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, G3Question 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	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. 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 atthis 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?	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	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. 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?	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	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 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?	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	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.	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	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. 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?	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	CalPA	Set WMP-13	CalAdvocates-PGE-2022WMP-13	8	CalAdvocates-PGE-2022WMP-13_8	PG&E's 2022 WMP provides the following for "Lessons Learned" from the REFCL initiative in 2021: • 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. 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?	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	CalPA	Set WMP-13	CalAdvocates-PGE-2022WMP-13	9	CalAdvocates-PGE-2022WMP-13_9	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. 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.	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	CalPA	Set WMP-13	CalAdvocates-PGE-2022WMP-13	10	CalAdvocates-PGE-2022WMP-13_10	Regarding these two 2022 WMP Initiatives: • 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 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.	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	CalPA	Set WMP-13	CalAdvocates-PGE-2022WMP-13	11	CalAdvocates-PGE-2022WMP-13_11	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. 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.	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	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)	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	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)	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 statue and regulatory guidelines only (E.III.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 grow-in 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 benefitting PSPS 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 PSPS 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 PSPS 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 PSPS Migitation
38	CalPA	Set WMP-14	CalAdvocates-PGE-2022WMP-14	8	CalAdvocates-PGE-2022WMP-14_8	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." a)Please describe why PG&E switched vendors for this work in 2021. b)Please provide all supporting documents and claims that describes PG&E's reasoning related to its response to subsection a) above. c)Describe the nature of the "extensive pilot" the new vendor completed. d)What was the approximate cost of the "extensive pilot"?	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	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. a)Please disaggregate these circuit-miles of transmission hardening into the following types: bare-wire overhead hardening, conductor removal, other. 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. c)Please disaggregate your response to part (b) into the following types: bare-wire overhead hardening, conductor removal, other. 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.	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	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." 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. b)What is the forecast number of circuit-miles to be removed due to the deployment of 2 SPS units in 2022? c)What is the forecast number of circuit-miles to be removed due to the deployment of 15 SPS units in 2023?	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	On Pg. 567 of PG&E's 2022 WMP, PG&E uses three different terms, "trench miles" "circuit miles" and "underground miles". a)Please define each of these terms. b)How does each term differ from one another? 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). 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). 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). 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). g)If any of your responses to parts (c) through (f) depend on whether or not the circuit has a neutral wire, please explain.	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	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." a)How many circuit-miles total (including non-Butte rebuild miles) were previously hardened overhead and were placed underground in 2020? b)How many circuit-miles total (including non-Butte rebuild miles) were previously hardened overhead and were placed underground in 2021? c)How many previously hardened overhead circuit-miles does PG&E expect to underground in 2022?	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	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).	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 Q07ai), 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 Kincade 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	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." 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	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	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." 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?	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	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." 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).	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	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." 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.	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	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." 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?	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	Section 7.3.5.7 of PG&E's 2022 WMP discuss remote sensing inspections of vegetation around distribution 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 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.	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	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: a)Adding a column for planned mileage of aerial LiDAR. b)Adding a row with data on actual mileage completed in 2021.	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 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 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 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 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 Carloyn 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 Carloyn 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 Carloyn 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
80	OEIS	Set 005	OEIS-PG&E-22-005	3 REV	OEIS-PG&E-22-005_3 REV	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	4/1/2022	4/1/2022	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	Q06. In Section 7.3.5.13, PG&E provides the number of QA/QV audits it intended to perform in2021 (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: 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	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	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." a) Explain the types of damage. b) Quantify the damage observed, by type indicated in Q07.a).	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	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." 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 segmentlevel notification impossible or impractical, explain those issues.	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	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: - 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) a) How does PG&E explain this vast discrepancy in 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?	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	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: 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	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	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. a) Please explain the projected increase in operating expenses of approximately 7.8 times for acorresponding mileage increase of approximately 2.2 times. b) Describe the work that will be funded under the operating expenses for this initiative in2022. c) Describe the work that will be funded under the operating expenses for this initiative in2023. d) Please provide any workpapers you used to develop the forecasts of 2022 and 2023operating expenses.	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022	3/24/2022	0		7.3.6.8	EPSS	EPSS Spend
89	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	2	CalAdvocates-PGE-2022WMP-17_2	a) Please provide an estimate for the number of EPSS-related outages that you currentlyforecast 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 youcurrently 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).	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022	3/24/2022	0		7.3.6.8	EPSS	EPSS-related outages
90	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	3	CalAdvocates-PGE-2022WMP-17_3	SCEand 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." 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.	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022	3/24/2022	0		7.3.6.8	EPSS	Device settings
91	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	4	CalAdvocates-PGE-2022WMP-17_4	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.	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022	3/24/2022	0		7.3.6.8	EPSS	Benchmarking
92	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	5	CalAdvocates-PGE-2022WMP-17_5	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.	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022	3/24/2022	0		7.3.6.8	EPSS	Benchmarking
93	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	6	CalAdvocates-PGE-2022WMP-17_6	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. 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?	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022	3/24/2022	0		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	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. 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.	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/25/2022	3/25/2022	0		7.3.3.6	Grid Design and System Hardening	Distribution Pole Replacement and Reinforcement, Including with Composite Poles
94	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	7 SUPP	CalAdvocates-PGE-2022WMP-17_7 SUPP	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. 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.	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	4/1/2022	4/1/2022	0		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	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." 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. 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." 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). 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. c) Please provide an estimate of the current cost per mile to install spacer cable in PG&E's HFTD. 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? 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.	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022	3/24/2022	0		4.6	Progress Reporting on Key Areas of Improvement	Additional Detail
96	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	9	CalAdvocates-PGE-2022WMP-17_9	a) What is the average trench depth PG&E employs in undergrounding projects? b) Has PG&E examined the potential benefits or drawbacks of shallower trenches? c) Please explain your response to part (b).	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022	3/24/2022	0		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	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): a) Project ID number or other identifier5 b) Circuit ID c) ID number of each CPZ that was entirely undergrounded in the project d) ID number of each CPZ that was partially undergrounded in the project e) Circuit voltage f) County or counties where undergrounding took place g) Project start date h) Project completion date i) Total circuit-miles undergrounded j) Total miles of trenching required 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. l) Total life-cycle costs of the project, including costs attributed to non-electric utilities, including costs for planning, design, permitting, and construction. m) Whether this was a Rule 20 project (yes/no) n) Whether this was a WMP project (yes/no) o) Whether this was a post-wildfire rebuild project (yes/no) p) Whether PG&E shared trenches for this project with any telecommunications utilities (yes/no) q) Whether PG&E shared trenches for this project with gas facilities (yes/no)	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/29/2022	3/29/2022	2		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	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: a) Project ID number or other identifier, matching part (a) of Question 10 b) Circuit ID c) Project completion date	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/29/2022	3/29/2022	1		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	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. Please state the basis for the reduction in planned distribution inspections in 2022 compared to 2021.	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022	3/24/2022	0		7.3.4	Asset Management and Inspections	Detailed Inspections of Distribution Electric Lines and Equipmen
100	CalPA	Set WMP-17	CalAdvocates-PGE-2022WMP-17	13	CalAdvocates-PGE-2022WMP-17_13	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. Please describe any changes to the above strategy for PG&E's detailed distribution inspections in 2022.	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022	3/24/2022	0		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	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." 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. a) Is this understanding correct? b) If not, please clarify.	Holly Wherman Carolyn Chen Layla Labagh	3/21/2022	3/24/2022	3/24/2022	0		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	3/24/2022	0		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	3/25/2022	1		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	3/25/2022	2		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	3/28/2022	1		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	3/28/2022	0		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	3/28/2022	0		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	3/28/2022	0		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	3/28/2022	0		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 and appropriate reference.	Joseph Mitchell on behalf of MGRA	3/23/2022	3/28/2022	3/28/2022	0		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	3/28/2022	0		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	3/28/2022	0		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	3/28/2022	0		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	3/28/2022	0		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	3/28/2022	0		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	3/28/2022	2		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	3/28/2022	0		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	3/28/2022	0		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	3/28/2022	0		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	3/28/2022	1		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	3/28/2022	1		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	3/28/2022	1		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	3/28/2022	1		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 “EII 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	3/28/2022	1		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 EII “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	3/28/2022	1		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	3/28/2022	1		8	PSPS	Additional Data
127	MGRA	2	MGRA Data Request No. 2	23 Followup, not Supp.	MGRA Data Request No. 2_23 Followup, not Supp.	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	4/1/2022	4/1/2022	1		N/A	Miscellaneous	Ignition Trends
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	3/28/2022	0		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	3/28/2022	0		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	3/28/2022	0		N/A	Miscellaneous	REFCL
130	MGRA	2	MGRA Data Request No. 2	26 (Incorrectly labeled as MGRA-2-17 on page 3)	MGRA Data Request No. 2_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	3/28/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Additional Efforts to Manage Community and Environmental Impacts
131	CalPA	Set WMP-18	CalAdvocates-PGE-2022WMP-18	1	CalAdvocates-PGE-2022WMP-18_1	PG&E’s response to data request CalAdvocates-PGE-2022WMP-16, Question 11 referred to Exhibit PG&E-4 from PG&E’s February 25, 2022 GRC Update. Page 9-20 of this exhibit states, “The updated EVM scope of work focuses on overhang clearing only; other activities previously included in the EVM scope of work are now addressed in Routine VM.” Page 9-30 and 9-31 state, “Ultimately, PG&E will conduct visual assessment of all sides of potential strike trees on routine vegetation management patrols in the entire 25,000 mile HFTD each year, whereas the existing hazard tree identification program under Enhanced VM addresses less than 2,000 miles annually.” a) Please explain what is meant by “visual assessment of all sides of potential strike trees” on pages 9-30 and 9-31 of Exhibit PG&E-4 from PG&E’s February 25, 2022 GRC Update. b) Beginning in 2023, will PG&E’s Routine VM patrols use PG&E’s Tree Assessment Tool to assess potential strike trees on all HFTD circuit-miles? c) Beginning in 2023, will PG&E’s Routine VM program include remediation and removal of potential strike trees on all HFTD circuit-miles? Please explain your answer. d) In comparing EVM work planned for 2022 and Routine VM work planned for 2023, does PG&E expect to remediate or remove more, fewer, or a similar number of potential strike trees in 2023? Please explain your answer.	Holly Wherman Carolyn Chen Layla Labagh	3/25/2022	3/30/2022	3/30/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Additional Detail
132	CalPA	Set WMP-18	CalAdvocates-PGE-2022WMP-18	2	CalAdvocates-PGE-2022WMP-18_2	PG&E’s response to data request CalAdvocates-PGE-2022WMP-15, Question 16 shows a reduction of approximately $412 million in projected total vegetation management expenditures from 2022 to 2023. a) Does the reduction in total VM expenditure from 2022 to 2023 result primarily from PG&E’s plan to combine aspects of the EVM program into routine VM? b) If the answer to part (a) is yes, please explain all the substantive ways in which vegetation management activities in 2023 will differ from vegetation management activities in 2022. c) If the answer to part (a) is no, please state the basis for the reduction in projected VM expenditures from 2022 to 2023. d) Please explain how PG&E will achieve comparable risk reduction in 2023 as in 2022 despite significantly reduced spending.	Holly Wherman Carolyn Chen Layla Labagh	3/25/2022	3/30/2022	3/30/2022	0		7.3.5	Vegetation Management (VM) and Inspections	VM Spend
133	CalPA	Set WMP-18	CalAdvocates-PGE-2022WMP-18	3	CalAdvocates-PGE-2022WMP-18_3	Regarding PG&E’s covered conductor and strategic undergrounding activities: a) What is PG&E’s current estimate for the service life of newly installed distribution covered conductor? b) What is PG&E’s current estimate for the service life of newly installed traditional (non-covered conductor) overhead distribution conductor? c) If the answers to parts (a) and (b) above differ, explain the factors that contribute to PG&E’s varying estimates. d) What is PG&E’s current estimate for the service life of newly installed distribution underground conductor?	Holly Wherman Carolyn Chen Layla Labagh	3/25/2022	3/30/2022	3/30/2022	0		7.3.3	Grid Design and System Hardening	Service Life of Assets
134	CalPA	Set WMP-18	CalAdvocates-PGE-2022WMP-18	4	CalAdvocates-PGE-2022WMP-18_4	PG&E’s response to data request OEIS-PG&E-22-005, Question 3, states, “The QA/QV scope is currently focused on contract Pre-Inspectors and does not evaluate the performance of PG&E Pre-Inspector employees.” a) Please describe the role of QA/QV as used in OEIS-PG&E-22-005, Question 3. b) Please explain why PG&E’s QA/QV scope does not include evaluation of the performance of PG&E Pre-Inspector employees. c) How does PG&E currently evaluate the performance of PG&E Pre-Inspector employees? d) What quality assurance practices and procedures does PG&E currently use to ensure the quality of the work performed by PG&E Pre-Inspector employees?	Holly Wherman Carolyn Chen Layla Labagh	3/25/2022	3/30/2022	3/30/2022	11		7.3.5	Vegetation Management (VM) and Inspections	Quality Assurance/Quality Control of Vegetation Management
135	CalPA	Set WMP-18	CalAdvocates-PGE-2022WMP-18	5	CalAdvocates-PGE-2022WMP-18_5	As part of PG&E’s response to Issue 5.4.B, PG&E included the following attachments to its 2022 WMP: 2022-02-25_PGE_2022_WMP-Update_R0_Section 4.6_Remedy 5.4.B_Atch02.xlsx 2022-02-25_PGE_2022_WMP-Update_R0_Section 4.6_Remedy 5.4.B_Atch03.xlsx With regard to these spreadsheets: a) Please explain the difference between “Notification Date” (column I) and “Notif Create Date” (column J). b) Please explain the difference between “Req End Date” (column L) and “Authorized End Date” (column M). c) Please explain what is meant by “Notif Ref Date” (column O).	Holly Wherman Carolyn Chen Layla Labagh	3/25/2022	3/30/2022	3/30/2022	0		7.3.4	Asset Management and Inspections	Additional Detail

136	CalPA	Set WMP-18	CalAdvocates-PGE-2022WMP-18	6	CalAdvocates-PGE-2022WMP-18_6	PG&E's written response to Issue 5.4.B3 states that priority A is used for "Conditions that require immediate action." The following priority A correctives opened in 2021 have a required end date4 several months after the creation date. For each, please explain why the tag did not require immediate action. a) 121439605 (206 days) b) 121439803 (206 days) c) 121738117 (169 days) d) 122121787 (72 days) e) 122371526 (98 days)	Holly Wherman Carolyn Chen Layla Labagh	3/25/2022	3/30/2022	3/30/2022	0		7.3.4	Asset Management and Inspections	Additional Detail
137	CalPA	Set WMP-18	CalAdvocates-PGE-2022WMP-18	7	CalAdvocates-PGE-2022WMP-18_7	In general, please explain: a) Why PG&E's procedures allow a priority A corrective notification to be given a required end date more than 1 month after the date the condition is found in the field. b) In what circumstances it would be appropriate for an inspector to create a priority A corrective and assign a required end date more than 30 days in the future.	Holly Wherman Carolyn Chen Layla Labagh	3/25/2022	3/30/2022	3/30/2022	0		7.3.4	Asset Management and Inspections	Additional Detail
138	CalPA	Set WMP-18	CalAdvocates-PGE-2022WMP-18	8	CalAdvocates-PGE-2022WMP-18_8	PG&E's response to data request CalAdvocates-PGE-2022WMP-16, Question 5, states, "Pre-Inspectors follow Procedure 'TD-7102P-23' for Red Flag Warning procedure and 'TD-7102P-17' for Priority Tag Procedure to review and re-prioritize work within the RFW area." Please provide documents TD-7102P-23 and TD-7102P-17	Holly Wherman Carolyn Chen Layla Labagh	3/25/2022	3/30/2022	3/30/2022	2		7.3.5	Vegetation Management (VM) and Inspections	Emergency Response Vegetation Management Due to Red Flag Warning or Other Urgent Weather Conditions
139	CalPA	Set WMP-18	CalAdvocates-PGE-2022WMP-18	9	CalAdvocates-PGE-2022WMP-18_9	PG&E's response to data request CalAdvocates-PGE-2022WMP-16, Question 6, states, "The current use case for VM Distribution LIDAR is tied to the VM Routine Program. LIDAR collection in line with the VM Routine schedule requires more agility than is currently possible with aerial LIDAR collections." Please explain why aerial LiDAR inspections are not currently possible with the VM Routine Program schedule while they are possible for transmission-based VM inspections.	Holly Wherman Carolyn Chen Layla Labagh	3/25/2022	3/30/2022	3/30/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Remote Sensing Inspections of Vegetation Around Distribution Electric Lines and Equipment
140	CalPA	Set WMP-18	CalAdvocates-PGE-2022WMP-18	10	CalAdvocates-PGE-2022WMP-18_10	PG&E's response to data request CalAdvocates-PGE-2022WMP-16, Question 6, states, "GBL scanning costs are approximately $400 per mile, including scanning, data processing and electrical asset and vegetation feature extraction." According to Table 12 of your WMP, the projected 2022 OPEX cost for initiative 7.3.5.7, "Remote sensing inspections of vegetation around distribution electric lines and equipment" is approximately $37.1 million. The projected line miles to be treated is 2,000, for an average cost-per-mile of $18,545. The projected 2022 OPEX cost for initiative 7.3.5.8, "Remote sensing inspections of vegetation around transmission electric lines and equipment" is approximately $13 million. The projected line miles to be treated is 17,759, for an average cost-per-mile of $732. a) Please provide a breakdown of the forecasted $18,545 cost per mile for initiative 7.3.5.7. b) Please explain the per-mile cost difference between initiatives 7.3.5.7 and 7.3.5.8.	Holly Wherman Carolyn Chen Layla Labagh	3/25/2022	3/30/2022	3/30/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Remote Sensing Inspections of Vegetation Around Distribution Electric Lines and Equipment
141	CalPA	Set WMP-19	CalAdvocates-PGE-2022WMP-19	1	CalAdvocates-PGE-2022WMP-19_1	Page 537 of PG&E's 2022 WMP states that, for 2022, the "highest wildfire risk miles" includes, among other definitions, "The top 20 percent of circuit segments as defined by PG&E's 2021 WDRM *v2* for System Hardening." In response to data request CalAdvocates-PGE-2021WMP-19, question 3, on March 15, 2021, PG&E provided a list of circuit-segments with associated equipment risk scores. Cal Advocates sorted this list by the attribute "mean_mavf_core_risk_rank" and selected the top 20% (727 circuit-segments out of the total of 3635 circuit-segments). This list is included as "CalAdvocates-PGE-2022WMP-19 Atch01.xlsx." a) Do the 727 circuit-segments included in the attachment CalAdvocates-PGE-2022WMP-19 Atch01.xlsx represent the "The top 20 percent of circuit segments as defined by PG&E's 2021 WDRM *v2* for System Hardening"? b) If the answer to part (a) is no, please explain why not. c) If the answer to part (a) is no, please revise and update the list of circuit-segments in attachment CalAdvocates-PGE-2022WMP-19 Atch01.xlsx as needed, so that the list in the attachment does match "The top 20 percent of circuit segments as defined by PG&E's 2021 WDRM *v2* for System Hardening."	Holly Wherman Carolyn Chen Layla Labagh	3/25/2022	3/31/2022	3/31/2022	0		7.3.1	Risk Assessment and Mapping	Additional Detail
142	CalPA	Set WMP-19	CalAdvocates-PGE-2022WMP-19	2	CalAdvocates-PGE-2022WMP-19_2	Please add the following data to "CalAdvocates-PGE-2022WMP-19 Atch01.xlsx" (with changes to the attachment as required by Question 1c) as new columns. Provide this data as of 2/1/2022, or the most current verified data, whichever is more recent. a) The total number of HFTD circuit-miles (including both overhead and underground miles) on each circuit-segment. b) The number of HFTD circuit-miles within each circuit-segment that have been hardened in such a way as to mitigate wildfire risk (e.g. undergrounding, covered conductor, line removal, etc.). c) The number of HFTD circuit-miles within each circuit-segment that have not yet been hardened in such a way as to mitigate wildfire risk.	Holly Wherman Carolyn Chen Layla Labagh	3/25/2022	3/31/2022	3/31/2022	1		7.3.3	Grid Design and System Hardening	Additional Detail
143	OEIS	Set 007	OEIS-PG&E-22-007	1	OEIS-PG&E-22-007_1	Q01. On P. 870, PG&E Indicates "Based on the 2021 10-year PSPS lookback analysis, PG&E identified potential locations for our transmission and distribution PSPS mitigation programs." a) In addition to PSPS risk is PG&E also evaluating prioritization for our transmission and distribution PSPS mitigation programs based on riskiest circuits in terms of ignition risk?	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	0		8	PSPS	Additional Detail
144	OEIS	Set 007	OEIS-PG&E-22-007	2	OEIS-PG&E-22-007_2	Q02. With regard to maturity survey question F.IV.a Does the utility have explicit thresholds for initiating a PSPS? PG&E's answer has remained the same from 2021 to 2022. a) At what point in time does PG&E expect to have explicit policies for the thresholds above which PSPS is activated, but attain the goal to maintain its grid in sufficiently low risk condition to not require any PSPS activity though may de-energize specific circuits upon detection of damaged condition of electrical lines and equipment or contact with foreign objects?	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	0		N/A	Miscellaneous	Maturity Survey
145	OEIS	Set 007	OEIS-PG&E-22-007	3	OEIS-PG&E-22-007_3	Q03. With regard to maturity survey question F.IV.c Under which circumstances does the utility de-energize circuits? Select all that apply. PG&E answered all options: i. Upon detection of damaged conditions of electric equipment; ii. When circuit presents a safety risk to suppression or other personnel; iii. When equipment has come into contact with foreign objects posing ignition risk; iv. Additional reasons not listed. a) Does PG&E foresee a time when one of options i., ii., or iii. could be excluded from consideration to de-energize? b) What are the highest ranked additional reasons not listed?	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	0		N/A	Miscellaneous	Maturity Survey
146	OEIS	Set 007	OEIS-PG&E-22-007	4	OEIS-PG&E-22-007_4	Q04. With regard to maturity survey question F.V.b How automated is the process for inspecting de-energized sections of the grid prior to re-energizing? In the 2021 Survey, PG&E answered as of January 1, 2023 it would be "Partially automated, <50%" and this year changed that answer to "Manual process, not at all." a) Explain why PG&E expects the process for inspecting de-energized sections of the grid prior to re-energizing to be manual process, not at all, instead of partially automated, <50% b) When does PG&E expect to automate the process for inspecting de-energized sections of the grid prior to re-energizing	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	0		N/A	Miscellaneous	Maturity Survey
147	OEIS	Set 007	OEIS-PG&E-22-007	5	OEIS-PG&E-22-007_5	Q05. Regarding OEIS0PG&E-22-005, provide the additional columns in WMP Discovery2022_DR_OEIS_005-Q01Atch01: a) The original number of Customers Experiencing Sustained Outages (CESO) from the actual outages that occurred (opposed to the predicted if EPSS was enabled) b) The original summed outage duration in minutes c) The predicted outage duration in minutes	Kevin Miller	3/25/2022	3/31/2022	3/31/2022	1		7.3.3	Grid Design and System Hardening	EPSS Reliability Impact analysis
148	OEIS	Set 007	OEIS-PG&E-22-007	6	OEIS-PG&E-22-007_6	Q06. Regarding WMP-Discovery2022_DR_CalAdvocates_12-Q08 and WMP Discovery2022_DR_CalAdvocates_012-Q02Atch01: a) Define the population of transmission detailed ground inspections 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 of transmission detailed ground inspections reviewed through Field Reviews, including but not limited to the number of inspections checked, and the date range that those inspections occurred within. c) Explain the QA/QC processes for Transmission, climbing inspections and Transmission, drone inspections. Information should include the following stats for every year applicable (i.e. 2019, 2020, 2021): i) Population of inspections eligible for QA/QC process ii) Number of inspections undergoing QA/QC process iii) Number of inspections with failed review or infractions	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	0		7.3.4.14	Asset Management and Inspections	Quality assurance / quality control of inspections
148	OEIS	Set 007	OEIS-PG&E-22-007	6 REV	OEIS-PG&E-22-007_6 REV	Q06. Regarding WMP-Discovery2022_DR_CalAdvocates_12-Q08 and WMP Discovery2022_DR_CalAdvocates_012-Q02Atch01: a) Define the population of transmission detailed ground inspections 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 of transmission detailed ground inspections reviewed through Field Reviews, including but not limited to the number of inspections checked, and the date range that those inspections occurred within. c) Explain the QA/QC processes for Transmission, climbing inspections and Transmission, drone inspections. Information should include the following stats for every year applicable (i.e. 2019, 2020, 2021): i) Population of inspections eligible for QA/QC process ii) Number of inspections undergoing QA/QC process iii) Number of inspections with failed review or infractions	Kevin Miller	3/25/2022	4/1/2022	4/1/2022	0		7.3.4.14	Asset Management and Inspections	Quality assurance / quality control of inspections
149	OEIS	Set 007	OEIS-PG&E-22-007	7	OEIS-PG&E-22-007_7	Q07. Provide the same information in the same format as supplied in Table 1, for climbing inspections, IR inspections, and drone inspections for detailed and transmission levels respectively: a) Number of total circuit miles inspected b) Level 1 findings c) Level 2 findings d) Level 3 findings e) Number of circuit miles inspected in HFTD f) Level 1 findings in HFTD g) Level 2 findings in HFTD h) Level 3 findings in HFTD	Kevin Miller	3/25/2022	4/8/2022	4/8/2022	1		7.3.4.14	Asset Management and Inspections	Detailed Inspections of Transmission Electric Lines and Equipment
150	OEIS	Set 007	OEIS-PG&E-22-007	8	OEIS-PG&E-22-007_8	Q08. Regarding Table 5.3-1, provide similar information for system hardening excluding undergrounding	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	0		7.3.3	Grid Design and System Hardening	Additional Detail
151	OEIS	Set 007	OEIS-PG&E-22-007	9	OEIS-PG&E-22-007_9	Q09. Provide a copy of E3's review of PG&E's 2022 WDRM v3 and WFC Model when it is complete.	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	0		4.5	Model and Metric Calculation Methodologies	Wildfire Distribution Risk Model
152	OEIS	Set 007	OEIS-PG&E-22-007	10	OEIS-PG&E-22-007_10	In Southern California Edison's 2022 WMP Update, the utility states that "in high and medium vibration susceptibility areas, vibration can reduce the covered conductor's useful life from 45 years to an average of 20 years if not addressed" and that "[i]nstalling dampers minimizes equipment failure ignition drivers, such as damage or failure of the conductor, connector, and/or splice" (Section 7.3.3.3.3 "Vibration Damper Retrofit [SH-16]," p. 202).[1] a) Is PG&E including vibration dampers as part of its covered conductor installations? If so, provide the percentage of covered conductor installations that include vibration dampers, as well as a description of how PG&E determined where to install vibration dampers. b) Has PG&E done an analysis for determining what areas within its system would be susceptible to vibrations and potentially benefit from vibration dampers? If so, describe how SDG&E made such determinations, which areas are classified as potentially benefiting from vibration dampers, and what criteria or thresholds are used to determine if vibration dampers should be installed. c) If PG&E is not currently including vibration dampers as part of its covered conductor installations, please explain whether PG&E plans to do so in the future and what those plans are, including possible retrofits. d) Provide a description of any lessons learned regarding vibration damper installation for covered conductor, whether they be from SCE, lessons shared by SCE or other utilities during the joint utility covered conductor effectiveness effort, or from broader industry experience, or PG&E's in-house research and experience.	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	0		7.3.3	Grid Design and System Hardening	Vibration Susceptibility

153	OEIS	Set 007	OEIS-PG&E-22-007	11	OEIS-PG&E-22-007_11	This joint response on covered conductor effectiveness states "[s]everal covered-conductor-specific failure modes exist that require operators to consider additional personnel training, augmented installation practices, and adoption of new mitigation strategies (e.g., additional lightning arrestors, conductor washing programs, etc.)" (ps. 7-8): a) What additional training has PG&E implemented for personnel pertaining to these covered conductor failure modes? Please list all trainings, the frequency at which trainings are required to be taken, and which personnel are required to take the trainings. Include the trainings used to train personnel for inspections, maintenance, and installation of covered conductor. b) How has PG&E augmented its installation practices to prevent these covered conductor failure modes? c) What new mitigation strategies has PG&E adopted to prevent these covered conductor failure modes?	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	1		7.3.3	Grid Design and System Hardening	Additional Detail
154	OEIS	Set 007	OEIS-PG&E-22-007	12	OEIS-PG&E-22-007_12	Regarding covered conductor inspections and maintenance. a) Provide the following job aids: i) TD-2305M-JA02 ii) TD-2305M-JA08 iii) TD-2305M-JA12 b) Provie a description and list of all changes made to inspections and maintenance procedures as it directly relates to covered conductor and all associated equipment.	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	3		7.3.3	Grid Design and System Hardening	Covered Conductor Maintenance
155	OEIS	Set 007	OEIS-PG&E-22-007	13	OEIS-PG&E-22-007_13	Regarding WMP-Discovery2022_DR_CalAdvocates_004-Q08Atch01.xlsx and Discovery2022_DR_CalAdvocates_004-Q09Atch01.xlsx: a) Provide an additional column with the coinciding risk scores for each project in WMP-Discovery2022_DR_CalAdvocates_004-Q08Atch01.xlsx, similar to WMP-Discovery2022_DR_CalAdvocates_004-Q09Atch01.xlsx b) Provide an additional column with the risk rankings for WMP-Discovery2022_DR_CalAdvocates_004-Q09Atch01.xlsx, similar to Discovery2022_DR_CalAdvocates_004-Q08Atch01.xlsx c) Do risk scores align and correspond with the top risk percentages presented in Table PG&E-5.3-1(A) from the 2022 WMP Update? If not, explain how the two correlate and/or differ. d) Provide the same information presented in these two Excel files for system hardening projects planned in 2023 and 2024.	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	1		7.3.1	Risk Assessment and Mapping	Additional Detail
156	OEIS	Set 007	OEIS-PG&E-22-007	14	OEIS-PG&E-22-007_14	Provide WMP-Discovery2022_DR_CalAdvocates_003-Q01Atch01CONF.xlsx with the additional columns: a) Wildfire Risk Score – 2021 b) Wildfire Risk Score – 2022	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	0		7.3.1	Risk Assessment and Mapping	Additional Detail
157	OEIS	Set 007	OEIS-PG&E-22-007	15	OEIS-PG&E-22-007_15	In PG&E's response to WMP-Discovery2022_DR_OEIS_002-Q07, PG&E states that they "are also reviewing and evaluating the Risk Associated with Value Exposure (RAVE) module from Technosylva that has components for estimating egress considering location and community factors." a. Provide a list of the community factors evaluated, including associated weights of each factor when implemented into modeling b. What is PG&E's current status of implementing the RAVE module? c. What are PG&E's conclusions on its analysis of the RAVE module? d. What is PG&E's timeline for implementation of the RAVE module? e. How is PG&E accounting for community factors in the meantime? In particular, describe what factors PG&E considers regarding vulnerable communities, and how such are accounted for in its risk analysis and modeling, including weights.	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	0		7.3.1	Risk Assessment and Mapping	Additional Detail
158	OEIS	Set 007	OEIS-PG&E-22-007	16	OEIS-PG&E-22-007_16	In PG&E's 2022 WMP Update, PG&E states the following (p. 531): Because system hardening work is generally identified 12 or more months before construction, the decision tree that was used for selecting between various distribution system hardening methods (e.g., undergrounding, covered conductor, line removal etc.) for 2022 work was not changed to incorporate our updated 2022 goals of expanding EPSS and undergrounding. Regarding PG&E's decision-making process for system hardening: a) Is PG&E currently using the 2021 methodology for decision-making, as presented on May 21, 2021 to the Wildfire Safety Division ("previous methodology")? b) When did/does PG&E intend to use the methodology outlined in the progress report in Figure PG&E-Remedy-21-14-01 ("new methodology")? c) For any circuits PG&E is planning on installing covered conductor based on the previous methodology: i) What percentage and number of circuit miles would have been determined to be undergrounded using the new methodology? ii) For any such miles, what additional initiative(s) in conjuncture with covered conductor is PG&E using to further reduce risk?	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	0		7.3.3	Grid Design and System Hardening	Additional Detail
159	OEIS	Set 007	OEIS-PG&E-22-007	17	OEIS-PG&E-22-007_17	PG&E states that it will "initiate reliability mitigations on 50 EPSS capable circuits in the HFTD areas, HFRA and non HFTD buffer zones based on highest projected Customer Experiencing Sustained Outage (CESO)." a) Explain a list of what "reliability mitigations" includes b) Provide calculations and explanations for how each mitigation is anticipated to improve reliability	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	0		N/A	EPSS	Additional Detail
160	OEIS	Set 007	OEIS-PG&E-22-007	18	OEIS-PG&E-22-007_18	In Section 7.3.5.20, PG&E details its Utility Defensible Space (UDS) program and sets a target of 7,000 distribution poles in the HFTD. a) To what standard does PG&E clear these poles? (i.e., to what radius and height?) i) Explain the rationale behind choosing this standard, including any scientific or wildfire safety rationales behind the extent of clearance. ii) Has PG&E considered the environmental impacts of this clearance radius? If so, what are environmental impacts, both positive and negative? (e.g., erosion, removal of invasive species, habitat fragmentation, water quality, etc.) b) Is PG&E considering alternative mitigation measures (i.e., ones that would negate the need for some or all of the UDS program)? i) If so, what are those mitigation measures? ii) If not, why not? c) Provide the procedural document for the UDS program (or a link to it).	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	1		7.3.5	Vegetation Management (VM) and Inspections	Vegetation Management to Achieve Clearances Around Electric Lines and Equipment
161	OEIS	Set 007	OEIS-PG&E-22-007	19	OEIS-PG&E-22-007_19	PG&E projects reductions in scale, scope and frequency in 2022 and 2023 based on mitigations and improved protocols and lessons learned in 2021. For instance, per PSPS event in PG&E-8.3-1 on page 934, PG&E shows estimated quantitative reduction of scope (Number of Customers) of 26,843 and estimated quantitative reduction of duration per event (Customer Hours) of 843,267. In Table 11, PG&E projects the same number of events for 2022 and 2023 as for 2021 (5). Yet, Table 11 (Rows 1a., 1b., and 1c.) show increases from 2021 to 2022 and no reductions between 2022 and 2023. a) Explain why there are identical total numbers indicated in 2022 or 2023 for Table 11, rows 1.a., 1b., and 1.c. b) Explain what analysis produced identical total numbers for 2022, and 2023.	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	0		8	PSPS	Additional Detail
162	OEIS	Set 007	OEIS-PG&E-22-007	20	OEIS-PG&E-22-007_20	Regarding section 7.3.2.1.3 weather stations: a) How many of PG&E's weather stations have been upgraded to give readings at 10 to 30-second intervals? b) How many (in percentages) of PG&E's weather stations are ground-based versus pole-mounted? c) Are any of PG&E's weather stations outfitted with 10hr fuel moisture sensors? d) What is the total number of weather stations PG&E plans to have deployed in its weather station network? e) Regarding PG&E's 2022 Program targets for weather stations: i. Please provide the number of new weather station installs for 2022. ii. Please provide the number of optimized weather station installs in 2022.	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	0		7.3.2	Situational Awareness and Forecasting	Weather Stations
163	OEIS	Set 007	OEIS-PG&E-22-007	21	OEIS-PG&E-22-007_21	Regarding PG&E's response to Maturity Survey question B.III.c: a) Please describe how PG&E interprets span based.	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	0		N/A	Miscellaneous	Maturity Survey
164	OEIS	Set 007	OEIS-PG&E-22-007	22	OEIS-PG&E-22-007_22	Regarding PG&E's response to Maturity Survey question B.IIc: a) Please describe what PG&E needs to do to improve weather data granularity to the span-based level.	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	0		N/A	Miscellaneous	Maturity Survey
165	OEIS	Set 007	OEIS-PG&E-22-007	23	OEIS-PG&E-22-007_23	Regarding Safety and Infrastructure Protection Teams (SIPT) in section 7.3.2.5: a) In 2022, PG&E is planning on increasing staffing by 22 full-time employees. How many SIPT Crews and Engines will PG&E have after increasing this staffing?	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	0		7.3.2	Situational Awareness and Forecasting	Personnel Monitoring Areas of Electric Lines and Equipment in Elevated Fire Risk Conditions
166	OEIS	Set 007	OEIS-PG&E-22-007	24	OEIS-PG&E-22-007_24	Regarding DTS FAST on Page 874 a) Was the prototype field test installation at the Santa Cruz service center that was completed in 2021 on distribution or transmission? b) Please provide an explanation on what approving the final version of DTS FAST means?	Kevin Miller	3/25/2022	3/30/2022	3/30/2022	0		N/A	Miscellaneous	DTS FAST
167	MGRA	3	MGRA Data Request No. 3	1	MGRA Data Request No. 3_1	Please explain technically how PG&E's WDRM applies a conditional probability or makes any other adjustment to account for the fact the Technosylva consequence model is run on "worst weather days", while the Probability of Ignition model analyzes all ignitions whether they are on worst weather days or not.	Joseph Mitchell on behalf of MGRA	3/28/2022	3/31/2022	3/31/2022	0		7.3.1	Risk Assessment and Mapping	Additional Detail
168	MGRA	4	MGRA Data Request No. 4	1	MGRA Data Request No. 4_1	In the WDRM v3 model, has Cal Fire outcome data derived from VIIRS correlation now replaced the 8 hour Technosylva simulation?	Joseph Mitchell on behalf of MGRA	4/1/2022	4/5/2022	4/5/2022	0		7.3.1	Risk Assessment and Mapping	Additional Detail
169	MGRA	4	MGRA Data Request No. 4	2	MGRA Data Request No. 4_2	What is the remaining role of Technosylva simulation in the v3 model?	Joseph Mitchell on behalf of MGRA	4/1/2022	4/5/2022	4/5/2022	0		7.3.1	Risk Assessment and Mapping	Additional Detail
170	MGRA	4	MGRA Data Request No. 4	3	MGRA Data Request No. 4_3	If the Technosylva outputs are linked to the VIIRS data, how is this linkage performed?	Joseph Mitchell on behalf of MGRA	4/1/2022	4/5/2022	4/5/2022	0		7.3.1	Risk Assessment and Mapping	Additional Detail
171	MGRA	4	MGRA Data Request No. 4	4	MGRA Data Request No. 4_4	Specify how consequences are assigned from the VIIRS fires to the Cal Fire fire outcome data set. Is this assignment based on a specific mapping, on averages, or on a Monte Carlo?	Joseph Mitchell on behalf of MGRA	4/1/2022	4/5/2022	4/5/2022	0		7.3.1	Risk Assessment and Mapping	Additional Detail
172	MGRA	4	MGRA Data Request No. 4	5	MGRA Data Request No. 4_5	PG&E states that: "The seasonal P(ignition) value are the result of marginalizing daily P(ignition|outage) values across days from historic fire seasons (i.e. based on daily weather and fuel conditions) to produce a seasonal value derived from daily estimates	Joseph Mitchell on behalf of MGRA	4/1/2022	4/5/2022	4/5/2022	0		7.3.1	Risk Assessment and Mapping	Additional Detail
173	MGRA	4	MGRA Data Request No. 4	6	MGRA Data Request No. 4_6	Is the seasonal P(ignition) multiplied by a seasonal estimate of consequence scores to obtain a seasonal risk score for each driver? Or is the daily (ignition|outage) multiplied by the daily consequence score, and the risk score averaged over season? If neither of these mechanisms explain risk scoring provide additional detail.	Joseph Mitchell on behalf of MGRA	4/1/2022	4/5/2022	4/5/2022	0		7.3.1	Risk Assessment and Mapping	Additional Detail
174	OEIS	Set 008	OEIS-PG&E-22-008	1	OEIS-PG&E-22-008_1	Q01. In section 7.3.2.2.6, Distribution Arcing Fault Signature Library, PG&E described completing an R&D project at the end of 2021, and the AH&PC team performed a strategic assessment of the results. PG&E then determined that the outcome of the pilot was not sufficient to develop a comprehensive fault signature library applicable to the larger incipient fault analytics tools that will be used to proactively detect and mitigate conditions that might result in a wildfire. And that no future actions are planned at this time. a)Please provide the details from the assessment of the results from the R&D project and what the limitations were that lead to the decision to no longer pursue the initiative.	Kevin Miller	4/1/2022	4/6/2022	4/6/2022	0		7.3.2.2.6	Situational Awareness and Forecasting	Distribution Arcing Fault Signature Library
175	OEIS	Set 008	OEIS-PG&E-22-008	2	OEIS-PG&E-22-008_2	Q02. In WMP-Discovery2022_DR_CalAdvocates_014-Q09 PG&E states that "some in-progress projects are forecasted in service towards the end of 2022" regarding transmission hardening projects. a) Provide the mileage of projects described to be forecasted. b) Explain why PG&E has decreased its transmission system hardening mileage from 104 in 2021 to 32 in 2022. i. Include any description of impacts from PG&E's 2021 reprioritization based on 2021 WMP model as well as resource changes to distribution.	Kevin Miller	4/1/2022	4/6/2022	4/6/2022	0		7.3.3.17.2	Grid Design and System Hardening	System Hardening - Transmission
176	OEIS	Set 008	OEIS-PG&E-22-008	3	OEIS-PG&E-22-008_3	Q03. Regarding PG&E's asset inspections: a)What percentage of inspections are completed by contractors vs. internally by PG&E employees? b)Provide a list of contractors used for asset inspections. c)How does training for contractors performing inspections differ from internal PG&E personnel? d)Provide the find rate for QA/QC of inspections performed by contractors. e)Provide documentation and procedures for PG&E's QA/QC process for asset inspections. f)Provide the number of inspectors that performed detailed asset inspections in 2021. g)Provide the number of detailed asset inspections performed by inspectors in 2021. h)Provide the average circuit mile per inspector per day completed for detailed asset inspections in 2021.	Kevin Miller	4/1/2022	4/6/2022	4/6/2022	1		7.3.4	Asset Management and Inspections	Additional Detail
177	OEIS	Set 008	OEIS-PG&E-22-008	4	OEIS-PG&E-22-008_4	Q04. Provide the geospatial files for the HFRA modifications shown on pg. 77 of PG&E's 2022 WMP Update.	Kevin Miller	4/1/2022	4/6/2022	4/6/2022	1		4.2.1	Lessons Learned and Risk Trends	Service Territory Fire-Threat Evaluation and Ignition Risk Trends

178	OEIS	Set 008	OEIS-PG&E-22-008	5	OEIS-PG&E-22-008_5	Q05. In CalAdvocates_007-Q01, PG&E states that it "completed over 210 miles of distribution system hardening, with approximately 66% of these circuits falling within the highest risk miles defined as the top 20% of the risk buydown curve, fire re-build miles, and PSPS mitigation miles." a)What is the percentage specifically that falls into each of the following respective categories? i.Top 20% of the risk buydown curve ii.PSPS Impacted locations iii.Locations where risk has materialized/historic wildfire locations iv.PSS-identified locations b)Where was the remaining 34% completed? c)What is PG&E's plan to meet the 80% threshold moving forward (i.e., approximate percentages in top risk per year)?	Kevin Miller	4/1/2022	4/6/2022	4/6/2022	0		7.3.3.17.1	Grid Design and System Hardening	System Hardening
179	OEIS	Set 008	OEIS-PG&E-22-008	6	OEIS-PG&E-22-008_6	Q06. In PG&E's 2022 WMP update, in section 7.3.7.4, PG&E discloses that it conducted an audit of work tracking databases which identified ignitions which had not been reported, "increasing PG&E's reportable ignition record by 23 percent." Regarding this audit, Energy Safety would like to know: a)Was any type of internal report on the audit prepared? i.If so, please provide a copy. b)PG&E's WMP update states that the audit led to "several corrective actions" but does not describe them – what were those specific actions? c)What is the temporal scope of ignitions not originally reported that were discovered? d)Does the spatial distribution of discovered ignitions show any pattern (are ignitions that were originally missed concentrated in certain areas, or distributed differently from ignitions that were originally reported? e)Were the discovered ignitions attributable to a particular cause or set of causes? f)Was the distribution of causes different for ignitions that were missed compared to those that were originally reported? g)Were any of PG&E's models that use ignitions as an input re-run with these additional ignitions included? If so, did model results change? i.If so, what were any further effects of those changes? ii.Did this have any impact on initiative selection?	Kevin Miller	4/1/2022	4/6/2022	4/6/2022	2		7.3.7.4	Data Governance	Documentation and disclosure of wildfire-related data and algorithms
180	OEIS	Set 008	OEIS-PG&E-22-008	7	OEIS-PG&E-22-008_7	Q07. In response to Data Request OEIS-PG&E-2022-001, Question 5a, PG&E states that it re-evaluated its 2021 [Maturity Survey] response related to communications tools (Question F.VI.b). PG&E also states, "because of the communications challenges in certain parts of our service territory, the current and future state [maturity] scores were reduced back to (iii)." a)What "communications challenges", specifically, is PG&E having that resulted in its reduced maturity score? b)Which portions of PG&E's service territory do these communications challenges apply? c)What is PG&E doing to remediate these challenges?	Kevin Miller	4/1/2022	4/6/2022	4/6/2022	0		N/A	Miscellaneous	Maturity Survey
181	OEIS	Set 008	OEIS-PG&E-22-008	8	OEIS-PG&E-22-008_8	Q08. On p. 746 of PG&E's 2021 WMP Update, PG&E states that it projected a need to hire approximately 40 Linemen and 100 Apprentices each year for the next five years, based on an internal demand and supply review. On p. 788 of PG&E's 2022 WMP Update, PG&E states that its hired 41 Linemen and 123 Apprentice Linemen, exceeding its target for staffing for support service restoration by 1 Lineman and 23 Apprentice Linemen. a)Given that PG&E exceeded its 2021 target for service restoration staffing, will PG&E be reducing its hiring of Lineman and Apprentice Linemen in 2022? i.Or will PG&E continue its hiring goal of "40 Linemen and 100 Apprentices each year for the next five years?" b)How many Linemen and Apprentice Linemen has PG&E hired in 2022 so far and how many does PG&E plan to hire in 2022?	Kevin Miller	4/1/2022	4/6/2022	4/6/2022	0		7.3.9.1	Emergency Planning and Preparedness	Adequate and Trained Workforce for Service Restoration
182	CalPA	Set WMP-20	CalAdvocates-PGE-2022WMP-20	1	CalAdvocates-PGE-2022WMP-20_1	In response to data request CalAdvocates-PGE-2022WMP-17, question 7, PG&E said, "For 2021, approximately 96% of covered conductor projects included pole replacements." Among the 96% of covered conductor projects in 2021 that did involve pole replacements, what percentage of poles were replaced, on average?	Holly Wherman Carolyn Chen Layla Labagh	4/5/2022	4/8/2022	4/11/2022	0		7.3.3.6	Grid Design and System Hardening	Distribution Pole Replacement and Reinforcement, Including with Composite Poles
183	CalPA	Set WMP-20	CalAdvocates-PGE-2022WMP-20	2	CalAdvocates-PGE-2022WMP-20_2	On average, how many poles per circuit-mile exist on bare-wire distribution circuits in HFTD? b) On average, how many poles per circuit-mile exist on covered conductor distribution circuits in HFTD?	Holly Wherman Carolyn Chen Layla Labagh	4/5/2022	4/8/2022	4/11/2022	0		7.3.3.6	Grid Design and System Hardening	Distribution Pole Replacement and Reinforcement, Including with Composite Poles
184	OEIS	Set 009	OEIS-PG&E-22-009	1	OEIS-PG&E-22-009_1	Q01. Based on analysis of information reported in the WMP, PG&E reports a $530 million increase in vegetation management category initiatives over the amount projected for 2022 in the 2021 WMP Update. a) What accounts for the $530 million increase in vegetation management category initiatives?	Kevin Miller	4/8/2022	4/13/2022	4/13/2022	0		7.3.5	Vegetation Management (VM) and Inspections	Program Cost Projection
185	OEIS	Set 009	OEIS-PG&E-22-009	2	OEIS-PG&E-22-009_2	Q02. Based on analysis of information reported in the WMP, PG&E reports an increase of $198 million in Grid Design and System Hardening category initiatives over the amount projected for 2022 in the 2021 WMP Update. a) What accounts for of $198 million increase in Grid Design and System Hardening category initiatives? b) Did it go up because of increase undergrounding miles	Kevin Miller	4/8/2022	4/13/2022	4/13/2022	1		7.3.3	Grid Design and System Hardening	Program Cost Projection
186	OEIS	Set 009	OEIS-PG&E-22-009	3	OEIS-PG&E-22-009_3	Q03. Table 12 shows zero spending for the undergrounding Grid Hardening Initiative 7.3.3.16 Undergrounding of electric lines and/or equipment (Row 61). a) What accounts for zero spending on undergrounding initiatives in Table 12? b) Provide expenditures for undergrounding initiatives for 2022. c) If this information is elsewhere in the WMP, please provide where it can be found. If it is aggregated with another program, please de-aggregate and provide this expenditure for undergrounding only.	Kevin Miller	4/8/2022	4/13/2022	4/13/2022	0		7.3.3.16	Grid Design and System Hardening	Undergrounding
187	OEIS	Set 009	OEIS-PG&E-22-009	4	OEIS-PG&E-22-009_4	Q04. Table 12 shows zero spending for the undergrounding Grid Hardening 7.3.3.3 Covered conductor installation (Row 38). a) What accounts for zero spending on covered conductor initiatives in Table 12? b) Provide expenditures for undergrounding initiatives for 2022. c) If this information is elsewhere in the WMP, please provide where it can be found. If it is aggregated with another program, please de-aggregate and provide this expenditure for covered conductor only.	Kevin Miller	4/8/2022	4/13/2022	4/13/2022	0		7.3.3.3	Grid Design and System Hardening	Covered Conductor Installation
188	OEIS	Set 009	OEIS-PG&E-22-009	5	OEIS-PG&E-22-009_5	Q05. Based on analysis of information reported in the WMP, spending in the data governance initiative category decreased by $53 million compared to the amount projected from the 2021 WMP Update. a) What accounts for the $53 million decrease in data governance initiative spending?	Kevin Miller	4/8/2022	4/13/2022	4/13/2022	0		7.3.7	Data Governance	Program Cost Projection
189	OEIS	Set 009	OEIS-PG&E-22-009	6	OEIS-PG&E-22-009_6	Q06. Provide the following information regarding PSPS Distribution sectionalizing devices: a) The average number of sectionalizing devices per circuit mile. b) PG&E's goal for number of sectionalizing devices per circuit mile. c) The average number of customers per sectionalizing device. d) The range of numbers of customers per sectionalizing device (i.e., minimum and maximum). e) The median number of customers per sectionalizing device. f) PG&E's goal for maximum number of customers per sectionalizing device	Kevin Miller	4/8/2022	4/13/2022	4/13/2022	0		7.3.3.8.1	Grid Design and System Hardening	Distribution Sectionalizing Devices
190	OEIS	Set 009	OEIS-PG&E-22-009	7	OEIS-PG&E-22-009_7	Q07. In PG&E's 2022 WMP update, in section 7.3.7.4, PG&E reports that it conducted an audit of work tracking databases which identified ignitions which had not been reported. Energy Safety asked several questions pertaining to this audit in data request OEIS 008 Question #6, including the following (item b): "PG&E's WMP update states that the audit led to "several corrective actions" but does not describe them – what were those specific actions?" PG&E's response to this was as follows: To reduce the occurrence of missed ignitions, the following actions have been taken: • PG&E partnered with IT to implement revisions to Field Automation System (FAS) to better self-guide the restoration team to identify ignition events – these enhancements were deployed in June 2021; • PG&E partnered with Dispatch and Scheduling on upcoming communications to the field regarding the usage of FAS to capture ignition events; • PG&E partnered with the Asset Failure Analysis team on the field data collection improvement pilot; • PG&E worked with the academy to implement an annual training requirement related to the use of the CPUC fire tab per our standards (RISK-6306S); • PG&E incorporated the review of all potential ignition related FAS tags into the scope of the Ignitions Investigations Team; • PG&E revised the RISK 6306-01 standard to include lessons learned from this audit as well as processes related to the ongoing review of FAS for potential missed ignitions. Energy safety requests the following items: a) Provide any available documentation on the "field data collection improvement pilot" or, if there is no existing documentation, describe the pilot (purpose, scope, methods, data collection) b) Provide a redline copy of the RISK 6306-01 standard showing the relevant revisions.	Kevin Miller	4/8/2022	4/13/2022	4/13/2022	2		7.3.7.4	Data Governance	Documentation and disclosure of wildfire-related data and algorithms
191	Will Abrams	Set 01	WillAbrams-Set 01	1	WillAbrams-Set 01_1	Please, provide the name and title of the responding individuals (i.e., the person responsible for the content of your answer) for each piece of information requested. If the responding individual is not your employee, please provide their name, title, and employer, as well as the name and title of your employee who is directly responsible for the work of the responding individual. As part of the wildfire mitigation plan proceeding and in preparation for my reply comments, I am requesting information about all the work performed on the "Geysers #9 Lakeville" since the Kincade Fire in 2019. I am concerned that the causes of that wildfire were not sufficiently addressed and mitigated within the proposed 2022 Wildfire Mitigation Plan. This information should include but is not limited to the following work noted within attachment #1 ("2022-02-25_PGE_2022_WMP-Update_RO_Section 4.6_Remedy 5.4.B_Atch01"): 1.Notification Date 2/15/2021 - All work pertaining to lines 217, 218, 219, 220 with "notification items_object" listed as "emergency" and "notification items_damage" listed as "fire" with "notification items_action" listed as "replace." 2.Notification date 2/16/2021 - All work pertaining to lines 221, 222 with "notification items_object" listed as "emergency" and "notification items_damage" listed as "fire" with "notification items_action" listed as "replace." 3.Notification date 4/23/2020 - All work pertaining to lines 227 with "notification items_object" listed as "Damper-Steel" and "notification items_damage" listed as "missing" with "notification items_action" listed as "install." 4.Notification date 9/16/2021 - All work pertaining to lines 672, 1532, 1533, 2618, 2619, 3519, 3520, 4450, 4451 with "notification items_object" listed as "Emergency" and "notification items_damage" listed as "Fire" with "notification items_action" listed as "replace." 5.Notification date 9/17/2021 - All work pertaining to lines 902, 2826, 3046, 3521 with "notification items_object" listed as "Emergency" and "notification items_damage" listed as "Fire" with "notification items_action" listed as "replace." 6.Notification date 5/19/2020 - All work pertaining to lines 908 with "notification items_object" listed as "Insulator-Steel" and "notification items_damage" listed as "No Good/Out of Stdrd" with "notification items_action" listed as "Repair, Completed." 7.Notification date 6/30/2021 - All work pertaining to lines 1104, 1105 with "notification items_object" listed as "Insulator-Steel" and "notification items_damage" listed as "No Good/Out of Stdrd" with "notification items_action" listed as "repair."	Will Abrams	4/11/2022	4/14/2022	4/14/2022	1		4.6	Miscellaneous	5.4B Corrective Actions
192	Will Abrams	Set 02	WillAbrams-Set 02	1	WillAbrams-Set 02_1	Q: (a) How has PG&E mitigated this to ensure that isolators are secured throughout their infrastructure and not swinging and causing sparks and catastrophic wildfires? (b) Has PG&E made efforts to mitigate the swinging of vertical insulator strings now that this has been identified as a cause of catastrophic wildfire? (c) What has PG&E changed in terms of their inspections and other mitigation activities to ensure this type of wildfire ignition never happens again?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.3.5	Grid Design and System Hardening	Crossarm Maintenance, Repair, and Replacement
193	Will Abrams	Set 02	WillAbrams-Set 02	2	WillAbrams-Set 02_2	Q: How has PG&E mitigated these microclimate/wind effects by placing wind sensors at different elevations to pick up on these variations that contributed to Kincade Fire ignitions? Are wind sensors now placed closer to these towers to pick up these types of variations?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.2.1.3	Situational Awareness and Forecasting	Weather Stations
194	Will Abrams	Set 02	WillAbrams-Set 02	3	WillAbrams-Set 02_3	Q: Has PG&E identified how they have mitigated these issues associated with line terminations? How does PG&E now ensure line terminations are secured and not causing similar fires?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	1		7.3.3.12.3	Grid Design and System Hardening	Maintenance, Transmission
195	Will Abrams	Set 02	WillAbrams-Set 02	4	WillAbrams-Set 02_4	Q: What mitigation has PG&E done to ensure old "spaghetti" wires like those indicated are not left dangling and causing fire risk across their infrastructure?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.4.3	Asset Management and Inspections	Improvement of Inspections
196	Will Abrams	Set 02	WillAbrams-Set 02	5	WillAbrams-Set 02_5	Q: What operational practices and QA has PG&E incorporated into their risk mitigation to ensure old wires are not left abandoned on the ground around infrastructure?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.4.3	Asset Management and Inspections	Improvement of Inspections

197	Will Abrams	Set 02	WillAbrams-Set 02	6	WillAbrams-Set 02_6	Q: How has PG&E modified their vegetation management practices to accommodate slope as a factor that could lead to fire spread from their infrastructure? If a pole, tower or line segment is situated on a similar “upslope” how is PG&E mitigating the increased fire risk?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.5.5	Vegetation Management (VM) and Inspections	Fuel Management and Management of All Wood and “Slash” From Vegetation Management Activities
198	Will Abrams	Set 02	WillAbrams-Set 02	7	WillAbrams-Set 02_7	Q: Given these findings and the increased fire risk on “south-facing slopes”, has PG&E modified their vegetation management practices to ensure this type of topography is treated differently or more regularly given the lower moisture content?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.2.1.2	Situational Awareness and Forecasting	Fuel Moisture Sampling and Modeling *[could also go to VM?]*
199	Will Abrams	Set 02	WillAbrams-Set 02	8	WillAbrams-Set 02_8	Q: It is clear that the rust and neglect of the line caused a “shower of sparks.” What has PG&E done to mitigate rust and corrosion on infrastructure that causes this shower effect with multiple ignition sources?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.4.3	Asset Management and Inspections	Improvement of Inspections
200	Will Abrams	Set 02	WillAbrams-Set 02	9	WillAbrams-Set 02_9	Q: Given this evidence that ember cast from transmission towers are “going to drift”, what has PG&E done to alter their vegetation management practices around transmission towers? Where is this within their WMP?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.5.5	Vegetation Management (VM) and Inspections	Fuel Management and Management of All Wood and “Slash” From Vegetation Management Activities
201	Will Abrams	Set 02	WillAbrams-Set 02	10	WillAbrams-Set 02_10	Q: What additional risk mitigation practices has PG&E implemented to ensure that jumpers are secured and not left “dangling” and susceptible to wind? Are rigid jumpers now more often used? What added inspection criteria have been added so this never leads to another catastrophic fire again?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.3.5	Grid Design and System Hardening	Crossarm Maintenance, Repair, and Replacement
202	Will Abrams	Set 02	WillAbrams-Set 02	11	WillAbrams-Set 02_11	Q: How has PG&E mitigated these wildfire risks to ensure cooling towers are properly decommissioned or moth balled in response to these failures?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.3.12.3	Grid Design and System Hardening	Other corrective action, Maintenance, Transmission
203	Will Abrams	Set 02	WillAbrams-Set 02	12	WillAbrams-Set 02_12	Q: Given this “primary concern,” what added risk mitigation practices has PG&E implemented to address power plant vegetation management and metal recycling procedures?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.5.5	Vegetation Management (VM) and Inspections	Fuel Management and Management of All Wood and “Slash” From Vegetation Management Activities
204	Will Abrams	Set 02	WillAbrams-Set 02	13	WillAbrams-Set 02_13	Q: What risk mitigation has PG&E done to ensure decommissioned or moth balled lines are not energized and connected to power plants? How have inspection practices changed to ensure these failures are not repeated?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.3.12.3	Grid Design and System Hardening	Other corrective action, Maintenance, Transmission
205	Will Abrams	Set 02	WillAbrams-Set 02	14	WillAbrams-Set 02_14	Q: Given that this “low cycle fatigue” was identified as a primary cause of the Kincade Fire, has PG&E reflected and corrected that issue within their WMP? Is added testing performed and/or different quality assurance checks to mitigate these risks?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		N/A	N/A	N/A
206	Will Abrams	Set 02	WillAbrams-Set 02	15	WillAbrams-Set 02_15	Q: Given these failures to deal with abandoned infrastructure, how has PG&E identified the added mitigation activities since the Kincade Fire? How does PG&E now treat “abandoned” infrastructure differently within their WMP?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.3.17.2	Grid Design and System Hardening	System Hardening - Transmission
207	Will Abrams	Set 02	WillAbrams-Set 02	16	WillAbrams-Set 02_16	Q: What has PG&E done to ensure security fencing around their infrastructure is inspected and maintained given these findings? How does PG&E mitigate the security dangers of poorly maintained fencing?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.4.3	Asset Management and Inspections	Improvement of Inspections
208	Will Abrams	Set 02	WillAbrams-Set 02	17	WillAbrams-Set 02_17	Q: What has PG&E done to mitigate the risks of misconfigured jumpers? Does PG&E now cut these within the manufacturing facility to ensure proper length and configuration?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.3.5	Grid Design and System Hardening	Crossarm Maintenance, Repair, and Replacement
209	Will Abrams	Set 02	WillAbrams-Set 02	18	WillAbrams-Set 02_18	Q: What has PG&E done to mitigate these risks and ensure that wires are secured and inspected within the shoe and do not come loose to cause future catastrophic wildfires?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.4.12	Asset Management and Inspections	Patrol inspections of transmission electric lines and equipment
210	Will Abrams	Set 02	WillAbrams-Set 02	19	WillAbrams-Set 02_19	Q: Given that the Saw Mill Fire pointed to the same or very similar infrastructure failures and mismanagement patterns as the Kincade Fire has PG&E finally included mitigation activities for these issues within their WMP?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.3.17.2	Grid Design and System Hardening	System Hardening - Transmission
211	Will Abrams	Set 02	WillAbrams-Set 02	20	WillAbrams-Set 02_20	Q: Given that wind readings were different on the surface vs. up on poles and towers and these differences contributed to the miscalculations and causes of both the Sawmill and Kincade Fires, has PG&E accounted for different wind sensor placement of wind (ground-level vs. high up on tower) within their WMP?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.2.1.3	Situational Awareness and Forecasting	Weather Stations
212	Will Abrams	Set 02	WillAbrams-Set 02	21	WillAbrams-Set 02_21	Q: Given all these similar causes (loose wires, low-cycle fatigue, wind conditions, etc.) between the Sawmill Fire and the Kincade Fire why did PG&E still not mitigate these causes and include those mitigation tactics within their WMP? Given this failure pattern, why did PG&E state over and over again that the Kincade Fire was a “black swan?” Why did Bill Johnson, CEO dismissively state that “sometimes things just break” in reference to the Kincade Fire given this pattern and the clear failure of PG&E policies and practices?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.3.17.2	Grid Design and System Hardening	System Hardening - Transmission
213	Will Abrams	Set 02	WillAbrams-Set 02	22	WillAbrams-Set 02_22	Q: When outside oversight agencies provide direction like “make sure those wires are secured” how does PG&E now make sure those instructions are documented and addressed? Where are these issues addressed in the PG&E WMP given that staff repeatedly did not heed these instructions?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.4.12	Asset Management and Inspections	Patrol inspections of transmission electric lines and equipment
214	Will Abrams	Set 02	WillAbrams-Set 02	23	WillAbrams-Set 02_23	Q: How has PG&E modified their inspection practices and noted those changes within their WMP given that these inspections did not successfully catch the many failures in configuration and maintenance practices that caused the Kincade Fire?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.4.10	Asset Management and Inspections	Other discretionary inspection of transmission electric lines and equipment, beyond inspections mandated by rules and regulations
215	Will Abrams	Set 02	WillAbrams-Set 02	24	WillAbrams-Set 02_24	Q: How has PG&E improved their policies and wildfire mitigation practices to more closely work with partners like CalPine to ensure access and maintenance issues do not impact safe operations of PG&E equipment?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.3.12.3	Grid Design and System Hardening	Other corrective action, Maintenance, Transmission
216	Will Abrams	Set 02	WillAbrams-Set 02	25	WillAbrams-Set 02_25	Q: Given the ambiguity of “N/A” meaning ‘not present” has PG&E revised their inspection forms to have less ambiguous and more accurate infrastructure evaluation and risk scoring? Are any changes reflected within their WMP?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.4.3	Asset Management and Inspections	Improvement of Inspections
217	Will Abrams	Set 02	WillAbrams-Set 02	26	WillAbrams-Set 02_26	Q: How has PG&E mitigated these risks to ensure “spewing steam” from cooling towers doesn’t cause arcing as was identified as a “constant source of entertainment”? Where in the PG&E WMP does it reference changed mitigation practices due to this new information?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.3.12.3	Grid Design and System Hardening	Other corrective action, Maintenance, Transmission
218	Will Abrams	Set 02	WillAbrams-Set 02	27	WillAbrams-Set 02_27	Q: Is this practice of “covering the insulators with silicone grease” the approved mitigation tactic of PG&E? If so, how is that reflected in their WMP and if not how has this poor maintenance practice been corrected?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.3.12.3	Grid Design and System Hardening	Other corrective action, Maintenance, Transmission
219	Will Abrams	Set 02	WillAbrams-Set 02	28	WillAbrams-Set 02_28	Q: Is this practice of waiting till there is a “solid line of arcing” a prudent wildfire mitigation practice during the nighttime when moisture content causes frequent arcing? If so, where is this referenced in the PG&E WMP? If not, how has PG&E corrected this flawed practice?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	1		7.3.3.12.3	Grid Design and System Hardening	Other corrective action, Maintenance, Transmission
220	Will Abrams	Set 02	WillAbrams-Set 02	29	WillAbrams-Set 02_29	Q: Is PG&E comfortable with this haphazard alerting practice or does a more standardized arcing alert need to be ingrained within their WMP andassociated operations?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.3.12.3	Grid Design and System Hardening	Other corrective action, Maintenance, Transmission
221	Will Abrams	Set 02	WillAbrams-Set 02	30	WillAbrams-Set 02_30	Q: Is PG&E still injecting iron into cooling systems? If so, how is PG&E mitigating these “higher level” contamination risks and wildfire risks? How is this reflected within their WMP given that is a cause or a contributor of catastrophic wildfires?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.3.12.3	Grid Design and System Hardening	Other corrective action, Maintenance, Transmission
222	Will Abrams	Set 02	WillAbrams-Set 02	31	WillAbrams-Set 02_31	Q: Given that extreme corrosiveness is associated with towers close to power plants, how has PG&E mitigated risks specific to these towers? What WMP standards have been created to mitigate these risks?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.3.12.3 (and possible 1.1 Verification; Group B section 1)	Grid Design and System Hardening	Other corrective action, Maintenance, Transmission
223	Will Abrams	Set 02	WillAbrams-Set 02	32	WillAbrams-Set 02_32	Q: Are these “Scotch-Brite and “heliwash” practices still employed for cleaning insulators? Has this been standardized or do crew supervisors still have discretion of when to wash orreplace? What WMP practices have standardized these practices given the known wildfire risks?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	2		7.3.3.12.3	Grid Design and System Hardening	Other corrective action, Maintenance, Transmission
224	Will Abrams	Set 02	WillAbrams-Set 02	33	WillAbrams-Set 02_33	Q: Has PG&E standardized around polymer insulators as part of their wildfire mitigation activities? What percentage of PG&E insulators are still the old ceramic type? Why is this not mentioned within the WMP when it was a leading cause or contributing factor of catastrophic wildfires?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.3.12.3	Grid Design and System Hardening	Other corrective action, Maintenance, Transmission
225	Will Abrams	Set 02	WillAbrams-Set 02	34	WillAbrams-Set 02_34	Q: Has PG&E standardized to 2 year lifecycle for changing insulators? Has PG&E set standards in their WMP for insulator inspections to determine replacement given the risk of wildfire ignitions?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.4.3	Asset Management and Inspections	Improvement of Inspections
226	Will Abrams	Set 02	WillAbrams-Set 02	35	WillAbrams-Set 02_35	Q: Do line crew supervisors still have the authority to “mothball” infrastructure with direction from outside sources? How has PG&E implemented corrective actions given the wildfire risks associated with how infrastructure is decommissioned or mothballed?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.3.12.3	Grid Design and System Hardening	Other corrective action, Maintenance, Transmission
227	Will Abrams	Set 02	WillAbrams-Set 02	36	WillAbrams-Set 02_36	Q: Why isn’t decommissioning infrastructure requiring an engineering consult? Given the evident wildfire risk has PG&E required engineering consults and direction on a going forward basis as part of their WMP?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.3.12.3	Grid Design and System Hardening	Maintenance, Transmission
228	Will Abrams	Set 02	WillAbrams-Set 02	37	WillAbrams-Set 02_37	Q: Given that this motion of the insulator string caused or contributed to the Kincade Fire has PG&E now measured these movements and identified wildfire mitigation practices and quality controls to remedy?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.3.12.3	Grid Design and System Hardening	Maintenance, Transmission
229	Will Abrams	Set 02	WillAbrams-Set 02	38	WillAbrams-Set 02_38	Q: Is engineering design now required for these types of mothballing practices? Why is this not reflected within the WMP given the wildfire risk?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.3.12.3	Grid Design and System Hardening	Maintenance, Transmission
230	Will Abrams	Set 02	WillAbrams-Set 02	39	WillAbrams-Set 02_39	Q: Given the subsequent catastrophic fire, does PG&E now require an “engineering reference” for this type of line configuration work? Why are these standards not set in the WMP?	Will Abrams	4/13/2022	4/25/2022	4/25/2022	0		7.3.3.12.3	Grid Design and System Hardening	Maintenance, Transmission
231	OEIS	Set 10	OEIS-PG&E-22-010	1	OEIS-PG&E-22-010_1	In the Section 8.2.3.7 PG&E describes its use of the risk vs. benefit tool in four events in 2021 to support the evaluation of the potential public safety risk due to a PSPS event against the forecasted potential wildfire risk. a. To date, did PG&E use the risk-benefit tool for determining to initiate any events that did not result in a PSPS event?	Kevin Miller	4/15/2022	4/20/2022	4/20/2022	0		8.2.3.7	PSPS	PSPS Risk-Benefit Tool
232	OEIS	Set 10	OEIS-PG&E-22-010	2	OEIS-PG&E-22-010_2	Regarding PG&E’s attachment CONFIDENTIAL_PGE_2022-WMP_Section_46_Remedy_2114_Atch01_CONF to the 2022 WMP Update: a. Concerning the project type “Community Wildfire Safety Program for projects aimed for 2022-2023”: i. Describe this project type, including where more information about this project type is described within the 2022 WMP (or previous WMPs, if applicable). ii. How were the projects that fall under this project type selected and prioritized? iii. How does this project type overlap and/or align with risk model output? iv. Provide a percentage of projects under CWSP that align with the top 20% risk score output from the 2021 Wildfire Distribution Risk Model b. How does this project type differ from the following: Top 20% MAVF CPZ, Top 250 miles, and Top 50 Miles? Currently, this data is showing around 0.82 miles planned for undergrounding in 2024. i. Is this still accurate? ii. If not, provide the updated mileage. iii. If so, when does PG&E intend to select locations for additional undergrounding miles? iv. If locations are not currently selected, how is PG&E planning on expediting undergrounding for completion in 2024? v. Are the locations for grid hardening, as a whole, selected for 2024 (i.e., know the hardening location, but don’t know the hardening initiative that will be used, UG vs. OH)? vi. If so, is it possible to provide an amended response including these projects?	Kevin Miller	4/15/2022	4/20/2022	4/20/2022	0		4.6	Grid Design and System Hardening	System Hardening

233	OEIS	Set 10	OEIS-PG&E-22-010	3	OEIS-PG&E-22-010_3	On page 870, PG&E indicates potential reductions in PSPS event size in 2022 are expected to come from planned mitigations and "PG&E is currently still in the process of finalizing locations for certain 2022 mitigations but anticipates the following mitigations to come online in 2022. These include: - Distribution Sectionalizing Devices - Transmission Sectionalizing Devices - Temporary Distribution Microgrids - Distribution System Hardening - Fixed Power Solutions (FPS) In a footnote on the same page, PG&E indicates "Some mitigation programs require more than a year of lead time to execute. As a result, some of the mitigations expected to be available in 2022 were identified using earlier data, including the 2020 lookback." This would seem to indicate at least some selections would have had to have been made previously. a. When does PG&E plan to have these remaining locations finalized? b. Please provide currently available locations for those which have been finalized as a GIS file (.gdb)? c. How will it determine locations are in the highest risk areas for PSPS? d. For each of the above-listed mitigations, please provide a percentage of projects that align with top risk, defined as: i. The top 20% risk score output from the 2021 Wildfire Distribution Risk Model ii. PSPS Impacted Locations iii. Locations where risk has materialized iv. PSS Identified Locations.	Kevin Miller	4/15/2022	4/20/2022	4/20/2022	1		8.1.4	PSPS	Future Plans
234	OEIS	Set 11	OEIS-PG&E-22-011	1	OEIS-PG&E-22-011_1	In response to OEIS-PG&E-22-007 Question 16, PG&E states that it "utilized the decision tree presented in 2021 for the 2022 scope of work." a.Is this in reference to the decision-tree provided in response to PG&E-Remedy-21-14 as part of the 2021 WMP Progress Report? b.How and where does PG&E's risk modeling output inform decision-making in relation to the decision-tree discussed in part (a)? c.When was this decision-making process first implemented? d.How does this align and/or differ with the system hardening decision-making methodology presented on May 21, 2021, to the Wildfire Safety Division (titled PG&E's System Hardening Program)? e.What changes to PG&E's decision-making have been made since the May 21, 2021, presentation to the Wildfire Safety Division?	Kevin Miller	4/22/2022	4/27/2022	4/27/2022	1		7.3.3	Grid Design and System Hardening	Additional Detail
235	OEIS	Set 11	OEIS-PG&E-22-011	2	OEIS-PG&E-22-011_2	In Table 5.3-1(A) of PG&E's 2022 WMP Update PG&E shows a decrease in targets for implementing sectionalization devices both at the distribution and transmission levels. For distribution, PG&E's targets decreased from 250 in 2021 to 100 in 2022. For transmission, PG&E's targets decreased from 29 in 2021 to 15 in 2022. a.Explain why PG&E has decreased its targets from 2021 to 2022 for sectionalization devices for both distribution and transmission. b.Provide any risk/benefit analysis completed for implementing more sectionalization devices for determination of targets. c.Explain how PG&E intends to decrease the number of customers impacted by de-energization (both for EPSS and PSPS) through future sectionalization, including how such analysis is used for determination of targets.	Kevin Miller	4/22/2022	4/27/2022	4/27/2022	0		7.3.3.8.1 7.3.3.8.2	Grid Design and System Hardening	Distribution & Transmission Line Sectionalizing
236	OEIS	Set 11	OEIS-PG&E-22-011	3	OEIS-PG&E-22-011_3	Regarding section 7.3.2.1.3 weather stations: a.Please explain how PG&E has determined 1300 weather stations as its long-term goal for weather stations density. i.Include any weather station to circuit mapping findings PG&E has used to identify any spatial gaps in network.	Kevin Miller	4/22/2022	4/29/2022	4/29/2022	1		7.3.2.1.3	Situational Awareness and Forecasting	Weather monitoring
237	OEIS	Set 12	OEIS-PG&E-22-012	1	OEIS-PG&E-22-012_1	Regarding information in PG&E's Third Errata to its 2022 WMP Update, provided April 25, 2022: a. PG&E has modified its pole clearing program target to inspect and clear (where clearance is needed) all poles identified in PG&E's VM Database, as of October 1, 2021, in HTFD areas or HFRA, not required by PRC 4292. How many poles meet these criteria? b. How many assets have been discovered since October 1, 2021? c. Does PG&E have an estimate for the number of assets it will discover from now to August 31, 2022? i. If so, provide the estimate and an explanation of how that estimate was calculated. d. Why is PG&E extending its target date from April 30, 2022, to October 1, 2022? e. How does a "target due date" differ from the 45-day timeline? f. How many assets discovered since October 1, 2021, have exceeded the 45-day timeline for inspection and clearance? g. How often (percentagewise) has PG&E missed the 45-day deadline due to "External Factors?" h. What is PG&E's plan for discovering assets for inspection and clearance? i. How far along is PG&E in completing this plan?	Kevin Miller	4/29/2022	5/4/2022	5/4/2022	0		7.3.5.2	Detailed Inspections and Management Practices for Vegetation Clearances	Pole Clearing
238	OEIS	Set 12	OEIS-PG&E-22-012	2	OEIS-PG&E-22-012_2	Regarding PG&E's implementation of EPSS? a. How many customer complaints has PG&E received regarding EPSS since implementation in June 2021? Provide a breakdown of number by month. b. What lessons learned has PG&E implemented as a result of EPSS-related customer complaints?	Kevin Miller	4/29/2022	5/4/2022	5/4/2022	0		7.3.6.8	Grid Operations and Protocols	EPSS
239	OEIS	Set 12	OEIS-PG&E-22-012	3	OEIS-PG&E-22-012_3	Regarding Table 7.2 from PG&E's 2022 WMP Update: a. Why does PG&E project an overall increase in ignitions from 2022 to 2023? b. Why does PG&E project a slight increase in overall ignitions for Tier 2 from 2022 to 2023? c. Why does PG&E project a sustained (no change) number of ignitions for Tier 3 from 2022 to 2023? d. Why does PG&E project a system-wide increase in ignitions from 2022 to 2023 for the following? i. Vegetation contact ii. Capacitor bank damage or failure iii. Conductor damage or failure iv. Fuse damage or failure v. Lightning arrestor damage or failure vi. Switch damage or failure vii. Crossarm damage or failure viii. Recloser damage or failure ix. Connection device damage or failure x. Transformer damage or failure xi. Other equipment damage or failure xii. Wire-to-wire contact e. Why does PG&E project an increase in the number of ignitions at the transmission level within Tier 3 for other equipment damage or failure? f. Why does PG&E project a sustained (no change) number of ignitions at the distribution level within the HFTD from 2022 to 2023 for the following? i. Vegetation contact ii. Conductor damage or failure iii. Pole damage or failure iv. Crossarm damage or failure v. Connection device damage or failure vi. Transformer damage or failure vii. Unknown	Kevin Miller	4/29/2022	5/4/2022	5/4/2022	0		6.7	Performance Metrics and Underlying Data	Recent and Projected Drivers of Ignition Probability
240	OEIS	Set 12	OEIS-PG&E-22-012	4	OEIS-PG&E-22-012_4	On page 697, under "Short-term improvements (2023-2028)", PG&E lists the vegetation management programs which will use the One VM Tool. Energy Safety acknowledges it defined "Future improvements to initiative" as "the next 5 years," i.e., 2022-2028 (2022 Guidelines, Attachment 2, page 74). Energy Safety needs to understand whether "Short-term improvements (2023-2028)" is a standard heading (as it is repeated throughout the WMP) or whether "2023-2028" in this case represents a timeline for deployment of the One VM Tool. a. Confirm that the schedule for deploying the VM One Tool to the listed programs is 2023-2028. i. If yes, does PG&E have a more detailed schedule for deployment? If so, share this schedule. ii. If no, clarify the schedule of the VM One Tool's deployment to the listed programs.	Kevin Miller	4/29/2022	5/4/2022	5/4/2022	0		7.3.5.19	Vegetation Management (VM) and Inspections	Vegetation Management Enterprise System
241	OEIS	Set 12	OEIS-PG&E-22-012	5	OEIS-PG&E-22-012_5	On page 915 under "Preparation for Re-Energization" PG&E lists the restoration team's activities leading up to re-energization, including "Determine if any Customer Owned Lines identified as being at risk are within the event footprint (both transmission and distribution) as detailed in Section 7.3.6.4. These are then isolated either during segmenting activities or during patrols, but in either case, prior to re-energization. a. Please explain what criteria is used to determine whether Customer Owned Lines are at risk. b. How does this new initiative further reduce wildfire ignition risk during the PSPS restoration process?	Kevin Miller	4/29/2022	5/4/2022	5/4/2022	0		8.2.4	Protocols on PSPS	Re-Energization Strategy
242	OEIS	Set 13	OEIS-PG&E-22-013	1	OEIS-PG&E-22-013_1	PG&E's Fourth Errata re: EPSS a.Provide all information in your possession, custody, or control, or the possession, custody, and/or control of your affiliates or agents, that is responsive to these data requests by the due date identified above. b.Responses and documents may be produced and served electronically, but they must be fully machine-readable and searchable. c.If you have any questions about the meaning or scope of the data requests herein, direct such questions to the Energy Safety staff identified as the "Originator" of this request at your earliest opportunity. i.Lack of clarity on meaning or scope of requests without prior request for clarification from the "Originator" will not be a permissible reason for incomplete responses and will be regarded as non-compliance with the request. d.Identify the personnel (e.g., employees, consultants, agents, etc.) who provided information responsive to each of the data requests below. As used in this context herein, "identify" means to provide the full name, business address, and title of each employee, consultant, or agent who provided such information. e.If you do not know the exact answer to any of the requests below, please so indicate and provide your best estimate. f.Provide data in its original format (e.g., PDF, Excel, GIS shapefile, etc.), unless otherwise specified in the request.	Kevin Miller	5/6/2022	5/11/2022	5/11/2022	0		7.3.6.8	Grid Operations and Protocols	Protective Equipment and Device Settings
243	OEIS	Set 14	OEIS-PG&E-22-014	1	OEIS-PG&E-22-014_1	The Wildfire Distribution Risk Model (WDRM) is undergoing third-party review to check for validation. PG&E previously conveyed that the WDRM V3 Validation Report would be published April 29, 2022. Energy Safety requests a copy of this report as soon as it is available. a. In the interim, please provide the planned publication date.	Kevin Miller	5/13/2022	5/18/2022	5/18/2022	0		4.5	Model and Metric Calculation Methodologies	Wildfire Distribution Risk Model
244	OEIS	Set 14	OEIS-PG&E-22-014	2	OEIS-PG&E-22-014_2	Energy Safety would like to know whether there were changes the personnel costs related to WMP between 2021 and 2022. a. If so, please provide this cost differential information. i. Overall ii. By Mitigation Initiative Category of spend: (1) Risk Assessment and Mapping (2) Situational Awareness and Forecasting (3) Grid Design and System Hardening (4) Asset Management and Inspections (5) Vegetation Management and Inspections (6) Grid Operations and Protocols (7) Data Governance (8) Resource Allocation Methodology (9) Emergency Planning and Preparedness (10) Stakeholder Cooperation and Community Engagement b. Which mitigation initiatives have experienced increases in personnel?	Kevin Miller	5/13/2022	5/18/2022	5/18/2022	0		3.1	Actuals and Planned Spending for Migitation Plan	Summary of WMP initiative expenditures
245	OEIS	Set 14	OEIS-PG&E-22-014	3	OEIS-PG&E-22-014_3	Regarding further breakdown of personnel changes: a. Does PG&E have a plan and resources to hire 100 employees for North Counties and another 100 for Sonoma County for WMP implementation? b. To which departments or programs would these positions be allocated? c. Would these positions be full time employees or contractors? d. What is the ratio of employees to contractors for North Counties and Sonoma County?	Kevin Miller	5/13/2022	5/18/2022	5/18/2022	0		N/A	N/A	N/A
246	OEIS	Set 14	OEIS-PG&E-22-014	4	OEIS-PG&E-22-014_4	Regarding PG&E's Public Safety Specialist (PSS) Program a. Provide how many total Public Safety Specialists positions have been filled for the following years and the counties they were assigned to. i. 2020 ii. 2021 iii. 2022	Kevin Miller	5/13/2022	5/18/2022	5/18/2022	4		7.3.9	Emergency Planning and Preparedness	Additional Detail

247	OEIS	Set 14	OEIS-PG&E-22-014	5	OEIS-PG&E-22-014_5	In its discussion of its EPSS Initiative 7.3.6.8 Protective Equipment and Device Settings (pp. 730-739) SCADA is not mentioned. a. Please discuss how SCADA is being implemented with EPSS enablement. b. How many EPSS devices are currently SCADA-enabled? c. What are PG&E's quarterly goals between now through 2024 for SCADA-enabling additional EPSS devices? d. Has a protocol been developed to centrally coordinate device/circuit assessment/restoration prioritization based upon SCADA communication? i. If so, provide a description of the protocol. ii. If not, provide a description of PG&E's plans to evaluate and implement protocols in the future.	Kevin Miller	5/13/2022	5/18/2022	5/18/2022	1		7.3.6.8	Grid Operations and Protocols	Protective equipment and device settings
248	OEIS	Set 14	OEIS-PG&E-22-014	6	OEIS-PG&E-22-014_6	Regarding PG&E's work orders: a. How many work orders within the HFTD in the past three years have decreased in priority levels? What percentage of total work orders within the HFTD in the past three years does this account for? b. How many work orders within the HFTD in the past three years have increased in priority levels? What percentage of total work orders within the HFTD in the past three years does this account for? c. Provide a spreadsheet of all work orders discussed in parts a and b above, including columns for the following: i. Work order number ii. Work order equipment iii. Work order description iv. HFTD level v. Original priority level vi. New priority level vii. Date for when the work order was created viii. Original due date ix. Date for when the work order changed priority level x. New due date (if changed) xi. Original priority level xii. Cause for change in priority level (i.e. reinspection, etc.) xiii. Associated wildfire risk ranking from modeling output for circuit location	Kevin Miller	5/13/2022	5/18/2022	5/19/2022	1		7.3.4	Asset Management and Inspections	Additional Detail
249	CalPA	Set WMP-21	CalAdvocates-PGE-2022WMP-21	1	CalAdvocates-PGE-2022WMP-21_1	With regard to PG&E's undergrounding efforts in the HFTD for wildfire mitigation purposes: a) Describe PG&E's current policy regarding undergrounding of existing service connections when the main lines are moved underground. b) Describe PG&E's current policy regarding the installation of new service connections underground when new main lines are installed underground (e.g. in a fire rebuild project or in new construction). c) Please provide a list of situations in which PG&E would underground the main line, but install or leave the service connection aboveground. d) For each situation in part (c), please explain the factors that would contribute to PG&E's decision not to underground the service connections.	Holly Wherman Carolyn Chen	5/31/2022	6/14/2022				7.3.3.16	Undergrounding of Electric Lines and/or Equipment	Additional Detail
250	CalPA	Set WMP-21	CalAdvocates-PGE-2022WMP-21	2	CalAdvocates-PGE-2022WMP-21_2	What is the average actual cost of installing service connections underground? Please provide this as a cost per foot (or a range of costs per foot, if variable) and state the time period from which this data is drawn.	Holly Wherman Carolyn Chen	5/31/2022	6/14/2022				7.3.3.16	Undergrounding of Electric Lines and/or Equipment	Additional Detail
251	CalPA	Set WMP-21	CalAdvocates-PGE-2022WMP-21	3	CalAdvocates-PGE-2022WMP-21_3	Section 7.3.3.16 of PG&E's 2022 WMP discusses PG&E's plan to underground approximately 10,000 distribution circuit miles in HFTDs. a) When PG&E undergrounds a segment of distribution circuit as part of its 10,000 mile undergrounding plan, does it plan to also underground that circuit's associated service connections? b) When PG&E places or plans to place a circuit's associated service connections underground, does PG&E include the length of those service connections in the 10,000 circuit mile forecast? c) Does the forecasted cost of undergrounding the 10,000 circuit miles discussed in your 2022 WMP include costs of undergrounding associated service connections? d) If the answer to part (c) is yes, please provide a cost estimate for the undergrounding of all service connections included as part of the 10,000 circuit mile plan.	Holly Wherman Carolyn Chen	5/31/2022	6/14/2022				7.3.3.16	Undergrounding of Electric Lines and/or Equipment	Additional Detail
252	CalPA	Set WMP-21	CalAdvocates-PGE-2022WMP-21	4	CalAdvocates-PGE-2022WMP-21_4	Section 7.3.3.17.6 of PG&E's 2022 WMP discusses PG&E's Butte County Rebuild Program, which involves undergrounding the distribution within the town of Paradise and lower Magalia. a) Does PG&E install service connections underground as part of the Butte County Rebuild Program? b) If the answer to part (a) is yes, please provide the actual to-date costs of undergrounding service connections as part of the Butte County Rebuild Program. c) If the answer to part (a) is yes, please provide the actual to-date linear feet of service connections that have been undergrounded as part of the Butte County Rebuild Program. d) Please provide the approximate percentage of service connections that have been (to date) installed above ground or left above ground as part of the Butte County Rebuild Program. e) If the answer to part (a) is no, explain all factors that contributed to PG&E's decision not to underground service connections as part of the Butte County Rebuild Program.	Holly Wherman Carolyn Chen	5/31/2022	6/14/2022				7.3.3.17.6	Butte County Rebuild Program	Additional Detail
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	QA/QC Reports
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 in	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	Supplemental for Q2 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 2021? 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 15	CalPA	Set WMP-03	CalAdvocates-PGE-2022WMP-03	12 REV	CalAdvocates-PGE-2022WMP-03_12 REV	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	4/1/2022	4/1/2022	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 6 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	1		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	0		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	7 SUPP	CalAdvocates-PGE-2022WMP-05_7 SUPP	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	Regarding PG&E's 2021 distribution system hardening efforts, as described in section 7.3.3.17.1 its 2021 Revised WMP: a) How many miles of distribution system hardening did PG&E complete in 2021? 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 c) If the answer to part (b) is lower than 80 percent, please explain why. 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.	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	The November 23, 2021 Federal Monitor's report3 states: 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 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. b) Has PG&E performed any re-inspections or inspection validation efforts following the findings of the Federal Monitor, described above? c) If the answer to part (b) is yes, please describe those efforts. d) If the answer to part (b) is no, 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 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. 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." 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	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	The November 23, 2021 Federal Monitor report states: 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 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. b) Has PG&E performed any re-inspections or inspection validation efforts following the findings of the Federal Monitor, described above? c) If the answer to part (b) is yes, please describe those efforts. d) If the answer to part (b) is no, please explain why not. 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	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		7.3.3.5	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 SUPP	CalAdvocates-PGE-2022WMP-08_5 SUPP	Final ACE reports for 11 ignitions in 2021	Holly Wehrman	1/28/2022	4/8/2022	4/29/2022	2		7.3.7	Data Governance	Asset Failure Analysis
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 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 reprioritized 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-interpretated 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 GO 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