

September 2, 2014

Mr. Matthew Fogelson Attorney Pacific Gas and Electric Company 77 Beale Street P.O. Box 7442, B30A San Francisco, CA 94120-7442

RE: Data Request #11 for Pacific Gas and Electric Company's Application for a Permit to Construct the Santa Cruz 115-kilovolt Reinforcement Project (A. 12-01-012)

Dear Mr. Fogelson:

The California Public Utilities Commission (CPUC) requests additional data related to the Santa Cruz 115-kV Reinforcement Project (A.12-01-012). In order to facilitate our assessment of project alternatives, based on the purpose and need of the project, the following information is requested.

- Provide the load flow model files used in the analysis of the assessing the reliability improvement of a third 115 kV line to Rob Roy Substation from Green Valley Substation (Santa Cruz 115 kV Reinforcement Project) in electronic format. Specifically:
 - a) General Electric Positive Sequence Load Flow (GE-PSLF) model files (.sav, .epc, .dyd) used in the analysis of the Santa Cruz 115 kV Reinforcement Project justifying the reliability need for the third 115 kV line.
 - b) Change files (.epc, .sav) used to add the third 115 kV line project and transmission line between Rob Roy Substation from Green Valley Substation to the base models requested above.
- 2. Provide technical studies/reports including power flow diagrams for pre and post implementation of the Santa Cruz 115 kV Reinforcement Project. Specifically:
 - c) PG&E System Impact Study Report for Santa Cruz 115 kV Reinforcement Project.
 - d) Provide all appendices and exhibits. Specifically include all power flow plots, draw files and diagrams reflecting pre and post project power flows and system voltages.
 - e) Study assumptions, including load forecast, specific years studied, generation levels and generation type, import assumptions, and transmission configurations.
 - f) Any and all sensitivity studies performed in conjunction with the System Impact Study. Specifically, any analysis associated with the alternative options identified in Chapter 5 Alternatives of the Santa Cruz 115 kV Reinforcement Project PEA.

- g) Category B and C contingency files used in the System Impact Study for the Santa Cruz 115 kV Reinforcement Project.
- 3. In PG&E's 2009 Electric Transmission Grid Expansion Plan it is noted that the Santa Cruz 115 kV Reinforcement Project has an expected cost of \$10M to \$15M and that the Paul Sweet, Camp Evers and Rob Roy Substations serve approximately 65,000 customers. Section 2.3 Project Objective of the PEA states the original lines were put into service in the 1970s and served approximately 50,000 customers. From the 1970s to the 2009 Electric Transmission Grid Expansion Plan an increase of approximately 15,000 customers is noted. The PEA for the Santa Cruz 115 kV Reinforcement Project, submitted subsequently in the 2009/2010 timeframe, indicates approximately 90,000 customers served. Please clarify and/or reconcile the load assumptions used in the reliability analysis of the Project.
- 4. Was reconductoring the 115 kV system a part of the original transmission planning analysis conducted as part of PG&E's 2009 Electric Transmission Grid Expansion Plan? Given that the proposed single circuit line across the Cox-Freedom segment can be installed on wooden poles, could the reconductoring project be constructed entirely on wooden poles? Per Data Request Response 10, PG&E has indicated that it may need to put a reconductored project on TSPs. Can you clarify whether TSP would be necessary or not, as this affects the feasibility of the alternative?
- 5. In consideration of the additional 115 kV circuit connecting to the Green Valley Substation, no specific work or modifications are identified for accommodating the new circuit in Green Valley Sub. The PEA indicates that modifications were being made to the Green Valley Sub as part of a separate, small project. How many 115 kV circuits presently feed into Green Valley and how many outgoing 115 kV circuits are there at Green Valley? Are there existing breaker(s) and/or bus segments to accommodate the additional circuit? Are any additional substation modifications anticipated for the Green Valley Sub?

Please contact me if you have any questions regarding this data request. Sincerely,

Tania Treis, Principal Panorama Environmental, Inc.

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cc: Matthew Fogelson, PG&E Lisa Orsaba, CPUC