

Link to Discovery Responses: https://www.pge.com/en_US/safety/emergency-preparedness/natural-disaster/wildfires/wildfire-mitigation-plan-discovery-data-requests.page

Count	Party Name	Data Set	Data Request	Question No.	Question ID	Question Text	Requestor	Date Rec'd	Final Due Date	Date Sent	Number of Atchs	NDA Required	WMP Section	Category	Subcategory
1	CalPA	Set WMP-12	CalAdvocates-PGE-2022WMP-12	1	CalAdvocates-PGE-2022WMP-12_1	In response to Data Request CalAdvocates-PGE-2022WMP-03, Question 5, PG&E stated with regard to detailed ground inspections of transmission towers, "The average number of inspections completed per day in 2021 was 10.9 for contractors, and 7.6 for internal PG&E inspectors." a) State the factors that explain why contractors performed more inspections per day on average than PG&E inspectors in 2021. b) With regard to detailed ground inspections of transmission towers performed by contractors in 2021, what was the percentage of inspections that resulted in a "Failed Review"3 by Quality Control? c) With regard to detailed ground inspections of transmission towers performed by PG&E employee inspectors in 2021, what was the percentage of inspections that resulted in a "Failed Review" by Quality Control?	Holly Wehrman Carolyn Chen Layla Labagh	3/3/2022	3/8/2022	3/8/2022	0		7.3.4.2	Asset Management and Inspections	Detailed Inspections of Transmission electric lines and equipment
2	CalPA	Set WMP-12	CalAdvocates-PGE-2022WMP-12	2	CalAdvocates-PGE-2022WMP-12_2	In response to Data Request CalAdvocates-PGE-2022WMP-03, Questions 9-11, PG&E responded that "PG&E's search of LC tags issued as a result of both desktop and field Quality Control reviews did not identify any Priority A or Priority B LC tags issued" for climbing, drone, or detailed ground inspections of transmission structures. Provide the following data for desktop Quality Control reviews of transmission climbing inspections: a) Number of inspections reviewed by Quality Control (population size) in 2018 b) Number of inspections with no mistakes4 in 2018 c) Number of inspections that resulted in a "Failed Review" in 2018 d) Number of inspections reviewed by Quality Control (population size) in 2019 e) Number of inspections with no mistakes in 2019 f) Number of inspections that resulted in a "Failed Review" in 2019 g) Number of inspections reviewed by Quality Control (population size) in 2020 h) Number of inspections with no mistakes in 2020 i) Number of inspections that resulted in a "Failed Review" in 2020 j) Number of inspections reviewed by Quality Control (population size) in 2021 k) Number of inspections with no mistakes in 2021 l) Number of inspections that resulted in a "Failed Review" in 2021	Holly Wehrman Carolyn Chen Layla Labagh	3/3/2022	3/8/2022	3/8/2022	1		7.3.4.14	Asset Management and Inspections	Quality assurance / quality control of inspections
3	CalPA	Set WMP-12	CalAdvocates-PGE-2022WMP-12	3	CalAdvocates-PGE-2022WMP-12_3	For desktop Quality Control reviews of transmission drone inspections, please provide the same data as requested in Question 2.	Holly Wehrman Carolyn Chen Layla Labagh	3/3/2022	3/8/2022	3/8/2022	0		7.3.4.14	Asset Management and Inspections	Quality assurance / quality control of inspections
4	CalPA	Set WMP-12	CalAdvocates-PGE-2022WMP-12	4	CalAdvocates-PGE-2022WMP-12_4	For desktop Quality Control reviews of transmission detailed ground inspections, please provide the same data as requested in Question 2.	Holly Wehrman Carolyn Chen Layla Labagh	3/3/2022	3/8/2022	3/8/2022	0		7.3.4.14	Asset Management and Inspections	Quality assurance / quality control of inspections
5	CalPA	Set WMP-12	CalAdvocates-PGE-2022WMP-12	5	CalAdvocates-PGE-2022WMP-12_5	For field Quality Control reviews of transmission climbing inspections, please provide the same data as requested in Question 2.	Holly Wehrman Carolyn Chen Layla Labagh	3/3/2022	3/8/2022	3/8/2022	0		7.3.4.14	Asset Management and Inspections	Quality assurance / quality control of inspections
6	CalPA	Set WMP-12	CalAdvocates-PGE-2022WMP-12	6	CalAdvocates-PGE-2022WMP-12_6	For field Quality Control reviews of transmission drone inspections, please provide the same data as requested in Question 2	Holly Wehrman Carolyn Chen Layla Labagh	3/3/2022	3/8/2022	3/8/2022	0		7.3.4.14	Asset Management and Inspections	Quality assurance / quality control of inspections
7	CalPA	Set WMP-12	CalAdvocates-PGE-2022WMP-12	7	CalAdvocates-PGE-2022WMP-12_7	For field Quality Control reviews of transmission detailed ground inspections, please provide the same data as requested in Question 2.	Holly Wehrman Carolyn Chen Layla Labagh	3/3/2022	3/8/2022	3/8/2022	0		7.3.4.14	Asset Management and Inspections	Quality assurance / quality control of inspections
8	CalPA	Set WMP-12	CalAdvocates-PGE-2022WMP-12	8	CalAdvocates-PGE-2022WMP-12_8	In response to Data Request CalAdvocates-PGE-2022WMP-08, Question 4, PG&E stated that PG&E System Inspection Quality Control found through Desktop Reviews that 60% of inspections had no mistakes and 13% of inspections resulted in a "Failed Review." Through Field Reviews, Quality Control found that 45% of inspections had no mistakes and 20% of inspections resulted in a "Failed Review." a) Define the population reviewed through Desktop Reviews, including but not limited to the number of inspections checked, and the date range that those inspections occurred within. b) Define the population reviewed through Field Reviews, including but not limited to the number of inspections checked, and the date range that those inspections occurred within.	Holly Wehrman Carolyn Chen Layla Labagh	3/3/2022	3/8/2022	3/8/2022	0		7.3.4.14	Asset Management and Inspections	Quality assurance / quality control of inspections
9	CalPA	Set WMP-12	CalAdvocates-PGE-2022WMP-12	9	CalAdvocates-PGE-2022WMP-12_9	For Desktop Quality Control reviews of detailed distribution inspections, please provide the same data as requested in Question 2.	Holly Wehrman Carolyn Chen Layla Labagh	3/3/2022	3/8/2022	3/8/2022	0		7.3.4.14	Asset Management and Inspections	Quality assurance / quality control of inspections
10	CalPA	Set WMP-12	CalAdvocates-PGE-2022WMP-12	10	CalAdvocates-PGE-2022WMP-12_10	For Field Quality Control reviews of detailed distribution inspections, please provide the same data as requested in Question 2.	Holly Wehrman Carolyn Chen Layla Labagh	3/3/2022	3/8/2022	3/8/2022	0		7.3.4.14	Asset Management and Inspections	Quality assurance / quality control of inspections

11	CalPA	Set WMP-12	CalAdvocates-PGE-2022WMP-12	11	CalAdvocates-PGE-2022WMP-12_11	In response to Data Request CalAdvocates-PGE-2022WMP-04, Question 2, PG&E stated that "The requested information is provided in PG&E's 2022 WMP in Section 7.1.F. PG&E is providing attachment "WMP-Discovery2022_DR_CalAdvocates_004-Q02Atch01.zip" which has been prepared with the same information in the requested shapefile format." Cal Advocates understands "The requested information is provided in PG&E's 2022 WMP in Section 7.1.F" to refer to the file "WMP_section_71F.gdb." Is this correct? If not, please explain.	Holly Wehrman Carolyn Chen Layla Labagh	3/3/2022	3/8/2022	3/8/2022	0		7.1.F	Wildfire Mitigation Strategy	Wildfire Risk Data
12	CalPA	Set WMP-12	CalAdvocates-PGE-2022WMP-12	12	CalAdvocates-PGE-2022WMP-12_12	The file "WMP_section_71F.gdb" submitted with PG&E's 2022 WMP contains a layer titled "WMP_section_71F Distribution_Wildfire_Risk." This layer has the following attributes: OBJECTID mean_mavf_core_risk Shape_Length Circuit_Segment_name Per PG&E's 2022 WMP, p. 330, the "mean_mavf_core_risk" attribute was derived from the 2021 WDRM v2 model. Cal Advocates understands that the 2021 WDRM v2 model includes separate risk scores for vegetation-caused ignitions and conductor-involved ignitions. a) Is the understanding above correct? Please explain if not. b) If the answer to part (a) is yes, please provide an updated version of the file "WMP_section_71F.gdb" that contains risk scores associated with vegetation and conductor as separate attributes. c) Please define the attribute "mean_mavf_core_risk" as currently used in "WMP_section_71F.gdb".	Holly Wehrman Carolyn Chen Layla Labagh	3/3/2022	3/8/2022	3/8/2022	1		7.1.F	Wildfire Mitigation Strategy	Wildfire Risk Data
13	CalPA	Set WMP-12	CalAdvocates-PGE-2022WMP-12	13	CalAdvocates-PGE-2022WMP-12_13	In response to Data Request CalAdvocates-PGE-2022WMP-04, Question 10, PG&E stated, "At this time, the program cannot forecast with accuracy the split of the 2022 budget forecast into Covered Conductor, Underground, and Line Removal." a) Please explain how PG&E developed the forecast total expenditure of \$819.1 million for 2022 system hardening, reported in response to that Data Request. b) Please provide any workpapers that PG&E used to develop the expenditure forecast noted in part (a).	Holly Wehrman Carolyn Chen Layla Labagh	3/3/2022	3/8/2022	3/8/2022	0		7.3.3.17.1	Grid Design and System Hardening	Updates to grid topology to minimize risk of ignition in HFTDs, System Hardening, Distribution
14	CalPA	Set WMP-12	CalAdvocates-PGE-2022WMP-12	14	CalAdvocates-PGE-2022WMP-12_14	In response to Data Request CalAdvocates-PGE-2022WMP-08, Question 7, PG&E stated, "We did not change the priority of the corrective notification during the period of February 19, 2020 to June 16, 2021 because none of the inspectors who reviewed this location during this time period recommended a priority change of the corrective notification." With that context: a) Do PG&E's inspection procedures require inspectors to recommend priority changes to an existing corrective notification if the inspector finds conditions in the field that warrant a higher priority? b) Do PG&E's inspection procedures require inspectors to re-inspect conditions noted in existing corrective notifications associated with a given asset? c) In the past year, has PG&E made any changes to its inspection procedures to improve the likelihood of inspectors recommending priority changes to existing corrective notifications based on changed field conditions?	Holly Wehrman Carolyn Chen Layla Labagh	3/3/2022	3/8/2022	3/8/2022	0		7.3.3.12.4	Grid Design and System Hardening	Other corrective action, Maintenance, Distribution
15	CalPA	Set WMP-13	CalAdvocates-PGE-2022WMP-13	1	CalAdvocates-PGE-2022WMP-13_1	PG&E's 2021 Q4 Quarterly Initiative Update states the following regarding 2021 WMP Initiative 7.3.3.17.4 Updates to grid topology to minimize risk of ignition in HFTDs, Rapid Earth Current Fault Limiter: The current REFCL pilot project at Calistoga experienced unsuccessful technology integration and implementation to date. We have encountered challenges with successfully implementing the REFCL technology, and reported final results based on this pilot. Please refer to final report for detailed information. 3 a) Please provide the "final report" referred to above. b) Please describe in detail the "unsuccessful technology integration and implementation to date" that the "current REFCL pilot project at Calistoga" experienced. c) Please cite to specific pages in the final report supporting your response to part (b) of this question. d) Please describe the "challenges with successfully implementing the REFCL technology" referred to above. e) Please cite to specific pages in the final report supporting your response to part (d) of this question. f) What do the "final results" refer to above? g) Please cite to specific pages in the final report supporting your response to part (f) of this question.	Miles Gordon Holly Wehrman Carolyn Chen Layla Labagh	3/4/2022	3/9/2022	3/9/2022	1		7.3.3.17.4	Grid Design and System Hardening	Rapid Earth Current Fault Limiter
16	CalPA	Set WMP-13	CalAdvocates-PGE-2022WMP-13	2	CalAdvocates-PGE-2022WMP-13_2	a) What is the status of PG&E's REFCL program as of the issuance date of this DR? b) Does PG&E plan to continue the REFCL program? c) If the answer to subpart (b) is "yes", please describe PG&E's current plans (with specific project timelines and milestones) for the REFCL program.	Miles Gordon Holly Wehrman Carolyn Chen Layla Labagh	3/4/2022	3/9/2022	3/9/2022	0		7.3.3.17.4	Grid Design and System Hardening	Rapid Earth Current Fault Limiter

17	CalPA	Set WMP-13	CalAdvocates-PGE-2022WMP-13	3	CalAdvocates-PGE-2022WMP-13_3	<p>PG&E's 2022 WMP states: While we have not set specific targets for this Initiative and will not provide ongoing reporting each quarter on it, we are still doing the work as part of our overall plan. We do not currently plan to install any additional REFCL systems at this time. PG&E plans to repair and rebuild the REFCL installation at Calistoga to complete additional pilot evaluation. If the additional pilot is successful, PG&E will look for opportunities to place REFCL into full service as well as evaluate whether any additional sites are appropriate for future installations.</p> <p>a) State the reasons PG&E has not "set specific targets for this initiative and will not provide ongoing reporting each quarter on it." b) Explain what PG&E means by "we are still doing the work as part of our overall plan." c) State the reasons PG&E does not "currently plan to install any additional REFCL systems at this time." d) Explain what the above "additional pilot evaluation" consists of. e) When does PG&E expect to complete the "additional pilot evaluation"? f) When does PG&E expect to "look for opportunities to place REFCL into full service"? g) When does PG&E expect to "evaluate whether any additional sites are appropriate for future installations"? h) What are the criteria which PG&E will use when evaluating "whether any additional sites are appropriate for future installations"? i) If PG&E finds more sites that are "appropriate for future installations", when will it perform such installations?</p>	Miles Gordon Holly Wehrman Carolyn Chen Layla Labagh	3/4/2022	3/9/2022	3/9/2022	0		7.3.3.17.4	Grid Design and System Hardening	Rapid Earth Current Fault Limiter
18	CalPA	Set WMP-13	CalAdvocates-PGE-2022WMP-13	4	CalAdvocates-PGE-2022WMP-13_4	<p>PG&E's 2022 WMP states: The Calistoga REFCL pilot project finished construction in 2020. In 2021, PG&E attempted to commission and test the REFCL technology in Calistoga. PG&E completed an elevated voltage stress test and one field ground fault test which demonstrated that REFCL technology can be effective at reducing fault currents to below fire ignition levels.</p> <p>a) Please explain what you mean by "REFCL technology can be effective at reducing fault currents to below fire ignition levels." b) Please define "fire ignition levels" as used the quotation above. c) In PG&E's testing of the Calistoga REFCL, to what extent did it reduce fault currents?</p>	Miles Gordon Holly Wehrman Carolyn Chen Layla Labagh	3/4/2022	3/9/2022	3/9/2022	0		7.3.3.17.4	Grid Design and System Hardening	Rapid Earth Current Fault Limiter
19	CalPA	Set WMP-13	CalAdvocates-PGE-2022WMP-13	5	CalAdvocates-PGE-2022WMP-13_5	<p>PG&E's 2022 WMP states: After the initial positive tests, the Calistoga REFCL pilot demonstration was stalled due to the failure of the substation REFCL equipment. In addition, PG&E had difficulty obtaining replacement equipment from various overseas suppliers due to supply chain issues and the ongoing COVID-19 pandemic</p> <p>a) Please describe the nature of the "failure of the substation REFCL equipment". b) How long has the REFCL pilot been stalled? c) Has PG&E obtained the necessary replacement equipment from any suppliers in order to continue with the REFCL pilot? d) What is the status of the REFCL pilot as of the issuance date of this DR? e) What are PG&E's next planned steps regarding the REFCL pilot? f) Describe what an "elevated voltage stress test" involves. g) Describe what a "field ground fault test" involves. h) Is it correct that PG&E completed only a single field ground fault test? i) If the answer to (h) is yes, why was only one test conducted?</p>	Miles Gordon Holly Wehrman Carolyn Chen Layla Labagh	3/4/2022	3/9/2022	3/9/2022	0		7.3.3.17.4	Grid Design and System Hardening	Rapid Earth Current Fault Limiter
20	CalPA	Set WMP-13	CalAdvocates-PGE-2022WMP-13	6	CalAdvocates-PGE-2022WMP-13_6	<p>a) How effective is REFCL compared to covered conductor installation in reducing wildfire risks? b) Please provide any available supporting documentation regarding your response to subpart (a) above. c) How effective is REFCL compared to undergrounding in reducing wildfire risks? d) Please provide any available supporting documentation regarding your response to subpart (c) above.</p>	Miles Gordon Holly Wehrman Carolyn Chen Layla Labagh	3/4/2022	3/9/2022	3/9/2022	0		7.3.3.17.4	Grid Design and System Hardening	Rapid Earth Current Fault Limiter
21	CalPA	Set WMP-13	CalAdvocates-PGE-2022WMP-13	7	CalAdvocates-PGE-2022WMP-13_7	<p>PG&E's 2022 WMP states: REFCL technology could not be fully evaluated beyond the initial testing because of the equipment failure and supply chain issues. As a result, PG&E is looking to further study REFCL capabilities after obtaining replacement supplies and making repairs and modifications at the Calistoga site in 2022.</p> <p>a) When does PG&E expect to obtain these replacement supplies? b) What will PG&E do to fully evaluate the REFCL technology beyond the initial testing? c) How have PG&E's plans changed given the equipment failure? d) How have PG&E's plans changed given the supply chain issues? e) Please describe the nature of the "repairs and modifications at the Calistoga site" referred to above. f) Does PG&E intend to finish the "repairs and modifications" in 2022? g) If the your answer to subpart (f) is no, what is PG&E's timetable to finish these repairs and modifications?</p>	Miles Gordon Holly Wehrman Carolyn Chen Layla Labagh	3/4/2022	3/9/2022	3/9/2022	0		7.3.3.17.4	Grid Design and System Hardening	Rapid Earth Current Fault Limiter

22	CalIPA	Set WMP-13	CalAdvocates-PGE-2022WMP-13	8	CalAdvocates-PGE-2022WMP-13_8	<p>PG&E's 2022 WMP provides the following for "Lessons Learned" from the REFCL initiative in 2021:</p> <ul style="list-style-type: none"> • PG&E should use gang operated switchgear and protective devices instead of single pole operated devices for REFCL installations. • PG&E should consider the use of domestically available equipment for future REFCL installation to avoid foreign supply chain issues. <p>a) Does PG&E intend to use "gang operated switchgear and protective devices instead of single pole operated devices for REFCL installations" going forward, including this Calistoga pilot? b) Why does PG&E conclude that it "should use gang operated switchgear and protective devices instead of single pole operated devices for REFCL installations" going forward? c) Does PG&E intend to use "domestically available equipment for future REFCL installation" going forward, including this Calistoga pilot? d) Has PG&E identified domestically available suppliers for REFCL equipment? e) If the answer to subpart (d) is "no", has PG&E identified any feasible options to solve the above-mentioned supply chain issues?</p>	Miles Gordon Holly Wehrman Carolyn Chen Layla Labagh	3/4/2022	3/9/2022	3/9/2022	0		7.3.3.17.4	Grid Design and System Hardening	Rapid Earth Current Fault Limiter
23	CalIPA	Set WMP-13	CalAdvocates-PGE-2022WMP-13	9	CalAdvocates-PGE-2022WMP-13_9	<p>PG&E's Test Year 2023 General Rate Case Testimony, Exhibit PG&E-4, states the following regarding the REFCL program: Based on our initial testing and the successful implementation in Australia, PG&E has developed a short-term strategy to install REFCLs in HFTD areas. PG&E forecasts deploying REFCLs at an additional two substations each year, but these plans could change pending pilot results and integration with other enhanced automation and wildfire mitigation efforts described in this chapter. In coordination with deployments of other technologies, future REFCL deployments will utilize PG&E's 2021 Wildfire Distribution Risk Model in combination with feasibility screens to help prioritize highest-risk locations for installations.</p> <p>a) Is the REFCL program above the same as 2022 WMP Initiative #7.3.3.17—Updates to grid topology to minimize risk of ignition in HFTDs, Rapid Earth Current Fault Limiter? b) How does PG&E define "short-term" in terms of the number of years involved? c) According to this "short-term strategy," at how many substations will have REFCL installed and by what date? d) According to this "short-term strategy," how many circuit-miles in the HFTD areas will be served by REFCLs? e) Please provide the "pilot results." f) What does "integration with other enhanced automation and wildfire mitigation efforts described in this chapter" mean? g) What does PG&E mean by "in coordination with deployments of other technologies"? h) Which technologies constitute the "other technologies" as used in the passage quoted? i) How will PG&E utilize the 2021 Wildfire Risk Model to "help prioritize highest-risk locations for installations"? j) How does PG&E's 2021 Wildfire Distribution Risk Model determine the use of REFCL as opposed to other wildfire mitigations (such as covered conductor and undergrounding)? k) Please describe the "feasibility screens" referred to in the above paragraph.</p>	Miles Gordon Holly Wehrman Carolyn Chen Layla Labagh	3/4/2022	3/9/2022	3/9/2022	0		7.3.3.17.4	Grid Design and System Hardening	Rapid Earth Current Fault Limiter
24	CalIPA	Set WMP-13	CalAdvocates-PGE-2022WMP-13	10	CalAdvocates-PGE-2022WMP-13_10	<p>Regarding these two 2022 WMP Initiatives:</p> <ul style="list-style-type: none"> • 7.3.3.17.4 – Updates to grid topology to minimize risk of ignition in HFTDs, Rapid Earth Current Fault Limiter11 • 7.3.6.8 – Protective Equipment and Device Settings" 12 <p>Please explain: a) How do these two initiatives differ? b) How do these two initiatives compare in terms of expected risk reduction? c) How do these two initiatives compare in terms of impacts to customers from loss of power? d) Have you performed a comparative cost-benefit analysis of these two initiatives? e) If the answer to part (d) is yes, please provide this analysis. f) Are aware of any external (non-PG&E) comparative cost-benefit analysis of these two initiatives? g) If the answer to part (f) is yes, please provide this analysis or a link to it.</p>	Miles Gordon Holly Wehrman Carolyn Chen Layla Labagh	3/4/2022	3/9/2022	3/9/2022	0		7.3.3.17.4	Grid Design and System Hardening	Rapid Earth Current Fault Limiter
25	CalIPA	Set WMP-13	CalAdvocates-PGE-2022WMP-13	11	CalAdvocates-PGE-2022WMP-13_11	<p>In its 2022 WMP and supporting attachments, PG&E does not appear to provide a Risk Spend Efficiency (RSE) score for 2022 WMP Initiative 7.3.3.17.4—Updates to grid topology to minimize risk of ignition in HFTDs, Rapid Earth Current Fault Limiter.</p> <p>a) Please explain why PG&E is not providing RSE information for this initiative in the 2022 WMP or relevant supporting attachments. b) Has PG&E calculated an RSE score for this initiative? c) If the answer to subpart (b) is "yes", please provide said RSE and all supporting workpapers for said RSE. d) If the answer to subpart (b) is "no", please explain why PG&E has not calculated an RSE for this initiative.</p>	Miles Gordon Holly Wehrman Carolyn Chen Layla Labagh	3/4/2022	3/9/2022	3/9/2022	1		7.3.3.17.4	Grid Design and System Hardening	Rapid Earth Current Fault Limiter
26	OEIS	Set 003	OEIS-PG&E-22-003	1	OEIS-PG&E-22-003_1	<p>Considering Maturity Model Survey question E.IV.h, how would PG&E answer this modified version? Does the utility work with landowners to provide a use(s) for vegetation cut on the landowner's property? (Y/N)</p>	Kevin Miller	3/4/2022	3/10/2022	3/10/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Vegetation grow-in mitigation
27	OEIS	Set 003	OEIS-PG&E-22-003	2	OEIS-PG&E-22-003_2	<p>Considering Maturity Model Survey question E.V.f, how would PG&E answer this modified version? Does the utility work with landowners to provide a use(s) for vegetation cut on the landowner's property? (Y/N)</p>	Kevin Miller	3/4/2022	3/10/2022	3/10/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Vegetation fall-in mitigation

28	OEIS	Set 003	OEIS-PG&E-22-003	3	OEIS-PG&E-22-003_3	From the Maturity Survey, in Category E (Vegetation Management) it is apparent that PG&E is building a granular, frequently updated inventory (Capability 21) and moving towards using "predictive modeling of vegetation growth" to schedule vegetation inspections (E.II.c). However, PG&E still (and will as of Jan 1, 2023) schedule VM inspections based on annual or periodic schedules (E.II.b) and determine procedures/checklists based on statute and regulatory guidelines only (E.II.b). a) Explain why PG&E is developing predictive modeling capabilities for VM (E.II.c) but not using those models to schedule inspections and determine procedures/checklists? b) When will predictive modeling be used to schedule inspections and create procedures/checklists?	Kevin Miller	3/4/2022	3/10/2022	3/10/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Vegetation inspection effectiveness
29	OEIS	Set 003	OEIS-PG&E-22-003	4	OEIS-PG&E-22-003_4	Concerning Maturity Survey question E.IV.c, why is PG&E not using ignition and propagation risk modeling to guide clearances around lines and equipment? a) How does and will PG&E's ignition and propagation risk modeling guide clearances? b) When?	Kevin Miller	3/4/2022	3/10/2022	3/10/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Vegetation growth mitigation
30	OEIS	Set 003	OEIS-PG&E-22-003	5	OEIS-PG&E-22-003_5	In data request OEIS-PG&E-22-002, Energy Safety asked PG&E to answer 41 2022 Maturity Survey questions it said it benchmarked through consultation with other utilities in 2022 by the same standard of interpretation it used to answer the same 41 questions in 2021 and 2020. In its response, PG&E indicated that "We cannot, however, go back in time to determine how we would have answered the same question in 2020 or 2021 in light of changes that have occurred since that time." Energy Safety understands that PG&E cannot go back in time to change its answers from 2021 or 2020, and that other factors have changed, however Energy Safety is asking PG&E to answer those questions in the same way in 2022 as they did in 2021 and 2020 in order to understand the true progression of PG&E's maturity not attributed to re-interpretation of questions. Prior to benchmarking its 2022 answers with other utilities and re-interpreting these questions, what was PG&E's answer to those questions?	Kevin Miller	3/4/2022	3/10/2022	3/10/2022	0		N/A	Miscellaneous	Maturity Survey
31	CalPA	Set WMP-14	CalAdvocates-PGE-2022WMP-14	1	CalAdvocates-PGE-2022WMP-14_1	On Pg. 436 of PG&E's 2022 WMP, table 7.3.3-1 highlights the average time it takes PG&E to complete a system hardening project that spans 1-2 miles. a) Please provide a list of all types of system hardening projects that are included in this table's data. b) Please provide a separate table highlighting the average time frame to complete a covered conductor project spanning 1-2 miles. If you are unable to do so, please describe your reasoning.	Dillon Copa Holly Wehrman Carolyn Chen Layla Labagh	3/10/2022	3/15/2022	3/15/2022	0		7.3.3.3	Grid Design and System Hardening	Covered Conductor Installation
32	CalPA	Set WMP-14	CalAdvocates-PGE-2022WMP-14	2	CalAdvocates-PGE-2022WMP-14_2	Pg. 435 of your 2022 WMP Update states, "The table represents base overhead System Hardening projects after scoping is completed. As mentioned above, Fire Rebuild occurs on a faster cycle." Therefore, please disaggregate table 7.3.3-1 into separate data according to the following project types (assuming that projects are comparable in scale): a) Covered conductor, Fire Rebuild b) Covered conductor, not Fire Rebuild c) Undergrounding, Fire Rebuild d) Undergrounding, not Fire Rebuild	Dillon Copa Holly Wehrman Carolyn Chen Layla Labagh	3/10/2022	3/15/2022	3/15/2022	0		7.3.3.3	Grid Design and System Hardening	Covered Conductor Installation
33	CalPA	Set WMP-14	CalAdvocates-PGE-2022WMP-14	3	CalAdvocates-PGE-2022WMP-14_3	On Pg. 442 of PG&E's 2022 WMP, PG&E states, "In 2021, PG&E identified and completed repairs or replacements of approximately 10,946 deteriorated crossarms." a) Please provide a .gdb spatial file showing where PG&E completed repairs of the deteriorated crossarms noted above. b) Please provide a .gdb spatial file showing where PG&E completed replacements of the deteriorated crossarms noted above.	Dillon Copa Holly Wehrman Carolyn Chen Layla Labagh	3/10/2022	3/15/2022	3/15/2022	1		7.3.3.5	Grid Design and System Hardening	Crossarm Maintenance, Repair and Replacement
34	CalPA	Set WMP-14	CalAdvocates-PGE-2022WMP-14	4	CalAdvocates-PGE-2022WMP-14_4	On Pg. 445 of PG&E's 2022 WMP, PGE&E states, "In 2021, PG&E replaced 16,359 poles and reinforced 3,012 poles." a) Please provide a .gdb spatial file showing where PG&E replaced poles. b) Please provide a .gdb spatial file showing where PG&E reinforced poles.	Dillon Copa Holly Wehrman Carolyn Chen Layla Labagh	3/10/2022	3/15/2022	3/15/2022	1		7.3.3.6	Grid Design and System Hardening	Distribution Pole Replacement
35	CalPA	Set WMP-14	CalAdvocates-PGE-2022WMP-14	5	CalAdvocates-PGE-2022WMP-14_5	On Pg. 451 of PG&E's 2022 WMP, PG&E states, "Recently, moisture intrusion issues have been identified in some of the "Viper" branded reclosers that have been installed on the PG&E system. After significant rains in the fall of 2021, this issue, which impacts the functionality but not the safety of these devices, was identified in several locations." a) Please describe the moisture intrusion issue occurring on the Viper reclosers. b) Please state the basis for PG&E's assertion that the issue "impacts the functionality but not the safety of these devices." c) Please describe the functionality issues occurring on the Viper reclosers.	Dillon Copa Holly Wehrman Carolyn Chen Layla Labagh	3/10/2022	3/15/2022	3/15/2022	0		7.3.3.8.1	Grid Design and System Hardening	Distribution Line Sectionalizing
36	CalPA	Set WMP-14	CalAdvocates-PGE-2022WMP-14	6	CalAdvocates-PGE-2022WMP-14_6	On Pg. 452 of PG&E's 2022 WMP, PGE&E states, "We achieved our 2021 target to install 29 switches by September 1, 2021. In addition, we installed 12 T-Line SCADA switches benefiting PPS operations after September 1, 2021, for a 2021 total of 41." a) Please provide GIS point location data (in .gdb format) showing where PG&E completed installations of the 29 switches in 2021. b) Please provide GIS point location data (in .gdb format) showing where PG&E completed installations of the 12 T-Line SCADA switches in 2021.	Dillon Copa Holly Wehrman Carolyn Chen Layla Labagh	3/10/2022	3/15/2022	3/15/2022	2		7.3.3.8.2	Grid Design and System Hardening	Transmission Line Sectionalizing
37	CalPA	Set WMP-14	CalAdvocates-PGE-2022WMP-14	7	CalAdvocates-PGE-2022WMP-14_7	On Pg. 472 of PG&E's 2022 WMP, PG&E states, "Due to the weather conditions in 2021, none of the substations where generation was staged were utilized in the 2021 PPS season." a) What lessons did PG&E learn about staging temporary generation from its experience in 2021? b) How will PG&E improve its staging of generation in 2022 to ensure that it is useful during the PPS season?	Dillon Copa Holly Wehrman Carolyn Chen Layla Labagh	3/10/2022	3/15/2022	3/15/2022	0		7.3.3.11.1	Grid Design and System Hardening	Generation for PPS Mitigation

38	CalPA	Set WMP-14	CalAdvocates-PGE-2022WMP-14	8	CalAdvocates-PGE-2022WMP-14_8	<p>On Pg. 514 of PG&E's 2022 WMP, PG&E states, "PG&E switched vendors for this work in 2021. Contracts took longer than expected and the new vendor had to complete an extensive pilot to establish a solid foundation based on high quality pole loading calculations."</p> <p>a)Please describe why PG&E switched vendors for this work in 2021.</p> <p>b)Please provide all supporting documents and claims that describes PG&E's reasoning related to its response to subsection a) above.</p> <p>c)Describe the nature of the "extensive pilot" the new vendor completed.</p> <p>d)What was the approximate cost of the "extensive pilot"?</p>	Dillon Copa Holly Wehrman Carolyn Chen Layla Labagh	3/10/2022	3/15/2022	3/15/2022	2		7.3.3.13	Grid Design and System Hardening	Pole Loading Infrastructure Hardening and Replacement
39	CalPA	Set WMP-14	CalAdvocates-PGE-2022WMP-14	9	CalAdvocates-PGE-2022WMP-14_9	<p>On Pg. 551 of PG&E's 2022 WMP, PG&E states that it will complete 32 circuit-miles of transmission system hardening in 2022.</p> <p>a)Please disaggregate these circuit-miles of transmission hardening into the following types: bare-wire overhead hardening, conductor removal, other.</p> <p>b)Please state how many total circuit-miles of transmission system hardening you plan to complete in 2022, excluding the work that resulted from the Administrative Consent Order attached to Resolution SED-6.</p> <p>c)Please disaggregate your response to part (b) into the following types: bare-wire overhead hardening, conductor removal, other.</p> <p>d)In 2021, PG&E completed 93 miles. Please explain the factors that are causing PG&E to decrease this output to 32 miles in 2022.</p>	Dillon Copa Holly Wehrman Carolyn Chen Layla Labagh	3/10/2022	3/15/2022	3/15/2022	0		7.3.3.17.2	Grid Design and System Hardening	System Hardening - Transmission
40	CalPA	Set WMP-14	CalAdvocates-PGE-2022WMP-14	10	CalAdvocates-PGE-2022WMP-14_10	<p>On Pg. 564 of PG&E's 2022 WMP regarding Remote Grid Standalone Power Systems (SPS), PG&E states, "The program expects to grow from 1 SPS unit deployed in 2021 to 2 SPS units deployed in 2022 and on towards approximately 15 projects in 2023, followed by additional growth in the overall number of systems deployed annually in 2024-2025."</p> <p>a)Please describe the planning, scoping, and pre-construction work PG&E will be performing in 2022 to facilitate the planned scaling up from 2 projects in 2022 to 15 projects in 2023.</p> <p>b)What is the forecast number of circuit-miles to be removed due to the deployment of 2 SPS units in 2022?</p> <p>c)What is the forecast number of circuit-miles to be removed due to the deployment of 15 SPS units in 2023?</p>	Dillon Copa Holly Wehrman Carolyn Chen Layla Labagh	3/10/2022	3/15/2022	3/15/2022	0		7.3.3.17.5	Grid Design and System Hardening	Remote Grid
41	CalPA	Set WMP-14	CalAdvocates-PGE-2022WMP-14	11	CalAdvocates-PGE-2022WMP-14_11	<p>On Pg. 567 of PG&E's 2022 WMP, PG&E uses three different terms, "trench miles" "circuit miles" and "underground miles".</p> <p>a)Please define each of these terms.</p> <p>b)How does each term differ from one another?</p> <p>c)Please provide a conversion between these units of measure for a 1-phase circuit (i.e., x trench miles = y circuit miles = z underground miles).</p> <p>d)Please provide a conversion between these units of measure for a 2-phase circuit (i.e., x trench miles = y circuit miles = z underground miles).</p> <p>e)Please provide a conversion between these units of measure for a 3-phase circuit (i.e., x trench miles = y circuit miles = z underground miles).</p> <p>f)Please provide a conversion between these units of measure for a right-of-way where two 3-phase circuits run in parallel (i.e., x trench miles = y circuit miles = z underground miles).</p> <p>g)If any of your responses to parts (c) through (f) depend on whether or not the circuit has a neutral wire, please explain.</p>	Dillon Copa Holly Wehrman Carolyn Chen Layla Labagh	3/10/2022	3/15/2022	3/15/2022	0		7.3.3.17.6	Grid Design and System Hardening	Butte County Rebuild Program
42	CalPA	Set WMP-14	CalAdvocates-PGE-2022WMP-14	12	CalAdvocates-PGE-2022WMP-14_12	<p>On Pg. 567 of PG&E's 2022 WMP, PG&E says, "This figure does not include a small volume (approximately 1.4 circuit miles) of previously hardened overhead lines that were placed underground."</p> <p>a)How many circuit-miles total (including non-Butte rebuild miles) were previously hardened overhead and were placed underground in 2020?</p> <p>b)How many circuit-miles total (including non-Butte rebuild miles) were previously hardened overhead and were placed underground in 2021?</p> <p>c)How many previously hardened overhead circuit-miles does PG&E expect to underground in 2022?</p>	Dillon Copa Holly Wehrman Carolyn Chen Layla Labagh	3/10/2022	3/15/2022	3/15/2022	0		7.3.3.17.6	Grid Design and System Hardening	Butte County Rebuild Program
43	CalPA	Set WMP-14	CalAdvocates-PGE-2022WMP-14	13	CalAdvocates-PGE-2022WMP-14_13	<p>In response to Data Request CalAdvocates-PGE-2022WMP-11, Question 3, PG&E provided its 2021 system hardening workplan, updated with the actual work performed in 2021. This workplan lists the circuit name associated with each system hardening order but does not list the circuit protection zone. Please provide an updated version of this spreadsheet with the circuit protection zone (as a new column) for each order (row).</p>	Dillon Copa Holly Wehrman Carolyn Chen Layla Labagh	3/10/2022	3/15/2022	3/15/2022	1		7.3.3.17	Grid Design and System Hardening	System Hardening

44	CalPA	Set WMP-15	CalAdvocates-PGE-2022WMP-15	1	CalAdvocates-PGE-2022WMP-15_1	PG&E's responses to Data Request CalAdvocates-PGE-2022WMP-10, Questions 1-3, are summarized in the following table: Tree Attachments Existing as of 2/1/2022 Tree Attachments Remediated in 2021 Tree Attachments to be removed in 2022 HFTD 19,214 247 588 Non-HFTD 749 139 245 a) Of the tree attachments PG&E remediated in 2021, approximately 36% were outside the HFTD. Please explain why PG&E selected these non-HFTD locations for remediation. b) Of the tree attachments PG&E plans to remediate in 2022, approximately 29% are outside the HFTD. Please explain why PG&E selected these non-HFTD locations for remediation. c) Please explain how PG&E determines where to remediate tree attachments.	Holly Wehrman Carolyn Chen Layla Labagh	3/11/2022	3/16/2022	3/16/2022	0		7.3.3	Grid Design and System Hardening	Tree Attachments
45	CalPA	Set WMP-15	CalAdvocates-PGE-2022WMP-15	2	CalAdvocates-PGE-2022WMP-15_2	a) Does PG&E consider tree attachments to be a significant wildfire risk factor? Please explain your answer. b) Does PG&E analyze and track whether ignitions or other adverse outcomes are caused by tree attachments? c) Has PG&E identified any ignitions in the past five years that were caused by tree attachments? If so, how many? d) Has PG&E identified any other adverse outcomes (such as outages) in the past five years that were caused by tree attachments? If so, how many?	Holly Wehrman Carolyn Chen Layla Labagh	3/11/2022	3/16/2022	3/16/2022	0		7.3.3	Grid Design and System Hardening	Tree Attachments
46	CalPA	Set WMP-15	CalAdvocates-PGE-2022WMP-15	3	CalAdvocates-PGE-2022WMP-15_3	In response to Data Request CalAdvocates-PGE-2022WMP-10, Question 9, PG&E provided its Quality Reviews of the potential exceptions identified in the Federal Monitor Report from November 19, 2021. Per the file "WMP-Discovery2022_DR_CalAdvocates_010-Q09Atch01.xlsx" PG&E agrees with the Federal Monitor (column J) in 1,576 findings. Of those 1,576 cases, the QC Action (column N) is "N/A" for 1,035 findings. a) Did PG&E perform any retraining in association with the 1,035 findings where QC Action is listed as "N/A" noted above? Please explain why or why not. b) Did PG&E perform other remedial action in association with the 1,035 findings where QC Action is listed as "N/A" noted above? Please explain why or why not.	Holly Wehrman Carolyn Chen Layla Labagh	3/11/2022	3/16/2022	3/16/2022	0		7.3.4.14	Asset Management and Inspections	Quality Assurance/Quality Control of Inspections
47	CalPA	Set WMP-15	CalAdvocates-PGE-2022WMP-15	4	CalAdvocates-PGE-2022WMP-15_4	In response to Data Request CalAdvocates-PGE-2022WMP-10, Question 9, PG&E provided its Quality Reviews of the potential exceptions identified in the Federal Monitor Report from November 19, 2021. Per the file "WMP-Discovery2022_DR_CalAdvocates_010-Q09Atch02.xlsx" PG&E agrees with the Federal Monitor (column K) in 636 findings. Of those 636 findings, the QC Review Action (column O) is "N/A" for 616. a) Did PG&E perform any retraining in association with the 616 findings where QC Review Action is listed as "N/A" noted above? Please explain why or why not. b) Did PG&E perform other remedial action in association with the 616 findings where QC Review Action is listed as "N/A" noted above? Please explain why or why not.	Holly Wehrman Carolyn Chen Layla Labagh	3/11/2022	3/16/2022	3/16/2022	0		7.3.4.14	Asset Management and Inspections	Quality Assurance/Quality Control of Inspections
48	CalPA	Set WMP-15	CalAdvocates-PGE-2022WMP-15	5	CalAdvocates-PGE-2022WMP-15_5	Page 129 of PG&E's 2022 WMP states the following: Finally, it is important to note that in this 2022 WMP, the model that is used for the development of workplans for the distribution system is the 2021 WDRM v2 which is described above and in the 2021 WMP. As described in (9) below, the 2022 WDRM v3 is still being reviewed prior to approval. Since workplans for the 2022 WMP needed to be developed prior to the beginning of the year, the 2021 WDRM v2 was used to inform these workplans. a) Does PG&E expect to see a significant reprioritization of circuit segments as a result of the forthcoming change from the 2021 WDRM v2 to the 2022 WDRM v3? b) How does PG&E's planning for 2022 wildfire mitigation initiatives take into account expected changes in circuit-segment reprioritization that may occur as a result of switching to 2022 WDRM v3 in the future? For example, if PG&E expects the risk-based prioritization of a given circuit segment to change, how does PG&E take that into account when scoping system hardening and other wildfire mitigations on the circuit-segment?	Holly Wehrman Carolyn Chen Layla Labagh	3/11/2022	3/16/2022	3/16/2022	0		4.5	Model and Metric Calculation Methodologies	Wildfire Distribution Risk Model
49	CalPA	Set WMP-15	CalAdvocates-PGE-2022WMP-15	6	CalAdvocates-PGE-2022WMP-15_6	In response to Data Request CalAdvocates-PGE-2022WMP-04, Question 8, PG&E provided its distribution system hardening workplan for 2022. Column P of attachment "WMP-Discovery2022_DR_CalAdvocates_004-Q08Atch01.xlsx" lists the risk ranking of each CPZ where PG&E plans to perform system hardening work. Please provide an updated copy of this workplan with an additional column listing the risk ranking of each CPZ according to the current version of PG&E's 2022 WDRM v3.	Holly Wehrman Carolyn Chen Layla Labagh	3/11/2022	3/16/2022	3/16/2022	0		7.3.3.17.1	Grid Design and System Hardening	System Hardening - Distribution
50	CalPA	Set WMP-15	CalAdvocates-PGE-2022WMP-15	7	CalAdvocates-PGE-2022WMP-15_7	Page 140 of PG&E's 2022 WMP states the following: To avoid exposing the model to misleading data, the training events are restricted to June through November. This does not require the assumption that no wildfires are possible in other months, but only that any ignitions and wildfires that do occur would have the same relationship with the model covariates as the ones the model is already trained on. Please provide workpapers or other available supporting evidence to support the statement that "any ignitions and wildfires that do occur [in months other than June through November] would have the same relationship with the model covariates as the ones the model is already trained on."	Holly Wehrman Carolyn Chen Layla Labagh	3/11/2022	3/16/2022	3/16/2022	0		4.5	Model and Metric Calculation Methodologies	Wildfire Distribution Risk Model
51	CalPA	Set WMP-15	CalAdvocates-PGE-2022WMP-15	8	CalAdvocates-PGE-2022WMP-15_8	Page 145 of PG&E's 2022 WMP states, "As of the state of the 2022 WMP submission, E3's review of 2022 WDRM v3 and WFC Model has not been completed." a) When does PG&E expect this review to be complete? b) Please provide a copy of E3's review of PG&E's 2022 WDRM v3 and WFC Model when it is complete.	Holly Wehrman Carolyn Chen Layla Labagh	3/11/2022	3/16/2022	3/16/2022	0		4.5	Model and Metric Calculation Methodologies	Wildfire Distribution Risk Model

52	CalPA	Set WMP-15	CalAdvocates-PGE-2022WMP-15	9	CalAdvocates-PGE-2022WMP-15_9	In response to remedy PG&E-21-13 on page 216 of PG&E's 2022 WMP, PG&E refers to the Progress Report it filed on November 1, 2021. Page 39 of this Progress Report states the following with respect development of the system hardening workplan: In addition, for some CPZs, although the CPZ is not itself the highest risk ranked CPZ, performing system hardening work may allow us to mitigate future PSPS events. a) Please state the basis for PG&E's decision to prioritize PSPS mitigation over wildfire mitigation in the situations described above. b) Please provide example workpapers to support PG&E's response to part (a), if available. c) To the extent that PG&E chooses to perform system hardening "to mitigate future PSPS events," how does PG&E evaluate the PSPS risk of each CPZ and determine how to prioritize CPZs?	Holly Wehrman Carolyn Chen Layla Labagh	3/11/2022	3/16/2022	3/16/2022	0		4.6	Progress Reporting on Key Areas of Improvement	Progress on Twenty-Nine Remedies
53	CalPA	Set WMP-15	CalAdvocates-PGE-2022WMP-15	10	CalAdvocates-PGE-2022WMP-15_10	Page 316 of PG&E's 2022 WMP states, "In 2021, PG&E implemented a program to proactively reduce the backlog of EC tags generated during the enhanced system inspections performed in recent years." Please describe this program.	Holly Wehrman Carolyn Chen Layla Labagh	3/11/2022	3/16/2022	3/16/2022	0		7.1.B	Wildfire Mitigation Strategy	Risk Modeling Outcomes in Decision-Making and Mitigations
54	CalPA	Set WMP-15	CalAdvocates-PGE-2022WMP-15	11	CalAdvocates-PGE-2022WMP-15_11	PG&E's response to data request CalAdvocates-PGE-2022WMP-09, Question 1, shows three open Priority A corrective notifications on PG&E's distribution system in HFTD with "Authorized End Dates" earlier than February 1, 2022. a) Why hasn't PG&E resolved these notifications yet? b) What is PG&E's timetable to resolve these notifications?	Holly Wehrman Carolyn Chen Layla Labagh	3/11/2022	3/16/2022	3/16/2022	0		7.3.4	Asset Management and Inspections	Additional Detail - Distribution
55	CalPA	Set WMP-15	CalAdvocates-PGE-2022WMP-15	12	CalAdvocates-PGE-2022WMP-15_12	PG&E's response to data request CalAdvocates-PGE-2022WMP-09, Question 1, shows 785 open Priority B corrective notifications on PG&E's distribution system in HFTD with "Authorized End Dates" earlier than February 1, 2022. a) Why hasn't PG&E resolved these notifications yet? b) What is PG&E's timetable to resolve these notifications?	Holly Wehrman Carolyn Chen Layla Labagh	3/11/2022	3/18/2022	3/18/2022	0		7.3.4	Asset Management and Inspections	Additional Detail - Distribution
56	CalPA	Set WMP-15	CalAdvocates-PGE-2022WMP-15	13	CalAdvocates-PGE-2022WMP-15_13	PG&E's response to data request CalAdvocates-PGE-2022WMP-09, Question 1, shows 111,502 open corrective notifications on PG&E's distribution system in HFTD with "Authorized End Dates" earlier than February 1, 2022 (that is, overdue notifications). Cal Advocates understands that the majority of these were opened in 2019 and later years as a result of enhanced inspections. Year corrective notification opened Number of overdue corrective notifications 2001 1 2013 1 2014 189 10 2015 2,698 2016 4,006 2017 333 2018 658 2019 51,729 2020 33,551 2021 18,334 2022 2 a) Why hasn't PG&E resolved the single overdue corrective notification opened in 2001? b) Why hasn't PG&E resolved the single overdue corrective notification opened in 2013? c) Why hasn't PG&E resolved the 189 overdue corrective notifications opened in 2014?	Holly Wehrman Carolyn Chen Layla Labagh	3/11/2022	3/18/2022	3/18/2022	0		7.3.4	Asset Management and Inspections	Additional Detail - Distribution
57	CalPA	Set WMP-15	CalAdvocates-PGE-2022WMP-15	14	CalAdvocates-PGE-2022WMP-15_14	Regarding PG&E's response to data request CalAdvocates-PGE-2022WMP-09: a) Does PG&E regularly monitor how many overdue, unresolved corrective notifications it has? b) Does PG&E take any special action when a corrective notification is years past its due date? c) Does PG&E analyze and track whether adverse outcomes (such as outages, wires down, and ignitions) are causally linked to overdue maintenance? d) Does PG&E regularly report any of the information addressed in parts (a) through (c) to its executives or its Board of Directors? If so, please describe this reporting, including when and how this reporting occurs and what information is included. e) Does PG&E regularly report any of the information addressed in parts (a) through (c) to the Commission? If so, please describe this reporting, including when and how this reporting occurs and what information is included. f) Does PG&E regularly report any of the information addressed in parts (a) through (c) to OEIS? If so, please describe this reporting, including when and how this reporting occurs and what information is included.	Holly Wehrman Carolyn Chen Layla Labagh	3/11/2022	3/16/2022	3/16/2022	0		7.3.4	Asset Management and Inspections	Additional Detail
58	CalPA	Set WMP-15	CalAdvocates-PGE-2022WMP-15	15	CalAdvocates-PGE-2022WMP-15_15	PG&E's non-spatial data tables included in 2022-02-25_PGE_2022_WMP-Update_R0_Section 7.3.a_Atch01.xlsx do not appear to follow the template included in Energy Safety's Final 2022 Wildfire Mitigation Plan (WMP) Update Guidelines, Attachment 3. Please provide an updated version of this file with data in the latest template.	Holly Wehrman Carolyn Chen Layla Labagh	3/11/2022	3/16/2022	3/16/2022	0		7.3.a	Detailed Wildfire Mitigation Initiatives	Financial Data on Mitigation Activities

59	CalPA	Set WMP-15	CalAdvocates-PGE-2022WMP-15	16	CalAdvocates-PGE-2022WMP-15_16	Table 12 of PG&E's non-spatial data tables appears to aggregate routine vegetation management and Enhanced Vegetation Management (EVM) under initiative "7.3.5.2 Detailed inspections and management practices for vegetation clearances around distribution electrical lines and equipment." Previously, EVM was listed separately from routine vegetation management. Please provide disaggregated costs for initiative 7.3.5.2, with separate numbers for routine VM, enhanced VM, and any other program currently aggregated under initiative 7.3.5.2.	Holly Wehrman Carolyn Chen Layla Labagh	3/11/2022	3/18/2022	3/18/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Program Costing
60	OEIS	Set 004	OEIS-PG&E-22-004	1	OEIS-PG&E-22-004_1	Please provide the Model Documentation and User Guide or available technical paper for each of the following from Table 9.5-1 Glossary of Primary Models (p. 1038): a) Fire Potential Index (FPI) Model b) Public Safety Power Shutoff (PSPS) Consequence Model	Kevin Miller	3/11/2022	3/16/2022	3/16/2022	2		4.5	Model and Metric Calculation Methodologies	Fire Potential Index (FPI) Model / PSPS Consequence Model
61	OEIS	Set 004	OEIS-PG&E-22-004	2	OEIS-PG&E-22-004_2	While PG&E provided undergrounding information in its GIS data, PG&E did not specifically report underground circuit miles in the nonspatial tables. Underground circuit miles were obtained from the GIS submission. a) Please provide updated data for rows 1a, 2a, and 3a in Table 8, which include underground circuits.	Kevin Miller	3/11/2022	3/16/2022	3/16/2022	1		7.3.a	Detailed Wildfire Mitigation Initiatives	Financial Data on Mitigation Activities
62	OEIS	Set 004	OEIS-PG&E-22-004	3	OEIS-PG&E-22-004_3	Regarding Section 7.3.2 – Risk assessment and mapping, and Section 9.1 – Risk mapping and simulation a) Section 7.3.2 of the 2022 Guidelines requires the inclusion of a "climate-driven risk map and modeling based on various relevant weather scenarios relevant maps within the report or appendices" for every risk assessment and mapping initiative. Section 9.1 defines "climate-driven risk map and modeling based on various relevant weather scenarios" as: "Development and use of tools and processes demonstrating medium and long-term climate trends based on the best available climate models demonstrating the most wildfire-relevant impacts (e.g., warming trends, fuel moisture trends, soil moisture trends, vegetation distribution trends). Describe how these trends are being incorporated into risk modeling or other risk-informed analyses." i) Provide the page number(s) within the 2022 WMP update that fulfills the requirement for the provision of climate-driven risk map and modeling demonstrating medium and long-term climate trends for the risk assessment and mapping initiatives. ii) If there are no, or any missing, climate-driven risk maps incorporating medium and long-term climate trends for the risk assessment and mapping initiatives (see Q07a), please submit those maps. iii) Provide the page number(s) within the 2022 WMP update that describes how medium and long-term climate trends are being incorporated into risk modeling or other risk-informed analyses. iv) If there is no description of how medium and long-term climate trends are being incorporated into risk modeling or other risk-informed analyses in the 2022 WMP update (see Q07aiii), please provide that description.	Kevin Miller	3/11/2022	3/16/2022	3/16/2022	0		7.3.1	Risk Assessment and Mapping	Climate Trends
63	OEIS	Set 004	OEIS-PG&E-22-004	4	OEIS-PG&E-22-004_4	How has PG&E changed its mitigation plans to address lessons learned from past catastrophic fires? a) Include page numbers in the 2022, 2021, or 2020 WMP for discussion of each of the following applied lessons and a description of such changes: i) 2017 – Railroad Fire, Atlas Fire, Cascade Fire, Redwood Fire, and Nuns Fire ii) 2018 – Camp Fire iii) 2019 – Camino Fire, Bethel Island Fire, and Kincadee Fire iv) 2020 – Zogg Fire v) 2021 – Dixie Fire and Fly Fire	Kevin Miller	3/11/2022	3/16/2022	3/16/2022	0		4.2	Lessons Learned and Risk Trends	Wildfire
64	OEIS	Set 004	OEIS-PG&E-22-004	5 (incorrectly marked as 4)	OEIS-PG&E-22-004_5 (incorrectly marked as 4)	Regarding Table 7.1: a) Provide the number of events broken down by equipment type that fall in the "Other" category in Rows 20, 39, 65, and 91. b) Why is PG&E expecting an increase in wire-down events for the following from 2022 to 2023?: i) Vegetation contacts ii) Connectors c) How is PG&E planning on addressing the wildfire risk presented by the following equipment failures/event causes at the distribution level, which showed increase wire down and/or outage events in 2021? Describe any failure mode analyses evaluating the cause for the increases in 2021, and any associated changes in maintenance or inspections from lesson learned in 2021: i) Transformers ii) Conductors iii) Fuses iv) Poles v) Crossarms vi) Connection devices vii) Other, including specific equipment types as delineated in part (a) viii) Wire-to-wire contacts ix) Vegetation contacts	Kevin Miller	3/11/2022	3/17/2022	3/17/2022	0		7.3.a	Detailed Wildfire Mitigation Initiatives	Financial Data on Mitigation Activities
65	OEIS	Set 004	OEIS-PG&E-22-004	6 (incorrectly marked as 5)	OEIS-PG&E-22-004_6 (incorrectly marked as 5)	Regarding Table 7.2: a) Why is PG&E expecting an increase in ignitions for the following from 2022 to 2023?: i) Vegetation contacts ii) Connectors iii) Conductor damage iv) Transformers v) Wire-to-wire contacts	Kevin Miller	3/11/2022	3/16/2022	3/16/2022	0		7.3.a	Detailed Wildfire Mitigation Initiatives	Financial Data on Mitigation Activities

66	CalPA	Set WMP-16	CalAdvocates-PGE-2022WMP-16	1	CalAdvocates-PGE-2022WMP-16_1	<p>Page 631 of PG&E's 2022 WMP states, "Pacific Gas and Electric Company (PG&E) works to inform customers, landowners, and communities about VM work taking place and our role in increasing public safety as well as reducing fire risk."</p> <p>a)What communication methods are PG&E employing to effectively communicate to the public? b)Please provide the average time it takes PG&E to communicate to the following groups: a.Homeowners b.Small businesses c.Medical baseline customers</p>	Dillon Copa Carloyn Chen Layla Labagh	3/18/2022	3/23/2022	3/23/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Additional Efforts to Manage Community and Environmental Impacts
67	CalPA	Set WMP-16	CalAdvocates-PGE-2022WMP-16	2	CalAdvocates-PGE-2022WMP-16_2	<p>Page 632 of PG&E's 2022 WMP states, "PG&E has finished the development of our new process to standardize and enhance customer and community engagement for electric VM work."</p> <p>a)Please provide further information on the new process referred to above. b)What process was in place prior to the new process referred to above? c)How do the new and previous processes differ?</p>	Dillon Copa Carloyn Chen Layla Labagh	3/18/2022	3/23/2022	3/23/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Additional Efforts to Manage Community and Environmental Impacts
68	CalPA	Set WMP-16	CalAdvocates-PGE-2022WMP-16	3	CalAdvocates-PGE-2022WMP-16_3	<p>Page 637 of PG&E's 2022 WMP states, "As of December 31, 2021, PG&E's internal resources and contractor partners had worked approximately 1,486,330 trees in our Routine VM program and 34,189 trees in our Tree Mortality program. In addition, we completed 1,983 miles of EVM work."</p> <p>a)Please provide total miles completed in PG&E's Routine VM program in 2021, disaggregated by HFTD region (see definitions P through S). b)Please provide total miles completed in PG&E's Tree Mortality program in 2021, disaggregated by HFTD region (see definitions P through S).</p>	Dillon Copa Carloyn Chen Layla Labagh	3/18/2022	3/23/2022	3/23/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Detailed Inspections and Management Practices for Vegetation Clearances Around Distribution Electrical Lines and Equipment
69	CalPA	Set WMP-16	CalAdvocates-PGE-2022WMP-16	4	CalAdvocates-PGE-2022WMP-16_4	<p>Page 637 of PG&E's 2022 WMP states, "In September 2021, we began to transition the maintenance of EVM work that has already been performed to Routine VM patrols."</p> <p>a)How did PG&E come to the decision to begin to transition the maintenance of EVM work to Routine EVM patrols? b)Please describe how PG&E is transitioning the maintenance of EVM work to Routine EVM patrols. c)Describe what "maintenance of EVM work" entails.</p>	Dillon Copa Carloyn Chen Layla Labagh	3/18/2022	3/23/2022	3/23/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Detailed Inspections and Management Practices for Vegetation Clearances Around Distribution Electrical Lines and Equipment
70	CalPA	Set WMP-16	CalAdvocates-PGE-2022WMP-16	5	CalAdvocates-PGE-2022WMP-16_5	<p>Page 645 of PG&E's 2022 WMP states, "Vegetation identified as pending Priority 2 work within the Red Flag Warning (RFW) area will be reviewed and re-prioritized if determined necessary by the local PG&E VM Point of Contact."</p> <p>a)Please describe the steps PG&E takes to review and re-prioritize vegetation identified as pending Priority 2 work within the RFW area. b)On average, how long does it take PG&E to review and re-prioritize such vegetation?</p>	Dillon Copa Carloyn Chen Layla Labagh	3/18/2022	3/23/2022	3/23/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Emergency Response Vegetation Management Due to Red Flag Warning or Other Urgent Weather Conditions
71	CalPA	Set WMP-16	CalAdvocates-PGE-2022WMP-16	6	CalAdvocates-PGE-2022WMP-16_6	<p>Section 7.3.5.7 of PG&E's 2022 WMP discuss remote sensing inspections of vegetation around distribution electric lines and equipment.</p> <p>a)Please describe the circumstances in which PG&E employs ground-based LiDAR inspections. b)Please describe the circumstances in which PG&E employs aerial LiDAR inspections. c)If PG&E uses ground-based LiDAR inspections more often than aerial LiDAR, please explain why. d)What is the approximate total cost per circuit-mile to perform ground-based LiDAR inspections on distribution circuits? e)What is the approximate total cost per circuit-mile to perform aerial LiDAR inspections on distribution circuits? f)When PG&E performs ground-based LiDAR inspections, is this work performed at the same time as VM patrols, inspection patrols, or other patrol work, in order to minimize costs? Please explain your response.</p>	Dillon Copa Carloyn Chen Layla Labagh	3/18/2022	3/23/2022	3/23/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Remote Sensing Inspections of Vegetation Around Distribution Electric Lines and Equipment
72	CalPA	Set WMP-16	CalAdvocates-PGE-2022WMP-16	7	CalAdvocates-PGE-2022WMP-16_7	<p>On page 657, PG&E provides Table 7.3.5-2, which shows planned mileage of ground-based LiDAR on distribution facilities. Please supplement this table by:</p> <p>a)Adding a column for planned mileage of aerial LiDAR. b)Adding a row with data on actual mileage completed in 2021.</p>	Dillon Copa Carloyn Chen Layla Labagh	3/18/2022	3/23/2022	3/23/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Remote Sensing Inspections of Vegetation Around Distribution Electric Lines and Equipment

73	CalPA	Set WMP-16	CalAdvocates-PGE-2022WMP-16	8	CalAdvocates-PGE-2022WMP-16_8	Section 7.3.5.8 of PG&E's 2022 WMP discuss remote sensing inspections of vegetation around transmission electric lines and equipment. a)Please describe the circumstances in which PG&E employs ground-based LIDAR inspections. b)Please describe the circumstances in which PG&E employs aerial LIDAR inspections. c)If PG&E uses ground-based LIDAR inspections more often than aerial LIDAR, please explain why. d)What is the approximate total cost per circuit-mile to perform ground-based LIDAR inspections? e)What is the approximate total cost per circuit-mile to perform aerial LIDAR inspections? f)When PG&E performs ground-based LIDAR inspections, is this work performed at the same time as VM patrols, inspection patrols, or other patrol work, in order to minimize costs? Please explain your response.	Dillon Copa Carolyn Chen Layla Labagh	3/18/2022	3/23/2022	3/23/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Remote Sensing Inspections of Vegetation Around Transmission Electric Lines and Equipment
74	CalPA	Set WMP-16	CalAdvocates-PGE-2022WMP-16	9	CalAdvocates-PGE-2022WMP-16_9	For Section 7.3.5.8 (regarding remote sensing on transmission facilities), please provide a table equivalent to Table 7.3.5-2, with the additions specified above in Question 7.	Dillon Copa Carolyn Chen Layla Labagh	3/18/2022	3/23/2022	3/23/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Remote Sensing Inspections of Vegetation Around Transmission Electric Lines and Equipment
75	CalPA	Set WMP-16	CalAdvocates-PGE-2022WMP-16	10	CalAdvocates-PGE-2022WMP-16_10	Table 12 of PG&E's 2022 WMP shows the costs for sections 7.3.5.2 and 7.3.5.3. a)Please explain why section 7.3.5.2 entails CAPEX and OPEX spending as opposed to only OPEX spending for 7.3.5.3. b)Please describe the capital expenditures planned in 2022 for section 7.3.5.2.	Dillon Copa Carolyn Chen Layla Labagh	3/18/2022	3/23/2022	3/23/2022	0		7.3.5	Vegetation Management (VM) and Inspections	VM Spend
76	CalPA	Set WMP-16	CalAdvocates-PGE-2022WMP-16	11	CalAdvocates-PGE-2022WMP-16_11	On March 2, 2022, PG&E presented its "2023 General Rate Case Wildfire Supplemental Testimony Overview." Slide 17 of this presentation includes the following chart, which appears to show a significant decrease in planned EVM spending from 2022 to 2023. a)Does PG&E expect to significantly reduce spending on EVM beginning in 2023, as indicated in this chart? b)If the answer to part (a) is yes, please explain the reasoning for the forecasted decrease in EVM spending. c)If the answer to part (a) is no, please explain the above chart. d)Does PG&E plan to reduce the annual mileage target for its EVM program after 2022? Please explain your answer. e)Does PG&E plan to reduce the scope of work covered by its EVM program after 2022? Please explain your answer. f)Please explain the apparent increase in planned Routine VM spending from 2022 to 2023, shown in the above chart.	Dillon Copa Carolyn Chen Layla Labagh	3/18/2022	3/23/2022	3/23/2022	0		7.3.5	Vegetation Management (VM) and Inspections	EVM Spend
77	CalPA	Set WMP-16	CalAdvocates-PGE-2022WMP-16	12	CalAdvocates-PGE-2022WMP-16_12	Table 5.3-1 on page 271 of PG&E's Revised 2021 WMP, June 3, 2021, showed a mileage target of 111 miles for initiative 7.3.3.17.2 "System Hardening – Transmission Conductor." Table PG&E-5.3-1(A) on page 267 of PG&E's 2022 WMP shows a mileage target of 32 miles for the same initiative. Please explain the reason for the decrease in the mileage target for this initiative, compared to last year's forecast.	Dillon Copa Carolyn Chen Layla Labagh	3/18/2022	3/23/2022	3/23/2022	0		7.3.3	Grid Design and System Hardening	System Hardening – Transmission
78	OEIS	Set 005	OEIS-PG&E-22-005	1	OEIS-PG&E-22-005_1	Q01. Provide and describe the "EPSS Reliability Impact analysis" as mentioned on page 494 of PG&E's 2022 WMP Update.	Kevin Miller	3/18/2022	3/23/2022	3/23/2022	1		7.3.3	Grid Design and System Hardening	EPSS Reliability Impact analysis
79	OEIS	Set 005	OEIS-PG&E-22-005	2	OEIS-PG&E-22-005_2	Q02. How many poles in PG&E's territory are subject to PRC 4292? a) How many of these poles does PG&E intend to inspect and work (as necessary) in 2022?	Kevin Miller	3/18/2022	3/23/2022	3/23/2022	0		7.3.5	Vegetation Management (VM) and Inspections	PRC 4292 Applicability
80	OEIS	Set 005	OEIS-PG&E-22-005	3	OEIS-PG&E-22-005_3	Q03. PG&E noted during the workshop that it has hired pre-inspectors as union employees. a) What percentage of pre-inspectors are contractors and what percentage are PG&E employees? b) Has PG&E found a difference in performance between contractor and PG&E employee pre-inspectors? i. If so, describe the observed differences in performance c) Provide relevant metrics, including QA/QV findings demonstrating performance, broken down by type of inspector (contractor v. PG&E employee) to show any differences between contractor and PG&E employee pre-inspector performance.	Kevin Miller	3/18/2022	3/23/2022	3/23/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Contractor/Employee Performance
81	OEIS	Set 005	OEIS-PG&E-22-005	4	OEIS-PG&E-22-005_4	Q04. Provide the QA/QV results for vegetation management broken down by inspection type completed in 2019, 2020, and 2021. This should include: a) Percentage of inspections with infractions found (e.g., under-trimming, overtrimming, missed hazard tree, improper clean-up etc.). b) Percentage of (a) which required remediation (e.g., re-inspection, additional trimming, removal of a tree). c) List of lessons learned from infractions and associated changes made to inspections moving forward.	Kevin Miller	3/18/2022	3/23/2022	3/23/2022	1		7.3.5	Vegetation Management (VM) and Inspections	Quality Assurance/Quality Control of Vegetation Management
82	OEIS	Set 005	OEIS-PG&E-22-005	5	OEIS-PG&E-22-005_5	Q05. According to Section 7.3.5.13, out of the 7 QA/QV programs PG&E describes, 4 programs fell short of targets. PG&E cites various reasons for the shortfall including resource constraints. How is PG&E: a) Addressing resource constraints for QA/QV? b) Minimizing turnover and loss of talent for QA/QV? c) Ensuring QA/QV targets are met in 2022?	Kevin Miller	3/18/2022	3/23/2022	3/23/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Quality Assurance/Quality Control of Vegetation Management

83	OEIS	Set 005	OEIS-PG&E-22-005	6	OEIS-PG&E-22-005_6	<p>Q06. In Section 7.3.5.13, PG&E provides the number of QA/QV audits it intended to perform in 2021 (e.g., for QAVM-Distribution Audits, PG&E had planned to complete 65 audits). Provide the number of audits PG&E plans to perform in 2022 for each QA/QV program:</p> <p>a) QAVM – Distribution Audits b) QAVM – Vegetation Pole Clearing Audit c) QAVM – Transmission Audits d) QAVM – Procedure Audits e) QVVM – Distribution f) QVVM – Vegetation Pole Clearing g) QVVM – Transmission</p>	Kevin Miller	3/18/2022	3/23/2022	3/23/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Quality Assurance/Quality Control of Vegetation Management
84	OEIS	Set 005	OEIS-PG&E-22-005	7	OEIS-PG&E-22-005_7	<p>Q07. Regarding PSPS, on p. 863, PG&E describes "...the January 19, 2021, event that resulted in a massive level of damages that severely impacted restoration."</p> <p>a) Explain the types of damage. b) Quantify the damage observed, by type indicated in Q07.a).</p>	Kevin Miller	3/18/2022	3/23/2022	3/23/2022	1		8	PSPS	Jan. 19, 2021 Event
85	OEIS	Set 005	OEIS-PG&E-22-005	8	OEIS-PG&E-22-005_8	<p>Q08. Regarding PSPS notification, discussing lessons learned from 2021, on p. 866 PG&E indicates "external communications and customer notification processes showed large improvements in 2021. PG&E will continue to work on this as an area for further improvement in 2022, focusing on decreasing the amount of time required to send customer notifications, accuracy of notifications, automating processes, and for issuing updated notifications based on scope changes due to weather."</p> <p>a) To what granularity is customer notification correlated with circuit sectionalization? b) Is PG&E able to send Initial Notifications of a Potential PSPS De-Energization and Notifications of Cancellation of PSPS De-Energization to customers on a discrete circuit segment, as opposed to an entire circuit? c) If a) and b) are not currently true, are there plans to notify customers regarding PSPS events at the segment level? d) If there are plans to notify customers regarding PSPS events at the segment level, what is the timeline for implementing segment-level notification? e) If there are no plans to notify customers regarding PSPS events at the segment level, what is the reasoning behind this decision? f) If there are one or more technical issues that prohibit or otherwise make segment-level notification impossible or impractical, explain those issues.</p>	Kevin Miller	3/18/2022	3/23/2022	3/23/2022	0		8	PSPS	Additional Detail
86	OEIS	Set 005	OEIS-PG&E-22-005	9	OEIS-PG&E-22-005_9	<p>Q09. As reported in Table 3-2, PG&E's increase in electric costs to ratepayer due to wildfire mitigation activities (total) is markedly higher than the ratepayer impact provided by PG&E's direct utility peers:</p> <p>- 2021 for PG&E \$11.63, SCE \$1.60, and SDG&E \$0.00 - 2022 for PG&E \$6.13, SCE \$6.90, SDG&E \$1.92 (projected)</p> <p>a) How does PG&E explain this vast discrepancy in electric costs to ratepayers due to wildfire mitigation activities? b) How is PG&E justifying the increase to ratepayers at a cumulative rate so much higher than its peers?</p>	Kevin Miller	3/18/2022	3/23/2022	3/23/2022	0		3.2	Summary of Ratepayer impact	VM Spend
87	OEIS	Set 005	OEIS-PG&E-22-005	10	OEIS-PG&E-22-005_10	<p>Q10. PG&E noted in its WMP that the deployment of EPSS throughout pilot areas in its service area led to a significant reduction in ignitions. After reviewing the ignition data submitted by PG&E, the basis of this claim is unclear (i.e., the total ignitions and annual ignitions normalized by environmental conditions were similar to 2020). Please provide the following:</p> <p>a) Geospatial data showing the locations of circuits/circuit segments which were protected by fast trip settings/EPSS in 2021, the date each was installed, and the number of de-energizations (and customer hours) resulting from each EPSS system b) Geospatial data showing the locations of circuits/circuit segments which are currently protected by fast trip settings/EPSS, the date each was installed, and the number of de-energizations (and customer hours) resulting from each EPSS system c) A summary for each automated de-energization, including whether it was a true hazard (i.e., resulting from object contact, equipment failure, etc.) or a false alarm/nuisance de-energization d) An explanation of the criteria used to determine when to enable fast trip settings/EPSS on these circuits (during extreme FPI, RFWs, fire season, etc.) e) Geospatial data showing the locations, cause codes, dates and times for ignitions, wires-down events, and outages that occurred along circuit segments with fast trip settings/EPSS enabled</p>	Kevin Miller	3/18/2022	3/23/2022	3/23/2022	1		7.3.6.8	EPSS	Ignition Trends

88	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	1	CalAdvocates-PGE-2022WMP-17_1	<p>Per Table 12 of PG&E's 2022 WMP, the operating expenses for initiative 7.3.6.8 "Protective equipment and device settings" are as follows: 2021: \$18.2 million (actual) 2022: \$142.6 million (projected) 2023: \$140.5 million (projected) Pages 730-739 of PG&E's 2022 WMP describe how PG&E will increase the mileage covered under this initiative from approximately 11,500 miles in 2021 to approximately 25,500 miles in 2022.</p> <p>a) Please explain the projected increase in operating expenses of approximately 7.8 times for corresponding mileage increase of approximately 2.2 times. b) Describe the work that will be funded under the operating expenses for this initiative in 2022. c) Describe the work that will be funded under the operating expenses for this initiative in 2023. d) Please provide any workpapers you used to develop the forecasts of 2022 and 2023 operating expenses.</p>	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022					7.3.6.8	EPSS	EPSS Spend
89	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	2	CalAdvocates-PGE-2022WMP-17_2	<p>a) Please provide an estimate for the number of EPSS-related outages that you currently forecast to occur in 2022. Provide a range if a specific estimate is not available. b) Please provide an estimate for the average duration of EPSS-related outages that you currently forecast to occur in 2022. Provide a range if a specific estimate is not available. c) Please describe the methods used to develop the forecasts noted in parts (a) and (b).</p>	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022					7.3.6.8	EPSS	EPSS-related outages
90	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	3	CalAdvocates-PGE-2022WMP-17_3	<p>SCE and SDG&E each have implemented fast recloser settings to de-energize a line rapidly upon detecting a fault. SCE's program is referred to here as "Fast Curve." SDG&E's program is referred to here as "Sensitive relay settings."</p> <p>a) When did PG&E first become aware of SCE's fast curve settings? b) When did PG&E first become aware of SDG&E's sensitive relay settings? c) Did PG&E consider implementing a similar program prior to 2021? d) If the answer to part (c) is yes, why did PG&E not implement such a program prior to 2021? e) If the answer to part (c) is no, please state the basis for PG&E's decision not to consider such a program prior to 2021.</p>	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022					7.3.6.8	EPSS	Device settings
91	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	4	CalAdvocates-PGE-2022WMP-17_4	<p>a) Has PG&E engaged in benchmarking, data-sharing, or other collaboration with SCE with regards to PG&E's EPSS program? b) If the answers to parts (a) is yes, please describe the collaboration(s). c) If the answers to parts (a) is no, please explain why not.</p>	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022					7.3.6.8	EPSS	Benchmarking
92	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	5	CalAdvocates-PGE-2022WMP-17_5	<p>a) Has PG&E engaged in benchmarking, data-sharing, or other collaboration with SDG&E with regards to PG&E's EPSS program? b) If the answers to parts (a) is yes, please describe the collaboration(s). c) If the answers to parts (a) is no, please explain why not.</p>	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022					7.3.6.8	EPSS	Benchmarking
93	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	6	CalAdvocates-PGE-2022WMP-17_6	<p>On November 2, 2021, Cal Advocates staff (and other stakeholders) visited the site of an overhead system hardening project, Diamond Springs 1107. At this site, Cal Advocates discussed the installation of covered conductor with PG&E staff. Cal Advocates was informed that, for this project, wider crossarms were being installed to minimize line slap of the heavier covered conductor.</p> <p>a) Is the above understanding correct with regard to the installation of wider crossarms in this project? b) What is PG&E's typical practice regarding installation or replacement of crossarms when installing covered conductor? c) Do PG&E's current design and construction standards typically call for different crossarm widths on poles that carry covered conductors than poles that carry bare conductors, for circuits of similar voltage? d) If the answer to part (c) is yes, please describe the differences. e) Regarding covered conductor projects completed in 2021, approximately what percentage of crossarms were replaced with wider crossarms as part of these projects?</p>	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022					7.3.3.3	Grid Design and System Hardening	Covered Conductor Installation
94	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	7	CalAdvocates-PGE-2022WMP-17_7	<p>On November 2, 2021, Cal Advocates staff (and other stakeholders) visited the site of an overhead system hardening project, Diamond Springs 1107. At this site, Cal Advocates discussed the installation of covered conductor with PG&E staff. Cal Advocates was informed that, for this project, new poles with intumescent wrap were being installed.</p> <p>a) What factors contribute to PG&E replacing poles during covered conductor installation projects? b) Regarding covered conductor projects completed in 2021, approximately what percentage of poles were replaced as part of these projects? c) What type(s) of new poles (e.g., wood, wood with intumescent wrap, steel, composite, or concrete) does PG&E currently install when installing covered conductor on distribution circuits? If PG&E uses more than one type of pole, please explain the circumstances and types of projects in which each type is preferred.</p>	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022					7.3.3.6	Grid Design and System Hardening	Distribution Pole Replacement and Reinforcement, Including with Composite Poles

95	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	8	CalAdvocates-PGE-2022WMP-17_8	<p>Pages 12-77 of document "2022-02-25_PGE_2022_WMP-Update_R0_Section 4.6_Atch01.pdf" contain the joint response by PG&E, SCE, and SDG&E to the issue identified by Energy Safety titled "Limited evidence to support the effectiveness of covered conductor."</p> <p>Page 52 of this document states, with regard to risk event mitigation, "In general, a spacer cable system and an ABC [aerial bundled cable] system provide higher effectiveness than a covered conductor system due to their strength and in the case of ABC both its strength and greater insulation properties."</p> <p>Page 62 of this document states, with regard to PSPS event mitigation, "Similar to the assessment in the section above, a spacer cable system and an ABC system provide could provide higher benefits than a covered conductor system due to their strength and in the case of ABC both its strength and greater insulation properties."</p> <p>a) Does PG&E have any spacer cable installed in its system currently? If so, state the approximate number of miles, disaggregated by HFTD tier (see definitions P through S).</p> <p>b) If PG&E has any spacer cable installed in its system, please provide the actual cost per mile to install the spacer cable, disaggregated by installation year.</p> <p>c) Please provide an estimate of the current cost per mile to install spacer cable in PG&E's HFTD.</p> <p>d) If PG&E were to install a spacer cable system, would the percentage of poles replaced as part of the installation be higher, lower, or comparable to PG&E's current pole replacement rate in covered conductor projects?</p> <p>e) Please state PG&E's reasons for installing covered conductor instead of spacer cable in its HFTD, despite the apparent benefits of spacer cable described above.</p>	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022				4.6	Progress Reporting on Key Areas of Improvement	
96	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	9	CalAdvocates-PGE-2022WMP-17_9	<p>a) What is the average trench depth PG&E employs in undergrounding projects?</p> <p>b) Has PG&E examined the potential benefits or drawbacks of shallower trenches?</p> <p>c) Please explain your response to part (b).</p>	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022				7.3.3.16	Grid Design and System Hardening	Undergrounding
97	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	10	CalAdvocates-PGE-2022WMP-17_10	<p>Please provide a spreadsheet listing (as rows) each undergrounding project completed during the period of January 1, 2020, through March 1, 2022. For each project, please provide the following information (as columns):</p> <p>a) Project ID number or other identifier5</p> <p>b) Circuit ID</p> <p>c) ID number of each CPZ that was entirely undergrounded in the project</p> <p>d) ID number of each CPZ that was partially undergrounded in the project</p> <p>e) Circuit voltage</p> <p>f) County or counties where undergrounding took place</p> <p>g) Project start date</p> <p>h) Project completion date</p> <p>i) Total circuit-miles undergrounded</p> <p>j) Total miles of trenching required</p> <p>k) Total life-cycle electric costs of the project (i.e., costs attributed to PG&E's electric facilities), including costs for planning, design, permitting, and construction.</p> <p>l) Total life-cycle costs of the project, including costs attributed to non-electric utilities, including costs for planning, design, permitting, and construction.</p> <p>m) Whether this was a Rule 20 project (yes/no)</p> <p>n) Whether this was a WMP project (yes/no)</p> <p>o) Whether this was a post-wildfire rebuild project (yes/no)</p> <p>p) Whether PG&E shared trenches for this project with any telecommunications utilities (yes/no)</p> <p>q) Whether PG&E shared trenches for this project with gas facilities (yes/no)</p>	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022				7.3.3.16	Grid Design and System Hardening	Undergrounding
98	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	11	CalAdvocates-PGE-2022WMP-17_11	<p>Please provide a file geodatabase with a polyline feature for each undergrounding project completed during the period of January 1, 2020, through March 1, 2022. In addition to the spatial location, please provide the following attributes for each project:</p> <p>a) Project ID number or other identifier, matching part (a) of Question 10</p> <p>b) Circuit ID</p> <p>c) Project completion date</p>	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022				7.3.3.16	Grid Design and System Hardening	Undergrounding
99	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	12	CalAdvocates-PGE-2022WMP-17_12	<p>Per the table on page 270 of PG&E's 2022 WMP, in 2022 PG&E plans to complete detailed ground inspections on a minimum of 396,000 distribution poles. In 2021, PG&E targeted completing inspections on 477,309 distribution poles, and completed inspections on 480,749 distribution poles.</p> <p>Please state the basis for the reduction in planned distribution inspections in 2022 compared to 2021.</p>	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022				7.3.4	Asset Management and Inspections	Detailed Inspections of Distribution Electric Lines and Equipment
100	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	13	CalAdvocates-PGE-2022WMP-17_13	<p>Per the table on page 270 of PG&E's 2022 WMP, in 2021 PG&E completed detailed distribution inspections on all assets in HFTD Tier 3 and Zone 1, and approximately one-third of assets in HFTD Tier 2.</p> <p>Please describe any changes to the above strategy for PG&E's detailed distribution inspections in 2022.</p>	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022				7.3.4.14	Asset Management and Inspections	Quality Assurance/Quality Control of Inspections
101	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	14	CalAdvocates-PGE-2022WMP-17_14	<p>Page 620 of PG&E's 2022 WMP states that Desktop QC activities are conducted based on "random selection," "targeted," or "probable cause." Random selection is described as "Determine the inspectors to evaluate using a simple random process methodology."</p> <p>Cal Advocates understands the above to mean that Desktop QC will perform QC checks on inspections performed by a subset of inspectors. That is, not every inspector's work will be reviewed through Desktop QC.</p> <p>a) Is this understanding correct?</p> <p>b) If not, please clarify.</p>	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022				7.3.4.14	Asset Management and Inspections	Quality Assurance/Quality Control of Inspections

102	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	15	CalAdvocates-PGE-2022WMP-17_15	Per Table 12 of PG&E's 2022 WMP, the operating expenses for initiative 7.3.4.14 "Quality assurance/quality control of inspections" is as follows: 2021: \$27.3 million (actual) 2022: \$6.0 million (projected) a) Please state the basis for the reduction in forecasted operating expenditures related to this initiative. b) Please provide any workpapers you used to develop the forecast of 2022 operating expenses.	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022					7.3.4.1	Asset Management and Inspections	Quality Assurance/Quality Control of Inspections
103	OEIS	Set 006	OEIS-PG&E-22-006	1	OEIS-PG&E-22-006_1	Q01. In response to WMP-Discovery2022_DR_CalAdvocates_003-Q02, PG&E, provided the below spreadsheet, an Excel table of all transmission circuits existing as of January 1, 2022. Energy Safety requests the below document and will adhere to established confidentiality requirements agreed to with PG&E, as set forth in the 2022 Wildfire Mitigation Plan Update Guidelines. a) Provide WMP-Discovery2022_DR_CalAdvocates_003-Q01Atch01CONF.xlsx	Kevin Miller	3/22/2022	3/25/2022					N/A	Miscellaneous	Additional Detail
104	OEIS	Set 006	OEIS-PG&E-22-006	2	OEIS-PG&E-22-006_2	Q02. The frequently de-energized circuit map provided as "Section_86_Atch01" appears incomplete, as it does not show all circuits listed in Section 8.6, Table 8.6-1 as presented in the guidelines, to address Public Utilities Code Section 8386(c)(8) requiring the "Identification of circuits that have frequently been de-energized. For instance, by zooming in to 500%, no circuits are visible in the map for Amador, Calaveras, El Dorado, Glenn, or Tuolumne Counties, nor in various other counties with de-energized circuits listed in Table 8.6-1. a) Provide a map which displays all circuits listed in Table 8.6-1. b) If a territory-wide map is scaled inappropriately to visibly display all circuits indicated, break the map into more than one map and scale appropriately for visibility (e.g., 1:250K or 1:100K), and/or use call-out maps within the map to make all frequently de-energized circuits visible. c) Differentiate discrete circuits by color. d) Confirm the total number of frequently de-energized circuits in Table 8.6-1. e) Provide an excel table of Table 8.6-1 with the number of times (frequency) each circuit was de-energized, with Column 4 "Dates of Outages" provided as a count.	Kevin Miller	3/22/2022	3/25/2022					8.6	PSPS	Identification of Frequently De-Energized Circuits
105	MGRA	2	MGRA Data Request No. 2	1	MGRA Data Request No. 2_1	Please provide a GIS file showing all EPSS outages and including an attribute for determined cause.	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					N/A	EPSS	Outage History
106	MGRA	2	MGRA Data Request No. 2	2	MGRA Data Request No. 2_2	Please provide data for all ignitions that occurred while EPSS was active on a circuit, including size and attributed cause.	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					N/A	EPSS	Ignition Trends
107	MGRA	2	MGRA Data Request No. 2	3	MGRA Data Request No. 2_3	Is SmartMeter Partial Voltage Detection used for emergency de-energization?	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					N/A	EPSS	Additional Detail
108	MGRA	2	MGRA Data Request No. 2	4	MGRA Data Request No. 2_4	On p. 860, Figure PG&E 8.1-3, guideline categories are shown for Asset, Vegetation, and Consequence. Is the "Consequence" category the result of PG&E's application of its "Black Swan" criteria, in which it shuts off power under conditions of high fire spread without regard to ignition probability?	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					8	PSPS	Additional Detail
109	MGRA	2	MGRA Data Request No. 2	5	MGRA Data Request No. 2_5	On p. 906, PG&E describes its decision-making process for PSPS. How does the existence of fires in or threatening the potential PSPS areas affect the decision to de-energize?	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					8	PSPS	Additional Detail
110	MGRA	2	MGRA Data Request No. 2	6	MGRA Data Request No. 2_6	On page 8, PG&E discusses "new modeling" for ignition risk. Please provide the description of what this "new modeling" consists of or provide an appropriate reference.	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					7.3.1	Risk Assessment and Mapping	Additional Detail
111	MGRA	2	MGRA Data Request No. 2	7	MGRA Data Request No. 2_7	In Table PG&E-4.2-2; WILDFIRE RISK DRIVERS, the frequency of facility failures plus object contact in the HFTD is 60, compared to 74 for vegetation contact. Frequency of vegetation contact is 23% larger than the other two drivers. For the percentage of risk in the HFTD, equipment failures plus object contact represents 36.6% of the risk, while vegetation contact represents 59.3% of the risk. Frequency of vegetation contact is 62% larger than the other two drivers combined. How does PG&E account for this discrepancy?	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					7.3.1	Risk Assessment and Mapping	Wildfire Risk Data
112	MGRA	2	MGRA Data Request No. 2	8	MGRA Data Request No. 2_8	On page 129, Figure PG&E-4.5.1-3, 2022 WDRM V3 COMPOSITE MODEL ARCHITECTURE, was the new WDRM V3 used in the GRC update provided in February?	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					7.3.1	Risk Assessment and Mapping	Risk Model
113	MGRA	2	MGRA Data Request No. 2	9	MGRA Data Request No. 2_9	Please ask Technosylva to provide a table and plot of 8 hour fire sizes against final fire sizes for a large (reasonably complete) set of historical fires.	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					7.3.1	Risk Assessment and Mapping	Additional Data
114	MGRA	2	MGRA Data Request No. 2	10	MGRA Data Request No. 2_10	Provide a non-confidential version of documentation describing the IPW model.	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					7.3.1	Risk Assessment and Mapping	Additional Data
115	MGRA	2	MGRA Data Request No. 2	11	MGRA Data Request No. 2_11	On p. 189, PG&E states that the IPW model uses the Cat Boost Machine Learning model. What implementation of the Cat Boost Machine learning model was used for the IPW?	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					7.3.1	Risk Assessment and Mapping	Additional Data
116	MGRA	2	MGRA Data Request No. 2	12	MGRA Data Request No. 2_12	On p. 191, PG&E states that with its IPW model "Operational Meteorologists used the dashboard to evaluate model performance against key historical storm events, evaluating timing of weather onset compared to modeled outage probability increases, and relative magnitude of outage probabilities." Please provide tabular and graphical analysis showing how the IPW finds that ignition probability increases versus wind speed for the five driver classes.	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					7.3.1	Risk Assessment and Mapping	Additional Data
117	MGRA	2	MGRA Data Request No. 2	13	MGRA Data Request No. 2_13	On p. 265 PG&E describes its undergrounding efforts "including a small volume of previously hardened overhead lines that are being placed underground, and any other undergrounding work performed in HFTD or fire rebuild areas." How many miles of previously hardened lines are being put underground and what is the motivation for this action?	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					7.3.3	Undergrounding	Additional Data
118	MGRA	2	MGRA Data Request No. 2	14	MGRA Data Request No. 2_14	Are the reviews of staff, management, or executives in any way tied to targets related to the successful completion of undergrounding projects?	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					7.3.3	Undergrounding	Additional Data

119	MGRA	2	MGRA Data Request No. 2	15	MGRA Data Request No. 2_15	In attachment TN10634-0_20220225T144600_Section_71H_Atch01_WorkMaps, PG&E provides maps for Covered conductor installation, Undergrounding of Electric lines or Equipment, and System hardening including line removal. Please provide these maps as a GIS file.	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					7.3.3	Grid Design and System Hardening	Additional Data
120	MGRA	2	MGRA Data Request No. 2	16	MGRA Data Request No. 2_16	Please provide a non-confidential version of Data request response WMP-Discovery2022_DR_CalAdvocates_003-Q01Atch01CONF(T) regarding PG&E's hardening program.	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					7.3.3	Grid Design and System Hardening	Additional Data
121	MGRA	2	MGRA Data Request No. 2	17	MGRA Data Request No. 2_17	On p. 319, PG&E states that it has "Developed a weather-station specific wind gust model, with particular emphasis on Diablo winds". Please provide the documentation for this weather model.	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					7.3.2	Situational Awareness and Forecasting	Additional Data
122	MGRA	2	MGRA Data Request No. 2	18	MGRA Data Request No. 2_18	On how many weather stations is 30 second weather observations collected? Please provide a list if it is not the complete set of weather stations. How long is the 30 second data maintained on the weather station? Is the 30 second weather data available to the public and are there any plans to make it so?	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					7.3.2	Situational Awareness and Forecasting	Additional Data
123	MGRA	2	MGRA Data Request No. 2	19	MGRA Data Request No. 2_19	On p. 384 PG&E states that "The phase and magnitude of the Madden-Julian Oscillation was shown to be a potential predictor of upcoming Diablo wind events by both internal and external research. Provide appropriate citations.	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					7.3.2	Situational Awareness and Forecasting	Additional Data
124	MGRA	2	MGRA Data Request No. 2	20	MGRA Data Request No. 2_20	On p. 765, PG&E states that its "Eli team conducted audit of multiple work tracking databases to identify ignitions that had been missed in the past, increasing PG&E's reportable ignition record by 23 percent." Please provide a complete set of the newly identified ignitions in GIS format.	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					7.3.7.4	Data Governance	Tracking and Analysis of Risk Event Data
125	MGRA	2	MGRA Data Request No. 2	21	MGRA Data Request No. 2_21	Provide the Eli "data dictionary/review guide for all collected [ignition] data points" with any confidential information removed.	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					7.3.7.1	Data Governance	Centralized Repository for Data
126	MGRA	2	MGRA Data Request No. 2	22	MGRA Data Request No. 2_22	Provide the contents of TABLE PG&E-8.6-1 LIST OF FREQUENTLY DE-ENERGIZED CIRCUITS in Excel format.	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					8	PSPS	Additional Data
127	MGRA	2	MGRA Data Request No. 2	23	MGRA Data Request No. 2_23	Please provide the 2022 reportable ignitions report, due to the CPUC on April 1, 2022. Due date for this data request is April 1, 2022.	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					N/A	Miscellaneous	Ignition Trends
128	MGRA	2	MGRA Data Request No. 2	24	MGRA Data Request No. 2_24	On p. 7.1.E-Atch1-21, the RSE for REFCL is given as 40. Please explain the factors that go into reaching this low estimate.	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					N/A	Miscellaneous	REFCL
129	MGRA	2	MGRA Data Request No. 2	25	MGRA Data Request No. 2_25	In the data request response WMP-Discovery2022_DR_CalAdvocates_013-Q11Atch01.xlsx, please verify the following interpretation: For a REFCL deployment, PG&E projects a \$75M capex, plus \$141M operating cost through 2026, constituting 14% of its 25,000 miles, and that the protection is 58% effective.	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					N/A	Miscellaneous	REFCL
130	MGRA	2	MGRA Data Request No. 3	26 (Incorrectly labeled as MGRA-2-17 on page 3)	MGRA Data Request No. 3_26 (Incorrectly labeled as MGRA-2-17 on page 3)	On p. 631 PG&E states that its Tree Assessment Tool (TAT) incorporates "local wind gust data". Is the local wind gust data specific to fire weather conditions (such as a Diablo corridor) or does it include winter storm conditions?	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022					7.3.5	Vegetation Management (VM) and Inspections	Additional Efforts to Manage Community and Environmental Impacts
Pre-Discovery 01	CalPA	Set WMP-02	CalAdvocates-PGE-2022WMP-02	1	CalAdvocates-PGE-2022WMP-02_1	Please identify and provide a copy of all quality assurance or quality control (QA/QC) reports conducted by internal entities that were completed since January 1, 2021 and that examined any programs, initiatives, or strategies described in your 2021 WMP Update.	Alan Wehrman	12/17/2021	1/18/2022	1/18/2022	17			7.3.4	Asset Management and Inspections	psps
Pre-Discovery 02	CalPA	Set WMP-02	CalAdvocates-PGE-2022WMP-02	2	CalAdvocates-PGE-2022WMP-02_2	Please identify and provide a copy of all quality assurance or quality control (QA/QC) reports conducted by external entities that were completed since January 1, 2021 and that examined any programs, initiatives, or strategies described in your 2021 WMP Update. External entities include, but are not limited to, contractors, auditors, the Federal Monitor, and Independent Evaluators.	Alan Wehrman	12/17/2021	1/18/2022	1/18/2022	27			7.3.4	Asset Management and Inspections	QA/QC Reports
Pre-Discovery 03	CalPA	Set WMP-02	CalAdvocates-PGE-2022WMP-02	3	CalAdvocates-PGE-2022WMP-02_3	Provide an Excel table of all defects in the year 2021 found by Energy Safety's Compliance Branch (or, previously, the CPUC's Wildfire Safety Division)1 (as rows) that includes the following information in separate columns. a) Associated circuit name b) Defect type c) Description of defect d) WMP initiative associated with defect e) Date that the defect was identified f) Date that the defect was corrected g) Priority level of corresponding corrective tag h) Location of defect (latitude/longitude)	Alan Wehrman	12/17/2021	1/18/2022	1/18/2022	1			N/A	Miscellaneous	Additional Detail

Pre-Discovery 04	CalPA	Set WMP-03	CalAdvocates-PGE-2022WMP-03	1	CalAdvocates-PGE-2022WMP-03_1	Please note that the geographical regions are mutually exclusive (i.e., Other HFTD excludes areas that are in either Tier 2 or Tier 3). Therefore, for any given circuit-segment, the following relationships should hold: • Tier 2 miles + Tier 3 miles + Other HFTD miles = total HFTD miles. • Tier 2 miles + Tier 3 miles + Other HFTD miles + non-HFTD miles = total circuit-segment miles. Provide an Excel table of all distribution circuit-segments existing as of January 1, 2022 (as rows) that includes the following information in separate columns. For items (j) and (k), please include all relevant risk scores. For example, include vegetation risk score, conductor risk score, and any other driver-specific risk scores PG&E has developed. Please insert additional columns as needed to accommodate this. 6 a. Circuit name b. Circuit ID number c. Circuit-segment ID number d. Total circuit-segment miles e. Circuit-segment miles in Non-HFTD Areas f. Circuit-segment miles in Other HFTD g. Circuit-segment miles in HFTD Tier 2 h. Circuit-segment miles in HFTD Tier 3 i. Circuit-segment voltage j. Wildfire Risk Score(s) according to the wildfire risk model used for your 2021 WMP Update submission (may require multiple columns) k. Wildfire Risk Score(s) according to the wildfire risk model used for your 2022 WMP Update submission (may require multiple columns) l. Circuit SAIDI (System Average Interruption Duration Index) for 2021 m. Circuit SAIFI (System Average Interruption Frequency Index) for 2021 n. Circuit MAIFI (Momentary Average Interruption Frequency Index) for 2021 o. Number of times the circuit-segment was de-energized in a PSPS event in 2020. p. Number of times the circuit-segment was de-energized in a PSPS event in 2021. q. Total minutes that the circuit-segment was de-energized due to PSPS events in 2020 (sum of minutes across all PSPS events). r. Total minutes that the circuit-segment was de-energized due to PSPS events in 2021 (sum of minutes across all PSPS events). s. Total customer-minutes of de-energization on the circuit-segment due to PSPS events in 2020 (sum of customer-minutes across all PSPS events). t. Total customer-minutes of de-energization on the circuit-segment due to PSPS events in 2021 (sum of customer-minutes across all PSPS events). u. Number of times the circuit-segment was de-energized due to EPSS fast-trip settings in 2021. v. Total minutes the circuit-segment was de-energized due to EPSS fast-trip settings in 2021 w. Total customer-minutes of de-energization on the circuit-segment due to EPSS fast-trip settings in 2021. x. Number of trees that were worked on for EVM in Non-HFTD in 2020 y. Number of trees that were worked on for EVM in Non-HFTD in 2021 z. Number of trees that were worked on for EVM in Other HFTD in 2020 aa. Number of trees that were worked on for EVM in Other HFTD in 2021 bb. Number of trees that were worked on for EVM in HFTD Tier 2 in 2020 cc. Number of trees that were worked on for EVM in HFTD Tier 2 in 2021 dd. Number of trees that were worked on for EVM in HFTD Tier 3 Supplemental for Q2	Alan Wehrman	12/17/2021	2/8/2022	2/10/2022	1		N/A	Miscellaneous	Additional Detail
Pre-Discovery 05	CalPA	Set WMP-03	CalAdvocates-PGE-2022WMP-03	2SUPP	CalAdvocates-PGE-2022WMP-03_2SUPP	Provide an Excel table of all transmission circuit-segments existing as of January 1, 2022 (as rows) that includes the same information listed above in Question 1.	Alan Wehrman	12/17/2021	2/15/2022	2/15/2022	1		N/A	Miscellaneous	Additional Detail
Pre-Discovery 05	CalPA	Set WMP-03	CalAdvocates-PGE-2022WMP-03	2	CalAdvocates-PGE-2022WMP-03_2	Provide an Excel table of all transmission circuit-segments existing as of January 1, 2022 (as rows) that includes the same information listed above in Question 1.	Alan Wehrman	12/17/2021	2/8/2022	2/10/2022	1		N/A	Miscellaneous	Additional Detail
Pre-Discovery 06	CalPA	Set WMP-03	CalAdvocates-PGE-2022WMP-03	3	CalAdvocates-PGE-2022WMP-03_3	Note: this question refers to transmission structures generally, and should not be construed to be limited to 500 kV towers. a) Provide the median amount of person-hours to perform a single climbing inspection of a transmission tower in 2021. b) Provide the total number of transmission towers that PG&E performed climbing inspections on in 2021.	Alan Wehrman	12/17/2021	2/1/2022	2/1/2022	0		7.3.4.2	Asset Management and Inspections	Detailed Inspections - Transmission
Pre-Discovery 07	CalPA	Set WMP-03	CalAdvocates-PGE-2022WMP-03	4	CalAdvocates-PGE-2022WMP-03_4	Note: this question refers to transmission structures generally, and should not be construed to be limited to 500 kV towers. a) Provide the median amount of person-hours to perform a single drone inspection of a transmission tower in 2021. b) Provide the total number of transmission towers that PG&E performed drone inspections on in 2021.	Alan Wehrman	12/17/2021	2/1/2022	2/1/2022	0		7.3.4.2	Asset Management and Inspections	Detailed Inspections - Transmission
Pre-Discovery 08	CalPA	Set WMP-03	CalAdvocates-PGE-2022WMP-03	5	CalAdvocates-PGE-2022WMP-03_5	Note: this question refers to transmission structures generally, and should not be construed to be limited to 500 kV towers. a) Provide the median amount of person-hours to perform a single detailed ground inspection of a transmission tower in 2021. b) Provide the total number of transmission towers that PG&E performed detailed ground inspections on in 2021.	Alan Wehrman	12/17/2021	2/1/2022	2/1/2022	0		7.3.4.2	Asset Management and Inspections	Detailed Inspections - Transmission
Pre-Discovery 09	CalPA	Set WMP-03	CalAdvocates-PGE-2022WMP-03	6	CalAdvocates-PGE-2022WMP-03_6	Note: this question refers to transmission structures generally, and should not be construed to be limited to 500 kV towers. a) How many Priority A corrective tags were issued as a result of transmission tower climbing inspections performed in 2021? b) How many Priority B corrective tags were issued as a result of transmission tower climbing inspections performed in 2021?	Alan Wehrman	12/17/2021	2/1/2022	2/1/2022	0		7.3.4.2	Asset Management and Inspections	Detailed Inspections - Transmission
Pre-Discovery 10	CalPA	Set WMP-03	CalAdvocates-PGE-2022WMP-03	7	CalAdvocates-PGE-2022WMP-03_7	Note: this question refers to transmission structures generally, and should not be construed to be limited to 500 kV towers. a) How many Priority A corrective tags were issued as a result of transmission tower drone inspections performed in 2021? b) How many Priority B corrective tags were issued as a result of transmission tower drone inspections performed in 2021?	Alan Wehrman	12/17/2021	2/1/2022	2/1/2022	0		7.3.4.2	Asset Management and Inspections	Detailed Inspections - Transmission
Pre-Discovery 11	CalPA	Set WMP-03	CalAdvocates-PGE-2022WMP-03	8	CalAdvocates-PGE-2022WMP-03_8	Note: this question refers to transmission structures generally, and should not be construed to be limited to 500 kV towers. 10 a) How many Priority A corrective tags were issued as a result of transmission tower detailed ground inspections performed in 2021? b) How many Priority B corrective tags were issued as a result of transmission tower detailed ground inspections performed in 2021?	Alan Wehrman	12/17/2021	2/1/2022	2/1/2022	0		7.3.4.2	Asset Management and Inspections	Detailed Inspections - Transmission
Pre-Discovery 12	CalPA	Set WMP-03	CalAdvocates-PGE-2022WMP-03	9	CalAdvocates-PGE-2022WMP-03_9	Note: this question refers to transmission structures generally, and should not be construed to be limited to 500 kV towers. a) How many Priority A corrective tags were issued as a result of work verification or quality control of transmission tower climbing inspections performed in 2021? b) How many Priority B corrective tags were issued as a result of work verification or quality control of transmission tower climbing inspections performed in 2021?	Alan Wehrman	12/17/2021	2/1/2022	2/1/2022	0		7.3.4.2	Asset Management and Inspections	Detailed Inspections - Transmission
Pre-Discovery 13	CalPA	Set WMP-03	CalAdvocates-PGE-2022WMP-03	10	CalAdvocates-PGE-2022WMP-03_10	Note: this question refers to transmission structures generally, and should not be construed to be limited to 500 kV towers. a) How many Priority A corrective tags were issued as a result of work verification or quality control of transmission tower drone inspections performed in 2021? b) How many Priority B corrective tags were issued as a result of work verification or quality control of transmission tower drone inspections performed in 2021?	Alan Wehrman	12/17/2021	2/1/2022	2/1/2022	0		7.3.4.2	Asset Management and Inspections	Detailed Inspections - Transmission

Pre-Discovery 14	CalPA	Set WMP-03	CalAdvocates-PGE-2022WMP-03	11	CalAdvocates-PGE-2022WMP-03_11	Note: this question refers to transmission structures generally, and should not be construed to be limited to 500 kV towers. a) How many Priority A corrective tags were issued as a result of work verification or quality control of transmission tower detailed ground inspections performed in 2017? b) How many Priority B corrective tags were issued as a result of work verification or quality control of transmission tower detailed ground inspections performed in 2021?	Alan Wehrman	12/17/2021	2/1/2022	2/1/2022	0		7.3.4.2	Asset Management and Inspections	Detailed Inspections - Transmission
Pre-Discovery 15	CalPA	Set WMP-03	CalAdvocates-PGE-2022WMP-03	12	CalAdvocates-PGE-2022WMP-03_12	Please note that the geographical regions are mutually exclusive (i.e., Other HFTD excludes areas that are in either Tier 2 or Tier 3). Therefore, for any given circuit-segment, the following relationships should hold: - Tier 2 miles + Tier 3 miles + Other HFTD miles = total HFTD miles. - Tier 2 miles + Tier 3 miles + Other HFTD miles + non-HFTD miles = total circuit-segment miles. Provide an Excel table of all distribution circuit-segments that traverse HFTD areas (i.e., the segment has greater than 0 circuit-miles in HFTD) existing as of January 1, 2022 (as rows) that includes the following information in separate columns. For items (j) and (k), please include all relevant risk scores. For example, include vegetation risk score, conductor risk score, and any other driver-specific risk scores PG&E has developed. Please insert additional columns as needed to accommodate this. a. Circuit name b. Circuit ID number c. Circuit-segment ID number d. Total circuit-segment miles e. Circuit-segment miles in Non-HFTD Areas f. Circuit-segment miles in Other HFTD g. Circuit-segment miles in HFTD Tier 2 h. Circuit-segment miles in HFTD Tier 3 i. Circuit-segment voltage j. Wildfire Risk Score(s) according to the wildfire risk model used for your 2021 WMP Update submission (may require multiple columns) k. Wildfire Risk Score(s) according to the wildfire risk model used for your 2022 WMP Update submission (may require multiple columns) l. Number of times the circuit-segment was de-energized in a PSPS event in 2020. m. Number of times the circuit-segment was de-energized in a PSPS event in 2021. n. Total minutes that the circuit-segment was de-energized due to PSPS events in 2020 (sum of minutes across all PSPS events). o. Total minutes that the circuit-segment was de-energized due to PSPS events in 2021 (sum of minutes across all PSPS events).	Alan Wehrman	12/17/2021	2/8/2022	2/10/2022	0		N/A	Miscellaneous	Additional Detail
Pre-Discovery 16	CalPA	Set WMP-04	CalAdvocates-PGE-2022WMP-04	1	CalAdvocates-PGE-2022WMP-04_1	For each POU to which you supply power, please respond to the following: Describe what coordination, planning, or other activities took place in 2021 between you and the POU to mitigate the effect of a potential PG&E-initiated PSPS event on the POU and its customers.	Alan Wehrman	12/17/2021	2/25/2022	2/25/2022	0		8	PSPS	Communication with Publicly-Owned Utilities
Pre-Discovery 17	CalPA	Set WMP-04	CalAdvocates-PGE-2022WMP-04	2	CalAdvocates-PGE-2022WMP-04_2	Provide a shapefile containing, as line features, the most recent spatial data for all circuit segments for which PG&E has used its Wildfire Distribution Risk Model to calculate circuit-segment-level expected risk. Include the following fields for each circuit-segment. For item (d), please include all relevant risk scores as separate attributes. For example, include vegetation risk score, conductor risk score, and all other driver-specific risk scores PG&E has developed. a) Circuit identification number b) Circuit name c) Circuit-segment identification number d) Circuit-segment Wildfire Risk Score (may require multiple columns)	Alan Wehrman	12/17/2021	2/25/2022	2/25/2022	1		7.1.F	Wildfire Mitigation Strategy	Wildfire Risk Data
Pre-Discovery 18	CalPA	Set WMP-04	CalAdvocates-PGE-2022WMP-04	3	CalAdvocates-PGE-2022WMP-04_3	Regarding your PSPS circuit modeling capabilities: a) Please describe your present circuit modeling capabilities with regard to PSPS decision-making ("PSPS circuit modeling capabilities"), including 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. b) Please describe any improvements to the present PSPS circuit modeling capabilities that you expect to implement in 2022. c) Please describe the expected state of your PSPS circuit modeling capabilities at the conclusion of the 2020-2022 WMP cycle.	Alan Wehrman	12/17/2021	2/25/2022	2/25/2022	0		8.1 and 8.2	PSPS	Additional Detail
Pre-Discovery 19	CalPA	Set WMP-04	CalAdvocates-PGE-2022WMP-04	4	CalAdvocates-PGE-2022WMP-04_4	Note: this question refers to transmission structures generally, and should not be construed to be limited to 500 kV towers. a) Provide the total number of transmission towers that PG&E forecasts performing climbing inspections on in 2022. b) Provide the total number of transmission towers that PG&E forecasts performing drone inspections on in 2022. c) Provide the total number of transmission towers that PG&E forecasts performing detailed ground inspections on in 2022.	Alan Wehrman	12/17/2021	2/25/2022	2/25/2022	0		7.3.4.2	Asset Management and Inspections	Detailed Inspections - Transmission
Pre-Discovery 20	CalPA	Set WMP-04	CalAdvocates-PGE-2022WMP-04	5 (a,b)	CalAdvocates-PGE-2022WMP-04_5 (a,b)	For any program for which you forecast capital expenditures in 2022 to be at least two times actual expenditure in 2021, please provide: a) The name of the program as it is identified in your 2022 WMP Update b) The WMP Initiative number in Table 12 of your 2022 WMP Update c) The name of the program as it is identified in your 2021 WMP Update d) The WMP Initiative number in Table 12 of your 2021 WMP Update e) An explanation for the projected increase.	Alan Wehrman	12/17/2021	3/4/2022	3/4/2022	1		3.1	Summary of Wildfire Mitigation Plan Initiative Expenditures	Additional detail on expenditures
Pre-Discovery 20	CalPA	Set WMP-04	CalAdvocates-PGE-2022WMP-04	5 (c-d)	CalAdvocates-PGE-2022WMP-04_5 (c-d)	Supplemental to Q5 For any program for which you forecast capital expenditures in 2022 to be at least two times actual expenditure in 2021, please provide: a) The name of the program as it is identified in your 2022 WMP Update b) The WMP Initiative number in Table 12 of your 2022 WMP Update c) The name of the program as it is identified in your 2021 WMP Update d) The WMP Initiative number in Table 12 of your 2021 WMP Update e) An explanation for the projected increase.	Alan Wehrman	12/17/2021	3/11/2022	3/4/2022	1		N/A	Miscellaneous	Additional Detail

Pre-Discovery 20	CalPA	Set WMP-04	CalAdvocates-PGE-2022WMP-04	5 (e)	CalAdvocates-PGE-2022WMP-04_5 (e)	Supplemental to Q5 For any program for which you forecast capital expenditures in 2022 to be at least two times actual expenditure in 2021, please provide: a) The name of the program as it is identified in your 2022 WMP Update b) The WMP Initiative number in Table 12 of your 2022 WMP Update c) The name of the program as it is identified in your 2021 WMP Update d) The WMP Initiative number in Table 12 of your 2021 WMP Update e) An explanation for the projected increase.	Alan Wehrman	12/17/2021	3/14/2022 (Noon)	3/14/2022				N/A	Miscellaneous	Additional Detail
Pre-Discovery 21	CalPA	Set WMP-04	CalAdvocates-PGE-2022WMP-04	6 (a,b)	CalAdvocates-PGE-2022WMP-04_6 (a,b)	For any program for which you forecast operating expenditures in 2022 to be at least two times actual expenditure in 2021, please provide: 7 a) The name of the program as it is identified in your 2022 WMP Update b) The WMP Initiative number in Table 12 of your 2022 WMP Update c) The name of the program as it is identified in your 2021 WMP Update d) The WMP Initiative number in Table 12 of your 2021 WMP Update e) An explanation for the projected increase.	Alan Wehrman	12/17/2021	3/4/2022	3/4/2022	1			3.1	Summary of Wildfire Mitigation Plan Initiative Expenditures	Additional detail on expenditures
Pre-Discovery 21	CalPA	Set WMP-04	CalAdvocates-PGE-2022WMP-04	6 (c-d)	CalAdvocates-PGE-2022WMP-04_6 (c-d)	Supplemental to Question 6 For any program for which you forecast operating expenditures in 2022 to be at least two times actual expenditure in 2021, please provide: 7 a) The name of the program as it is identified in your 2022 WMP Update b) The WMP Initiative number in Table 12 of your 2022 WMP Update c) The name of the program as it is identified in your 2021 WMP Update d) The WMP Initiative number in Table 12 of your 2021 WMP Update e) An explanation for the projected increase.	Alan Wehrman	12/17/2021	3/11/2022	3/4/2022	1			N/A	Miscellaneous	Additional Detail
Pre-Discovery 21	CalPA	Set WMP-04	CalAdvocates-PGE-2022WMP-04	6 (e)	CalAdvocates-PGE-2022WMP-04_6 (e)	Supplemental to Question 6 For any program for which you forecast operating expenditures in 2022 to be at least two times actual expenditure in 2021, please provide: 7 a) The name of the program as it is identified in your 2022 WMP Update b) The WMP Initiative number in Table 12 of your 2022 WMP Update c) The name of the program as it is identified in your 2021 WMP Update d) The WMP Initiative number in Table 12 of your 2021 WMP Update e) An explanation for the projected increase.	Alan Wehrman	12/17/2021	3/14/2022 (Noon)	3/14/2022				N/A	Miscellaneous	Additional Detail
Pre-Discovery 22	CalPA	Set WMP-04	CalAdvocates-PGE-2022WMP-04	7	CalAdvocates-PGE-2022WMP-04_7	Provide PG&E's workplan that describes where PG&E will undertake EVM projects in 2022. This workplan should be in an Excel format, with circuit-segments as rows. Please include the same information as in PG&E's Enhanced Oversight And Enforcement Process Corrective Action Plan 90-Day Report Pursuant To Resolution M-4852, November 4, 2021, Attachment E, columns 1-8. Please additionally include circuit-segment ID numbers that match those provided in response to Question 1 of Data Request CalAdvocates-PGE-2022WMP-03.	Alan Wehrman	12/17/2021	2/25/2022	2/25/2022	1			7.3.5.2	Vegetation Management (VM) and Inspections	Enhanced Vegetation Management
Pre-Discovery 23	CalPA	Set WMP-04	CalAdvocates-PGE-2022WMP-04	8	CalAdvocates-PGE-2022WMP-04_8	Provide PG&E's workplan that describes where and when you will perform system hardening on distribution circuits in 2022. For projects that you expect to partially complete in 2022 (i.e. projects that started before 2022 and are expected to continue in 2022, or projects that are expected to be completed after 2022), please include the project and report the work that you forecast will actually be performed in calendar year 2022. This workplan should be in an Excel format, with circuit-segments as rows. For each project, include the following information, at a minimum: a) Circuit-segment ID number (corresponding to those provided in response to Questions 1 and 2 of Data Request CalAdvocates-PGE-2022WMP-03) associated with the project. b) Circuit-segment name c) Relevant wildfire risk score(s) d) The start date of the project. e) The expected completion date of the project. f) Length of covered conductor to be installed in 2022 in miles. g) Length of underground conductor to be installed in 2022 in miles. h) Length in miles of any other type of system hardening project to be installed in 2022 (if this is greater than zero, please describe the type of system hardening project).	Alan Wehrman	12/17/2021	2/25/2022	2/25/2022	1			7.3.3.17.1	Grid Design and System Hardening	System Hardening - Distribution
Pre-Discovery 24	CalPA	Set WMP-04	CalAdvocates-PGE-2022WMP-04	9	CalAdvocates-PGE-2022WMP-04_9	Provide PG&E's workplan that describes where and when you will perform system hardening on transmission circuits in 2022. Include the same information detailed in the preceding question.	Alan Wehrman	12/17/2021	2/25/2022	2/25/2022	1			7.3.3.17.2	Grid Design and System Hardening	System Hardening - Transmission
Pre-Discovery 25	CalPA	Set WMP-04	CalAdvocates-PGE-2022WMP-04	10	CalAdvocates-PGE-2022WMP-04_10	Please provide disaggregated information related to system hardening in the tables below. Note: in PG&E's 2021 WMP Update, this information was aggregated into Section 7.3.3.17.1 "Updates to grid topology to minimize risk of ignition in HFTDs, System Hardening, Distribution" in Table 12. a. Please fill out the table below, disaggregating the actual and projected spending amounts as shown. Add extra columns as needed. Total Line Removal Relocation of Overhead to Underground Covered Conductor Other (please explain) 2021 expenditures (actual) 2022 expenditures (projected) b. Please fill out the table below, providing the actual or projected number of miles treated by that method per year. Add extra columns as needed. Total Miles Treated Line Removal Relocation of Overhead to Underground Covered Conductor Other (please explain) 2021 (actual) 2022 (projected)	Alan Wehrman	12/17/2021	2/25/2022	2/25/2022	0			7.3.3.17.1	Grid Design and System Hardening	System Hardening - Distribution
Pre-Discovery 26	CalPA	Set WMP-05	CalAdvocates-PGE-2022WMP-05	1	CalAdvocates-PGE-2022WMP-05_1	The following questions relate to the article Humboldt County Issues Stop Work Order, PG&E Removes Contractor on EVM in Sohum After Complaints/Video by Residents, published in Redheaded Blackbelt on December 16, 2021 (the article).2 This article describes activities performed by a contractor allegedly performing EVM work for PG&E in Humboldt County. Question 1 The article alleges that a contractor, KDF, was performing EVM work for PG&E in Humboldt County, on Thomas Road in the Salmon Creek watershed, on or around December 16, 2021. a) Is it accurate that KDF was in this area performing EVM work at this time for PG&E? b) Please provide GIS files that show where KDF has performed EVM work for PG&E in Humboldt County in 2021.	Alan Wehrman	12/23/2021	1/10/2022	1/10/2022	1			7.3.5.2	Vegetation Management (VM) and Inspections	Miscellaneous
Pre-Discovery 27	CalPA	Set WMP-05	CalAdvocates-PGE-2022WMP-05	2	CalAdvocates-PGE-2022WMP-05_2	Question 2 a) Is KDF still engaged with PG&E to perform EVM work? b) Is KDF currently engaged with PG&E as a contractor for any work other than EVM?	Alan Wehrman	12/23/2021	1/10/2022	1/10/2022	0			7.3.5.2	Vegetation Management (VM) and Inspections	Miscellaneous

Pre-Discovery 28	CalPA	Set WMP-05	CalAdvocates-PGE-2022WMP-05	3	CalAdvocates-PGE-2022WMP-05_3	Question 3 The article alleges that the contractor, KDF, did not have an encroachment permit to do road work on Thomas Road in the Salmon Creek watershed. a) Is it accurate that KDF did not have an encroachment permit to do road work in the area described, as alleged in the article? b) If the answer to part (a) is yes, please explain why KDF did not secure the proper permits prior to performing the work.	Alan Wehrman	12/23/2021	1/10/2022	1/10/2022	0		7.3.5.2	Vegetation Management (VM) and Inspections	Miscellaneous
Pre-Discovery 29	CalPA	Set WMP-05	CalAdvocates-PGE-2022WMP-05	4	CalAdvocates-PGE-2022WMP-05_4	Question 4 The article alleges that KDF had left logs and chips in the ditch, plugged culverts, and damaged the shoulders of a road. Are these allegations accurate with respect to KDF's work in this area? If not, please describe the inaccuracies or omissions in the article.	Alan Wehrman	12/23/2021	1/10/2022	1/10/2022	0		7.3.5.2	Vegetation Management (VM) and Inspections	Miscellaneous
Pre-Discovery 30	CalPA	Set WMP-05	CalAdvocates-PGE-2022WMP-05	5	CalAdvocates-PGE-2022WMP-05_5	Question 5 The article states that a PG&E spokesperson confirmed that KDF "did not complete the work to [PG&E's] satisfaction." a) Is PG&E aware of other instances during 2021 in which KDF did not complete EVM work to PG&E's satisfaction? b) If the answer to part (a) is yes, please list all such instances, including i. the location of the work, ii. the date(s) of the work, and iii. the reasons that the work was unsatisfactory.	Alan Wehrman	12/23/2021	1/10/2022	1/10/2022	0		7.3.5.2	Vegetation Management (VM) and Inspections	Miscellaneous
Pre-Discovery 31	CalPA	Set WMP-05	CalAdvocates-PGE-2022WMP-05	6	CalAdvocates-PGE-2022WMP-05_6	Question 6 Following the August CZU Lightning Complex Fire in the Santa Cruz Mountains in 2020, PG&E received several complaints from local governments regarding contractors failing to secure appropriate permits and causing erosion on narrow roads.3 a) Following these complaints, what specific actions did PG&E take to improve contractor performance? b) Following these complaints, what specific actions did PG&E take to reduce similar problems in the future?	Alan Wehrman	12/23/2021	1/24/2022	1/10/2022	0		7.3.5.2	Vegetation Management (VM) and Inspections	Miscellaneous
Pre-Discovery 32	CalPA	Set WMP-05	CalAdvocates-PGE-2022WMP-05	7	CalAdvocates-PGE-2022WMP-05_7	Question 7 List all instances in 2020 and 2021 that PG&E is aware of in which a local government has complained to or about PG&E regarding vegetation management work performed by PG&E or a contractor of PG&E. For each such instance, please state: a) The name of the local government making the complaint b) The date range of the work in question c) What program was concerned (e.g., EVM, routine VM, or CEMA patrols) d) Whether the work was performed by PG&E employees or contractors e) If the work was performed by contractors, the name of the contracting firm	Alan Wehrman	12/23/2021	1/24/2022	1/24/2022	1		7.3.5.2	Vegetation Management (VM) and Inspections	Miscellaneous
Pre-Discovery 32	CalPA	Set WMP-05	CalAdvocates-PGE-2022WMP-05	7SUPP	CalAdvocates-PGE-2022WMP-05_7SUPP	Supplemental for Q7 List all instances in 2020 and 2021 that PG&E is aware of in which a local government has complained to or about PG&E regarding vegetation management work performed by PG&E or a contractor of PG&E. For each such instance, please state: a) The name of the local government making the complaint b) The date range of the work in question c) What program was concerned (e.g., EVM, routine VM, or CEMA patrols) d) Whether the work was performed by PG&E employees or contractors e) If the work was performed by contractors, the name of the contracting firm	Alan Wehrman	12/23/2021	1/24/2022	1/24/2022	1		7.3.5.2	Vegetation Management (VM) and Inspections	Miscellaneous
Pre-Discovery 33	CalPA	Set WMP-06	CalAdvocates-PGE-2022WMP-06	1	CalAdvocates-PGE-2022WMP-06_1	The following questions relate to the PG&E Independent Monitor Report of November 19, 2021, Kirkland & Ellis LLP, filed on November 23, 2021 (the Monitor's 2021 report).2 Question 1 The Monitor's 2021 report describes an ignition that occurred on June 16, 2021. The report states that PG&E's Preliminary Ignition Investigation Report (PIIR) attributed the ignition to "a rotten and decayed secondary, wooden cross arm failing and igniting the light, flashy fuels below the pole."3 a) Please provide a copy of the Preliminary Ignition Investigation Report mentioned above. b) Please provide copies of any additional PG&E investigation reports associated with the ignition mentioned above. c) Was the cross arm described above located in an HFTD? If so, which tier? d) Please provide the latitude and longitude of the crossarm described above.	Alan Wehrman	12/23/2021	1/10/2022	1/10/2022	2		7.3.3.5	Crossarm Maintenance	Miscellaneous
Pre-Discovery 34	CalPA	Set WMP-06	CalAdvocates-PGE-2022WMP-06	2	CalAdvocates-PGE-2022WMP-06_2	Question 2 The Monitor's 2021 report states: The cross arm was first identified in connection with an August 19, 2019 patrol. The tag had a due date of February 19, 2020 (a 6-month Priority E tag). The repair was permitted and ready for construction in April 2020 (which was already late), but was never completed. On September 10, 2020, the notification was reassessed and the crew lead requested that the work be expedited before the 2021 fire season (that is, August 30, 2021).4 a) In reference to the above, why was the work scheduled for April 2020 not completed? b) Please explain what is meant above by "the crew lead requested that the work be expedited before the 2021 fire season." For example, did the crew open a new tag, or increase the priority of the existing tag? c) In reference to the above, why was the expedited work that was requested on September 10, 2020 not completed? d) As of June 16, 2021, what was the priority of the tag on this crossarm discussed above?	Alan Wehrman	12/23/2021	1/14/2022	1/14/2022	0		7.3.3.5	Crossarm Maintenance	Miscellaneous
Pre-Discovery 35	CalPA	Set WMP-06	CalAdvocates-PGE-2022WMP-06	3	CalAdvocates-PGE-2022WMP-06_3	Question 3 P. 37 of the Monitor's 2021 report describes PG&E's Field Safety Reassessments (FSR) process, in which unresolved tags are periodically reviewed. a) Was the September 10, 2020 reassessment described in Question 2 part of PG&E's FSR process? b) Please provide copies of all inspection reports related to the tag on the crossarm described in Question 2, including FSR inspections, that occurred between the date the tag was originally opened and June 16, 2021.	Alan Wehrman	12/23/2021	1/14/2022	1/14/2022	4		7.3.3.5	Crossarm Maintenance	Miscellaneous
Pre-Discovery 36	CalPA	Set WMP-06	CalAdvocates-PGE-2022WMP-06	4	CalAdvocates-PGE-2022WMP-06_4	Question 4 The Monitor's 2021 report states: As of the date of the PIIR, there were 1290 open notifications on the same circuit associated with common ignition drivers, of which 886 were past due and 256 were due within six months. Of these, 66 open notifications were associated with cross arms, of which 55 were past due and 11 were due within six months.5 a) Following the ignition on June 16, 2021, did PG&E reinspect or otherwise assess the 886 past due tags described above? b) Describe all actions that PG&E has taken since the ignition on June 16, 2021, to mitigate the risk of another ignition associated with a past-due tag on its system.	Alan Wehrman	12/23/2021	1/14/2022	1/14/2022	0		7.3.3.5	Crossarm Maintenance	Miscellaneous
Pre-Discovery 37	CalPA	Set WMP-06	CalAdvocates-PGE-2022WMP-06	5	CalAdvocates-PGE-2022WMP-06_5	Question 5 a) Does PG&E have a plan to address the late tags that exist on its system in HFTD? b) If the answer to part (a) is yes, will this plan be described in PG&E's 2022 WMP? c) If the answer to part (a) is no, please explain why not.	Alan Wehrman	12/23/2021	1/14/2022	1/14/2022	0		7.3.4	Asset Management and Inspections	Additional Detail

Pre-Discovery 38	CalPA	Set WMP-07	CalAdvocates-PGE-2022WMP-07	1	CalAdvocates-PGE-2022WMP-07_1	<p>Regarding PG&E's 2021 distribution system hardening efforts, as described in section 7.3.3.17.1 its 2021 Revised WMP:</p> <p>a) How many miles of distribution system hardening did PG&E complete in 2021?</p> <p>b) What percentage of the distribution system hardening work in 2021 was performed in the top 20 percent of circuit segments as defined by PG&E's 2021 Wildfire Distribution Risk Model for System Hardening?2</p> <p>c) If the answer to part (b) is lower than 80 percent, please explain why.</p> <p>2 "The top 20 percent of circuit segments as defined by PG&E's 2021 Wildfire Distribution Risk Model for System Hardening" should be defined the same way for the purposes of this question as in PG&E's 2021 Revised WMP.</p>	Alan Wehrman	12/23/2021	2/1/2022	2/1/2022	0		7.3.3.17.1	Grid Design and System Hardening	System Hardening
Pre-Discovery 39	CalPA	Set WMP-07	CalAdvocates-PGE-2022WMP-07	2	CalAdvocates-PGE-2022WMP-07_2	Please provide a GIS file showing where PG&E completed distribution system hardening work in 2021, in accordance with section 7.3.3.17.1 its 2021 Revised WMP.	Alan Wehrman	12/23/2021	2/1/2022	2/1/2022	1		7.3.3.17.1	Grid Design and System Hardening	System Hardening
Pre-Discovery 40	CalPA	Set WMP-07	CalAdvocates-PGE-2022WMP-07	3	CalAdvocates-PGE-2022WMP-07_3	<p>The November 23, 2021 Federal Monitor's report3 states:</p> <p>In 2021, the Monitor team conducted an in-field review of 1,628 distribution structures in HFTDs that had been inspected by PG&E. Approximately 27% of the structures had potential exceptions related to field conditions, for a total of 583 missed field issues by PG&E inspectors across 435 structures. Approximately 31% of the structures had potential exceptions related to recordkeeping, for a total of 642 potential exceptions by PG&E inspectors across 507 structures.4</p> <p>a) Please describe all actions that PG&E has taken in 2021 to improve the quality of its distribution inspections to reduce the number of potential exceptions5 in the future.</p> <p>b) Has PG&E performed any re-inspections or inspection validation efforts following the findings of the Federal Monitor, described above?</p> <p>c) If the answer to part (b) is yes, please describe those efforts.</p> <p>d) If the answer to part (b) is no, please explain why not.</p> <p>3 Kirkland & Ellis LLP, PG&E Independent Monitor Report of November 19, 2021 (Case No. 14-CR-00175-WHA Doc. No. 1524-1), November 23, 2021.</p> <p>4 Kirkland & Ellis LLP, PG&E Independent Monitor Report of November 19, 2021 (Case No. 14-CR-00175-WHA Doc. No. 1524-1), November 23, 2021, p. 31.</p> <p>5 Potential exceptions are defined as, "field conditions that should have been identified by an inspector in accordance with PG&E guidance but were not, or a recordkeeping question that was answered inaccurately by a PG&E inspector."</p> <p>Kirkland & Ellis LLP, PG&E Independent Monitor Report of November 19, 2021 (Case No. 14-CR-00175-WHA Doc. No. 1524-1), November 23, 2021, p. 30</p>	Alan Wehrman	12/23/2021	2/1/2022	2/1/2022	0		7.3.4.1	Asset Management and Inspections	Inspections - Distribution
Pre-Discovery 41	CalPA	Set WMP-07	CalAdvocates-PGE-2022WMP-07	4	CalAdvocates-PGE-2022WMP-07_4	<p>The November 23, 2021 Federal Monitor report states:</p> <p>In 2021, the Monitor team inspected 304 electric transmission structures via PG&E aerial photography records. Approximately 47% of the steel structures inspected had potential exceptions, for a total of 160 missed issues across 88 structures. Approximately 53% of the wood structures also had potential exceptions, for a total of 136 missed issues across 76 structures.6</p> <p>a) Please describe all actions that PG&E has taken in 2021 to improve the quality of its aerial transmission inspections to reduce the number of potential exceptions in the future.</p> <p>b) Has PG&E performed any re-inspections or inspection validation efforts following the findings of the Federal Monitor, described above?</p> <p>c) If the answer to part (b) is yes, please describe those efforts.</p> <p>d) If the answer to part (b) is no, please explain why not.</p> <p>6 Kirkland & Ellis LLP, PG&E Independent Monitor Report of November 19, 2021 (Case No. 14-CR-00175-WHA Doc. No. 1524-1), November 23, 2021, p. 32</p>	Alan Wehrman	12/23/2021	2/1/2022	2/1/2022	0		7.3.4.2	Asset Management and Inspections	Inspections - Transmission
Pre-Discovery 42	CalPA	Set WMP-08	CalAdvocates-PGE-2022WMP-08	1	CalAdvocates-PGE-2022WMP-08_1	The following questions relate to the PG&E Independent Monitor Report of November 19, 2021, Kirkland & Ellis LLP, filed on November 23, 2021 (the Monitor's 2021 report),3 and PG&E's responses to Data Request CalAdvocates-PGE-2022WMP-06, dated January 10 and 14, 2022. PG&E's response to Data Request CalAdvocates-PGE-2022WMP-06 states that the ignition occurring on June 21, 2021 was CPUC reportable.4 a) Please provide a copy of each ignition report (for the ignition referenced above) that PG&E submitted to the CPUC. b) If PG&E did not submit any ignition reports for the ignition referenced above, please explain why not. 3 Kirkland & Ellis LLP, PG&E Independent Monitor Report of November 19, 2021 (Case No. 14-CR-00175-WHA Doc. No. 1524-1), November 23, 2021. 4 PG&E's response to Data Request CalAdvocates-PGE-2022WMP-06, Question 1, Attachment 1, p. 1.	Alan Wehrman	1/28/2022	2/25/2022	2/25/2022	0		N/A	Miscellaneous	Additional Detail

Pre-Discovery 43	CalPA	Set WMP-08	CalAdvocates-PGE-2022WMP-08	2	CalAdvocates-PGE-2022WMP-08_2	PG&E's response to Data Request CalAdvocates-PGE-2022WMP-06 includes an inspection report from June 13, 2021 with the finding "Open Wire Service (to weatherhead) or Open Wire Secondary at this location." 5 a) Please explain what is meant by this finding. b) Please define "Open Wire Service (to weatherhead)." c) Please define "Open Wire Secondary." 5 PG&E's response to Data Request CalAdvocates-PGE-2022WMP-06, Question 3, Attachment 4, p. 2.	Alan Wehrman	1/28/2022	2/25/2022	2/25/2022	0		7.3.4	Asset Management and Inspections	Additional Detail
Pre-Discovery 44	CalPA	Set WMP-08	CalAdvocates-PGE-2022WMP-08	3	CalAdvocates-PGE-2022WMP-08_3	PG&E's response to Data Request CalAdvocates-PGE-2022WMP-06 includes an inspection report from June 13, 2021 which lists no "damage or compelling abnormal conditions" in all categories except "Other Required Data." 6 Regarding this inspection: a) It is Cal Advocates' understanding that, as of June 13, 2021, the crossarm that failed on June 16 still had open electric corrective notifications because the maintenance issues previously flagged in 2019 and 2020 had not been remediated. Is this correct? b) Please explain why the inspector did not note any damage to the crossarm during this inspection. c) State what PG&E inspection protocol(s) the inspector used on June 13, 2021 for this inspection. d) List the regulations and internal standards against which the inspector was supposed to verify compliance in this inspection on June 13, 2021. e) Has PG&E's management identified any flaws or shortcomings in the performance of this particular inspection? f) If the answer to part (e) is yes, please describe what action(s) PG&E has taken to address the identified flaws or shortcomings in the performance of this particular inspection. 6 PG&E's response to Data Request CalAdvocates-PGE-2022WMP-06, Question 3, Attachment 4.	Alan Wehrman	1/28/2022	2/25/2022	2/25/2022	0		7.3.4.3.5	Crossarm Maintenance	Miscellaneous
Pre-Discovery 45	CalPA	Set WMP-08	CalAdvocates-PGE-2022WMP-08	4	CalAdvocates-PGE-2022WMP-08_4	PG&E's response to Data Request CalAdvocates-PGE-2022WMP-06 includes an inspection report from June 13, 2021. Regarding this inspection: a) Since June 16, 2021, has PG&E performed any quality control or reinspection activities to validate the completeness and accuracy of other inspections performed by the individual who performed the inspection on June 13, 2021? b) If the answer to part (a) is yes, please list and describe the specific actions PG&E has taken. c) If the answer to part (a) is no, please explain why not.	Alan Wehrman	1/28/2022	2/25/2022	2/25/2022	0		7.3.4.14	Asset Management and Inspections	Quality Assurance/Quality Control of Inspections
Pre-Discovery 46	CalPA	Set WMP-08	CalAdvocates-PGE-2022WMP-08	5 (a,b)	CalAdvocates-PGE-2022WMP-08_5 (a,b)	The Monitor's 2021 report states, "For example, PG&E's recently established Asset Failure Analysis Team causally connected a June 2021 ignition to a broken cross arm." 7 a) When was PG&E's Asset Failure Analysis Team established? b) Please provide a brief description of the purpose and activities of the Asset Failure Analysis Team. c) Please describe what, if any, work product is produced by the Asset Failure Analysis Team (for example, written reports or presentations). d) Please describe any changes or improvements to WMP initiatives that have resulted from activities performed by the Asset Failure Analysis Team. e) Is the Asset Failure Analysis Team discussed in PG&E's 2022 WMP Update? Please provide a reference to the appropriate section, if yes. f) Please describe how the Asset Failure Analysis Team causally connected the June 2021 ignition to the broken crossarm. g) Has the Asset Failure Analysis Team causally connected other ignitions that occurred in 2021 to failed assets with existing corrective notifications? h) If the answer to part (g) is yes, please list such ignitions, their cause, and provide copies of associated reports or investigations performed by the Asset Failure Analysis Team. 7 Monitor's 2021 Report, p. 36.	Alan Wehrman	1/28/2022	2/25/2022	2/25/2022	0		7.3.7	Data Governance	Asset Failure Analysis
Pre-Discovery 46	CalPA	Set WMP-08	CalAdvocates-PGE-2022WMP-08	5 (c-h)	CalAdvocates-PGE-2022WMP-08_5 (c-h)	The Monitor's 2021 report states, "For example, PG&E's recently established Asset Failure Analysis Team causally connected a June 2021 ignition to a broken cross arm." 7 a) When was PG&E's Asset Failure Analysis Team established? b) Please provide a brief description of the purpose and activities of the Asset Failure Analysis Team. c) Please describe what, if any, work product is produced by the Asset Failure Analysis Team (for example, written reports or presentations). d) Please describe any changes or improvements to WMP initiatives that have resulted from activities performed by the Asset Failure Analysis Team. e) Is the Asset Failure Analysis Team discussed in PG&E's 2022 WMP Update? Please provide a reference to the appropriate section, if yes. f) Please describe how the Asset Failure Analysis Team causally connected the June 2021 ignition to the broken crossarm. g) Has the Asset Failure Analysis Team causally connected other ignitions that occurred in 2021 to failed assets with existing corrective notifications? h) If the answer to part (g) is yes, please list such ignitions, their cause, and provide copies of associated reports or investigations performed by the Asset Failure Analysis Team. 7 Monitor's 2021 Report, p. 36.	Alan Wehrman	1/28/2022	3/4/2022	3/8/2022	0		7.3.7	Data Governance	Asset Failure Analysis
Pre-Discovery 47	CalPA	Set WMP-08	CalAdvocates-PGE-2022WMP-08	6	CalAdvocates-PGE-2022WMP-08_6	What date does PG&E define as the start of the 2021 fire season? 8 PG&E's response to Data Request CalAdvocates-PGE-2022WMP-06, Question 2.	Alan Wehrman	1/28/2022	2/25/2022	2/25/2022	0		N/A	Miscellaneous	Additional Detail
Pre-Discovery 48	CalPA	Set WMP-08	CalAdvocates-PGE-2022WMP-08	7	CalAdvocates-PGE-2022WMP-08_7	PG&E's response to Data Request CalAdvocates-PGE-2022WMP-06 states that, as of June 16, 2021, the priority of the corrective notification associated with the failed crossarm was priority E. 9 Why was the corrective notification never re-prioritized above priority E during the period of February 19, 2020 to June 16, 2021? 9 PG&E's response to Data Request CalAdvocates-PGE-2022WMP-06, Question 2.	Alan Wehrman	1/28/2022	2/25/2022	2/25/2022	0		7.3.4	Asset Management and Inspections	Additional Detail
Pre-Discovery 49	CalPA	Set WMP-09	CalAdvocates-PGE-2022WMP-09	1	CalAdvocates-PGE-2022WMP-09_1	Provide an Excel table listing (as rows) all corrective notifications on electric distribution circuits that were open as of February 1, 2022, and located in HFTD areas. The table should include the following information in separate columns. a. Notification identification (ID) number b. Name of the associated circuit c. ID number of the associated circuit d. HFTD tier e. Functional location f. Geographic latitude in decimal degrees, truncated to seven decimal places g. Geographic longitude in decimal degrees, truncated to seven decimal places h. Date the notification was originally opened i. Priority of the original notification (please use PG&E's internal system of A, B, E, etc.) j. Due date of the original notification k. Object/damage code (see definitions) l. Date(s) the notification was reinspected or modified, if any m. Priority of the notification after it was reinspected or modified, if applicable n. Due date of the notification after it was reinspected or modified, if applicable	Holly Wehrman	2/15/2022	3/2/2022	3/2/2022	1		7.3.4	Asset Management and Inspections	Additional Detail - Distribution
Pre-Discovery 50	CalPA	Set WMP-09	CalAdvocates-PGE-2022WMP-09	2	CalAdvocates-PGE-2022WMP-09_2	Provide an Excel table listing (as rows) all corrective notifications on electric transmission circuits that were open as of February 1, 2022, and located in HFTD areas. The table should include the same information requested in Question 1.	Holly Wehrman	2/15/2022	3/2/2022	3/2/2022	1		7.3.4	Asset Management and Inspections	Additional Detail - Transmission

Pre-Discovery 51	CalPA	Set WMP-09	CalAdvocates-PGE-2022WMP-09	3	CalAdvocates-PGE-2022WMP-09_3	Provide an Excel table listing (as rows) all corrective notifications on electric substations that were open as of February 1, 2022, and located in HFTD areas. The table should include the information requested in Question 1.	Holly Wehrman	2/15/2022	3/2/2022	3/2/2022	1		7.3.4	Asset Management and Inspections	Additional Detail - Substations
Pre-Discovery 52	CalPA	Set WMP-10	CalAdvocates-PGE-2022WMP-10	1	CalAdvocates-PGE-2022WMP-10_1	Provide the number of tree attachments existing in PG&E's system as of February 1, 2022 in each of the following categories: a) Total b) HFTD Tier 3 c) HFTD Tier 2 d) Other HFTD e) Non-HFTD	Holly Wehrman	2/15/2022	3/2/2022	3/2/2022	0		7.3.3	Grid Design and System Hardening	Tree Attachments
Pre-Discovery 53	CalPA	Set WMP-10	CalAdvocates-PGE-2022WMP-10	2	CalAdvocates-PGE-2022WMP-10_2	How many tree attachments did PG&E remediate in calendar year 2021 in each of the following categories: a) Total b) HFTD Tier 3 c) HFTD Tier 2 d) Other HFTD e) Non-HFTD	Holly Wehrman	2/15/2022	3/2/2022	3/2/2022	0		7.3.3	Grid Design and System Hardening	Tree Attachments
Pre-Discovery 54	CalPA	Set WMP-10	CalAdvocates-PGE-2022WMP-10	3	CalAdvocates-PGE-2022WMP-10_3	How many tree attachments does PG&E plan to remediate in calendar year 2022 in each of the following categories: a) Total b) HFTD Tier 3 c) HFTD Tier 2 d) Other HFTD e) Non-HFTD	Holly Wehrman	2/15/2022	3/2/2022	3/2/2022	0		7.3.3	Grid Design and System Hardening	Tree Attachments
Pre-Discovery 55	CalPA	Set WMP-10	CalAdvocates-PGE-2022WMP-10	4	CalAdvocates-PGE-2022WMP-10_4	When PG&E performs undergrounding in the HFTD for wildfire mitigation purposes, in places where other utilities (such as telecommunications providers) share PG&E's poles: a) Please describe PG&E's current policy regarding undergrounding the other utilities' equipment. b) Please describe PG&E's current policy regarding removal of the shared poles. c) Please describe PG&E's current policy regarding ownership of the shared poles after electric conductors have been placed underground. d) Please describe PG&E's approach to co-trenching with utilities that share PG&E's poles, if any. e) What is PG&E's current regarding undergrounding other utilities' equipment in locations with limited ingress and egress, such as evacuation corridors from rural communities? f) What is PG&E's current policy regarding removal of shared poles in locations with limited ingress and egress, such as evacuation corridors from rural communities?	Holly Wehrman	2/15/2022	3/7/2022	3/7/2022	0		7.3.3.16	Grid Design and System Hardening	Undergrounding of Electric Lines and/or Equipment
Pre-Discovery 56	CalPA	Set WMP-10	CalAdvocates-PGE-2022WMP-10	5	CalAdvocates-PGE-2022WMP-10_5	During the field visit to PG&E facilities on November 2, 2021, Cal Advocates visited an undergrounding project in El Dorado County, which was referred to as "Undergrounding Project El Dorado 2101 Phase 4." During the visit PG&E representatives represented that, after the powerline was moved underground, the poles would be "topped," which would remove a portion of the pole but leave the remainder of the pole intact to support telecommunications utility infrastructure. a) Is the above representation accurate with respect to the Undergrounding Project El Dorado 2101 Phase 4? b) If the answer to part (a) is no, please correct any misrepresentations.	Holly Wehrman	2/15/2022	3/7/2022	3/7/2022	0		7.3.3.16	Grid Design and System Hardening	Undergrounding of Electric Lines and/or Equipment
Pre-Discovery 57	CalPA	Set WMP-10	CalAdvocates-PGE-2022WMP-10	6	CalAdvocates-PGE-2022WMP-10_6	During the field visit to PG&E facilities on November 2, 2021, Cal Advocates visited an undergrounding project in El Dorado County, which was referred to as "Undergrounding Project El Dorado 2101 Phase 4." During the visit PG&E representatives represented that, after the powerline was moved underground, the poles would be "topped," which would remove a portion of the pole but leave the remainder of the pole intact to support telecommunications utility infrastructure. a) Is this representative of PG&E's practice when undergrounding powerlines that share poles with other utilities? b) If not, please describe PG&E's typical practice in such circumstances.	Holly Wehrman	2/15/2022	3/7/2022	3/7/2022	0		7.3.3.16	Grid Design and System Hardening	Undergrounding of Electric Lines and/or Equipment
Pre-Discovery 58	CalPA	Set WMP-10	CalAdvocates-PGE-2022WMP-10	7	CalAdvocates-PGE-2022WMP-10_7	Per PG&E's response to Data Request CalAdvocates-PGE-2022WMP-03, Question 1, PG&E installed approximately 109 circuit-miles of underground conductor in HFTDs in 2021. a) Please verify that the above number of circuit-miles is accurate. b) Noting that multiple circuits may sometimes run in parallel through the same right-of-way, how many miles of right-of-way did PG&E's 2021 undergrounding work affect in HFTDs? c) Among the miles of right-of-way undergrounded in HFTDs in 2021, how many miles of telecommunications did PG&E co-trench? d) Of the miles undergrounded in HFTDs in 2021, on how many miles of right-of-way did PG&E remove the poles? e) Of the miles undergrounded in HFTDs in 2021, on how many miles of right-of-way did PG&E top the poles?	Holly Wehrman	2/15/2022	3/7/2022	3/7/2022	0		7.3.3.16	Grid Design and System Hardening	Undergrounding of Electric Lines and/or Equipment
Pre-Discovery 59	CalPA	Set WMP-10	CalAdvocates-PGE-2022WMP-10	8	CalAdvocates-PGE-2022WMP-10_8	a) Has PG&E identified transportation corridors within its 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 PG&E identifies such transportation corridors. c) If available, please provide a geospatial data file that contains all current identified transportation corridors with ingress and egress hazards.	Holly Wehrman	2/15/2022	3/2/2022	3/2/2022	0		7.3.9	Emergency Planning And Preparedness	Additional Detail
Pre-Discovery 60	CalPA	Set WMP-10	CalAdvocates-PGE-2022WMP-10	9	CalAdvocates-PGE-2022WMP-10_9	In its responses to Data Request CalAdvocates-PGE-2022WMP-07, Questions 3 and 4, PG&E stated that it is performing Quality Reviews of past inspections, both of which were expected to be complete by February 28, 2022. Please provide copies of these Quality Reviews, if available. If the Quality Reviews have not been completed as of the date of your response to this Data Request, provide copies as soon as they are complete.	Holly Wehrman	2/15/2022	3/2/2022	3/2/2022	2		7.3.4.14	Asset Management and Inspections	Quality Assurance/Quality Control of Inspections

Pre-Discovery 61	OEIS	Set 002	OEIS-PG&E-22-002	1	OEIS-PG&E-22-002_1	Q01. As a follow up to the answer received from DR-001, which asked: 'In PG&E's cover letter to its Submission of 2022 Wildfire Mitigation Plan Maturity Model Assessment submitted February 4, 2022, PG&E states: "in addition to our internal review of the questions and the scores, this year we were also able to benchmark with Southern California Edison Company (SCE) and San Diego Gas & Electric Company (SDG&E) regarding the Survey. These benchmarking discussions were very helpful, especially to understand how the other utilities were interpreting certain questions and approaching the response to those questions. This benchmarking resulting in a re-evaluation of some of our scores based on feedback from the other utilities." Energy Safety would like to know the following: To which questions of the 2022 Wildfire Mitigation Plan Maturity Model Assessment answered by PG&E does this above notice apply?'; please answer the below questions: Energy Safety requires like data for comparison across a three-year Maturity Survey for the years 2020, 2021, and 2022 to determine whether the utility has truly progressed or regressed. To help ensure accuracy in comparison of re-interpreted responses to the same questions from the 2020 and 2021 surveys, for each of the 41 questions re- interpreted in answering the 2022 Maturity Survey, please provide the following: a. How was this specific question re-interpreted? b. What would PG&E's answer to the question have been had it been answered in the same way it was interpreted in the 2020 and 2021 Maturity Surveys submitted by PG&E?	Kevin Miller	2/22/2022	3/4/2022	3/4/2022	0			N/A	Miscellaneous	Maturity Survey
Pre-Discovery 62	OEIS	Set 002	OEIS-PG&E-22-002	2	OEIS-PG&E-22-002_2	A. Risk mapping and simulation Q02. Regarding PG&E's response to Maturity Survey question A.V.b (How automated is the mechanism to determine whether to update algorithms based on deviations?): a. How is PG&E planning to increase automation for algorithm updates based on deviations? b. How does PG&E currently perform partial (<50%) automation for this task?	Kevin Miller	2/22/2022	3/4/2022	3/4/2022	0		7.3.1	Risk Assessment and Mapping	Survey Responses	
Pre-Discovery 63	OEIS	Set 002	OEIS-PG&E-22-002	3	OEIS-PG&E-22-002_3	Q03. Regarding PG&E's response to Maturity Survey question A.V.c (How are deviations from risk model to ignitions and propagation detected?): a. Describe how PG&E "manually" checks deviations between the risk model to ignitions and propagation detection. b. Provide PG&E's plan to progress to a semi-automated for this check by January 1, 2023.	Kevin Miller	2/22/2022	3/4/2022	3/4/2022	0		7.3.1	Risk Assessment and Mapping	Survey Responses	
Pre-Discovery 64	OEIS	Set 002	OEIS-PG&E-22-002	4	OEIS-PG&E-22-002_4	C. Grid design and system hardening Q04. Regarding PG&E's response to Maturity Survey question C.II.a (Does grid design meet minimum G095 requirements and loading standards in HFTD areas?): a. Describe how PG&E plans to exceed G0 95 requirements by January 1, 2023.	Kevin Miller	2/22/2022	3/4/2022	3/4/2022	0		7.3.3	Grid Design and System Hardening	Survey Responses	
Pre-Discovery 65	OEIS	Set 002	OEIS-PG&E-22-002	5	OEIS-PG&E-22-002_5	Q05. Regarding PG&E's response to Maturity Survey question C.III.a (What level of redundancy does the utility's transmission architecture have?): a. Provide the percentage of circuits that have n-1 redundancy. b. Provide PG&E's plan to increase level of redundancy for transmission circuits.	Kevin Miller	2/22/2022	3/4/2022	3/4/2022	0		7.3.3	Grid Design and System Hardening	Survey Responses	
Pre-Discovery 66	OEIS	Set 002	OEIS-PG&E-22-002	6	OEIS-PG&E-22-002_6	Q06. Regarding PG&E's response to Maturity Survey question C.III.c (What level of sectionalization does the utility's distribution architecture have?): a. Provide the percentage of circuits that have more than 2000 customers within one switch. b. Describe PG&E's plan to isolate circuits to reduce the number of customers within one switch.	Kevin Miller	2/22/2022	3/4/2022	3/4/2022	0		7.3.3	Grid Design and System Hardening	Survey Responses	
Pre-Discovery 67	OEIS	Set 002	OEIS-PG&E-22-002	7	OEIS-PG&E-22-002_7	Q07. Regarding PG&E's response to Maturity Survey question C.III.d (How does the utility consider egress points in its grid topology?): a. Given PG&E "does not consider" egress as part of its grid topology design, how does PG&E currently factor and account for egress into wildfire and safety risks? b. How is PG&E planning to input egress into grid topology design moving forward?	Kevin Miller	2/22/2022	3/4/2022	3/4/2022	0		7.3.3	Grid Design and System Hardening	Survey Responses	
Pre-Discovery 68	OEIS	Set 002	OEIS-PG&E-22-002	8	OEIS-PG&E-22-002_8	Q08. Regarding PG&E's response to Maturity Survey question C.IV.d (What grid hardening initiatives does the utility include within its evaluation?): a. Define PG&E's understanding of what "Some" and "Most" include when considering grid hardening initiatives. b. How does PG&E plan to move from considering some hardening initiatives to most by January 1, 2023?	Kevin Miller	2/22/2022	3/4/2022	3/4/2022	0		7.3.3	Grid Design and System Hardening	Survey Responses	
Pre-Discovery 69	OEIS	Set 002	OEIS-PG&E-22-002	9	OEIS-PG&E-22-002_9	D. Asset management and inspections Q09. Regarding PG&E's response to Maturity Survey question D.I.a (What information is captured in the equipment inventory database?): a. Describe why PG&E moved from having an "accurate inventory of equipment" to "no service territory-wide inventory" from 2021 to 2022. Include any lessons learned from benchmarking with other utilities. b. Provide an estimated percentage of the equipment currently within PG&E's inventory. c. Provide PG&E's plan to move towards an accurate inventory service territory-wide, including integration of inspections and repairs, by January 1, 2023.	Kevin Miller	2/22/2022	3/4/2022	3/4/2022	0		7.3.4	Asset Management and Inspections	Survey Responses	
Pre-Discovery 70	OEIS	Set 002	OEIS-PG&E-22-002	10	OEIS-PG&E-22-002_10	Q10. Regarding PG&E's response to Maturity Survey question D.I.c (Does all equipment in HFTD areas have the ability to detect and respond to malfunctions?): a. Why does PG&E only update asset condition annually? b. Provide all existing bottlenecks that prevent PG&E from updating its asset conditions more frequently, including any plans to alleviate such bottlenecks.	Kevin Miller	2/22/2022	3/4/2022	3/4/2022	0		7.3.4	Asset Management and Inspections	Survey Responses	
Pre-Discovery 71	OEIS	Set 002	OEIS-PG&E-22-002	11	OEIS-PG&E-22-002_11	Q11. Regarding PG&E's response to Maturity Survey question D.IV.a (What level are electrical lines and equipment maintained at?): a. Why is PG&E not currently meeting consistent maintenance, as required? b. What percentage of circuits are not meeting required regulation? c. How did benchmarking with other utilities change PG&E's response and understanding?	Kevin Miller	2/22/2022	3/4/2022	3/4/2022	1		7.3.3	Grid Design and System Hardening	Survey Responses	

Pre-Discovery 72	OEIS	Set 002	OEIS-PG&E-22-002	12	OEIS-PG&E-22-002_12	F. Grid operations and protocols Q12. Regarding PG&E's response to Maturity Survey question F.III.d (During PSPS events does the utility's website go down?): a. How many times did PG&E's website go down during PSPS events in 2021? Include associated timeframes for when the website was down, as well as a percentage of time that the website was down during PSPS events. b. What is PG&E's plan to decrease the likelihood that the website will go down during PSPS events moving forward?	Kevin Miller	2/22/2022	3/4/2022	3/4/2022	0		7.3.6	Grid Operations and Protocols	Survey Responses
Pre-Discovery 73	CalPA	Set WMP-11	CalAdvocates-PGE-2022WMP-11	1	CalAdvocates-PGE-2022WMP-11_1	On February 2, 2022, PG&E filed its third 90-day report in response to the Enhanced Oversight and Enforcement Process. Please provide Excel versions of the following attachments to this report: a) Attachment A: 2021 EVM Scope of Work – Year End Summary b) Attachment B: 2021 EVM Work Performed Outside the 2021 EVM Scope of Work – Year-End Summary c) Attachment C: 2022 EVM Scope of Work	Holly Wehrman Carolyn Chen Layla Labagh	2/24/2022	3/2/2022	3/3/2022	3		N/A	Miscellaneous	Additional Detail
Pre-Discovery 74	CalPA	Set WMP-11	CalAdvocates-PGE-2022WMP-11	2	CalAdvocates-PGE-2022WMP-11_2	In response to Data Request CalAdvocates-PGE-2021WMP-10, Question 5, March 3, 2021, PG&E provided its 2021 EVM workplan. Please provide an updated version of this workplan that lists the actual EVM mileage performed in each circuit-segment in 2021 as a new column. Rows should be added as needed to cover all circuit-segments where PG&E performed EVM work in 2021. Note: If the response to this question is entirely covered by Question 1, please explain how so. No additional files will be required in this case.	Holly Wehrman Carolyn Chen Layla Labagh	2/24/2022	3/2/2022	3/3/2022	0		7.3.5.2	Vegetation Management (VM) and Inspections	Enhanced Vegetation Management
Pre-Discovery 75	CalPA	Set WMP-11	CalAdvocates-PGE-2022WMP-11	3	CalAdvocates-PGE-2022WMP-11_3	In response to Data Request CalAdvocates-PGE-2021WMP-10, Question 6, March 3, 2021, PG&E provided its 2021 system hardening workplan for the categories referred to in parts (a)-(d) below. Please provide an updated version of this workplan with additional columns to show the actual system hardening work performed in each circuit-segment in 2021 for each of these categories. 7 Rows should be added as needed to cover all circuit-segments where PG&E performed system hardening work in 2021. a) Installation of covered conductor b) Installation of underground conductor c) Removal of overhead conductor d) Removal of overhead conductor associated with remote grid work	Holly Wehrman Carolyn Chen Layla Labagh	2/24/2022	3/2/2022	3/3/2022	1		7.3.3.17	Grid Design and System Hardening	System Hardening
Pre-Discovery 76	CalPA	Set WMP-11	CalAdvocates-PGE-2022WMP-11	4	CalAdvocates-PGE-2022WMP-11_4	In PG&E's 2021 Q4 Quarterly Initiative Update, PG&E stated that, as of 2021 Q4, PG&E had hardened 210.5 distribution line miles under initiative "C.13 – System Hardening (Distribution)." As stated in PG&E's response to Data Request CalAdvocates-PGE-2022WMP-03, February 15, 2022, attachment "WMP-Discovery2022_DR_CalAdvocates_003-Q02Supp01Atch01CONF.xlsx," PG&E installed 153.1 miles of covered conductor in HFTD in 2021, and 108.8 miles of underground conductor in HFTD in 2021, which totals 261.9 miles. Please explain the apparent discrepancy in number of miles between the above documents.	Holly Wehrman Carolyn Chen Layla Labagh	2/24/2022	3/2/2022	3/3/2022	0		7.3.3.17	Grid Design and System Hardening	System Hardening