because of loss of electricity supply from NV Energy transmission lines?</p> <p>e) If the answer to part (d) is yes, please state the date of each such outage since the beginning of 2018.</p> <p>f) If the answer to part (d) is yes, for each such outage since the beginning of 2018, please elaborate on the duration, number of customers affected, and actions that Liberty took during the outage.</p>  | <p>a) Refer to supporting materials: Liberty Corporate Emergency Management Plan (CEMP)<br/>b) Refer to supporting materials: Liberty Public Safety Power Shutoff Playbook</p>  | Talal Harashsh | 6/6/2023  | 6/9/2023  | 6/9/2023  | CalAdvocates-Liberty-2023WMP-13_Liberty Response_06092023.pdf (libertyutilities.com) | 8 | Emergency Preparedness (8.4)                   | 8.4.2   |
| CalAdvocates | 13 | CalAdvocates-Liberty-2023WMP-13 | 2 | CalAdv-13-13.2 | <p>On p. 162 of its WMP, Liberty states: "[T]hese programs, in particular Liberty's SRP program, may reduce the need for PSPS in certain areas."</p> <p>a) Please explain how Liberty's SRP program may reduce the need for PSPS in certain areas.</p> <p>b) Please describe the decision-making process for a situation in which Liberty anticipates PSPS conditions but decides to use its SRP program instead.</p> <p>c) Please list at dates in 2022 when Liberty anticipated PSPS conditions but use its SRP program instead.</p>   | <p>a) Yes.<br/>b) N/A<br/>c) To the extent possible, Liberty will follow PSPS protocols regarding communications if an NV Energy PMSD event impacts Liberty's power lines and customers.<br/>d) Liberty objects to this request as vague and ambiguous with regard to the term "de-energizations," "overhead, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence. Notwithstanding the foregoing objections, Liberty responds as follows: Yes.<br/>e) Liberty objects to this request as vague and ambiguous with regard to the term "de-energizations," "overhead, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence. Notwithstanding the foregoing objections, Liberty responds as follows: Refer to file: CalAdvocates-Liberty-2023WMP-13_Liberty Response Question 2.<br/>f) Liberty objects to this request as vague and ambiguous with regard to the term "de-energizations," "overhead, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence. Notwithstanding the foregoing objections, Liberty responds as follows: Refer to file: CalAdvocates-Liberty-2023WMP-13_Liberty Response Question 2.</p>   | Talal Harashsh | 6/6/2023  | 6/9/2023  | 6/9/2023  | CalAdvocates-Liberty-2023WMP-13_Liberty Response_06092023.pdf (libertyutilities.com) | 8 | Emergency Preparedness (8.4)                   | 8.4.3.2 |
| CalAdvocates | 13 | CalAdvocates-Liberty-2023WMP-13 | 3 | CalAdv-13-13.3 | <p>Request provide a description of the weather conditions in which Liberty enables its SRP program.</p> <p>a) Please identify the months or seasons in which Liberty enables its SRP program.</p> <p>b) Please provide relevant work documents or procedures that Liberty uses related to enabling its SRP program.</p>   | <p>a) Various weather conditions influence the SRP decision process, including wind conditions, temperature conditions, and moisture content.<br/>b) The area of Liberty service territory and weather conditions in any given year or month affect whether SRP will be enabled. Based on historical conditions, SRP settings would be enabled in the summer and early fall when the moisture content is low and temperatures and wind conditions can be high.<br/>c) Liberty does not have any work documents directly related to SRP.</p>   | Talal Harashsh | 6/6/2023  | 6/9/2023  | 6/9/2023  | CalAdvocates-Liberty-2023WMP-13_Liberty Response_06092023.pdf (libertyutilities.com) | 8 | Grid Design, operations, and maintenance (8.1) | 8.1.2.6 |
| CalAdvocates | 13 | CalAdvocates-Liberty-2023WMP-13 | 4 | CalAdv-13-13.4 | <p>On p. 162 of its WMP, Liberty states: "Liberty will be expanding the 2022 Fast Trip, or SRP, pilot project because of its effectiveness."</p> <p>a) In Liberty's response to CalAdvocates-Liberty-2023WMP-03, Question 1, the excel sheet column C "g. Total customer-minutes of de-energization on the circuit during fast-trip settings in 2021" provides a value of 204,400 for the Circuit Meyers 3302. Please explain if the pilot SRP program began in 2021 or if Liberty used a different program for this de-energization.</p> <p>b) There are values listed in Liberty's response to CalAdvocates-Liberty-2023WMP-03, Question 1, the excel sheet column R "y. Total customer-minutes of de-energization on the circuit during fast-trip settings in 2022". Please clarify if the values listed in Liberty's response were due to the SRP program pilot.</p> <p>c) Please describe the scope, planned duration, goals, and success metrics of the 2022 Fast Trip / SRP pilot project.</p> <p>d) Other than expanding which circuits may use SRP settings, as shown in Appendix C, may there be a 2023 Restorative Relay Profile Program, on p. 474 of the 2023 WMP, that has Liberty modified its SRP program since 2021? For example, have the speed or sensitivity of the fast-trip settings changed?</p> <p>e) Please provide a list of the circuits included in Liberty's SRP program in 2022.</p> | <p>a) Liberty's SRP program is not currently impacting Liberty's PSPS protocols. In 2023, Liberty is working with University of Nevada, Reno (UNR) to develop the SRP settings and discuss how this could impact PSPS protocols. If SRP settings are set sensitive enough, then the ignition risk from a fire could be low enough to act in place of a PSPS. The settings that Liberty is currently planning to use for the SRP system are not currently proven to be low enough to make this call. Liberty will be evaluating this topic with UNR and other major utilities in 2023.<br/>b) Liberty's SRP program is not currently impacting Liberty's PSPS protocols, and thus Liberty does not have an established decision-making process to utilize SRP as an alternative to PSPS.<br/>c) None.</p>  | Talal Harashsh | 6/6/2023  | 6/9/2023  | 6/9/2023  | CalAdvocates-Liberty-2023WMP-13_Liberty Response_06092023.pdf (libertyutilities.com) | 8 | Grid Design, operations, and maintenance (8.1) | 8.1.2.6 |
| CalAdvocates | 13 | CalAdvocates-Liberty-2023WMP-13 | 5 | CalAdv-13-13.5 | <p>Request provide a description of the weather conditions in which Liberty enables its SRP program.</p> <p>a) Please identify the months or seasons in which Liberty enables its SRP program.</p> <p>b) Please provide relevant work documents or procedures that Liberty uses related to enabling its SRP program.</p>   | <p>a) Various weather conditions influence the SRP decision process, including wind conditions, temperature conditions, and moisture content.<br/>b) The area of Liberty service territory and weather conditions in any given year or month affect whether SRP will be enabled. Based on historical conditions, SRP settings would be enabled in the summer and early fall when the moisture content is low and temperatures and wind conditions can be high.<br/>c) Liberty does not have any work documents directly related to SRP.</p>   | Talal Harashsh | 6/6/2023  | 6/9/2023  | 6/9/2023  | CalAdvocates-Liberty-2023WMP-13_Liberty Response_06092023.pdf (libertyutilities.com) | 8 | Grid Design, operations, and maintenance (8.1) | 8.1.2.6 |
| CalAdvocates | 14 | CalAdvocates-Liberty-2023WMP-14 | 1 | CalAdv-14-14.1 | <p>Request provide a description of the weather conditions in which Liberty enables its SRP program.</p> <p>a) Please identify the months or seasons in which Liberty enables its SRP program.</p> <p>b) Please provide relevant work documents or procedures that Liberty uses related to enabling its SRP program.</p>   | <p>a) Liberty utilized a different program in 2021. Prior to the SRP program pilot in 2022, Liberty utilized "wildfire mode" settings which removes reclosing. The SRP program takes this a step further by removing reclosing and lowering the trip settings to a number that impacts relay coordination and reduces incident energy on fault conditions, which in turn reduces ignition risk.<br/>b) In 2022, Liberty utilized a mix of SRP settings and "wildfire mode" settings because the pilot program took time to develop, install, and commission settings.<br/>c) The goals in 2022 were to pilot the SRP program. This entailed working with UNR to research these settings and benchmark them against other major utilities. Liberty enabled SRP settings and began to track associated reliability metrics. With a small sample size, Liberty has not observed a noticeable decrease in reliability for the circuits on which SRP has been implemented.<br/>d) Liberty did not utilize SRP settings in 2021. Since the SRP program was started in 2022, there have not been any significant changes to the "speed or sensitivity" of the fast trip settings. Liberty plans to review the load seen by the overcurrent protection devices (a recloser or a substation circuit breaker) on the SRP circuits on an annual basis. This load data is then used to engineer a sensitive relay profile that aims to limit the incident energy developed on a fault event, thus reducing ignition risk, while also not "nuisance" tripping for events that are not actual faults. e) Meyers 3300 and Toyah 1261.</p>  | Talal Harashsh | 6/6/2023  | 6/9/2023  | 6/9/2023  | CalAdvocates-Liberty-2023WMP-14_Liberty Response_06132023.pdf (libertyutilities.com) | 8 | Grid Design, operations, and maintenance (8.1) | 8.1.2.6 |
| CalAdvocates | 15 | CalAdvocates-Liberty-2023WMP-15 | 1 | CalAdv-15-15.1 | <p>Request provide a description of the weather conditions in which Liberty enables its SRP program.</p> <p>a) Please identify the months or seasons in which Liberty enables its SRP program.</p> <p>b) Please provide relevant work documents or procedures that Liberty uses related to enabling its SRP program.</p>   | <p>a) In its evaluation of whether to move forward with the proposed solution from IBM, Liberty considered factors including:<br/>+ cost<br/>+ system compatibility, particularly the risk of moving forward with the solution prior to SRP implementation later this year; and<br/>+ the ability to operationalize model outputs.<br/>b) Yes, Liberty is in the process of exploring alternative solutions.<br/>c) The number of ignitions reported in Liberty's QDR for Q1 and Q2 of 2022 is incorrect. Liberty's QDR for Q1 of 2022 correctly reports the total number of distribution ignitions in 2020 and 2021 as four.</p>   | Talal Harashsh | 6/14/2023 | 6/19/2023 | 6/20/2023 | CalAdvocates-Liberty-2023WMP-15_Liberty Response_06202023.pdf (libertyutilities.com) | 8 | Grid Design, operations, and maintenance (8.1) | 8.1.2.6 |
| CalAdvocates | 15 | CalAdvocates-Liberty-2023WMP-15 | 2 | CalAdv-15-15.2 | <p>Request provide a description of the weather conditions in which Liberty enables its SRP program.</p> <p>a) Please identify the months or seasons in which Liberty enables its SRP program.</p> <p>b) Please provide relevant work documents or procedures that Liberty uses related to enabling its SRP program.</p>   | <p>a) One.<br/>b) Three.<br/>c) One.</p>  | Talal Harashsh | 6/14/2023 | 6/19/2023 | 6/20/2023 | CalAdvocates-Liberty-2023WMP-15_Liberty Response_06202023.pdf (libertyutilities.com) | 8 | Grid Design, operations, and maintenance (8.1) | 8.1.2.6 |



