PACIFIC GAS AND ELECTRIC COMPANY
Wildfire Mitigation Plans Discovery 2023
Data Response

PG&E Data Request No.:	OEIS_001-Q003		
PG&E File Name:	WMP-Discovery2023_DR_OEIS_001-Q003		
Request Date:	April 5, 2023	Requester DR No.:	P-WMP_2023-PG&E-001
Date Sent:	April 10, 2023	Requesting Party:	Office of Energy Infrastructure Safety
DRU Index #:		Requester:	Colin Lang

SUBJECT: REGARDING PG&E'S FOCUSED TREE INSPECTIONS PILOT

QUESTION 003

a. Describe the current state of development for the pilot area, PG&E's Areas of Concern (AOC), and "polygons where focused vegetation inspection can be evaluated to determine appropriate counties to prioritize pilots(s)" (page 529) and the expected timeline for operationalization.

b. Detail the criteria PG&E has and is using to develop the pilot area, PG&E's Areas of Concern (AOC), and "polygons where focused vegetation inspection can be evaluated to determine appropriate counties to prioritize pilots(s)" (page 529).

c. What standards, processes, procedures, and tools are vegetation management personnel using/will use to perform tree risk assessments for this pilot?

d. Will PG&E be using its One VM Tool for recordkeeping for this pilot? If not, what system will PG&E use for recording keeping for this pilot?

e. Where is PG&E conducting its Focused Tree Inspections pilot? If PG&E has not yet begun its pilot, where will PG&E be conducting its Focused Tree Inspections pilot?

f. How many circuit miles are in scope for the pilot?

g. Was the pilot area previously in-scope for Enhanced Vegetation Management (EVM)?

h. For each Circuit Protection Zone (CPZ) in the pilot area provide the:

   i) CPZ name.

   ii) Tree Weighted Risk Score from PG&E's most recent version of its EVM Tree-Weighted Prioritization List.

   iii) Tree Weighted Rank from PG&E's most recent version of its EVM Tree-Weighted Prioritization List.

   iv) Risk Tranche

i. Does PG&E have a plan to continue its Focused Tree Inspections assuming the pilot is a success? If so, detail those plans, including how many circuit miles PG&E plans to inspect under this program in 2023 and 2024.

j. Provide a GIS layer of the pilot area, PG&E's Areas of Concern (AOC),1 and "polygons where focused vegetation inspection can be evaluated to determine

appropriate counties to prioritize pilots(s)" (page 529). As applicable, provide the following attributes for each polygon:

i) Number of overhead circuit miles within the polygon

ii) Overall Utility Risk

iii) Ignition Risk

iv) PSPS Risk

v) Contact from Vegetation Likelihood of Ignition

ANSWER 003

a) Four regional AOCs totaling 300 miles have been identified for the FTI Pilot, one in each of the following counties: Butte, Calaveras, El Dorado, and Napa. Pilot operationalization will begin in Q2 2023.

b) AOCs were identified through a cross-functional effort utilizing county-based regional reviews to create polygons. Initial polygon development utilized Public Safety Specialist circuit-based evaluations, 30-year lookback of meteorology data, PSPS Lookback Polygons, PSPS Vegetation Damage locations, vegetation caused ignition data, and vegetation caused outage data. The completed AOC polygons were further analyzed against WDRMv3 model. This analysis supported the prioritization of AOC polygons which were selected as regional pilots. To bring value to overall future guidance and execution, the pilots need to capture regional variations and piloting only in highest risk AOC polygons would not support the significant learnings expected of the pilot.

c) The approach to tree inspections pilots intends to follow the American National Standards Institute (ANSI) A-300 tree risk assessment standard per field conditions and individual tree mitigation needs. In addition, inspections will utilize ISA TRAQ Certified Arborists and supporting checklist for tree assessments.

d) The pilot plans to use OneVM for execution. Business requirements to import the CPZ and/or targeted circuit segments in AOC polygons are under development as of 3-31-2023. We expect to standardize the data collection system for the pilot in April 2023.

e) The FTI program will be piloted in four regional AOCs (Butte, Calaveras, El Dorado, and Napa Counties) beginning in Q2 2023.

f) The FTI Pilot will consist of 300 miles within AOCs.

g) Yes all circuit segments in HFTD were subject to annual EVM plans as prioritized by WDRM models. FTI program pilots are targeted in HFTD areas. Portions of FTI circuit segments have been subject to EVM mitigation in prior years and trees will be inspected consistent with the portions that were not previously mitigated with EVM.

h)

i. See attachment "WMP-Discovery2023_DR_OEIS_001-Q003_Atch001" for CPZ names and associated tranches."

ii. See response to j) for WDRMv3 scores per AOCs. Development and prioritization of Areas of Concern polygons that define the pilot areas for the FTI program used WDRM v3. WDRM v3 improved upon v2 by taking individual event driver inputs into consideration separately and allowing them to be composited for the appropriate mitigation program. This was combined with effectiveness measurements to provide more detailed views of EVM mitigation. There was no tree weighting factor applied as was applied in v2, as the different modes of vegetation failure were incorporated into the individual model outputs for the vegetation models. WDRM v3 generated a trunk failure, branch failure, and other vegetation failure model output.

iii. See response to j) for WDRM v3 scores per AOCs. Development and prioritization of Areas of Concern polygons that define the pilot areas for the FTI program used WDRM v3. WDRM v3 improved upon v2 by taking individual event driver inputs into consideration separately and allowing them to be composited for the appropriate mitigation program. This was combined with effectiveness measurements to provide more detailed views of EVM mitigation. There was no tree weighting factor applied as was applied in v2, as the different modes of vegetation failure were incorporated into the individual model outputs for the vegetation models. WDRM v3 generated a trunk failure, branch failure, and other vegetation failure model output.

iv. See attachment “WMP-Discovery2023_DR_OEIS_001-Q003Atch01.xlsx” for CPZ names and associated tranches.

i) Yes, we plan to inspect up to 3000 miles from Tranche 1 and Tranche 2 AOCs by the end of 2024.

j)

i. Please see WMP-Discovery2023_DR_OEIS_001-Q003Atch02.zip” and “WMP-Discovery2023_DR_OEIS_001-Q003Atch03.xlsx” for a breakdown of the total overhead circuit miles per AOC.

ii. AOC development methodology was specific to prioritizing work for Vegetation Management to reduce tree caused outages and ignitions. Overall Utility Risk analysis for was not performed to support this programs development and the resulting pilots.

iii. See response v. AOC development methodology was specific to prioritizing work for Vegetation Management to reduce tree caused outages and ignitions. Ignition Risk analysis was not performed to support this program’s development and the resulting pilots.

iv. PSPS lookback polygons and VM related PSPS asset damage attributed to vegetation was utilized to inform AOC polygon development. AOC development methodology was specific to prioritizing work for Vegetation Management to reduce tree caused outages and ignitions. Overall PSPS Risk analysis for was not performed to support this programs development and the resulting pilots.

v. Please see “WMP-Discovery2023_DR_OEIS_001-Q003Atch02.zip” and “WMP-Discovery2023_DR_OEIS_001-Q003Atch03.xlsx” for a breakdown per AOC of the probability of ignition caused by vegetation coupled with the consequence of ignition as given by WDRM v3.