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PUBLIC ADVOCATES OFFICE DATA REQUEST

No. CalAdvocates-PacifiCorp-2021WMP-01A
Proceeding: 2021 Wildfire Mitigation Plans

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Response requested: March 9, 2021

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INSTRUCTIONS

You are instructed to answer the following Data Requests in the above-captioned proceeding, with written, verified responses per Public Utilities Code §§ 309.5(e) and 314, and Rules 1.1 and 10.1 of the California Public Utilities Commission's Rules of Practice and Procedure. Restate the text of each request prior to providing the response. Identify the person providing the answer to each data request and his/her contact information.

Please send your response to the Originator and e-copies to the following Public Advocates Office representatives:

Henry.Burton@cpuc.ca.gov

Provide your response as it becomes available, but no later than the due date noted above. If you are unable to provide a response by this date, notify the Originator **at least** 3 days before the data request is due and provide a written explanation as to why the response date cannot be met and a best estimate of when the information can be provided. Please identify the person who will be providing the response and his/her phone number and email address.

Responses should be provided in the original electronic format, if available, and if not, in hard copy. (If available in Word format, send the Word document and do not send the information as a PDF file.) All electronic documents submitted in response to this data request should be in readable, downloadable, printable, and searchable formats, unless use of such formats is infeasible. Each page should be numbered. If any of your answers refer to or reflect calculations, provide a copy of the supporting electronic files that were used to derive such calculations, such as Excel-compatible spreadsheets or computer programs, with data and formulas intact and functioning. Documents produced in response to the data requests should be Bates-numbered and, if voluminous, indexed. Responses to data requests that refer to or incorporate documents should identify the particular documents referenced by Bates-numbers or Bates-range.

For any questions, email the Public Advocates Office contact(s) above with a copy to the Public Advocates Office attorney. If you are unable to answer a question completely, accurately, and with the specificity requested, notify the Public Advocates Office as soon as possible. In your written response to the question, explain why you are unable to answer in full and describe the limitations of your response.

DEFINITIONS

- A. As used herein, the terms "you," "your(s)," "Company," and "PacifiCorp" mean PacifiCorp and any and all of its respective present and former employees, agents, consultants, attorneys, and officials, and any and all other persons acting on its behalf.
- B. The terms "and" and "or" shall be construed either disjunctively or conjunctively whenever appropriate in order to bring within the scope of these Data Requests any information or documents which might otherwise be considered to be beyond their scope.
- C. Date ranges shall be construed to include the beginning and end dates named. For example, the phrases "from January 1 to January 31," "January 1-31," "January 1 to 31," and "January 1 through January 31" should be understood to include both the 1st of January and the 31st

of January. Likewise, phrases such as “since January 1” and “from January 1 to the present” should be understood to include January 1st, and phrases such as “until January 31,” “through January 31,” and “up to January 31” should also be understood to include the 31st.

- D. The singular form of a word shall be interpreted as plural, and the plural form of a word shall be interpreted as singular whenever appropriate in order to bring within the scope of these Data Requests any information or documents which might otherwise be considered to be beyond their scope.
- E. The term “communications” includes all verbal and written communications of every kind, including but not limited to telephone calls, conferences, notes, correspondence, and all memoranda concerning the requested communications. Where communications are not in writing, provide copies of all memoranda and documents made relating to the requested communication and describe in full the substance of the communication to the extent that the substance is not reflected in the memoranda and documents provided.
- F. The terms “document,” “documents,” or “documentary material” include, without limitation, the following items, whether in electronic form, printed, recorded, or written or reproduced by hand: reports, studies, statistics, projections, forecasts, decisions, orders, intra-office and interoffice communications, correspondence, memoranda, financial data, summaries or records of conversations or interviews, statements, returns, diaries, calendars, work papers, graphs, notebooks, notes, charts, computations, plans, drawings, sketches, computer printouts, summaries or records of meetings or conferences, summaries or reports of investigations or negotiations, opinions or reports of consultants, photographs, bulletins, records or representations or publications of any kind (including microfilm, videotape, and records however produced or reproduced), electronic or mechanical or electrical records of any kind (including, without limitation, tapes, tape cassettes, discs, emails, and records), other data compilations (including, without limitation, input/output files, source codes, object codes, program documentation, computer programs, computer printouts, cards, tapes, and discs and recordings used in automated data processing, together with the programming instructions and other material necessary to translate, understand, or use the same), and other documents or tangible things of whatever description which constitute or contain information within the scope of these data requests
- G. “Relate to,” “concern,” and similar terms and phrases shall mean to consist of, refer to, reflect, comprise, discuss, underlie, comment upon, form the basis for, analyze, mention, or be connected with, in any way, the subject of these Data Requests.
- H. “Identify”:
 - i. When used in reference to a person, includes stating his or her full name, his or her most recent known business address and telephone number, and his or her present title or position;
 - ii. When used in reference to documents, includes stating the nature of the document (e.g., letter, memorandum), the date (if any), the title of the document, the identity of the author and/or the document, the location of the document, the identity of the person having possession, control or custody of the document, and the general subject matter of the document.

- I. When requested to “state the basis” for any analysis (including studies and workpapers), proposal, assertion, assumption, description, quantification, or conclusion, please describe every fact, statistic, inference, supposition, estimate, consideration, conclusion, study, and analysis known to you which you believe to support the analysis, proposal, assertion, assumption, description, quantification, or conclusion, or which you contend to be evidence of the truth or accuracy thereof.
- J. HFTD means High Fire-Threat District.
- K. PSPS means Public Safety Power Shutoff, or an intentional de-energization event initiated by the utility due to weather conditions that create high fire hazards.
- L. POU means a publicly owned electric utility or an electrical cooperative.

DATA REQUESTS

The following questions amend data request CalAdvocates-Pacificorp-2021 WMP-01, issued January 15, 2021). In particular, questions 4 and 5 are amended. Deletions are indicated with strikethroughs and additions indicated by red text. One column has been deleted due to inadvertent duplication.

If a full response to a given question is included in your WMP submission, your response to this data request may consist of a citation to the specific page(s) or table(s) of the WMP where the information may be found, a written response to the question, or both.

Question 1

Please provide a list of all publicly owned electric utilities and electrical cooperatives (collectively, POUs) that you supply in part or whole.

Question 2

For each publicly owned electric utility and electrical cooperative (collectively, POUs) to which you supply power, please respond to the following:

- a) Have you coordinated with the POU to ensure resilience of the POU during a public safety power shutoff (PSPS) event that you initiate? Please describe the nature of this coordination if so.
- b) In 2020, what coordination, planning, or other activities took place between you and the POU to mitigate the effect of a potential SCE-initiated PSPS event on the POU and its customers?

Question 3

Regarding your wildfire risk model¹:

¹ Wildfire risk model refers to a risk-estimation model that quantifies the wildfire risk level of your facilities.

- a) Have you developed a risk-estimation model that quantifies the wildfire risk level of each of your circuits?
- b) If the answer to question 3(a) is yes, explain the finest level physical granularity (i.e. individual equipment, pole/tower, circuit-segment, circuit) with which you assess the wildfire risk level of your facilities.
- c) If the answer to question 3(a) is yes, explain the finest level of temporal granularity (i.e. day, week, month, year) with which you assess the wildfire risk level of your facilities.
- d) How are transmission and distribution circuits treated differently in the model referred to in question 3(a)?
- e) Does the model in question 3(a) allow you to rank circuits or circuit-segments by risk level?
- f) Does the model in question 3(a) rank transmission and distribution circuits together or separately?
- g) Are your wildfire risk model's outputs for transmission and distribution circuits comparable to each other?

Question 4 – amended February 1, 2021

Provide an Excel table of all distribution circuits existing in 2020 (as rows) that includes the following information in separate columns. Items (a) through (gk) are features of the circuit. Items (hl) through (dddggg) pertain to work performed for each circuit.

- a. Circuit Name
- b. **Circuit ID Number**
- c. Total Circuit Miles
- d. **Circuit Miles in non-High Fire Threat District (HFTD) Areas**
- e. **Circuit Miles in HFTD Tier 2**
- f. **Circuit Miles in HFTD Tier 3**
- g. Circuit Voltage
- h. Wildfire Risk Level²
- i. Circuit SAIDI (System Average Interruption Duration Index) **for 2020**
- j. Circuit SAIFI (System Average Interruption Frequency Index) **for 2020**
- k. Circuit MAIFI (Momentary Average Interruption Frequency Index) **for 2020**
- l. Miles of Enhanced Vegetation Management (EVM) Work in Non-High-Fire Threat District (HFTD) Areas in 2020
- m. Miles of EVM Work in HFTD Tier 2 in 2020
- n. Miles of EVM Work in HFTD Tier 3 in 2020
- o. Miles of Routine Vegetation Management Work in Non-High-Fire Threat District (HFTD) Areas in 2020
- p. Miles of Routine Vegetation Management Work in HFTD Tier 2 in 2020
- q. Miles of Routine Vegetation Management Work in HFTD Tier 3 in 2020
- r. Miles of Covered Conductor Installed in Non-HFTD in 2018
- s. Miles of Covered Conductor Installed in Non-HFTD in 2019

² This refers to the risk calculated for each given circuit, as an output of your quantitative wildfire risk model, if the answer to Question 3(a) is "yes".

- t. Miles of Covered Conductor Installed in Non-HFTD in 2020
- u. Miles of Covered Conductor Installed in HFTD Tier 2 in 2018
- v. Miles of Covered Conductor Installed in HFTD Tier 2 in 2019
- w. Miles of Covered Conductor Installed in HFTD Tier 2 in 2020
- x. Miles of Covered Conductor Installed in HFTD Tier 3 in 2018
- y. Miles of Covered Conductor Installed in HFTD Tier 3 in 2019
- z. Miles of Covered Conductor Installed in HFTD Tier 3 in 2020
- aa. Number of Poles Replaced in Non-HFTD in 2018
- bb. Number of Poles Replaced in Non-HFTD in 2019
- cc. Number of Poles Replaced in Non-HFTD in 2020
- dd. Number of Poles Replaced HFTD Tier 2 in 2018
- ee. Number of Poles Replaced HFTD Tier 2 in 2019
- ff. Number of Poles Replaced HFTD Tier 2 in 2020
- gg. Number of Poles Replaced HFTD Tier 3 in 2018
- hh. Number of Poles Replaced HFTD Tier 3 in 2019
- ii. Number of Poles Replaced HFTD Tier 3 in 2020
- jj. Miles of Underground Conductor Installation in Non-HFTD in 2018
- kk. Miles of Underground Conductor Installation in Non-HFTD in 2019
- ll. Miles of Underground Conductor Installation in Non-HFTD in 2020
- mm. Miles of Underground Conductor Installation in HFTD Tier 2 in 2018
- nn. Miles of Underground Conductor Installation in HFTD Tier 2 in 2019
- oo. Miles of Underground Conductor Installation in HFTD Tier 2 in 2020
- pp. Miles of Underground Conductor Installation in HFTD Tier 3 in 2018
- ~~qq. Miles of Underground Conductor Installation in HFTD Tier 3 in 2018~~
- rr. Miles of Underground Conductor Installation in HFTD Tier 3 in 2019
- ss. Miles of Underground Conductor Installation in HFTD Tier 3 in 2020
- tt. Miles of Light Detection and Ranging (LiDAR) Inspection in Non-HFTD in 2020
- uu. Miles of LiDAR Inspection HFTD Tier 2 in 2020
- vv. Miles of LiDAR Inspection HFTD Tier 3 in 2020
- ww. Number of Detailed Overhead Inspections in Non-HFTD in 2020
- xx. Number of Detailed Overhead Inspections HFTD Tier 2 in 2020
- yy. Number of Detailed Overhead Inspections HFTD Tier 3 in 2020
- zz. Number of Sectionalization Devices Installed in Non-HFTD in 2018
- aaa. Number of Sectionalization Devices Installed in Non-HFTD in 2019
- bbb. Number of Sectionalization Devices Installed in Non-HFTD in 2020
- ccc. Number of Sectionalization Devices Installed HFTD Tier 2 in 2018
- ddd. Number of Sectionalization Devices Installed HFTD Tier 2 in 2019
- eee. Number of Sectionalization Devices Installed HFTD Tier 2 in 2020
- fff. Number of Sectionalization Devices Installed HFTD Tier 3 in 2018
- ggg. Number of Sectionalization Devices Installed HFTD Tier 3 in 2019
- hhh. Number of Sectionalization Devices Installed HFTD Tier 3 in 2020

Question 5 – amended February 1, 2021

Provide an Excel table of all transmission circuits (as rows) that includes the same information listed above in Question 4(a)-(dddggg).

Question 6

For each WMP initiative listed below, please state how the Wildfire Risk Levels provided in the Excel spreadsheet for Questions 4 and 5 influenced where you performed work in 2020 and how work was sequenced.

- a) EVM
- b) Covered conductor installation
- c) Pole replacement
- d) Undergrounding
- e) Grid sectionalization
- f) Detailed inspections of distribution assets
- g) Detailed inspections of transmission assets
- h) Aerial inspections of transmission assets
- i) Aerial inspections of distribution assets
- j) LiDAR inspections of distribution assets
- k) LiDAR inspections of transmission assets

Question 7

For each WMP initiative listed below, please complete Table A below, showing how much of the work you completed in 2020 was performed on distribution circuit-segments in each risk quintile.

- a) EVM
- b) Covered conductor
- c) Pole replacement
- d) Undergrounding
- e) Grid sectionalization
- f) Climbing inspections
- g) Aerial inspections
- h) LiDAR inspections

Table A		
Initiative: _____		
Quintile of circuit-segments, ranked by	Explanation	Amount of work completed in 2020

wildfire risk		
0 – 20	Top quintile of riskiest circuit-segments, which account for the first 20 percent of cumulative wildfire risk	
21 – 40	Second quintile of riskiest circuit-segments, which account for percentiles 21 to 40 of cumulative wildfire risk	
41 – 60	Third quintile of riskiest circuit-segments, which account for percentiles 41 to 60 of cumulative wildfire risk	
61 – 80	Fourth quintile of riskiest circuit-segments, which account for percentiles 61 to 80 of cumulative wildfire risk	
81 – 100	Last quintile of riskiest circuit-segments, which account for percentiles 81 to 100 of cumulative wildfire risk	
Total	Entire service territory	

Question 8

For each WMP initiative listed below, please complete Table B below, showing how much of the work you completed in 2020 was performed on transmission circuit-segments in each risk quintile.

- a) EVM
- b) Covered conductor
- c) Pole replacement
- d) Undergrounding
- e) Grid sectionalization
- f) Climbing inspections
- g) Aerial inspections
- h) LiDAR inspections

Table B		
Initiative: _____		
Quintile of circuit-segments, ranked by wildfire risk	Explanation	Amount of work completed in 2020

0 – 20	Top quintile of riskiest circuit-segments, which account for the first 20 percent of cumulative wildfire risk	
21 – 40	Second quintile of riskiest circuit-segments, which account for percentiles 21 to 40 of cumulative wildfire risk	
41 – 60	Third quintile of riskiest circuit-segments, which account for percentiles 41 to 60 of cumulative wildfire risk	
61 – 80	Fourth quintile of riskiest circuit-segments, which account for percentiles 61 to 80 of cumulative wildfire risk	
81 – 100	Last quintile of riskiest circuit-segments, which account for percentiles 81 to 100 of cumulative wildfire risk	
Total	Entire service territory	

Question 9

Regarding your PSPS circuit modeling capabilities:

- a) Please describe your present circuit modeling capabilities with regard to PSPS thresholds (“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 capability that you expect to enact in 2021.
- c) Please describe the expected state of your PSPS circuit modeling capabilities at the conclusion of the 2020-2022 WMP cycle.

Question 10

For each program identified in WMP section 5.3, Plan Program Targets:

- a) Provide the annual program targets from the year 2019 onward as identified in the 2019 WMP filing.
- b) Provide the annual program targets from the year 2020 onward as identified in the 2020 WMP filing.
- c) List the actual work completed for 2019.
- d) List the actual work completed for 2020.

Question 11

For each mitigation initiative identified in WMP section 7.3.1, Financial data on mitigation initiatives:

- a) Provide the spending forecasts from the year 2019 onward as identified in the 2019 WMP filing.
- b) Provide the spending forecasts from the year 2020 onward as identified in the 2020 WMP filing.
- c) Provide the actual spending for 2019.
- d) Provide the actual spending for 2020.

Question 12

Please identify and provide a copy of all quality assurance or quality control (QA/QC) reports — conducted by both internal and external entities — that were completed since January 1, 2020 and that examined any programs, initiatives, or strategies described in your 2020 Wildfire Mitigation Plan. External entities include, but are not limited to, contractors, auditors, and Independent Evaluators.

Question 13

Provide an Excel table of all defects in the year 2020 found by the Wildfire Safety Division’s Compliance Branch (as rows) that includes the following information in separate columns.

- a) Associated Circuit Name
- b) Defect Type
- c) Description of defect
- d) WMP initiative associated with defect
- e) Date that defect was identified
- f) Date that defect was corrected
- g) Priority level of corresponding corrective tag
- h) Location of defect (latitude/longitude)

END OF REQUEST