



Public Advocates Office Data Request

No. CalAdvocates-PacifiCorp-2022WMP-16
Proceeding: 2022 Wildfire Mitigation Plans

Date of issuance: Tuesday, July 5, 2022
Responses due: Tuesday, July 19, 2022

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INSTRUCTIONS

You are instructed to answer the following Data Request in the aforementioned proceeding, with written, accurate responses pursuant to Public Utilities Code §§ 309.5(e) and 314, Rule 1.1 of the California Public Utilities Commission's (CPUC) Rules of Practice and Procedure, and the Office of Energy Infrastructure Safety's guidelines for Wildfire Mitigation Plan (WMP) discovery.¹

Restate the text of each data request question prior to providing the response. Provide the name and title of the responding individual (i.e., the person responsible for the content of your answer) for each data request question. 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.

Please send your responses and inquiries to the originators of this data request (that is, the Public Advocates Office employees and attorneys listed on the cover page), with copies to the following representatives of the Public Advocates Office:

1. CalAdvocates.WildfireDiscovery@cpuc.ca.gov
2. Henry.Burton@cpuc.ca.gov
3. Natalie.Monroe@cpuc.ca.gov
4. Matthew.Karle@cpuc.ca.gov
5. Charles.Madison@cpuc.ca.gov

Requests for Clarification: If a request, definition, or an instruction, is unclear, please notify the originators in writing as soon as feasible, including a specific description of what you find unclear and why. If possible, please provide a proposal for resolving the issue. In any event, unless directed otherwise by the originators, answer the request to the fullest extent possible, explain why you are unable to answer in full, and describe the limitations of your response.

Incomplete responses: If you are unable to answer a question completely, accurately, and with the specificity requested, notify the originators as soon as possible. If possible, please provide a proposal for resolving the issue. In your written response to the question, explain why you are unable to answer in full and describe the limitations of your response.

Timing of responses: Please respond to each question as soon as your complete response to that specific question is available, and no later than the due date listed on the cover sheet.

Deadline extension requests: If you are unable to provide a complete response to each question by the due date noted on the cover page, contact the originators in writing to request a deadline

¹ Office of Energy Infrastructure Safety, *Final 2022 Wildfire Mitigation Plan (WMP) Update Guidelines*, December 15, 2021. See Attachment 5: Guidelines for Submission and Review of 2022 Wildfire Mitigation Plan Updates, pp. 10-11.

extension. Please submit your deadline extension request as soon as feasible. In your deadline extension request, please (1) specify the questions affected by the delay, (2) propose an alternative response date and (3) provide a written explanation as to why the deadline cannot be met.

Objections: If you object to any portion of this Data Request, please submit your objections, including the specific legal basis for each objection, to the originators as soon as possible. *At latest*, submit your objections and legal bases by the response deadline on the cover sheet.

Response format: Responses should be provided in the original electronic format if available, and otherwise, in hard copy. (If available in Word or Excel format, send the Word or Excel document not 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 rely on, refer to or reflect calculations that are not shown therein, provide a copy of the supporting electronic files that were used to derive such calculations, such as Excel spreadsheets or computer programs, with data and formulas intact and functioning.
- Voluminous documents produced in response to the data request should be Bates-numbered and indexed.
- Responses to the data request that refer to or incorporate documents should clearly identify the particular documents referenced, including the title and page number or, if available, Bates-numbers or Bates-range.

Other questions: For any questions, email the originators.

DEFINITIONS

- A. As used herein, the terms “you,” “your(s),” “Company,” “PacifiCorp,” and “Pacific Power” 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 this Data Request 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 this Data Request 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 this Data Request.
- 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 this Data Request.
- H. “Identify”:
- i. When used in reference to a Company employee, “identify” includes stating their full name and title.
 - ii. When used in reference to a consultant or contractor for the Company, “identify” includes stating the person’s name, title, and employer, and the name and title of the Company employee who is directly responsible for the work of the consultant.

- iii. When used in reference to a person who is not a current Company employee, consultant or contractor, “identify” includes stating the person’s name; most recent title and supervisor at the Company; and most recent known employer, title/position, and business address.
 - iv. When used in reference to documents, “identify” includes stating the nature of the document (e.g., letter, memorandum, study), the date (if any), the title of the document, the identity of the author, and the general subject matter of the document. For documents not publicly available, please also provide the location of the document, and identify the person having possession, control or custody of the document.
- I. When requested to “state the basis” for any statement (i.e., any analysis, workpaper, study, proposal, assertion, assumption, description, quantification, or conclusion), please describe every fact, statistic, inference, supposition, estimate, consideration, conclusion, study, report, and analysis available to you which you believe to support the statement, or which you contend to be evidence of the truth or accuracy thereof.
 - J. “CPUC” and “Commission” mean the California Public Utilities Commission.
 - K. “Cal Advocates” means the Public Advocates Office.
 - L. “Energy Safety” and “OEIS” mean the California Office of Energy Infrastructure Safety.
 - M. “WMP” means wildfire mitigation plan.
 - N. “GIS” means Geographic Information Systems.
 - O. “HFTD” means High Fire-Threat District as defined in CPUC General Order 95, Section II, item 21.2(D), and CPUC Decision 17.01.009 (pp. 39-40; Ordering Paragraphs 1 and 1(mm)) (“Fire Map 2”).² This term encompasses three areas:
 - a. Tree Mortality High Hazard Zone (HHZ) 1 on the U.S. Forest Service - CAL FIRE joint map of Tree Mortality HHZs (see D.17-01-009, pp. 39-40);
 - b. HFTD Tier 2, the elevated wildfire risk area included in Shape C map of the CPUC Fire-Threat Map (“Fire Map 2”) that was adopted in D.17.01.009, pp. 39-40; and
 - c. HFTD Tier 3, the extreme wildfire risk area included in Shape C map of the CPUC Fire-Threat Map (“Fire Map 2”) that was adopted in D.17.01.009, pp. 39-40.
 - P. “Non-HFTD” means areas that are not designated as HFTD according to the definition above.

² As modified by Commission Decision 20-12-030.

- Q. “Tier 2” means HFTD Tier 2, as defined in D.17.01.009, pp. 25, 39-40 and Ordering Paragraph 1(v).
- R. “Tier 3” means HFTD Tier 3, as defined in D.17.01.009, pp. 25, 39-40 and Ordering Paragraph 1(v).
- S. “Other HFTD” means areas *outside of Tier 2 and Tier 3* that are designated as HFTD because they are included in Tree Mortality High Hazard Zone 1.
- T. “Protective device” means a device installed on the electrical grid that can de-energize a portion of the circuit in the case of an abnormal current or voltage.
- U. “Minimum to trip” means the minimum current that causes a relay setting to open a circuit breaker or recloser, regardless of time.
- V. “Definite time delay” means a time added to a time-overcurrent curve or an instantaneous trip.
- W. “Time curve” means a time-overcurrent curve which states which currents and delay times cause a circuit breaker, recloser, or fuse to open.
- X. “Coordination parameters” mean any parameters that show how an upstream recloser, circuit breaker, or fuse is delayed compared to a downstream protective device.

DATA REQUEST

Question 1

State how many customer accounts PacifiCorp has as of July 1, 2022, and disaggregate the total by HFTD tier (as defined above).

Question 2

- a) Do you use unusually sensitive protective device settings (i.e., “fast curve” or “fast trip” settings) during certain times of the year, during weather conditions that create high risk of wildfire, or on relatively high-risk circuits?
- b) If the answer to part (a) of this question is yes, please describe when and where you implement these more sensitive protective device settings.
- c) Please explain the reasoning supporting the choices described in part (b) of this question.

Fast Curve Settings for 2022

Question 3

Please provide the protective device settings that PacifiCorp plans to use during high fire-risk weather in 2022, including the following parameters:

- a) The minimum to trip current,

- b) Definite time delay,
- c) Time curve, and
- d) Coordination parameters.

Question 4

If any of the parameters identified in question 3 depend on the normal operating parameters for its protective devices (i.e., device settings such as the minimum to trip during ordinary weather or outside of HFTD areas), please describe how PacifiCorp determines those normal operating parameters.

Question 5

- a) Please state whether PacifiCorp plans to coordinate protective devices with fuses' time overcurrent curves, or plans to operate protective devices in a fuse-saving mode (i.e. the recloser/circuit breaker trips before the fuse operates) while fast curve settings are in effect.
- b) Please explain the reasoning for PacifiCorp's choice(s) in part (a) of this question.

Question 6

Please provide:

- a) Any studies that show how PacifiCorp determined that the protective device settings identified in question 3 are the best settings to use during high fire-risk weather; and
- b) Any studies of the expected impact to reliability due to the settings identified in question 3.

Regular Settings for 2022

Question 7

Please provide the protective device settings that PacifiCorp normally uses (i.e., outside of HFTD areas or outside of high fire-risk weather) in 2022, including the following parameters:

- a) The minimum to trip current;
- b) Definite time delay;
- c) Time curve; and
- d) Coordination parameters.

Fast Curve Settings for 2021

Question 8

Please provide the protective device settings that PacifiCorp used during high fire-risk weather in 2021, including the following parameters:

- a) The minimum to trip current,

- b) Definite time delay,
- c) Time curve, and
- d) Coordination parameters.

Question 9

If any of the parameters identified in question 8 depended on the normal operating parameters for its protective devices (i.e., device settings such as the minimum to trip during ordinary weather or outside of HFTD areas), please describe how PacifiCorp determined those normal operating parameters.

Question 10

- a) Please state whether, in 2021, PacifiCorp coordinated protective devices with fuses' time overcurrent curves, or operated protective devices in a fuse-saving mode (i.e. the recloser/circuit breaker trips before the fuse operates) while fast curve settings were in effect.
- b) Please explain the reasoning for PacifiCorp's choice(s) in part (a) of this question.

Question 11

Please provide any studies that show how PacifiCorp determined that the protective device settings identified in question 8 were the best settings to use during high fire-risk weather.

Question 12

Please provide a spreadsheet listing (as rows) each outage that occurred in 2021 on a PacifiCorp circuit that had fast curve settings at any point during 2021, including the following information as columns:

- a) The circuit ID number of the circuit involved in the outage (associated circuit);
- b) The cause of the outage;
- c) The asset ID number of the furthest upstream protective device that operated on the associated circuit;
- d) The geographic latitude (in decimal degrees, truncated to seven decimal places) of the furthest upstream protective device that operated on the associated circuit;
- e) The geographic longitude (in decimal degrees, truncated to seven decimal places) of the furthest upstream protective device that operated on the associated circuit;
- e) Whether the furthest upstream protective device on the associated circuit was a fuse;
- f) The number of customers interrupted as a result of the outage;
- g) The total customer minutes of interruption as a result of the outage; and

- h) The duration of the outage (in minutes).

Question 13

Please provide a spreadsheet listing (as rows) each protective devices that had fast curve settings enabled in 2021, including the following information as columns:

- a) The device number of the protective device;
- b) The type of device (e.g., recloser);
- c) The geographic latitude of the device (in decimal degrees, truncated to seven decimal places);
- d) The geographic longitude of the device (in decimal degrees, truncated to seven decimal places);
- e) The ID number of the circuit the device was on;
- f) The number of times that the fast curve setting was enabled on this device in 2021;
- g) The date and time when the fast curve setting on this device was enabled;
- h) The date and time when then the fast curve setting on this device was disabled;
- i) The reason why the fast curve setting on this device was enabled in this instance (e.g., Red Flag Warning, or Fire Weather Threat Declaration); and
- j) If fast curve settings were enabled more than once on a particular device, please replicate columns G, H and I as needed to provide a start and end date for each instance in which was the fast curve setting was enabled.

Regular Settings for 2021

Question 14

Please provide the protective device settings that PacifiCorp normally used (i.e., outside of HFTD areas or outside of high fire-risk weather) in 2021, including the following parameters:

- a) The minimum to trip current;
- b) Definite time delay;
- c) Time curve; and
- d) Coordination parameters.

END OF REQUEST