2/1/2024				Liberty 2023 WMP Discovery Log					
2/1/2021	R Set # Data Request	Question No. Ques	stion ID Question Please provide a copy of each WMP-related document, submission, or report you submit to the Office of Energy Infrastructure Safety (Energy Safety)		Date Received	Final Date Due	Date Sent Links Number of Attachements	Attachment Links NDA Required? WMP Section Category	
			2023 that is related to your WMP. Provide the copy to Cal Advocates within one business day of the document's submittal to Energy Safety. (If you has 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	provide CalAdvocates with copies of its Q4 2022 Quarterly Data Report ("QDR") files on k February 1, 2023. However, due to technical issues with the CPUC Kiteworks platform, Liberty		N/A	1		
alAdvocates	1 CalAdvocates-Liberty-2023WMP-01	1 CalAdv-0	concerning information or statements in your WMP (and any subsequent revisions or change orders affecting your WMP). 01-1.1 Please provide a copy of your WMP pre-submission within two business days of its submission to Energy Safety.	Aaron Louie Aaron Louie Refer to attachment: "2023-03-06_Liberty_2023_WMP_RO_Public" for Liberty's 2023 WMP	2/24/2023	N/A	CalAdvocates-Liberty-2023WMP-01_Liberty 3/8/2023 Response_03082023.pdf (libertyutilities.com) CalAdvocates-Liberty-2023WMP-01_Liberty	WMP Pre- Submission Administrative WMP Pre-	
Advocates	1 CalAdvocates-Liberty-2023WMP-01	2 CalAdv-0	01-1.2 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 document is sent to Energy		2/24/2023	N/A	3/8/2023 Response_03082023.pdf (libertyutilities.com)	Submission Administrative	
IAdvocates	1 CalAdvocates-Liberty-2023WMP-01	3 CalAdv-0	01-1.3 Safety. 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	able to provide copies of these files until February 9, 2023. Aaron Louie Liberty will provide CalAdvocates with copies of responses to 2023 WMP discovery requests Aaron Louie	2/24/2023		3/8/2023 Response_03082023.pdf (libertyutilities.com)	Submission Administrative	
IAdvocates	1 CalAdvocates-Liberty-2023WMP-01	4 CalAdv-0	the discovery request. This includes: a) Confidential responses to WMP discovery requests issued by Energy Safety. b) Confidential responses to WMP 01-1.4 discovery requests issued by other entities. Please identify and provide a copy of all quality assurance or quality control (QA/QC) reports conducted by internal entities that were completed sinc	Aaron Louie	2/24/2023	N/A	3/8/2023 CalAdvocates-Liberty-2023WMP-01_Liberty 3/8/2023 Response_03082023.pdf (libertyutilities.com)	WMP Pre- Submission Administrative	
			January 1, 2022, and that examined any programs, initiatives, or strategies described in your 2022 WMP Update.	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 file related to Liberty's Post-Work Verification Procedure ("PWVP") desktop review is included in the Supporting Materials email for this data request response sent to CalAdvocates through the CPUC Kiteworks system: "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 clearances were 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 QA/QC program in 2022. Liberty plans to provide this information to CalAdvocates by March 17, 2023.	2/24/2022	2/40/2022	CalAdvocates-Liberty-2023WMP-02_Liberty_	Grid Design, operations, and maintenar	nce (8.1)
Advocates	2 CalAdvocates-Liberty-2023WMP-02	1 CalAdv-C	Please identify and provide a copy of all quality assurance or quality control (QA/QC) reports conducted by external entities that were completed sind January 1, 2022, and that examined any programs, initiatives, or strategies described in your 2022 WMP Update. External entities include, but are not limited to, consultants, contractors, auditors, court-appointed monitors, and Independent Evaluators.	 email for this data request response sent to CalAdvocates through the CPUC Kiteworks system: • 2022_VM_QC_Pass_Results_Report.xlsx • TAH7300_LiDAR_Work_QC_Corrective_Action.xlsx • QC of Completed Work folder • QC of Inspections folder Liberty is in the process of collecting QA/QC materials completed as part of its asset inspections QA/QC program in 2022. Liberty plans to provide this 	2/24/2023	3/10/2023	3/10/2023 Response_03102023.pdf (libertyutilities.com) 6	8 Vegetation Management (8.2)	
IAdvocates	2 CalAdvocates-Liberty-2023WMP-02	2 CalAdv-0	02-2.2	information to CalAdvocates by March 17, 2023. • QC of Pole Clearing folder • Dead tree audit 7 22 folder Aaron Louie	2/24/2023	3/10/2023	CalAdvocates-Liberty-2023WMP-02_Liberty_ 3/10/2023 Response 03102023.pdf (libertyutilities.com)	Grid Design, operations, and maintenar 8 Vegetation Management (8.2)	າce (8.1).
IAdvocates	2 CalAdvocates-Liberty-2023WMP-02	3 CalAdv-0	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.	2/24/2023	3/10/2023	3/10/2023 Response 03102023.pdf (libertyutilities.com)	12 Notices of Violation and Defect	
			 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 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 	h in Liberty did not receive any Notices of Violations from Energy Safety in 2022.			CalAdvocates-Liberty-2023WMP-02_Liberty_		
IAdvocates	2 CalAdvocates-Liberty-2023WMP-02	4 CalAdv-C	 j) Geographic longitude of violation in decimal degrees, truncated to seven decimal places. 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-HFTD Areas e) Circuit miles in Other HFTD f) Circuit miles in HFTD Tier 2 g) Circuit miles in HFTD Tier 3 h) Circuit voltage i) Circuit SAIDI (System Average Interruption Duration Index) for 2021 j) Circuit SAIFI (System Average Interruption Frequency Index) for 2021 l) Circuit SAIFI (System Average Interruption Frequency Index) for 2021 l) Circuit SAIFI (System Average Interruption Frequency Index) for 2021 l) Circuit SAIFI (System Average Interruption Frequency Index) for 2021 	Aaron Louie a) Refer to supporting file: "CalAdvocates-Liberty-2023WMP-03_Liberty Response Questions 1- 4," Tab Q1 – Distribution.	2/24/2023	3/10/2023	3/10/2023 Response_03102023.pdf (libertyutilities.com)	12 Notices of Violation and Defect	
Advocates	3 CalAdvocates-Liberty-2023WMP-03	1 CalAdv-C	 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 PSPS events in 2021 (sum of customer-minutes across all PSPS events). p) Total customer-minutes of de-energization on the circuit due to PSPS events in 2022 (sum of customer-minutes across all PSPS 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 EVM in Non-HFTD in 2021 t) Number of trees that were worked on for EVM in Other HFTD in 2021 v) Number of trees that were worked on for EVM in Other HFTD in 2022 w) Number of trees that were worked on for EVM in HFTD Tier 2 in 2021 x) Number of trees that were worked on for EVM in HFTD Tier 2 in 2021 x) Number of trees that were worked on for EVM in HFTD Tier 2 in 2022 a) Miles of covered conductor installed in Non-HFTD in 2022 a) Miles of covered conductor installed in Non-HFTD in 2022 b) Miles of covered conductor installed in Non-HFTD in 2021 	Aaron Louie	2/24/2023	3/24/2023	1 1 3/29/2023 <u>CalAdvocates-Liberty-2023WMP-03 Liberty</u> 3/29/2023 <u>Response_03292023.pdf (libertyutilities.com)</u>	5, 6 Electrical Infrastructure	
			Circuit name b) Circuit ID number c) Total circuit miles d) Circuit miles in Non-HFTD Areas e) Circuit miles in Other HFTD f) Circuit miles in HFTD Tier 2 g) Circuit miles in HFTD Tier 3 h) Circuit voltage i) Total customer-minutes of de-energization on the circuit due to PSPS events in 2021 (sum of customer-minutes across all PSPS events). j) Total customer-minutes of de-energization on the circuit due to PSPS events in 2022 (sum of customer-minutes across all PSPS events). j) Total customer-minutes of de-energization on the circuit due to pSPS events in 2022 (sum of customer-minutes across all PSPS events). k) Total customer-minutes of de-energization on the circuit due to fast-trip settings in 2021. j) Total customer-minutes of de-energization on the circuit due to fast-trip settings in 2022. m) Number of support structures replaced in Non-HFTD in 2021 o) Number of support structures replaced in Other HFTD in 2021 o) Number of support structures replaced in Other HFTD in 2022 q) Number of support structures replaced in HFTD Tier 2 in 2021 r) Number of support structures replaced in HFTD Tier 2 in 2021 r) Number of support structures replaced in HFTD Tier 2 in 2021 r) Number of support structures replaced in HFTD Tier 3 in 2021 t) Number of support structures replaced in HFTD Tier 3 in 2021 d) Miles of LIDAR inspection in Non-HFTD in 2022 d) Miles of LIDAR inspection in Non-HFTD in 2022 d) Miles of LIDAR inspection in HFTD Tier 2 in 2022 d) Miles of LIDAR inspection in HFTD Tier 2 in 2022 d) Miles of LIDAR inspection in HFTD Tier 2 in 2022 d) Miles of LIDAR inspection in HFTD Tier 2 in 2021 d) Miles of LIDAR inspection in HFTD Tier 2 in 2022 d) Miles of LIDAR inspection in HFTD Tier 2 in 2022 d) Miles of LIDAR inspection in HFTD Tier 2 in 2022 d) Miles of LIDAR inspection in HFTD Tier 2 in 2022 d) Miles of LIDAR inspection in HFTD Tier 3 in 2021 d) Miles of LIDAR inspection in HFTD Tier 2 in 2022 d) Miles of LIDAR inspection in HFTD Tier 2 in 2022 d) Miles of LIDAR inspection in HFTD Tier 3 in 2021 d) Miles o	. a) Refer to supporting file: "CalAdvocates-Liberty-2023WMP-03_Liberty Response Questions 1- 4," Tab Q2 – Transmission.			CalAdvocates-Liberty-2023WMP-03 Liberty.		
Advocates	3 CalAdvocates-Liberty-2023WMP-03	2 CalAdv-C	 03-3.2 ON the set of the field of the field	Aaron Louie Refer to supporting file: "CalAdvocates-Liberty-2023WMP-03_ Liberty Response Questions 1- 4," Tab Q3 – Distribution Removals.	2/24/2023	3/24/2023	3/29/2023 Response 03292023.pdf (libertyutilities.com) 1 CalAdvocates-Liberty-2023WMP-03 Liberty	5,6 Electrical Infrastructure	
Advocates	3 CalAdvocates-Liberty-2023WMP-03	3 CalAdv-0	03-3.3 g) Reason(s) for removal or decommissioning. 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-HFTD Areas d) Circuit miles removed or decommissioned in Other HFTD e) Circuit miles removed or decommissioned in HFTD Tier 2	Aaron Louie Refer to supporting file: "CalAdvocates-Liberty-2023WMP-03_Liberty Response Questions 1- 4," Tab Q4 – Transmission Removals.	2/24/2023	3/24/2023	3/29/2023 Response_03292023.pdf (libertyutilities.com) 1	8 Line Removal	
Advocates	3 CalAdvocates-Liberty-2023WMP-03	4 CalAdv-C	f) Circuit miles removed or decommissioned in HFTD Tier 3 03-3.4 g) Reason(s) for removal or decommissioning. 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 distribution assets i) Aerial inspections of transmission assets i) Aerial inspections of transmission assets j) LiDAR inspections of distribution assets	Aaron LouieLiberty 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.	2/24/2023	3/24/2023	CalAdvocates-Liberty-2023WMP-03_Liberty 3/29/2023 Response_03292023.pdf (libertyutilities.com) Image: CalAdvocates-Liberty-2023WMP-03_Liberty	8 Line removal	
Advocates	3 CalAdvocates-Liberty-2023WMP-03	5 CalAdv-0	03-3.5 k) LiDAR inspections of transmission assets. 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	Aaron LouieLiberty 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.	2/24/2023		3/29/2023 Response_03292023.pdf (libertyutilities.com)	6 Risk Scoring	
alAdvocates	3 CalAdvocates-Liberty-2023WMP-03	6 CalAdv-0	03-3.6 k) LiDAR inspections of transmission assets. For each WMP initiative listed below, please state how the modeled Wildfire Risk Scores for each circuit or circuit-segment influence where you plan perform work in 2023. a) VM	Aaron Louie to 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	2/24/2023	3/24/2023	3/29/2023 Response_03292023.pdf (libertyutilities.com)	6 Risk Scoring	
			b) Covered conductor installation c) Undergrounding d) Distribution pole replacement e) Grid sectionalization f) Detailed inspections of distribution assetsg) Detailed inspections of transmission assets	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.					
			 h) Aerial inspections of distribution assets i) Aerial inspections of transmission assets j) LiDAR inspections of distribution assets 				CalAdvocates-Liberty-2023WMP-03 Liberty_		

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canavocates	5 Ca	An ACCOLOLES-LIDEI LY-2023 WIVIP-05	۷	CaIAUV-U5-5.2	Provide a g the circuit- spatial data
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					e) Grid sect f) Detailed g) Detailed
				1	d) Distribut

	For each WMP initiative listed below, please state which and how the modeled Wildfire Risk Scores for each circuit or circuit-segment influence how work in 2023 will be sequenced. a) VM	Liberty did not perform overall wildfire risk scores at the circuit or circuit segment level that influenced how work was sequenced in 2023. Work performed in 2023 was planned using						
	b) Covered conductor installation c) Undergrounding	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						
	d) Distribution pole replacement e) Grid sectionalization f) Detailed inspections of distribution assets	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.						
	g) Detailed inspections of transmission assets h) Aerial inspections of distribution assets							
3-3.8	 i) Aerial inspections of transmission assets j) LiDAR inspections of distribution assets k) LiDAR inspections of transmission assets. 		Aaron Louie	2/24/2023	3/24/2023	CalAdvocates-Liberty-2023WMP-03_Liberty 3/29/2023 Response_03292023.pdf (libertyutilities.com)	6	Risk Scoring N/A
	For each WMP initiative listed below, please state how the modeled Wildfire Risk Scores for each circuit or circuit-segment influence where you plan to perform work in 2024. a) VM	circuit segment level to plan and prioritize where it performs future work in 2024. For						
	 b) Covered conductor installation c) Undergrounding d) Distribution pole replacement 	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.						
	e) Grid sectionalization f) Detailed inspections of distribution assets g) Detailed inspections of transmission assets							
	 a) Aerial inspections of distribution assets a) Aerial inspections of transmission assets 							
	 j) LiDAR inspections of distribution assets k) LiDAR inspections of transmission. For each WMP initiative listed below, please state how the modeled Wildfire Risk Scores for each circuit or circuit-segment influence how work in 2024 	Liberty is evaluating the results of differing wildfire risk assessments at the circuit and/or	Aaron Louie	2/24/2023	3/24/2023	CalAdvocates-Liberty-2023WMP-03_Liberty 3/29/2023 Response_03292023.pdf (libertyutilities.com)	6	Risk Scoring N/A
	will be sequenced. a) VM b) Covered conductor installation	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						
	c) Undergrounding d) Distribution pole replacement e) Grid sectionalization	initiative subsections in Section 8 of Liberty's 2023 WMP pre-submission.						
	f) Detailed inspections of distribution assets g) Detailed inspections of transmission assets							
3-3.10	 h) Aerial inspections of distribution assets i) Aerial inspections of transmission assets j) LiDAR inspections of distribution assets k) LiDAR inspections of transmission assets. 		Aaron Louie	2/24/2023	3/24/2023	CalAdvocates-Liberty-2023WMP-03_Liberty 3/29/2023 Response 03292023.pdf (libertyutilities.com)	6	Risk Scoring N/A
	For each WMP initiative for which you forecast capital expenditures in 2023 to be at least two times actual capital expenditures in 2022, please provide: a) The name of the initiative as it is identified in your 2023-2025 WMP	Refer to supporting file: "CalAdvocates-Liberty-2023WMP-04_Liberty Response Questions 1- 4," Tab Response 1.						
	 b) The WMP Initiative number in Table 11 of your 2023-2025 WMP c) The name of the initiative as it is identified in your 2022 WMP Update d) The WMP Initiative number in Table 12 of your 2022 WMP Update 					CalAdvocates-Liberty-2023WMP-04 Liberty	1	
	e) An explanation for the projected increase. For each WMP initiative for which you forecast capital expenditures in 2024 to be at least two times actual capital expenditures in 2022, please	Refer to supporting file: "CalAdvocates-Liberty-2023WMP-04_Liberty Response Questions 1- 4," Tab Response 2.	Aaron Louie	2/24/2023	3/24/2023	3/31/2023 <u>Response_03312023.pdf (libertyutilities.com)</u>	WMP Financials	N/A N/A
	provide: a) The name of the initiative as it is identified in your 2023-2025 WMP b) The WMP Initiative number in Table 11 of your 2023-2025 WMP c) The name of the initiative as it is identified in your 2022 WMP Update	4, Tab Response 2.				CalAdvocates-Liberty-2023WMP-04_Liberty_	1	
	 d) The WMP Initiative number in Table 12 of your 2022 WMP Update e) An explanation for the projected increase. For each WMP initiative for which you forecast operating expenditures in 2023 to be at least two times actual operating expenditures in 2022, please provide: a) The name of the initiative as it is identified in your 2023-2025 WMP 	Refer to supporting file: "CalAdvocates-Liberty-2023WMP-04_Liberty Response Questions 1- 4," Tab Response 3.	Aaron Louie	2/24/2023	3/24/2023	3/31/2023 Response_03312023.pdf (libertyutilities.com)	WMP Financials	N/A N/A
	b) The WMP Initiative number in Table 11 of your 2023-2025 WMP c) The name of the initiative as it is identified in your 2022 WMP Update						1	
4-4.3	 d) The WMP Initiative number in Table 12 of your 2022 WMP Update e) An explanation for the projected increase. For each WMP initiative for which you forecast operating expenditures in 2024 to be at least two times actual operating expenditures in 2022, please 	Refer to supporting file: "CalAdvocates-Liberty-2023WMP-04 Liberty Response Questions 1-	Aaron Louie	2/24/2023	3/24/2023	CalAdvocates-Liberty-2023WMP-04_Liberty 3/31/2023 Response_03312023.pdf (libertyutilities.com)	WMP Financials	N/A N/A
	provide: a) The name of the initiative as it is identified in your 2023-2025 WMP b) The WMP Initiative number in Table 11 of your 2023-2025 WMP	4," Tab Response 4.					1	
4-4.4	c) The name of the initiative as it is identified in your 2022 WMP Update d) The WMP Initiative number in Table 12 of your 2022 WMP Update e) An explanation for the projected increase.		Aaron Louie	2/24/2023	3/24/2023	CalAdvocates-Liberty-2023WMP-04_Liberty 4/10/2023 Response 03312023.pdf (libertyutilities.com)	- WMP Financials	N/A N/A
	a) As of January 1, 2022, have you identified transportation corridors within your service territory where falling or failing lines or poles could currently limit egress and/or ingress during an emergency? b) If the answer to part (a) is yes, please describe how you identify such transportation corridors. c) If	a) No. b) N/A c) N/A			5/21/2020			
5-5.1	available, please provide a geospatial data file that contains all current identified transportation corridors with ingress and egress hazards. Provide an Excel table of all distribution circuit-segments that traverse HFTD areas (i.e., the segment has greater than zero circuit-miles in HFTD) existing	Refer to supporting file: "CalAdvocates-Liberty-2023WMP-05 Liberty Response Question 2."	Aaron Louie	2/24/2023	3/30/2023	CalAdvocates-Liberty-2023WMP-05_Liberty_ 4/10/2023 Response_04102023.pdf (libertyutilities.com)	6	N/A N/A
	as of January 1, 2023. The Excel table should list each such circuit-segment as a row and include the following information in separate columns. For items (n) and (r), please include all relevant risk scores. For example, include vegetation risk score, conductor risk score, and any other driver-specific							
	risk scores you have developed. Please insert additional columns as needed to accommodate this. a) Name or ID number of each circuit segment b) Circuit name for the circuit that each segment is part of c) Circuit ID for the circuit that each segment is part of							
	d) Nominal voltage e) Total circuit-miles on the circuit-segment							
	f) Overhead circuit-miles on the circuit-segment in non-HFTD Areas g) Overhead circuit-miles on the circuit-segment in HFTD Tier 2 h) Overhead circuit-miles on the circuit-segment in HFTD Tier 3							
	i) Underground circuit-miles on the circuit-segment in non-HFTD Areas j) Underground circuit-miles on the circuit-segment in HFTD Tier 2 k) Underground circuit-miles on the circuit-segment in HFTD Tier 3						1	
	 I) Probability of ignition score for the circuit-segment, according to the risk model you used for your 2022 WMP filing m) Consequence of ignition score for the circuit-segment, according to the risk model you used for your 2022 WMP filing 							
	 n) Total wildfire risk score(s) for the circuit-segment, according to the risk model you used for your 2022 WMP filing. Insert additional columns if needed o) Power Safety Power Shutoff (PSPS) risk score for the circuit-segment, according to the risk model you used for your 2022 WMP filing p) Probability of ignition score for the circuit-segment, according to the risk model you are using for your 2023-2025 WMP filing 							
	q) Consequence of ignition score for the circuit-segment, according to the risk model you are using for your 2023-2025 WMP filing r) Total wildfire risk score(s) for the circuit-segment, according to the risk model you are using for your 2023-2025 WMP filing. Insert additional columns							
	if needed s) Power Safety Power Shutoff (PSPS) risk score for the circuit-segment, according to the risk model you are using for your 2023-2025 WMP filing.					CalAdvocates-Liberty-2023WMP-05 Liberty_		
	Provide a geodatabase file containing the outputs from your current wildfire risk model (i.e., the model you are using for your 2023-2025 WMP filing), a the circuit-segment level. (This data should be equivalent to the previous question, but in GIS format.) Please provide, as line features, the most recent		Aaron Louie	2/24/2023	3/30/2023	4/10/2023 <u>Response_04102023.pdf (libertyutilities.com)</u>	6	N/A N/A
	spatial data for all circuit segments for which your current risk model calculates circuit segment-level expected risk (i.e., probability of ignition multiplied by the consequence of ignition). Include the following attributes for each circuit segment: a) Items (a) through (c) of the previous question	used for the 2023-2023 while pre-submission at the circuit-segment level.						
5-5.3	 b) Items (p) through (s) of the previous question. Please fill out the attached spreadsheet, CalAdvocates-Liberty-2023WMP-05_Attachment Tab 1, requesting information regarding your asset 	Refer to supporting file: "CalAdvocates-Liberty-2023WMP-05_Liberty Response Question 4."	Aaron Louie	2/24/2023	3/30/2023	CalAdvocates-Liberty-2023WMP-05_Liberty 4/10/2023 Response_04102023.pdf (libertyutilities.com) CalAdvocates-Liberty-2023WMP-05_Liberty	6	N/A N/A
5-5.4	inspections in 2022. In response to Data Request CalAdvocates-Liberty-2022WMP-06, Question 7, March 24, 2022, Liberty stated, "Liberty's QA/QC processes for asset	a) Yes.	Aaron Louie	2/24/2023	3/30/2023		1 8	Grid Design, operations, and maintenance (8.1) 8.1.6
	inspections were developed for implementation in 2022. The QA/QC processes will be conducted in Quarter 3 and Quarter 4 of 2022 after Quarter 1 and Quarter 2 detailed inspections are completed." a) Did Liberty implement its QA/QC processes for asset inspections in the second half of 2022 as referenced in the quote above?	b) As part of its QA/QC process for 2022, Liberty assigned a third-party contractor to re- inspect 0.5% of its 2022 detailed inspections, equating to 27 re-inspections. Of these, 24 were completed and three locations were inaccessible at the time of re-inspection due to						
	b) Please summarize the results of Liberty's asset inspection QA/QC reviews in 2022. c) Did Liberty's asset inspection QA/QC reviews in 2022 lead to any corrective actions or improvements, such as performing re-inspections of certain	snow, equating to 0.44% re-inspected. Refer to supporting file: "CalAdvocates-Liberty- 2023WMP-05_Liberty Response Question 5 and 6."					1	
	assets, revising inspection protocols, or changing training for inspectors? d) If the answer to part (c) is yes, please describe the actions that Liberty is taking as a result of its asset inspection QA/QC reviews. e) If the answer to part (c) is no, please explain why not.	 c) No. The QA/QC reviews showed that there are some inconsistencies among inspectors, but the significant issues were captured by both inspections. d) None. 						
5-5.5			Aaron Louie	2/24/2023	3/30/2023	4/10/2023 <u>Response_04102023.pdf (libertyutilities.com)</u>	8	Grid Design, operations, and maintenance (8.1) 8.1.6
	In response to Data Request CalAdvocates-Liberty-2022WMP-06, Question 7, March 24, 2022, Liberty stated "Liberty's QA/QC processes for asset inspections were developed for implementation in 2022. The QA/QC processes will be conducted in Quarter 3 and Quarter 4 of 2022 after Quarter 1 and Quarter 2 detailed inspections are completed." The following questions refer to the QA/QC processes for asset inspections that Liberty	a) Liberty completed one Program Manager Review Acknowledgement form for 2022 asset inspection QA/QC activities. Refer to supporting file: "CalAdvocates-Liberty-2023WMP- 05_Liberty Response Question 6a."						
	implemented in Quarter 3 and Quarter 4 of 2022: a) Please provide a sample of 5 completed "Appendix A – Program Manager Quarterly Review Acknowledgment" forms.	b) Liberty completed one Senior Manager Annual Review Acknowledgement form for 2022 asset inspection QA/QC activities. Refer to supporting file: "CalAdvocates-Liberty-2023WMP- 05 Liberty Response Question 6b."					1	
	 b) Please provide a sample of 5 completed "Appendix B – Senior Manager Annual Review Acknowledgment" forms. c) Please provide a sample of 5 completed "Appendix C – Third Party Inspection" forms that were completed by third party contractors. 	 c) Refer to supporting file: "CalAdvocates-Liberty-2023WMP-05_Liberty Response Question 5 and 6." This file captures the information from the third party QA/QC inspections completed 	5			CalAdvocates-Liberty-2023WMP-05 Liberty_		
	Please augment Table 13 of the non-spatial data tables in your WMP Quarterly Data Report for Q4 of 2022, which reports asset-related corrective notifications on electric circuits that were open at the end of the quarter. Add the following information in separate columns: a) Name of the	in 2022. Refer to supporting file: "CalAdvocates-Liberty-2023WMP-05_Liberty Response Question 7."	Aaron Louie	2/24/2023	3/30/2023		8	Grid Design, operations, and maintenance (8.1) 8.1.6
	associated circuit b) ID number of the associated circuit						1	
5-5.7	 c) Geographic latitude in decimal degrees, truncated to seven decimal places d) Geographic longitude in decimal degrees, truncated to seven decimal places e) Object/damage code or other description of defect 		Aaron Louie	2/24/2023	3/30/2023	CalAdvocates-Liberty-2023WMP-05_Liberty_ 4/10/2023 Response_04102023.pdf (libertyutilities.com)	8	Grid Design, operations, and maintenance (8.1) 8.1.6
	Regarding Table 13 of the non-spatial data tables in your WMP Quarterly Data Report for Q4 of 2022: a) Do you have an internal system of identifying priority levels for corrective notifications that differs from the priority levels specified in General Order 95, Rule 18?	b) Along with GO 95, Rule 18, Liberty uses its fire risk maps and asset condition codes to			0,00,2020			
	 b) If the answer to part (a) is yes, please explain your internal priority system. c) Do you ever re-inspect corrective notifications before they are resolved? d) If the answer to the part (b) is yes, under what circumstances do you conduct re-inspections? 	assess the prioritization of corrective actions and replacements.c) Yes.d) Liberty has conducted re-inspections through its detailed asset inspection program of						
5-5.8	Please provide a list of any incidents in 2022 where the actions of a VM contractor posed a safety risk to workers and/or the public "Safety risk" here i		Aaron Louie	2/24/2023	3/30/2023	CalAdvocates-Liberty-2023WMP-05_Liberty 4/10/2023 Response_04102023.pdf (libertyutilities.com)	8	Grid Design, operations, and maintenance (8.1) 8.1.6
	Please provide a list of any incidents in 2022 where the actions of a VM contractor posed a safety risk to workers and/or the public. "Safety risk" here is defined as any occurrence on a worksite where the contractor's behavior created a safety hazard for either workers or the general public. For each instance, please provide: a) The date you were informed of the safety issue	a safety risk to workers or the public.						
	 b) The date that the original work that created the safety issue was performed c) Whether the safety issue concerned a transmission or distribution circuit d) The vegetation management initiative involved in the original work 					CalAdvocates-Liberty-2023WMP-06 Liberty_		
6-6.1	e) A brief description of the safety issue involved. Provide your workplan that describes where and when you will perform system hardening on distribution circuits in 2023. For projects that you expect	Refer to tab "2023" in supporting file: "CalAdvocates-Liberty-2023WMP-06_Liberty	Aaron Louie	2/24/2023	4/19/2023		8	Vegetation Management and Inspections (8.2) 8.2.7
	to partially complete in 2023 (i.e., projects that started before 2023 and are expected to continue in 2023, or projects that are expected to be completed after 2023), please include the project and report the work what you forecast will actually be performed in calendar year 2023. For each project, include the following information in separate columns, at a minimum: a) Order number	Response Questions 2 and 3."						
	b) Program c) Circuit ID number							
	 d) Circuit-segment name or ID number (if the project affects more than one circuit-segment, please identify each one) e) Relevant wildfire risk score(s) from the wildfire risk model that you are using to estimate 							
	distribution risk in your 2023-2025 WMP filing f) The expected or actual start date of the project						1	
	g) The expected completion date of the project h) Length (in circuit miles) of covered conductor to be installed in 2023 i) Length (in circuit miles) of underground conductor to be installed in 2023							
	 j) Length (in circuit miles) of overhead conductor to be permanently removed in 2023 and replaced by underground conductor (note that this may differ slightly from the previous part due to differing overhead and underground routes) k) Length (in circuit miles) of overhead conductor to be permanently removed in 2023 and not replaced with covered conductor or undergrounded. 							
6-6.2	I) Length (in circuit miles) of any other type of system hardening project to be installed in 2023 (if this is greater than zero, please describe the type of system hardening project)		Aaron Louie	2/24/2023	4/19/2023	CalAdvocates-Liberty-2023WMP-06_Liberty 4/26/2023 Response 04262023.pdf (libertyutilities.com)	8	Grid Design, operations, and maintenance (8.1) 8.1.2
	Provide your workplan that describes where and when you will perform system hardening on distribution circuits in 2024. For projects that you expect to partially complete in 2024 (i.e., projects that are expected to start before 2024 and are expected to continue in 2024, or projects that are expected to be completed after 2024), please include the project and report the work that you forecast will actually be performed in calendar year 2024. For							
	each project, include the following information in separate columns, at a minimum: a) Order number b) Program							
	c) Circuit ID number d) Circuit-segment name or ID number (if the project affects more than one circuit-segment, please identify each one)							
	e) Relevant wildfire risk score(s) from the wildfire risk model that you are using to estimate distribution risk in your 2023-2025 WMP filing							
	f) The expected or actual start date of the project g) The expected completion date of the project h) Length (in circuit miles) of covered conductor to be installed in 2024						1	
	i) Length (in circuit miles) of underground conductor to be installed in 2024 j) Length (in circuit miles) of overhead conductor to be permanently removed in 2024 and							
	replaced by underground conductor (note that this may differ slightly from the previous part due to differing overhead and underground routes) k) Length (in circuit miles) of overhead conductor to be permanently removed in 2024 and not							
	replaced with covered conductor or undergrounded I) Length (in circuit miles) of any other type of system hardening project to be installed in		Aaron Louis	2/24/2023	A/10/2022	<u>CalAdvocates-Liberty-2023WMP-06_Liberty</u>		Grid Design operations and maintenance (9.1)
	2024 (if this is greater than zero, please describe the type of system hardening project). For each of your 2023-2025 WMP system hardening initiatives, please provide disaggregated information related to expenditures and circuit miles treated in the attached table, Cal Advocates-Liberty-2023WMP-06_Attachment Tab 1. Add extra columns as needed. Note: for the purposes of this	Refer to supporting file: "CalAdvocates-Liberty-2023WMP-06_Liberty Response Question 4"	Aaron Louie	2/24/2U23	4/19/2023		1	Grid Design, operations, and maintenance (8.1) 8.1.2
	question, "line removal" refers to conductors that are permanently removed without replacement – for instance, as part of a remote grid project. This should be understood as identical to part (k) of questions 2 and 3 above.		Aaron Louie	2/24/2023	4/19/2023	CalAdvocates-Liberty-2023WMP-06Liberty4/26/2023Response 04262023.pdf (libertyutilities.com)	- 8	Grid Design, operations, and maintenance (8.1) 8.1.2

			Regarding your PSPS circuit modeling capabilities: a) Please describe your present circuit modeling capabilities with regard to PSPS decision-making	a) Liberty's 2023 WMP section 6.2 includes the baseline PSPS risk analyses and assessment						
			("PSPS circuit modeling capabilities"), including with what level of granularity they are able to determine how circuit hardening efforts or other changes to a line segment will affect PSPS thresholds.	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 offerts and is a static study. The decision-making framework would have to consider current						
			b) Please describe any improvements to the present PSPS circuit modeling capabilities that you expect to implement in 2023.	efforts and is a static study. The decision-making framework would have to consider current PSPS thresholds 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						
			c) Please describe any improvements to the present PSPS circuit modeling capabilities that you expect to implement in 2024.	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						
			d) Please describe the expected state of your PSPS circuit modeling capabilities at the conclusion of the 2023-2025 WMP cycle.	current PSPS circuit model capabilities. Measuring PSPS risk reduction would require tracking circuit segments with PSPS mitigations planned such as covered conductor, 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 forced 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 integration of asset						
				and vegetation performance tracking with real-time data analytics to effectively measure risk reduction as it relates to wildfire risk. Liberty could also integrate PSPS mitigation measures			CalAdvocates-Liberty-2023WMP-06_Liberty_			
IAdvocates	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	as part of its enterprise risk management solution. Aaron Louie Liberty did not have any ignitions in 2022 associated with assets where it had an existing Image: Comparison of the ignition	2/24/2023	4/19/2023 4/26	6/2023 Response 04262023.pdf (libertyutilities.com)		6	Risk Analysis Framework (6.2)
			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	corrective notification at the time of the 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							
IAdvocates	6 CalAdvocates-Liberty-2023WMP-06	6 CalAdv-06-6.6	j) Notification number(s) for the existing corrective notification on the asset in question	Aaron Louie	2/24/2023	4/19/2023 4/26	6/2023 <u>Response 04262023.pdf (libertyutilities.com)</u>		8	Grid Design, operations, and maintenance (8.1)
			Page 55 of Liberty's 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?	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 Reax wildfire risk polygons.						
			b) What other wildfire risk assessments has Liberty conducted instead?	Liberty provides an additional map in Appendix C of its 2023 WMP showing the SVI distribution, Liberty's updated utility risk analysis in its 2023 WMP, and major roads. Due to increased rick modeling requirements in the Office of Energy Infrastructure Safety (OEIS)						
				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						
lAdvocates	7 CalAdvocates-Liberty-2023WMP-07	1 CalAdv-07-7.1		Liberty's updated wildfire risk modeling results. b) Refer to Section 6 of Liberty's 2023 WMP.	5/18/2023	5/23/2023 5/23	CalAdvocates-Liberty-2023WMP-07 Liberty 3/2023 Response 05232023.pdf (libertyutilities.com)		5	Community Values at Risk (5.4)
			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	a) No. b) N/A	5/10/2025		Nesponse OS252025.pdf (indertyddinties.com)			
			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	 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- 						
			surrounded by similar vegetation, but the topography varies from flat land to slopes, ridges, and canyons. All 35 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.	supporting materials: "CalAdvocates-Liberty-2023WMP-07_Liberty Response Question 3c." d) During the 2023-2025 WMP cycle, Liberty will continue to perform mitigation work across				1		
			 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? 	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						
Advocatos	7 CalAdvacates Liberty 2022141 to 27	,		may consider incorporating limited egress into wildfire risk analysis in future years so that the risk can be quantified.	5/18/2023	E /22 /2022	CalAdvocates-Liberty-2023WMP-07 Liberty			Community Values at Disk (5.1)
Advocates	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 ameliorate the	a) Liberty uses a variety of methods for notifying customers of O&M activities: Talal Harahsheh • Door hangers • Door hangers	5/18/2023	5/23/2023 5/23	3/2023 <u>Response_05232023.pdf (libertyutilities.com)</u>		5	Community Values at Risk (5.4)
			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.	 Door nangers Sign boards Mailed letters or postcards 						
			c) Please describe Liberty's public communication strategy to informs homeowners and renters in its service territory when O&M activities are to be expected?							
				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 "Varifies sustamer information according to Liberty.						
IAdvocates	7 CalAdvocates-Liberty-2023WMP-07	3 CalAdv-07-7.3		the Call Quality Program in which "Verifies customer information according to Liberty standards" is one component of the scorecard.Talal Harahshehc) Refer to Response 3a.Talal Harahsheh	5/18/2023	5/23/2023 5/23	<u>CalAdvocates-Liberty-2023WMP-07 Liberty</u> 3/2023 Response 05232023.pdf (libertyutilities.com)			Community Values at Risk (5.4)
		CaiAuv-0/-7.5	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	 a) No. b) Liberty is in the process of executing an MOU with TRPA. The draft MOU is currently being 		_,,				
			and approval." a) To date, has Liberty executed an updated memorandum of understanding with Tahoe Regional Planning Agency? b) If the answer the part (a) above is "no," please describe the status of developing an updated memorandum of understanding and the projected timeline to execute it.	he reviewed by TRPA legal counsel and will then be sent back to Liberty for additional review.			CalAdvocates-Liberty-2023WMP-07_Liberty_			
Advocates	7 CalAdvocates-Liberty-2023WMP-07	4 CalAdv-07-7.4	Page 64 of Liberty's WMP states:	a) Refer to Liberty's 2023 WMP for the analysis that Liberty completed in advance of its 2023	5/18/2023	5/23/2023 5/23	3/2023 Response_05232023.pdf (libertyutilities.com)		5	Community Values at Risk (5.4)
			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 WM submission Liberty between is committed to continuing to evolve and improve its risk modeling practices and intende to conduct the analyses and							
			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 provide in the 2022-2025 WMP Technical Guidelines that Liberty has not yet conducted.							
			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.	analytics utilizing its Wildfire Risk Reduction Model ("WRRM"). Liberty received its first analytics package with the results from WRRM in late February 2023. Additionally, in late January 2023, Liberty signed a formal agreement with Direxyon to pilot its asset risk decision-						
				making solution to be incorporated, in part, in Liberty's 2023 WMP. Liberty's 2023 WMP pre- submission was submitted to OEIS on March 6, 2023. Thus, time was a limiting factor in						
				completing additional analysis contained in the OEIS 2023-2025 WMP Technical Guidelines. c) Liberty anticipates completing additional analysis contained in the OEIS 2023-2025 WMP						
IAdvocates	7 CalAdvocates-Liberty-2023WMP-07	5 CalAdv-07-7.5		Technical Guidelines during the 2023-2025 WMP cycle. Talal Harahsheh	5/18/2023	5/23/2023 5/23	3/2023 <u>CalAdvocates-Liberty-2023WMP-07 Liberty</u> <u>8/2023 Response_05232023.pdf (libertyutilities.com)</u>		6	Risk Methodology and Assessment
			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	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						
			Liberty utilize to define "social vulnerability"? d) What data does Liberty currently maintain or collect to measure social vulnerability?	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						
				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 Reax wildfire risk polygons. Liberty provides an additional map in Appendix C of its 2023 WMP showing the						
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IAdvocates IAdvocates IAdvocates IAdvocates IAdvocates IAdvocates IAdvocates IAdvocates	 CalAdvocates-Liberty-2023WMP-08 CalAdvocates-Liberty-2023WMP-09 	1 CalAdv-08-8.1 1 CalAdv-09-9.1 2 CalAdv-09-9.2 3 CalAdv-09-9.3 4 CalAdv-09-9.3	Pleae provide an Excel share that period has satisfied outlings that was caused by equipment failure for the period from 2020 to 2021 in any HFD are A statisfied outlings is an outling that is for five or more induces. The Excel sheet should list each outling as a row, with the following information in columns: all D number of the circuit affected. C) Diverse of the circuit affected. C) Diverse of the outlings. C) Cause of the outling spectra. C) Cause of the outling comes impacted. C) Page 200 fubberty NMP states tacked outline tability is not a factor currently included in Liberty's wildfire risk analysis, though Liberty intends to incorporate it in its factor ack mobiling process. C) Mater when blinety anticipates being able to include social vulnerability process? Page 200 f Liberty's WMP states that polynical vulnerability is not a factor currently included in Liberty's wildfire risk analysis, though Liberty intends to incorporate it in its factor ack mobiling process? Page 200 f 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 factor is mobiling process. C) In which year of this WMP outlings: D) State when Liberty anticipates being able to include social vulnerability as part of Liberty's wildfire risk analysis, though Liberty intends to incorporate it in its factor expending process. C) In which year of this WMP cycle does Liberty pion on being able to include capred capability in its fature risk modeling process? Page 20 of Liberty's WMP states that coping capability is not a factor currently included in Liberty's 201 WMP submission. D) State when tabert	contency: Additionally, ints 2023 WMP, Uberty provides a map in Figure 5-11 showing its service artery overlaid with the Scald Vulnerability folds (SVI) and its current Reax wildline risk polygons. Uberty provides an additional map in Appendix C of its 2023 WMP showing the SVI distribution. Uberty submitting its 2023 WMP in Status and Were Centers for Disease Centrel and Prevention/Agency for Toxic Substances and Disease Registry's Social Vulnerability Index dataset. a. Refer to supporting file: "CalAdvocates-Liberty-2023WMP-08_Liberty Response Question 1." n Table Harahsheh el(). Table Harahsheh a) With the final 2023 WMP technical guidelines issued approximately three months prior to submission of the 2023 WMP. Uberty was not able to incorporate social vulnerability into its status issue approximately three months prior to submission of the 2023 WMP, Uberty was not able to incorporate social vulnerability into its status issue approximately three months prior to submission of the 2023 WMP, Uberty was not able to incorporate social vulnerability into its status issue approximately three months prior to submission of the 2023 WMP, Uberty was not able to incorporate social vulnerability into its status is not applied uberty file; Table Harahsheh a) Liberty is current fire science consultant, Dr. Chris Lautenberger, has advised Liberty that file; rouse to quarify a succurs's probability of being damaged or detroyed in a first balance on many and status damaged approximately a months prior to submission of the 2023 WMP submission o	5/18/2023 5/26/2023 5/26/2023 5/26/2023	5/23/2023 5/25 6/1/2023 6/3 6/1/2023 6/3 6/1/2023 6/3 6/1/2023 6/3	3/2023 Response_05232023.pdf (libertyutilities.com) 5/2023 CalAdvocates-Liberty-2023WMP-08_Liberty, 5/2023 CalAdvocates-Liberty-2023WMP-09_Liberty, 1/2023 CalAdvocates-Liberty-2023WMP-09_Liberty, 1/2024 CalAdvocates-Liberty-2023WMP-09_Liberty, 1/2023 CalAdvocates-Liberty-2023WMP-09_Liberty, 1/2024 CalAdvocates-Liberty-2023WMP-09_Liberty, 1/2025 CalAdvocates-Liberty-2023WMP-09_Liberty, 1/2026 CalAdvocates-Liberty-2023WMP-09_Liberty, 1/2027 CalAdvocates-Liberty-2023WMP-09_Liberty, 1/2028 CalAdvocates-Liberty-2023WMP-09_Liberty, 1/2029 CalAdvocates-Liberty-2023WMP-09_Liberty, 1/2029 CalAdvocates-Liberty-2023WMP-09_Liberty, 1/2029 CalAdvocates-Liberty-2023WMP-09_Liberty,			Grid Design, operations, and maintenance (8.1) Risk Methodology and Assessment Risk Methodology and Assessment

				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 th context:	his a) Liberty works on multiple circuits simultaneously. b) Liberty plans to conduct grid design and system hardening work on 16 of the top 20 risk-					
				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?	contributing circuits in 2023. c) No.					
				 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? c) Does Liberty use estimates of expected risk reduction to determine the sequence of mitigation work conducted on its top-risk circuits? 	he 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					
		0		d) If the answer to part (c) is no, why not?	timeline to develop the baseline risk of assets failing in service given historic outage events by type to calculate the likelihood of the risk events in future with the planned mitigations	F /2C /2022	C/1/2022 C/1/2022 Decrements 00012022 reff (liberty-tilities ears)		C	
IAdvocates	9 CalAdvocates-Liberty-2023WMP-09	8	CalAdv-09-9.8	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 augments Table 6-7 with information about planned wildfire mitigation measures on each circuit during the 2023-	correlating to the events to estimate risk reduction. Talal Harahsheh Refer to file: CalAdvocates-Liberty-2023WMP-09_Liberty Response Question 9 Image: CalAdvocates-Liberty-2023WMP-09_Liberty Response Question 9	5/26/2023	6/1/2023 6/1/2023 Response_06012023.pdf (libertyutilities.com)		6	Risk Methodology and Assessment
				2025 WMP cycle. Specifically, the table should add these new columns to Table 6-7: 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 1 new recloser on this circuit).						
				b) The month and year when Liberty began project planning for the work identified in part (a). c) The month and year when Liberty began construction or plans to begin construction of the work identified in part (a).				1		
Advocates	9 CalAdvocates-Liberty-2023WMP-09	9	CalAdv-09-9.9	 d) The month and year when Liberty currently plans to complete the project(s) identified in part (a). e) Brief description of other wildfire mitigation measures planned in 2023-2025. f) Timeline for completion of the work identified in the previous part. 	Talal Harahsheh	5/26/2023	6/1/2023 6/1/2023 <u>CalAdvocates-Liberty-2023WMP-09_Liberty</u> 6/1/2023 <u>Response_06012023.pdf (libertyutilities.com)</u>		6	Risk Methodology and Assessment
				Pages 104-105 of Liberty's WMP states: In late January 2023, Liberty signed a formal agreement with Direxyon to pilot its asset risk decision-making solution to be incorporated, in part, in this	a) Refer to file: CalAdvocates-Liberty-2023WMP-09_Liberty Response Question 10a for the scope of work of the pilot project with Direxyon. Liberty provided data to Direxyon that	5,20,2020				nisk methodology and Assessment
				WMP. If the pilot is successful for the pole asset type and produces effective decision-making tools Liberty will continue building out the risk-informe 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 abovementioned pilot project by Direxyon.	a) service risk for pole assets. The information included, but was not limited to, pole age, pole type, date of last inspection, GO 165 condition findings, vegetation LiDAR clearance findings,					
				 b) Describe the success criteria for the abovementioned Direxyon pilot project – in other words, what criteria is Liberty using to evaluate the success of the asset risk decision-making solution? c) Will the abovementioned pilot be completed by the end of 2023? 	of and financial costs of inspection and repair/replacement. Data was also provided from Technosylva to model fire risk. Direxyon combined the findings from in service risk and fire risk to create an overall risk scenario for pole assets throughout Liberty's territory.					
				d) If the answer to subpart (c) is "no," please state when Liberty expects the pilot to be complete. e) Please describe each specific way that Liberty anticipates utilizing the Direxyon tools to inform its 2023-2025 wildfire mitigation strategy.	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 expand Liberty's risk profile. Direxyon 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			1		
					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. c) Yes d) N/A e) Subsequent to evaluating Direxyon's modeling for pole assets, Liberty plans to					
					operationalize outputs to inform decision-making. Liberty will continue working with Direxyon 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.).		CalAdvocates-Liberty-2023WMP-09 Liberty			
alAdvocates	9 CalAdvocates-Liberty-2023WMP-09	10	CalAdv-09-9.10	Page 107 of Liberty's WMP states "Liberty's strategy development for this WMP did not utilize wildfire risk scores developed by Reax." a) Does Liberty plan on utilizing the wildfire risk scores developed by Reax to help plan future decisions regarding wildfire mitigation?	a) Yes. a) Yes. b) Liberty plans on utilizing the wildfire risk scores developed by Reax in 2024. a) Yes.	5/26/2023	6/1/2023 6/1/2023 Response_06012023.pdf (libertyutilities.com)		6	Risk Methodology and Assessment
				b) If the answer to part (a) above is yes, when does Liberty plan on utilizing the wildfire risk scores developed by Reax? c) If the answer to part (a) above is yes, please describe how Liberty's current approach will change with the utilization of the wildfire risk scores by	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					
alAdvocates	9 CalAdvocates-Liberty-2023WMP-09	11	CalAdv-09-9.11	Reax. 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 wildfi mitigation.	decision-making assessment and monitoring to improve its overall risk reduction ire performance over time. d) N/A Talal Harahsheh	5/26/2023	6/1/2023 6/1/2023 <u>CalAdvocates-Liberty-2023WMP-09_Liberty</u> 6/1/2023 <u>Response_06012023.pdf (libertyutilities.com)</u>		7	Wildfire Mitigation Strategy Development
				On page 173 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, causing Liberty to miss its 2022 inspection target by 203 miles. Please respond to the following:	a) Liberty erroneously reported its target as the total overhead miles for its service territory. Liberty does not perform patrol inspections in areas where detailed inspections are being					
				 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 amount Liberty was able to complete in 2022). c) Explain Liberty's process, procedure, or protocol for determining annual asset inspection targets for each type of inspection Liberty conducts. 	overhead detailed inspection miles. 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). c) Refer to Table 8-8 in Liberty's 2023 WMP for Liberty's asset inspection frequency, method		CalAdvocates-Liberty-2023WMP-10_Liberty_			
IAdvocates	10 CalAdvocates-Liberty-2023WMP-10	1	CalAdv-10-10.1	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 i 2022, while Liberty's target was to QA/QC 0.0050% of the detailed asset inspections in 2022. Please respond to the following:	and criteria. Talal Harahsheh	5/26/2023	6/1/2023 6/2/2023 Response_06022023.pdf (libertyutilities.com)		8	Grid Design, operations, and maintenance (8.1)
				a) How many individual asset inspections did Liberty conduct QA/QC on in 2022? b) Are both transmission and distribution detailed inspections included in the 0.0044% figure?	c) N/A d) 15 transmission (60 kV) and 9 distribution.					
				 c) If the answer is to part (b) above is "no," please answer which type of detailed inspections is included in the 0.0044% figure. d) If the answer is to part (b) above is "yes," please breakdown of each type of detailed inspections is included in the 0.0044% figure. 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 	 e) Refer to file: CalAdvocates-Liberty-2023WMP-10_Liberty Response Question 2. f) Liberty targeted 0.5% of detailed inspections as its QA/QC target as a starting point for the program and plans to escalate this sampling size in 2023. 			1		
				following information as 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.	g) Three of the 27 selected locations were inaccessible in December (when the QA/QC was completed) due to snow					
IAdvocates	10 CalAdvocates-Liberty-2023WMP-10	2	CalAdv-10-10.2	 f) State the basis for Liberty's target of performing QA/QC on 0.0050% of detailed asset inspections in 2022. g) Explain why Liberty missed the 0.005% QA/QC target in 2022. 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 re- 		5/26/2023	6/1/2023 6/2/2023 CalAdvocates-Liberty-2023WMP-10_Liberty Response_06022023.pdf (libertyutilities.com)		8	Grid Design, operations, and maintenance (8.1)
				inspected by third-party inspectors. Minimal differences were noted by the third-party inspectors, who found only very minor infractions during the re- inspections if differences were noted at all. 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	b) N/A					
		-		174 and 0.5% on page 182). 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	s		CalAdvocates-Liberty-2023WMP-10_Liberty		<u>_</u>	Crid Docimentary
alAdvocates	10 CalAdvocates-Liberty-2023WMP-10	3	CalAdv-10-10.3	and differences. 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 reinspected by third-party inspectors. Minimal differences were noted by the third-party inspectors, who found only very minor infractions during the re-	b) Six re-inspections noted minor differences.	5/26/2023	6/1/2023 6/2/2023 Response_06022023.pdf (libertyutilities.com)		8	Grid Design, operations, and maintenance (8.1)
				inspections if differences were noted at all. Please respond to the following: a) How many third-party QA/QC checks were completed on detailed asset inspections in 2022?	c) Examples include noting Level 3 differences such as foreign sign, loose secondary down guy, and auto splice 1" away from insulator.					
				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?			CalAdvocates-Liberty-2023WMP-10 Liberty			
alAdvocates	10 CalAdvocates-Liberty-2023WMP-10	4	CalAdv-10-10.4	 c) Please describe and provide examples of the "very minor infractions." On page 183 of its WMP, Liberty states: 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 	Talal Harahsheh a) Liberty halted its detailed inspections on January 1st, 2023, with the exception of detailed underground inspections due in 2023.	5/26/2023	6/1/2023 6/2/2023 Response_06022023.pdf (libertyutilities.com)		8	Grid Design, operations, and maintenance (8.1)
				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."	b) 40.3 circuit miles. c) Liberty has not completed detailed inspections yet in 2023.					
				Please respond to the following: a) On what exact date in 2023 did Liberty halt its detailed inspections, as referenced in the above quote?	 d) Liberty is currently planning to resume its detailed inspections on January 1st, 2024. e) Liberty will remain in compliance with GO95 and 165. f) Yes. 					
				 b) What is Liberty's 2023 target for detailed asset inspections? c) How many detailed asset inspections has Liberty completed in 2023? 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. e) Is Liberty currently in compliance with General Orders 95 and 165 regarding the frequency of detailed asset inspections? 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,			CalAdvocates-Liberty-2023WMP-10 Liberty_			
alAdvocates	10 CalAdvocates-Liberty-2023WMP-10	5	CalAdv-10-10.5	2024? On page 183 of its WMP, Liberty states: As of May 1, 2023, Liberty has halted its detailed inspections in 2023 to eliminate its backlog of open work	Talal Harahsheh a) Liberty is halting its detailed overhead inspections in 2023 in order to avoid further overlap af informations formations for a statement of the statement of	5/26/2023	6/1/2023 6/2/2023 <u>Response_06022023.pdf (libertyutilities.com)</u>		8	Grid Design, operations, and maintenance (8.1)
				orders. Both contract crews and internal crews are working to expedite the process. Please respond to the following: a) Explain Liberty's rationale for halting detailed inspections in 2023 to reduce the number of open work orders on Liberty's system, as referenced in th	 of infractions found in its 2020 full system survey and prioritize repairs to infractions found during the system survey b) Liberty's full system survey completed in 2020 included all overhead lines that normally are 					
				quote above. b) Explain the prudence of halting detailed asset inspections until 2024.	inspected over a five-year period. Liberty will remain compliant during 2023 without completing any overhead detailed inspections.					
				c) Estimate the potential safety risk caused by not conducting detailed inspections of Liberty infrastructure in 2023.	 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, 					
alAdvocates	10 CalAdvocates-Liberty-2023WMP-10	6	CalAdv-10-10.6	a) Describe Liberty's current staffing resources allocated to each of the following items under asset management, including but not limited to:	Liberty will continue to make repairs and replace poles across both Tier 2 and Tier 3 areas in its service territory in 2023. Talal Harahsheh a) Liberty's current staffing resources include:	5/26/2023	6/1/2023 6/2/2023 CalAdvocates-Liberty-2023WMP-10 Liberty 6/2/2023 Response_06022023.pdf (libertyutilities.com)		8	Grid Design, operations, and maintenance (8.1)
				a. Inspections b. Maintenance	a. Inspections: Five internal inspectors and one contract inspector b. Maintenance: Four internal crews and three contract crews available					
				 c. Resolution of open work orders and any other items not listed above. b) Please explain how Liberty's current staffing is sufficient or not sufficient to comply with regulatory requirements for asset management and inspection? 	 c. Open work orders and other: Same as above plus five internal troublemen b) Liberty's current staffing has been sufficient to comply with regulatory requirements for asset management and inspection. 					
				 c) How many open (unfilled) staff or contractor positions does Liberty have in the area of asset management and inspections? Please explain your response. d) How many filled staff or contractor positions in the area of asset management and inspections would Liberty consider to be "fully staffed"? 	 c) Zero. Liberty is fully staffed with inspection resources and one contractor resource. d) Fiver internal staff and one contractor is currently considered fully staffed. e) No. 				N/A	N/A
				e) Does Liberty intend to increase staffing (either with directly employed personnel or contractors) to increase capacity to perform asset management and inspections?	f) N/A g) N/A					
				f) If the answer to part (e) is yes, will the increase be temporary or permanent? g) If the answer to part (e) is yes, will the increase be based on creating new positions or filling current vacancies?						
alAdvocates	10 CalAdvocates-Liberty-2023WMP-10	7	CalAdv-10-10.7	Page 109 of Liberty's WMP states that "Liberty sought to separately strategize future risk model refinements and approaches by onboarding new	a) Yes.	5/26/2023	6/1/2023 6/2/2023 CalAdvocates-Liberty-2023WMP-10_Liberty 8 Response_06022023.pdf (libertyutilities.com)			
				vendors to help develop a formal risk model decision framework for Liberty." a) Are the "new vendors" that Liberty refers to above IBM and Direxyon?	b) N/A		Liberty Decomposite DD Call Advantus 11 - 1			
lAdvocates	11 CalAdvocates-Liberty-2023WMP-11	1	CalAdv-11-11.1	 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. 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: 	Talal Harahsheh :: a) Liberty does not know the total number of discussion points that will be included in its risk	6/1/2023	6/6/2023 6/6/2023 <u>Liberty Response to DR CalAdvocates-Liberty-</u> 2023WMP-11.pdf (libertyutilities.com)		7	Risk Evaluation (7.1)
				 a) What is the total number of "discussion points" that Liberty will plot on Figure 7-1 while conducting its risk evaluation process? b) Please list all of the "discussion points" that Liberty will plot on Figure 7-1 as part of the risk identification and analysis. c) Please provide any documents generated from Liberty's risk evaluation process related to the Topaz circuit. 	 evaluation process as Liberty advances its risk model decision framework. b) Examples of discussion points included in the risk evaluation process are: identification of all risk events; 					
				c) Please provide any documents generated from Liberty's risk evaluation process related to the Topaz circuit. d) Please provide any documents generated from Liberty's risk evaluation process related to the Muller circuit. e) Please provide any documents generated from Liberty's risk evaluation process related to the Meyers circuit.	 likelihood of wildfire risk drivers; impacts of significant weather (snow and wind) on asset degradation and health; 					
					 scenario analyses discussion; and how seasonality affects the planning of overhead system design and operations. c) Liberty does not have any documents generated from the process related to the Topaz 					
					circuit. d) Liberty does not have any documents generated from the process related to the Muller circuit.					
IAdvocates	11 CalAdvocates-Liberty-2023WMP-11	2	CalAdv-11-11.2		e) Liberty does not have any documents generated from the process related to the Meyers circuit.	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)
				Pages 116-117 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: a) Does Liberty have any system hardening mitigation work planned in 2023 for the Topaz circuit listed above? b) If the answer to part (a) above is yes,	 a) Yes. 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 					
				please identify the mitigation work selected for the circuit. 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.	repairing various poles on this circuit to address needs found during system surveys. c) N/A d) Yes					
				d) Does Liberty have any system hardening mitigation work planned in 2024 for the Topaz circuit listed above? e) If the answer to part (d) above is yes, please identify the mitigation work planned for 2024.	d) Yes. 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		Liberty Response to DR CalAdvocates-Liberty-			
alAdvocates	11 CalAdvocates-Liberty-2023WMP-11	3	CalAdv-11-11.3	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:	poles on this circuit to address needs found during system surveysTalal Harahsheha) Yes.b) Liberty is replacing or repairing various poles on this circuit to address needs found during	6/1/2023	6/6/2023 6/6/2023 2023WMP-11.pdf (libertyutilities.com)		7	Risk Evaluation (7.1)
				a) Does Liberty have any system hardening mitigation work planned in 2023 for the Muller circuit listed above? b) If the answer to part (a) above is yes, please identify the mitigation work selected for the circuit.	system surveys. c) N/A d) Yes.					
				 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. d) Does Liberty have any system hardening mitigation work planned in 2024 for the Muller circuit listed above? e) If the answer to part (d) above is yes, please identify the mitigation work planned for 2024. 	e) 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 2025 but there is a possibility that it may be as soon as 2024.		Liberty Response to DR CalAdvocates-Liberty-			
CalAdvocates	11 CalAdvocates-Liberty-2023WMP-11	4	CalAdv-11-11.4	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	a) Yes.	6/1/2023	6/6/2023 6/6/2023 2023WMP-11.pdf (libertyutilities.com)		7	Risk Evaluation (7.1)
				drivers impacting the overall risk score and used older studies to support this WMP. With this context: a) Does Liberty have any system hardening mitigation work planned in 2023 for the Meyers circuit listed above? b) If the answer to part (a) above is yes, please identify the mitigation work selected for the circuit.	b) Liberty is planning to complete two covered conductor projects on Meyers circuits in 2023. Those projects are Celio A (1.6 miles) and Celio B (0.93 miles). Liberty will also complete 0.11 miles of undergrounding on the Cascade Project. Liberty is also replacing or repairing various					
				 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. d) Does Liberty have any system hardening mitigation work planned in 2024 for the Meyers circuit listed above? e) If the answer to part (d) above is yes, please identify the mitigation work planned for 2024. 	poles on these circuits to address needs found during system surveys. c) N/A d) Yes.					
					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					
alAdvocates	11 CalAdvocates-Liberty-2023WMP-11	5	CalAdv-11-11.5	Page 127 of Liberty's WMP states, "Liberty is currently evaluating wildfire risk results in consultation with its analytics team. Liberty has developed an	includes a microgrid. Liberty is also replacing or repairing various poles on these circuits to address needs found during system surveys Talal Harahsheh During the 2023-2025 WMP cycle. During the 2023-2025 WMP cycle. Talal Harahsheh	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)
alAdvocates	11 CalAdvocates-Liberty-2023WMP-11	6	CalAdv-11-11.6	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? Page 128 of Liberty's WMP states, "Liberty is actively planning and executing wildfire mitigation initiatives while developing its risk based decision-	Talal Harahsheh	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)
				making process." a) Are any WMP activities or initiatives that Liberty is executing in 2023 based upon the abovementioned risk based decision-making process?	a) NO. b) N/A c) The abovementioned risk based decision-making process is not complete. Liberty used risk-					
			CalAdv-11-11.7	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. c) If the answer to part (a) is no, please explain why not.	based principles and tools (i.e., Reax risk map) to inform decision-making. Talal Harahsheh		6/6/2023 6/6/2023 <u>Liberty Response to DR CalAdvocates-Liberty-</u>		7	

			Page 135 of Liberty's WMP states:	a) Examples of evaluation criteria Liberty considered are cost, accuracy of risk identification		
			In conjunction with this study, Liberty also plans to assess the asset risk reduction and vegetation risk reduction at an operational perfo utilizing IBM's work management platform. IBM's Maximo asset health and predict solution that was customized for Liberty will integra	asset risk and operationalize model outputs given available resources.		
			detailed vegetation risk scores to help asset and vegetation managers better assess operational risk to plan and adjust work activities for weather event days, including elevated high fire risk days. a) Describe the success criteria for the abovementioned IBM Maximo project – in other words, what criteria is Liberty using to evaluate	c) Liberty has decided to not move forward with IBM's proposed solution at this time.		
			the asset and vegetation risk scores produced by IBM's Maximo platform? b) When (i.e., month and year) will the abovementioned platform be complete and operational?			
CalAdvocates	11 CalAdvocates-Liberty-2023WMP-11	8 CalA	 c) Please describe each specific way that Liberty anticipates utilizing the abovementioned IBM work management platform to inform its wildfire mitigation strategy. Page 138 of Liberty's WMP states: 	2023-2025 Talal Harahsheh 6/1/2023 a) Liberty plans to have an initial risk-informed decision-making framework for overhead	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
			Liberty's risk-informed decision-making framework is under development. Liberty's engineering, planning, and regulatory staff will need months post-product/service delivery of all risk studies to fully engage with internal subject matter experts to evaluate the results of th	nree to six assets by August 2023. risk analyses. b) Liberty does not know the timeline for when all risk studies will be delivered. Liberty's		
			 a) When (i.e., month and year) does Liberty expect the development (referenced in the quote above) of the risk-informed decision-mak to be finished? b) When (i.e., month and year) does Liberty expect all risk studies to be delivered (as mentioned in the quote above)? 	g framework wildfire risk modeling is an ongoing process that is informed by the results of current risk studies (i.e., Technosylva modeling results, Reax modeling results, Direxyon outputs), OEIS risk modeling guidelines, and collaborative discussions with stakeholders through processes		
			c) Please estimate when (i.e., month and year) Liberty expects to be able to utilize the abovementioned risk-informed decision-making scope planned system hardening projects for the future.	amework to such as the Risk Modeling Working Group c) Beginning in 2025.		
			 d) Please describe how Liberty planned system hardening projects occurring in 2023. e) Please describe how Liberty planned or will plan system hardening projects that will start in 2024. 	 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. e) Liberty will use the Reax fire risk polygons, its circuit risk assessment, and subject matter 		
CalAdvocates	11 CalAdvocates-Liberty-2023WMP-11	9 CalA	Adv-11-11.9	expert knowledge to target specific areas that have the highest wildfire risk or previous reliability or safety issues. 6/1/2023	6/6/2023 6/6/2023 <u>Liberty Response to DR CalAdvocates-Liberty-</u> <u>2023WMP-11.pdf (libertyutilities.com)</u>	7 Risk Evaluation (7.1) 7.2.3
			On pp. 29-30 of its WMP, Liberty describes its actual WMP spends for the 2020-2022 cycle. Please provide a breakdown of the actual sp at least the following categories:	nds including a) Refer to Liberty's Revised Q4 2022 WMP Quarterly Data Report (QDR) submitted to OEIS on March 8, 2023. b) See response 1a.		
			 Risk assessment and modeling Grid design and system hardening Asset management and inspections 	c) See response 1b.		
			 Vegetation management and inspections Situational awareness and forecasting Other management is the brackdown in tabular format for each second brack and the cost of the brackdown is tabular format for a showing all the cost of the brackdown is tabular format for a showing all the cost of the brackdown is tabular format for			
			 Other spending Please provide the breakdown in tabular format for each year, showing all the costs amounting to: a) \$33,331,000 for 2020, b) \$33,567,000 for 2021, and 		CalAdvocates-Liberty-2023WMP-12_Liberty_	
CalAdvocates	12 CalAdvocates-Liberty-2023WMP-12	1 CalA	Adv-12-12.1 c) \$50,132,000 for 2022 On p. 30 of its WMP, Liberty describes its planned spends for the 2023-2025 WMP cycle. Please provide a breakdown of the described p	pposed a) Refer to Liberty's Revised Q4 2022 WMP Quarterly Data Report (QDR) submitted to OEIS Talal Harahsheh 6/6/2023	6/9/2023 6/9/2023 <u>Response_06092023.pdf (libertyutilities.com)</u>	4 Proposed Expenditures (4.3)
			 expenditures including at least the following categories: Risk assessment and modeling Grid design and system hardening 	b) See response 2a. c) See response 2b.		
			 Asset management and inspections Vegetation management and inspections Situational awareness and forecasting 			
			 Other spending Please provide the breakdown in tabular format for each year, showing all the costs amounting to: 			
CalAdvocates	12 CalAdvocates-Liberty-2023WMP-12		a) \$48,391,000 for 2023, b) \$54,180,000 for 2024, and Adv-12-12.2 c) \$45,078,000 for 2025.	Talal Harahsheh 6/6/2023	C (0 /2022) C (0 /2022) Despanse OC002022 pdf (libertyutilities earp)	A Drepsed Expenditures (4.2)
		2 Cal#	Adv-12-12.2 (c) \$45,078,000 for 2025. On pp. 201-202 of its WMP, Liberty provides Table 8-18: "Liberty Vegetation Inspections Targets by Year." Please explain why the row of Liberty's Vegetation Targets by Year for the Initiative Activity "Program – LiDAR" is blank.		6/9/2023 6/9/2023 <u>Response_06092023.pdf (libertyutilities.com)</u>	4 Proposed Expenditures (4.3)
CalAdvocates	12 CalAdvocates-Liberty-2023WMP-12	3 CalA	Adv-12-12.3	LiDAR" and the initiative activity row was inadvertently split up due to the page break. Talal Harahsheh 6/6/2023	6/9/2023 6/9/2023 CalAdvocates-Liberty-2023WMP-12_Liberty 6/9/2023 Response_06092023.pdf (libertyutilities.com)	8 Vegetation Management and Inspections (8.2) 8.2.1.
			On p. 209 of its WMP, Liberty provides Figure 8-4: "Liberty VM Inspection Overview." a) Please describe what steps Liberty takes if a customer refuses access to his or her property for either a vegetation inspection or a veg maintenance activity.	a) If Liberty VM field personnel are unable to perform their job function due to a customer tation 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		
			b) Please provide any internal protocols, handbooks, or other documents that describe the actions Liberty takes if a customer refuses a her property for either a vegetation inspection or a vegetation maintenance activity.	ess to his or photographed for reference and record keeping. 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 unattainable 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 help 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. 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	CalAdvocates-Liberty-2023WMP-12_Liberty_	
CalAdvocates	12 CalAdvocates-Liberty-2023WMP-12	4 CalA	Adv-12-12.4 On p. 243 of its WMP, Liberty provides Table 8-31: "Past Due Vegetation Management Work Orders Categorized by Age." 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?	required Vegetation Management workTalal Harahsheh6/6/2023a) Age refers to the date the work order was first created.b) Liberty details how work orders are prioritized based on risk and how mitigationb)	6/9/2023 6/9/2023 <u>Response_06092023.pdf (libertyutilities.com)</u>	8 Vegetation Management and Inspections (8.2) 8.2.
			 b) Please explain why there are 2,588 past due work orders in HFTD Tier 2 Areas with ages of 181+ days. 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 	timeframes are identified based on observed field conditions in Section 8.2.6 of the 2023		
			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 resolv explain your response.	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. 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 "Sagehen" 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.		
				d) Liberty expects to complete the remaining 164 work orders by the end of the third quarter in 2023.	CalAdvocates-Liberty-2023WMP-12 Liberty	
CalAdvocates	12 CalAdvocates-Liberty-2023WMP-12	5 CalA	Adv-12-12.5 Please provide copies of the following documents:	a) Refer to supporting materials: Liberty Corporate Emergency Management Plan (CEMP) 6/6/2023	6/9/2023 6/9/2023 <u>Response_06092023.pdf (libertyutilities.com)</u>	8 Vegetation Management and Inspections (8.2) 8.2.6
CalAdvocates	13 CalAdvocates-Liberty-2023WMP-13	1 CalA	 a) Corporate Emergency Management Plan (CEMP), dated April 27, 2022, referenced on p. 284 of your WMP Adv-13-13.1 b) Liberty Utilities Public Safety Power Shutoff Playbook, dated June 13, 2022, referenced on p. 284 of your WMP On p. 311 of its WMP, Liberty states "NV Energy is the [Transmission Owner] for Liberty A specific plan for communicating with NV En 	b) Refer to supporting materials: Liberty Public Safety Power Shutoff Playbook Talal Harahsheh 6/6/2023	6/9/2023 6/9/2023 CalAdvocates-Liberty-2023WMP-13_Liberty 2 8 Response_06092023.pdf (libertyutilities.com) 2	8 Emergency Preparedness (8.4) 8.4.2
			the information to be provided is included in the Liberty CEMP" a) Is NV Energy the sole provider of electricity to Liberty's circuits?	b) N/A c) To the extent possible, Liberty will follow PSPS protocols regarding communications if an		
			 b) If the answer to part (a) is no, please list the circuits that NV Energy provides electricity to. c) Please describe Liberty's plan in the event of de-energization of its circuits by NV Energy. d) Has Liberty ever experienced any de-energizations (including, but not limited to PSOM) because of loss of electricity supply from NV Energy. 	NV Energy PSOM event impacts Liberty's power lines and customers. d) Liberty objects to this request as vague and ambiguous with regard to the term "de- ergy energizations," overbroad, unduly burdensome, and not reasonably calculated to lead to the		
			transmission lines? e) If the answer to part (d) is yes, please state the date of each such outage since the beginning of 2018.	discovery of admissible evidence. Notwithstanding the foregoing objections, Liberty responds as follows: Yes.		
			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 custom and actions that Liberty took during the outage.	rs affected, e) Liberty objects to this request as vague and ambiguous with regard to the term "de- energizations," overbroad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence. Notwithstanding the foregoing objections, Liberty responds	1	
				as follows: Refer to file: CalAdvocates-Liberty-2023WMP-13_Liberty Response Question 2. f) Liberty objects to this request as vague and ambiguous with regard to the term "de-		
				energizations," overbroad, 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: CalAdvecates, Liberty, 2022WMP, 12, Liberty, Response, Question 2,		
CalAdvocates	13 CalAdvocates-Liberty-2023WMP-13	2 CalA	Adv-13-13.2	as follows: Refer to file: CalAdvocates-Liberty-2023WMP-13_Liberty Response Question 2. Talal Harahsheh 6/6/2023	6/9/2023 6/9/2023 <u>CalAdvocates-Liberty-2023WMP-13 Liberty</u> 6/9/2023 <u>Response_06092023.pdf (libertyutilities.com)</u>	8 Emergency Preparedness (8.4) 8.4.3.
			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 are a) Please explain how Liberty's SRP program may reduce the need for PSPS in certain areas.	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		
			 b) Please describe the decision-making process for a situation in which Liberty anticipates PSPS conditions but decides to use its SRP process c) Please list all dates in 2022 when Liberty anticipated PSPS conditions but use its SRP program instead. 	ram instead this could impact PSPS protocols. If SRP settings are set sensitive enough, then the ignition risk from a line 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. 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. c) None.		
CalAdvocates	13 CalAdvocates-Liberty-2023WMP-13	3	Adv-13-13.3	Talal Harahsheh 6/6/2023	6/9/2023 6/9/2023 Response 06092023 pdf (liberty-utilities com)	
		J CalA	Adv-13-13.3 Please provide a description of the weather conditions in which Liberty enables its SRP program. b) Please identify the months or seasons in which Liberty enables its SRP program.	a) Various weather conditions influence the SRP decision process, including wind conditions, temperature conditions, and moisture content. 6/6/2023	6/9/2023 6/9/2023 Response_06092023.pdf (libertyutilities.com)	8 Grid Design, operations, and maintenance (8.1) 8.1.2.
			c) Please provide relevant work documents or procedures that Liberty uses related to enabling its SRP program.	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		
CalAdvocates	13 CalAdvocates-Liberty-2023WMP-13	4 (23)	Adv-13-13.4	enabled in the summer and early fall when the moisture content is low and temperatures and wind conditions can be high.c) Liberty does not have any work documents directly related to SRP.Talal Harahsheh6/6/2023	6/9/2023 6/9/2023 <u>CalAdvocates-Liberty-2023WMP-13 Liberty</u> <u>6/9/2023 Response 06092023.pdf (libertyutilities.com)</u>	8 Grid Design, operations, and maintenance (8.1) 8.1.2.
			On p. 162 of its WMP, Liberty states "Liberty will be expanding the 2022 Fast Trip, or SRP, pilot project because of its effectiveness" a) In Liberty's response to CalAdvocates-Liberty-2023WMP-03, Question 1, the excel sheet column Q "q. Total customer-minutes of de-	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		
			the circuit during fast-trip settings in 2021" provides a value of 20244.00 for the Circuit Meyers 3300. Please explain if the pilot SRP prog 2021 or if Liberty used a different program for this de-energization. b) There are values listed in Liberty's response to CalAdvocates-Liberty-2023WMP-03, Question 1, the excel sheet column R "r. Total cu	coordination and reduces incident energy on fault conditions, which in turn reduces ignition		
			b) There are values listed in Liberty's response to CalAdvocates-Liberty-2023WMP-03, Question 1, the excel sheet column R "r. Total cu 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 pilot.			
			 c) Please describe the scope, planned duration, goals, and success metrics of the 2022 Fast Trip / SRP pilot project. d) Other than expanding which circuits may use SRP settings, as shown in Appendix C, map titled "2023 Sensitive Relay Profile Program". 2023 how has Liberty modified its SRP program since 20212 For example, have the speed or consitivity of the fast trip settings changed. 	c) The goals in 2022 were to pilot the SRP program. This entailed working with UNR to on pdf p. 474 in research these settings and benchmark them against other major utilities. Liberty enabled		
			2023, how has Liberty modified its SRP program since 2021? For example, have the speed or sensitivity of the fast-trip settings changed e) Please provide a list of the circuits included in Liberty's SRP program in 2022.	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.		
				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 Topaz 1261.	CalAdvocates-Liberty-2023WMP-13 Liberty	
CalAdvocates	13 CalAdvocates-Liberty-2023WMP-13	5 CalA	Adv-13-13.5 Liberty's response to question 8 of data request CalAdvocates-Liberty-2023WMP-11 discusses an "IBM Maximo project" and when the		6/9/2023 6/9/2023 Response_06092023.pdf (libertyutilities.com)	8 Grid Design, operations, and maintenance (8.1) 8.1.
			be complete and operational. Liberty's response states, "Liberty has decided to not move forward with IBM's proposed solution at this a) Please explain why Liberty has decided not to move forward with the proposed solution from IBM to consolidate its risk data source b) Is Liberty pursuing an alternative solution for the same purpose? If so, please explain.			
				 system compatibility, particularly the risk of moving forward with the solution prior to SAP implementation later this year; and the ability to operationalize model outputs. 	CalAdvocates-Liberty-2023WMP-14_Liberty_	
		1 CalA	Adv-14-14.1	b) Yes, Liberty is in the process of exploring alternative solutions. Talal Harahsheh 6/8/2023	6/13/2023 6/13/2023 Response 06132023.pdf (libertyutilities.com)	
CalAdvocates	14 CalAdvocates-Liberty-2023WMP-14		Please explain why your QDR for Q1 of 2022 reports the total number of distribution ignitions in 2020 and 2021 as 26, but your QDR for reports the total number of distribution ignitions in 2020 and 2021 as 4		CalAdvacates-Liberty 2022/MAD 15 Liberty	
CalAdvocates CalAdvocates	14 CalAdvocates-Liberty-2023WMP-14 15 CalAdvocates-Liberty-2023WMP-15		Please explain why your QDR for Q1 of 2022 reports the total number of distribution ignitions in 2020 and 2021 as 26, but your QDR for reports the total number of distribution ignitions in 2020 and 2021 as 4. Adv-15-15.1 a) How many reportable distribution ignitions did Liberty experience in 2020? b) How many reportable distribution ignitions did Liberty experience in 2021?	Liberty's QDR for Q1 of 2023 correctly reports the total number of distribution ignitions in 2020 and 2021 as four. Talal Harahsheh 6/14/2023 a) One. 6/14/2023 6/14/2023	6/19/2023 6/20/2023 CalAdvocates-Liberty-2023WMP-15 Liberty Response_06202023.pdf (libertyutilities.com) CalAdvocates-Liberty-2023WMP-15 Liberty CalAdvocates-Liberty-2023WMP-15 Liberty	

1			Ι	1	
					Please provide a please provide t a) Date
					b) Circuit ID nun c) Line Type (Dis d) HFTD Tier at 1
					e) Geographic la f) Geographic lo
					g) Cause of the i h) If the ignition i) List any actior
CalAdvocates	15	CalAdvocates-Liberty-2023WMP-15	3	CalAdv-15-15.3	 j) Was this ignitic k) At the time of Liberty states or
					a) Please provid b) Cal Advocate
 CalAdvocates	16	CalAdvocates-Liberty-2023WMP-16	1	CalAdv-16-16.1	of the Revised 2 understanding a Liberty states of
					2023 and is on t a) Does Liberty
					 b) Does Liberty c) How many traditional traditio
CalAdvocates	16	CalAdvocates-Liberty-2023WMP-16	2	CalAdv-16-16.2	e) How many ye
Green Power Institute	1	GPI-Liberty-2023WMP-01	1	GPI-01-1.1	document. Inclu Q01. Regarding
					a. Liberty states service territory
					weather station i. Provide the ins and which side o
					ii. Provide the to iii. Provide the to iv. Provide the e
			1	OEIS-1-1.1	v. Provide the to repair.
					vi. Provide the n vii. Provide eithe location of the f
					situational awar
OEIS	1	OEIS-P-WMP_2023-LU-001			Q02. Regarding
					a. Liberty states 2023 fire seasor i. Provide a map
			2	OEIS-1-1.2	entities (CAL FIR ii. Provide a list
OEIS	1	OEIS-P-WMP_2023-LU-001			iii. Does Libertyiv. Will Liberty c1. If no, explain
					Q03. Regarding a. On page 167 c "At the end of 2
					halted expulsion i. Provide the nu
					limiting fuse that b. On page 167 of "The current-lim
					confirm they did i. Provide Liberty
					ii. Provide Libert iii. Provide the n c. On page 167 d
			3	OEIS-1-1.3	"In collaboration replacing it with operating, grubb
					in place." i. Describe Liber
					used in the repla ii. What other of iii. Describe the
 OEIS	1	OEIS-P-WMP_2023-LU-001			004 Degarding
			4	OEIS-1-1.4	Q04. Regarding a. On page 182 d established and
OEIS	1	OEIS-P-WMP_2023-LU-001	+	0113-1-1.4	i. Has Liberty est timeline for esta
					Q05. Regarding a. In Table 8-11
			5	OEIS-1-1.5	i. Provide details
OEIS	1	OEIS-P-WMP_2023-LU-001			Q06. Regarding a. On page 185 d
					impacts has Libe i. Number of ou
					ii. Number of cu iii. Duration of o iv. Customer int
			6	OEIS-1-1.6	b. How is Liberty c. What percent
					d. What percent e. On page 185 of settings change
					consideration. f. Provide data c i. Number of dev
					ii. Number of da iii. Number of tii
OEIS	1	OEIS-P-WMP_2023-LU-001			iv. Duration of e Q07. AlertWildfi a. In Liberty's 20
					finalizing the par i. Provide an ove
					ii. Provide an ex including specific iii. Provide the lo
			7	OEIS-1-1.7	
			,		
OEIS	1	OEIS-P-WMP_2023-LU-001			a. Liberty descri
					i. What type of b ii. In 2021 and 20 program in 2023
			1		2023
OEIS	2	OEIS-P-WMP_2023-LU-002		OEIS-2-2.1	
					a. Has Liberty pe i. If so, provide a
					b. Has Liberty pe of LiDAR to accu i. If so, provide a
			2		
OEIS	2	OEIS-P-WMP_2023-LU-002		OEIS-2-2.2	a. In Section 6.6
			3		using a new wild i. Once Liberty h data collection a
OEIS	2	OEIS-P-WMP_2023-LU-002		OEIS-2-2.3	ii. What element

provide the following columns of data:	Refer to file: CalAdvocates-Liberty-2023WMP-15_Liberty Response Question 3.						
uit ID number Type (Distribution or Transmission) D Tier at the ignition location							
graphic latitude of the ignition location in decimal degrees, truncated to seven decimal places graphic longitude of the ignition location in decimal degrees, truncated to seven decimal places se of the ignition					1		
e ignition involved equipment failure, identify the type of equipment any actions you have taken to reduce the likelihood of future ignitions for the same cause. this ignition associated with equipment that had an open maintenance tag at the time of ignition? (yes/no)				CalAdvocates-Liberty-2023WMP-15 Liberty			
ne time of the ignition, was there an open vegetation management tag within 100 meters of the ignition location? (yes/no) y states on p. 106 of its Revised 2023-2025 WMP, "Liberty's wildfire risk model will continue to evolve with no specific date for full completion." use provide additional explanation as to the meaning of the quote above.	a) In its Revision Notice for Liberty's 2023-2025 Wildfire Mitigation Plan (WMP), OEIS Talal Harahsheh required Liberty to provide an estimated completion date for the risk model transition as a Example 1	6/14/2023	6/19/2023	6/20/2023 Response_06202023.pdf (libertyutilities.com)			
Advocates understood the statement quoted above to mean that (1) Liberty's wildfire risk model will be under continual development and (2) as Revised 2023-2025 WMP submission, it is difficult for Liberty to predict when Liberty's wildfire risk model will be fully completed. Is this standing accurate?	remedy for Issue RN-LU-23-01. Liberty responded by stating that it plans to utilize an updated version of its wildfire risk model for limited facets of its business starting in Q3 2024. Liberty			CalAdvocates-Liberty-2023WMP-16_Liberty_			
v states on p. 174 of its Revised 2023-2025 WMP, "Liberty aims to replace approximately 3,800 fault tamers with ELFs [expulsion limiting fuses] in and is on track for its target."	Aaron Louie Aaron Louie	11/2/2023	11/7/2023	11/7/2023 Response 11072023.pdf (libertyutilities.com)			
s Liberty plan on re-introducing traditional expulsion fuses into its overhead system in 2024? s Liberty plan on re-introducing traditional expulsion fuses into its overhead system in 2025? / many traditional expulsion fuses currently remain in place across Liberty's service territory?	 c) 9,521 fuses. d) See Response 2c. e) The timeline for replacing all fuses in Liberty's service territory is to be determined. Liberty 						
oss Liberty's service territory, how many traditional expulsion fuses remain in place? w many years will it take Liberty to replace all remaining expulsion fuses on its system (see part (d) above) with expulsion limiting fuses? WETD portions of Liberty's convice territory, how many traditional expulsion fuses remain in place? provide Liberty's Pre-submission 2023-2025 WMP Base Plan filed on March 6, 2023, with the OEIS per the 2023 WMP Guidelines and Schedule	plans to establish fuse replacement targets for 2024 and 2025 in advance of the 2025 WMP Update. Aaron Louie	11/2/2023	11/7/2023	CalAdvocates-Liberty-2023WMP-16_Liberty 11/7/2023 Response_11072023.pdf (libertyutilities.com)			
nent. Including all attachments and associated supporting documents required for the Pre-submission 2023-2025 WMP Base Plan filing.	Refer to attachment: "2023-03-06_Liberty_2023_WMP_RO_Public" for Liberty's 2023 WMP pre-submission. Gregg Morris	3/6/2023	3/9/2023	GPI_Liberty_2023WMP_01_Liberty_ 3/8/2023 Response_03082023.pdf (libertyutilities.com)	1	WMP Pre- Submission	Administrative N/A
	Response to Q01.: i. Standards including the height from ground and side of pole for installation are based on existing equipment that occupy the pole as well as bucket truck accessibility. Additional						
er stations within the service territory that are monitored through the MesoWest network". ide the installation and equipment standard that all Liberty weather stations are installed to, including height from ground, direction of cross-arm, nich side of the pole/tower they are installed on.	ii. None.						
vide the total number of stations that were serviced annually over the past three years, and the maintenance preformed on each station. vide the total number of stations not serviced annually over the past three years. vide the estimated life span of each sensor and the replacement cycle for each.	iii. 2020: 10; 2021: 29; 2022: 29. iv. Refer to supporting materials: "Attachment Q01.ivLIB-Parts-Lifespan-Warranty." v. None.						
vide the total number of repair requests initiated, per year, over the past three years. Include the time duration from initiation to completion of	vi. Liberty continuously collects weather data and compares observations to forecast in real time. Refer to: https://tahoefireweather.com/actuals/. The number of observations per hour depends on the type of station (e.g., utility stations report every 10 minutes, RAWS report				4		
wide either a map or table showing the locations of all weather stations currently being used by Liberty for its situational awareness and the on of the four weather stations that will be installed in 2023. Include all weather stations owned by outside entities that Liberty uses for its onal awareness.	 every 60 minutes, etc.).vii. Refer to: https://liberty.westernweathergroup.com/ Supporting materials: "Attachment Q01.viiLiberty Weather Station Locations" 						
	Supporting materials; "Attachment Q01.vii_Future Liberty Weather Station Locations" Nathan Poon	6/7/2023	6/12/2023	Data Request OEIS-P-WMP_2023-LU-001_Liberty 6/12/2023 Response 07122023.pdf (libertyutilities.com)			8 Situational Awareness & Forecasting (8.3) 8.3.2
egarding Fuel Moisture Sampling: rty states in section 8.3.2.1 of its WMP (p. 243): "In 2022, fuel moisture sampling was conducted on a weekly basis and will continue during the ire season."	Response to Q02.: i. Refer to: https://fuelmoisture.com ii. Vegetation types: iii. Vegetation types:	0,7,2025	0/12/2023				
ide a map of the Live Fuel Moisture (LFM) and Dead Fuel Moisture (DFM) sampling sites, including any sites used that are being collected by other s (CAL FIRE, USFS, BLM, etc.).	 Sagebrush at Meyers and Topaz (CA) Manzanita at Ward Creek and Burton Creek (CA) 						
vide a list of the vegetation types being sampled at each location. As Liberty use the National Fuel Moisture Database for any additional fuel moisture data and/or to house its collected data? I Liberty continue to conduct fuel moisture sampling after the 2023 season?	Sagebrush at Verdi (NV) iii. No, the national fuel moisture database is no longer maintained. iv. Yes Nathan Poon		C 14 2 12 0000	Data Request OEIS-P-WMP_2023-LU-001_Liberty			8 Situational Awaranass 9 Forecasting (0.2)
o, explain why. legarding Expulsion Fuse Replacements: page 167 of Liberty's 2023 WMP, Liberty states:	Nathan Poon Response to Q03.: a. i. Liberty experienced four decumented failures	6/7/2023	6/12/2023	6/12/2023 Response 07122023.pdf (libertyutilities.com)			8 Situational Awareness & Forecasting (8.3) 8.3.2
e end of 2022, Liberty became aware that one of the current-limiting fuse options on the market was experiencing failures in the field. Liberty expulsion fuse replacements because these current-limiting fuses failed to provide ignition risk reduction." ide the number of failures Liberty experienced with this current-limiting fuse. ii. Provide the number of ignitions associated with this current-	 i. Liberty experienced four documented failures. ii. Liberty has experienced no ignitions associated with these fuses. b. 						
urrent-limiting fuse vendor suggested that no more fuses should be installed, and any that were installed needed to be continuously checked to	 i. The language quoted in this question was incorrectly stated in Liberty's 2023 WMP. The words "continuously checked" were an error and should have been "continuity-checked." ii. Liberty plans to replace the fuses with ELF non-expulsion fuses. iii. 						
n they did not have any air gaps that would lead to excessive heat buildup." ide Liberty's current process for performing such continuous checks. ride Liberty's plans to reduce ignition risk relating to current-limiting fuses that have been installed.	2018 2019 2020						
vide the number of such current-limiting fuses Liberty has installed within its territory, as well as the number of fuses installed by year since 2018. Dage 167 of Liberty's 2023 WMP, Liberty states: laboration with other utilities and experts in the field, Liberty determined that removing this particular current-limiting fuse altogether and	2021 2022 Fuses Replaced						
ing it with a traditional expulsion fuse—along with adding overreaching sensitive relay profiles to prevent the likelihood of the expulsion fuses ing, grubbing the poles, and clearing vegetation around the expulsion fuses—will reduce ignition risk more than keeping the current-limiting fuses e."	- 250 1150						
ribe Liberty's plans and targets for performing such removals and replacements of the current-limiting fuse, including details on the fuses being In the replacements. In other options has Liberty evaluated for replacements of expulsion fuses? Why is Liberty not pursuing such options?	557 1858 c.						
cribe the collaboration Liberty has performed with other utilities and experts, including a list of such participants and Liberty's lessons learned.	i. Liberty plans to replace the fuses with ELF non-expulsion fuses. Liberty will work to remove and replace as many fuses as possible throughout 2023 and will conduct work in conjunction with pole repairs and replacements when possible.						
	 ii. Liberty conducted a search for alternative non-expulsion fuses working with vendors and industry experts. The ELF fuse was selected as the best solution. iii. Liberty has reviewed non-expulsion fuse issues with San Diego Gas and Electric Company 						
	(SDG&E) and Pacific Gas and Electric Company (PG&E). After a thorough internal engineering review and collaboration call with PG&E's asset management team, Liberty decided to use Nathan Poon	6/7/2023	6/12/2023	Data Request OEIS-P-WMP_2023-LU-001_Liberty 6/12/2023 Response_07122023.pdf (libertyutilities.com)			8 Grid Design, operations, and maintenance (8.1) 8.1.2
regarding QA/QC for Asset Inspections: page 182 of Liberty's 2023 WMP, Liberty states: "Current pass rates and pass rate targets are not currently available. Pass rates and targets will be shed and implemented for use during its 2023 QA/QC of inspections."	Response to Q04.: a. i. No. Liberty expects it to take two years of program implementation and data collection to						
Liberty established these pass rates? If so, provide pass rates broken down by inspection type as applicable. If not, provide Liberty's expected ne for establishment, and describe how Liberty plans to develop such pass rates.	determine the appropriate metrics and scoring criteria to measure QA/QC program performance, including establishing an Acceptable Quality Level ("AQL") and Conformance Rate ("CR"). Nathan Poon	6/7/2023	6/12/2023	Data Request OEIS-P-WMP_2023-LU-001_Liberty 6/12/2023 Response_07122023.pdf (libertyutilities.com)			8 Grid Design, operations, and maintenance (8.1) 8.1.3
egarding Open Work Orders: able 8-11 of Liberty's 2023 WMP, Liberty shows a total of 390 overdue work orders in HFTD Tier 2 or 3, with 285 work orders 181+ days overdue. ide details as to why these work orders are overdue, including trends on cause for delay.	Response to Q05.: a. i. The main cause includes limited resources being diverted to respond to storm events						
	instead of being directed toward GO 95 infractions. Liberty plans to continue to address its outstanding Level 2 repairs in 2023 and plans to bring on additional contract resources in Q3 and Q4 of 2023 in order to stay in compliance with GO timelines. Nathan Poon	6/7/2023	6/12/2023	Data Request OEIS-P-WMP_2023-LU-001_Liberty 6/12/2023 Response_07122023.pdf (libertyutilities.com)			8 Grid Design, operations, and maintenance (8.1) 8.1.2
egarding Fast Trip Settings: Dage 185 of Liberty's 2023 WMP, Liberty states "the use of fast trip settings will have an impact on system reliability." What, if any, reliability Its has Liberty observed from use of fast trip settings so far? This should include data on the following:	Response to Q06.: a. Refer to supporting materials: "Attachment Q06.a. and Q06.fLiberty Fast Trip Data." b. Liberty is planning to implement sensitive relay profile (SRP) settings that are designed to						
ber of outages that occurred while fast trip settings were enabled. Ther of customers affected by such outages. ation of outages that occurred while fast trip settings were enabled.	not cause nuisance trips but will trip as needed to provide protection. Settings will be staged to minimize portions of circuits that will be de-energized. In addition, Liberty will be adding fault indicators on circuits with SRP settings in order to aide in quickly locating faults and						
tomer interruption minutes associated with such outages. v is Liberty working to reduce reliability impacts from fast trip settings moving forward? at percentage of Liberty's territory is currently included in its fast trip program?	restoring power. c. The percentage of Liberty's system with fast trip capabilities is three percent. d. The percentage of Liberty's system with planned fast trip capabilities is 18 percent.						
at percentage of Liberty's territory will be included in the expansion of its fast trip program through the inclusion of the 12 additional feeders? Dage 185 of Liberty's 2023 WMP, Liberty states that "Liberty management will take all pertinent data into consideration before implementing a	e. Liberty will utilize its weather consultant, Reax, to monitor forecast and real-time weather conditions, just like a PSPS scenario. Weather data that Reax monitors includes wind speed, wind gusts, relative humidity, FFW index, ERC, fuel moisture samples, and Red Flag Warning				1		
eration. ide data on the number of times fast trip settings were enabled in 2022. This should include: ber of devices with fast trip setting capabilities.	days. Liberty also collaborated with University of Nevada, Reno PhD Electrical Engineering program and other California utilities to help develop the settings. Settings changes will be implemented at thresholds below those of a PSPS.						
ation of enablement.	f. Refer to supporting materials: "Attachment Q06.a. and Q06.fLiberty Fast Trip Data."	6/7/2023	6/12/2023	Data Request OEIS-P-WMP_2023-LU-001_Liberty 6/12/2023 Response 07122023.pdf (libertyutilities.com)			8 Grid Design, operations, and maintenance (8.1) 8.1.8
lertWildfire Cameras Sponsorship: berty's 2023 WMP (pp. 265-266), Liberty states it intends to sponsor and support eight HD Cameras within its territory in 2023. Liberty stated it is ng the partnership for the eight cameras prior the fire season in both its 2021 (p. 83) and 2022 (p. 107) WMP submissions.	Response to Q07.:	6,7,2025	0/12/2023				
ide an overview of the process involved in adopting/partnering/sponsoring of these eight cameras. vide an explanation behind the delays in achieving the previous targeted goals for partnering/adopting/sponsoring of the eight HD Cameras,	network to bring eight cameras in the Lake Tahoe Basin as well as the ability to access other existing cameras within Liberty's service territory. The process has included discussions with						
ng specific challenges or obstacles that has led to the postponement. vide the locations of the eight targeted locations that Liberty plans to sponsor.	AlertWildfire regarding the AlertWildfire annual operations services, scope of work, pricing and locations. The process has also included negotiating a service agreement for the targeted AlertWildfire cameras.						
	 ii. Liberty has experienced challenges finalizing terms in the service agreement for the targeted AlertWildfire cameras, specifically the minimum insurance coverage requirement. iii. D. L. Bliss State Park, CA 						
	 D. L. Bliss State Park, CA Alpine Meadows CTC, CA Martis Peak, CA Slide Mtr. NV 						
	 Slide Mtn, NV Diamond Peak, NV Zephyr Cove, NV Deid Mtr. NV(
rty describes a back-up power program in Section 2.1.3 of its Plan to Support Populations with Access and Functional Needs During PSPS.	Bald Mtn, NV Fallen Leaf Lake Nathan Poon a.	6/7/2023	6/12/2023	6/12/2023 <u>Pata Request OEIS-P-WMP_2023-LU-001_Liberty</u> Response_07122023.pdf (libertyutilities.com)			8 Grid Design, operations, and maintenance (8.1) 8.3.4.3
t type of battery back-up service does Liberty provide to medical baseline customers? D21 and 2022, how many customers participated in this back-up power program? How many customers does Liberty project to participate in the m in 2023, 2024, and 2025?	i. Liberty proposed a behind-the-meter battery program for medical baseline customers in its Customer Resiliency Program application (A.22-02-008). Cal Advocates opposed the program, and the proposal was dropped in a settlement agreement submitted to the CPUC in that						
	proceeding. Liberty is currently reevaluating options for providing back-up service to its medical baseline customers. ii. Liberty did not have a battery back-up service for medical baseline customers in 2021 and						
Liberty performed a cost-benefit analysis of its annual LiDAR inspections?	2022. Liberty does not have customer projections for a battery back-up service for medical baseline customers in 2023, 2024 and 2025.Nathan Poona.A	6/18/2023	6/21/2023	6/21/2023 <u>Response_07212023.pdf (libertyutilities.com)</u>		N/A	AFN Plan N/A
, provide a brief discussion of the results of that cost-benefit analysis. Liberty performed any type of effectiveness study or studies as it relates to its LiDAR inspections, including, but not limited to, the effectiveness AR to accurately calculate clearance distances and identify potential fall-in hazards?	i. Yes, Liberty completed a cost-benefit analysis of its annual LiDAR inspections after 2020 when the program was first implemented. The results of that analysis showed LiDAR inspections provide a lower cost per mile for performing inspections than that of ground-						
, provide a brief discussion of the results of that study/those studies.	based inspections. Additional benefits have been realized due to the ability to perform these inspections on an annual basis resulting in a decrease in time between inspections. Below is a table demonstrating the cost difference between Liberty's various vegetation inspection						
	methods from 2020. (See DR resonspe for table) b. i. Liberty has not conducted an effectiveness study related to the use of LiDAR inspections. The use of LiDAR technology for utility vegetation management has been in use for several						
	years and Liberty has relied on the use of industry specific studies that have been previously conducted to validate the accuracy of the technology. Previous studies determined LiDAR as a superior method of inspections when evaluating vegetation to conductor distances,						
	because it eliminates human error and provides a higher degree of accuracy over vegetation inspectors. Additionally, Liberty receives an annual technical report from its LiDAR vendor which provides						
	data regarding calibration and accuracy of the sensors used to perform the inspections. The Liberty program LiDAR data is thoroughly tested for data accuracy and consistency using ground survey data collected at the same time as the aerial LiDAR collection. This review will						
	confirm the data across the system is internally consistent (point to point) as well as surface to ground. The relative accuracy (internal consistency of the point to point measurement) of the data set is 2.7 cm (0.09 ft). The absolute data accuracy of the lidar surface compared to						
	901 ground control points was 3.5 cm (0.11ft) RMSEz (Root Mean Squared Error) and 6.8 cm (0.22 ft) at the 95 percent confidence level (RMSEz x 1.96). The result is generated by comparing the ground control points to the LiDAR surface. This is tested using industry						
ection 6.6.1 (page 101) of its WMP. Liberty states that independent review is not applicable due to being in the early states of insulance time.	standards for APSRS Guidelines for Vertical Accuracy Reporting for Lidar Data. Nathan Poon	6/18/2023	6/21/2023	6/21/2023 Response 07212023.pdf (libertyutilities.com)		N/A	N/A N/A
ection 6.6.1 (page 101) of its WMP, Liberty states that independent review is not applicable due to being in the early stages of implementing and new wildfire risk model. E Liberty has fully implemented its wildfire model, what does Liberty expect the independent review process for its wildfire risk modeling, and the collection and generation of its wildfire risk modeling?							
ollection and generation of its wildfire risk modeling? It elements of Liberty's wildfire risk modeling does it expect will require independent review (e.g., model integration, input data, review triggers)?	ii. The independent review process should encompass the data inputs and the statistical framework/model. Nathan Poon	6/18/2023	6/21/2023	Data Request OEIS-P-WMP_2023-LU-002_Liberty 6/21/2023 Response_07212023.pdf (libertyutilities.com)			6 Risk Methodology and Assessment (6.6) 6.6.1

		4	 a. Regarding Section 6.1.1, Independent Review and Section 6.6.2, Model Controls, Design, and Review; what parts of Liberty's risk modeling cap will remain "in-house" after the Technosylva model is fully implemented? i. How are Technosylva's analytics used to make risk mitigation decisions. ii. Describe the roles and functions Liberty's staff have in the process that uses vendor analytics to produce risk identification, prioritization, and mitigation decisions. b. Besides Technosylva, what other risk modeling vendors and subject matter experts will be involved in the on-going operation of Liberty's wildf modeling, once fully implemented?
OEIS	2 OEIS-P-WMP_2023-LU-002	OE	IS-2-2.4
		1	a. Does Liberty plan on replacing installed, non-exempt lightning/surge arrestors with CALFIRE exempt lightning/surge arrestors? If so, provide a for the project and yearly replacement targets.
OEIS	3 OEIS-P-WMP_2023-LU-003	OF	IS-3-3.1
OEIS	3 OEIS-P-WMP_2023-LU-003	2	 a. On page 55 of its WMP, Liberty states it has not conducted a wildfire risk assessment using the 85th percentile consequence calculation. i. Provide Liberty's expected timeline for completion of this calculation, including an explanation of any factors contributing to potential delays in calculating this risk score, if applicable. a. On page 36 of its WMP, Table 5-2. Overview of Key Liberty Electrical Equipment, Overhead transmission and distribution lines (circuit miles), Li states that it has 724.1 circuit miles in the HFTD and 35.6 circuit miles in the Non-HFTD with a Total of 759.7 circuit miles. i. Provide Liberty's total circuit miles of Overhead Transmission Lines in the HFTD and Non-HFTD and Liberty's total circuit miles of Overhead
OEIS	3 OEIS-P-WMP 2023-LU-003		Distribution Lines in the HFTD and Non-HFTD. IS-3-3.3
		1	 miles of transmission lines are included in the distribution inspection program. i. Describe how transmission inspections are included in the distribution inspection program. ii. Describe any differences with the transmission inspection process compared to distribution, as applicable. b. For transmission detailed inspections performed on a 5-year cycle? If so, describe this process, including any timeline differences for If not, explain why. ii. Are approximately 20% of the transmission line miles inspected each year, or is the entirety of the transmission system inspected in one year, again five years later? iii. Are transmission line detailed inspections executed using the same checklists and/or manuals as distribution detailed inspections? If so, how of Liberty account for transmission-specific equipment? iv. Are there different inspector qualifications required for transmission line inspections vs distribution line inspections? If so, describe such qualifications. c. For transmission intrusive pole inspections performed on a 10-year cycle? If so, describe this process, including any timeline differences for HF not, explain why. ii. Are transmission intrusive pole inspections performed on a 10-year cycle? If so, describe this process, including any timeline differences for HF not, explain why. ii. Are transmission pole intrusive pole inspections executed using the same checklists and/or manuals as distribution intrusive inspected in one year the nagain ten years later? iii. Are transmission pole intrusive inspections executed using the same checklists and/or manuals as distribution intrusive inspections? If so, how Uberty account for transmission plete inspections? d. For transmission patrol inspections i. Are transmission pole intrusive inspected annually? If so, describe this process, including any timeline differences for HFTD. If not, explain is i. Are transmission patrol inspections execu
OEIS	4 OEIS-P-WMP_2023-LU-004	1 OE	IS-4-4.1 In Liberty's 2023-2025 WMP, Table 8-31: "Liberty Past Due Vegetation Management Work Orders Categorized by Age," Liberty reports 3,262 past vegetation management work orders in HFTD Tier 2 and Tier 3. However, for Q1 2023, Liberty reports 3,333 open vegetation management work and 10 vegetation management work orders past due (Q3 2023 QDR, Table 2, Metric 6). a. Identify and describe the dataset used to populate Table 8-31. b. If Table 8-31 is not populated with past-due vegetation management work orders, provide an updated Table 8-31 showing past-due vegetation management work orders, provide an updated Table 8-31 showing past-due vegetation management work orders, explain the discrepancy in past-due work orders between the V (Table 8-31) and the QDR (Table 2, Metric 6.b.).
OEIS	5 OEIS-P-WMP_2023-LU-005	OE	IS-5-5.1

Regarding Section 6.1.1, Independent Review and Section 6.6.2, Model Controls, Design, and Review; what parts of Liberty's risk modeling capabilities a. After the risk modeling framework is fully implemented, Liberty will be able to run Il remain "in-house" after the Technosylva model is fully implemented? How are Technosylva's analytics used to make risk mitigation decisions. Describe the roles and functions Liberty's staff have in the process that uses vendor analytics to produce risk identification, prioritization, and igation decisions. esides Technosylva, what other risk modeling vendors and subject matter experts will be involved in the on-going operation of Liberty's wildfire risk |ii. Liberty's staff are directly involved in decision making, collection and review of data leling, once fully implemented? operations, regulatory, planning and engineering.

Does Liberty plan on replacing installed, non-exempt lightning/surge arrestors with CALFIRE exempt lightning/surge arrestors? If so, provide a timeline a. Liberty has initiated its evaluation of exempt lightning/surge arresters. Liberty recent r the project and yearly replacement targets.

n page 55 of its WMP, Liberty states it has not conducted a wildfire risk assessment using the 85th percentile consequence calculation. ovide Liberty's expected timeline for completion of this calculation, including an explanation of any factors contributing to potential delays in culating this risk score, if applicable. n page 36 of its WMP, Table 5-2. Overview of Key Liberty Electrical Equipment, Overhead transmission and distribution lines (circuit miles), Liberty a. In responding to this question, Liberty identified an error in Table 5-2 of its 2023 WM es that it has 724.1 circuit miles in the HFTD and 35.6 circuit miles in the Non-HFTD with a Total of 759.7 circuit miles. ovide Liberty's total circuit miles of Overhead Transmission Lines in the HFTD and Non-HFTD and Liberty's total circuit miles of Overhead tribution Lines in the HFTD and Non-HFTD.

r transmission detailed inspections: e overhead transmission detailed inspections performed on a 5-year cycle? If so, describe this process, including any timeline differences for HFTD. i. Transmission inspections are on a 5-year cycle, same as distribution. Currently, there a t, explain why. e approximately 20% of the transmission line miles inspected each year, or is the entirety of the transmission system inspected in one year, then inspections. ii. Transmission is inspected during 2 of the 5-year cycle. North Lake Tah n five years later? re transmission line detailed inspections executed using the same checklists and/or manuals as distribution detailed inspections? If so, how does iii. Yes, the same checklists are used for transmission as distribution. rty account for transmission-specific equipment?

ifications. or transmission intrusive pole inspections:

e transmission intrusive pole inspections performed on a 10-year cycle? If so, describe this process, including any timeline differences for HFTD. If possible. Currently, there are no differences for HFTD zones. Liberty stays compliant v explain why. e approximately 10% of the transmission poles inspected each year, or are the entirety of the transmission system poles inspected in one year, ii. Yes, the transmission is rolled into the 10-year schedule with the distribution circuits. n again ten years later? re transmission pole intrusive inspections executed using the same checklists and/or manuals as distribution intrusive inspections? If so, how does d.

rty account for transmission-specific equipment? e transmission patrol inspections completed annually? If so, describe this process, including any timeline differences for HFTD. If not, explain why. for HFTD zones. Liberty stays compliant with the GO165 timelines for overhead inspec re transmission line patrol inspections executed using the same checklists and/or manuals as distribution- patrol inspections? If so, how does Liberty ii. Yes, same checklists.

Liberty's 2023-2025 WMP, Table 8-31: "Liberty Past Due Vegetation Management Work Orders Categorized by Age," Liberty reports 3,262 past-due a. The dataset used to populate Table 8-31 was all vegetation management work orders etation management work orders in HFTD Tier 2 and Tier 3. However, for Q1 2023, Liberty reports 3,333 open vegetation management work orders open as of January 1, 2023 10 vegetation management work orders past due (Q3 2023 QDR, Table 2, Metric 6). dentify and describe the dataset used to populate Table 8-31.

Table 8-31 is not populated with past-due vegetation management work orders, provide an updated Table 8-31 showing past-due vegetation agement work orders categorized by age as of May 5, 2023 (the initial submission date of Liberty's 2023-2025 WMP). Table 8-31 is populated with past-due vegetation management work orders, explain the discrepancy in past-due work orders between the WMP specific timelines that would qualify a work order as past due, however, Liberty prioritizes

scenarios, develop model characteristics, and gain tactical insights from the risk modeli i. Technosylva's analytics will be inputs to the risk-based decision-making frameworks Liberty is developing in conjunction with Direxyon. The frameworks are under develop and Liberty is identifying how the data and analytics will be used to inform decisions. inputs/outputs, and the development of the overall risk framework. b. Besides Technosylva, Liberty plans to continue to work with Reax and Direxyon on its wildfire risk modeling. Liberty subject matter experts ("SMEs") will be involved in the o going operation of Liberty's wildfire risk modeling, including SMEs from data analytics,

received sample materials and Liberty's Standards Committee plans to evaluate and recommend construction standards for install prior to piloting the technology. There are currently no timelines or yearly replacement targets set. а. i. Liberty expects to complete the wildfire risk assessment using the 85th percentile consequence calculation prior to the 2024 WMP Update.

submission. The correct numbers for the Overhead transmission and distribution lines Table 5-2 should be 673.29 circuit miles in the HFTD and 34.72 circuit miles in the Nonwith a total of 708.01 circuit miles. Please refer to the table below. (See response for i. Transmission inspections are treated the same as distribution inspections and are scheduled as such.

differences for HFTD zones. Liberty stays compliant with the GO165 timelines for overh transmission in one year, and South Lake Tahoe transmission in another.

ii. There are no differences.

iv. No.

с. i. Yes, intrusive pole inspections are on a 10-year cycle. Liberty uses a 3rd party contract perform these inspections and any urgent pole replacements are completed as soon a GO165 timelines for overhead inspections. iii. Yes, same checklists.

i. Patrol inspections are completed on transmission annually except for years where t transmission lines are on the detailed inspection schedule. Currently, there are no diffe

b. Refer to the updated table below: *SEE DR FOR TABLE* c. Table 8-31 in Liberty's 2023 WMP displays all open vegetation management work orders as

of January 1, 2023 categorized by age from when the work order was created. Liberty is not aware of any requirements for completing vegetation management work orders within completion of its vegetation management work orders based off the assigned work order priority and mitigation timeline as described in its Vegetation Threats Procedure, VM-05. The

updated Table 8-31, provided in response to Q01-b., is populated with work orders that were not completed within Liberty's identified timelines per priority as of May 5th, 2023

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for table)	Nathan Poon	7/27/2023	8/1/2023	Data Request OEIS-P-WMP_2023-LU-003_Liberty 8/1/2023 Response_08012023.pdf (libertyutilities.com)		5	Electrical Infrastructure (5.2)	5.2
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8 Grid Design, operations, and maintenance (8.1) 8.1.3

Data Request OEIS-P-WMP_2023-LU-004_Liberty_ 8/18/2023 8/23/2023 8/23/2023 <u>Response_08232023.pdf (libertyutilities.com)</u> Nathan Poon

Data Request OEIS-P-WMP_2023-LU-005_Liberty_ 1/23/2024 <u>Response_01222024.pdf (libertyutilities.com)</u> Nathan Poon 1/18/2024