Pacific Gas and Electric Company ™

BDCP1677.

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July 29, 2014

VIA US MAIL AND ELECTRONIC MAIL (BDCP.COMMENTS@NOAA.GOV)

Mr. Ryan Wulff, NMFS
650 Capitol Mall, Suite 5-100
Sacramento, CA 95814

Re: *Pacific Gas and Electric Company – Comments on Bay-Delta Conservation Plan and Draft Environmental Impact Report/Environmental Impact Statement*

Dear Mr. Wulff:

Pacific Gas and Electric Company (PG&E) appreciates the opportunity to review the California Department of Water Resources' (CDWR) Draft Bay-Delta Conservation Plan (BDCP) and the associated Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS). PG&E looks forward to working with CDWR staff on this important infrastructure project for the state of California.

Because the BDCP is a significant infrastructure project, it is likely to impact PG&E's existing electric and gas infrastructure. PG&E is proud to serve 15 million gas and electric customers in California, from Bakersfield to the Oregon border. Given PG&E's vast service territory, a project of the size and scope of the BDCP will need to be closely coordinated with PG&E's existing and planned infrastructure, and PG&E's operations and maintenance activities will also need to be considered.

In addition to managing potential impacts of the BDCP on its infrastructure, PG&E understands that CDWR may request that PG&E provide some or all of the power supply needs of the project, which could include the temporary power for the construction/tunnel boring process or the permanent needs of the new pumping stations. Meeting these needs would likely require development of new infrastructure and require substantial lead time and coordination with multiple other entities, including the California Public Utilities Commission (CPUC) and the California Independent System Operator Corporation (CAISO). We appreciate CDWR's willingness to work with PG&E on these issues and early engagement of PG&E in the planning process could help avoid project delays.

PG&E provides the following comments to assist the project in addressing these issues comprehensively and efficiently. We have been in communication with CDWR regarding these issues and encourage the project to continue working closely with potentially affected utilities in a collaborative manner. PG&E will be able to provide more specific comments about necessary mitigation of impacts to utility infrastructure once the project plan has been further defined.

I. Cost, Permitting, and Planning

The BDCP project proponents (Proponents) are responsible for costs associated with the relocation and protection of existing PG&E facilities to accommodate construction and operation of the new water conveyance facilities proposed in Conservation Measure 1 (CM-1), as well as those affected by any future restoration activities within the proposed Restoration Opportunity Areas (ROAs). These costs include utility relocation and protection activities associated with the gas and electric distribution and transmission systems, including planning activities, grid reliability studies, engineering studies, environmental studies, environmental permitting, land acquisition, and any other activities necessary to comply with all requirements and standards to ensure safe, reliable energy and meet all environmental obligations. Because utility relocations typically require long lead times to plan, permit, and execute, and are not feasible in all cases, the Proponents are encouraged to consult with PG&E early and often during the planning and design phases for the new CM-1 facilities, as well as for the future restoration projects as these are proposed.

While it is not yet clear to what extent PG&E facilities will play a role in providing temporary construction power to the project, or any new permanent facilities to serve the project's operational needs once it is built, PG&E has been working with the Proponents and other potential power providers to conduct system impacts studies and other analyses to determine the least impactful, most environmentally sound configuration for new or upgraded electric transmission facilities. As a general principle, these costs would also be the responsibility of the project.

II. California Public Utilities Commission Jurisdiction

Section 20.2.2 of Chapter 20 (Public Services and Utilities) of the Draft EIR/EIS should include reference to the California Public Utilities Commission (CPUC) General Order (GO) 131-D, which governs the siting of electric facilities constructed by CPUC-regulated investor-owned utilities like PG&E. PG&E will need to comply with GO 131-D requirements prior to constructing any new electric facilities that might be required to serve the project, or relocating existing electric facilities.

PG&E is subject to the jurisdiction of the CPUC and must comply with CPUC GO 131-D in connection with the construction or modification of electric facilities (e.g., transmission lines, substations, switchyards, etc.). In most cases where PG&E's electric facilities are under 200 kV and are related to a larger project (e.g., electric generation plant), GO 131-D exempts PG&E from obtaining an approval from the CPUC provided its planned facilities have been included in the larger project's California Environmental Quality Act (CEQA) review, the review has included circulation with the State Clearinghouse and review by the CPUC, and the project's lead agency finds no significant unavoidable environmental impacts as a result of construction of the electric

facilities. PG&E may proceed with construction once PG&E has filed notice with the CPUC and the public as to the project's exempt status, and the public has had a chance to protest PG&E's claim of exemption. If PG&E facilities are not adequately evaluated in the larger project's CEQA review, or if the project does not qualify for the exemption because the lead agency has concluded that the electric facilities will result in a significant unavoidable impact, PG&E may need to seek approval from the CPUC (e.g., Permit to Construct (PTC)), which could take 18 months or more, although it could take less time than that in cases where another lead agency has already conducted an environmental review that includes PG&E's facilities.

When PG&E's transmission lines are designed for immediate or eventual operation at 200 kV or more, GO 131-D requires PG&E to obtain a Certificate of Public Convenience and Necessity (CPCN) from the CPUC unless one of the following exemptions applies: the replacement of existing power line facilities or supporting structures with equivalent facilities or structures, the minor relocation of existing facilities, the conversion of existing overhead lines (greater than 200 kV) to underground, or the placing of new or additional conductors, insulators, or their accessories on or replacement of supporting structures already built. Obtaining a CPCN can take 18 months or more, although it could take less time than that in cases where another lead agency has already conducted an environmental review that includes PG&E's facilities.

III. Planned and Unplanned PG&E Projects

PG&E also recommends that the Proponents consult with PG&E concerning planned and potential future PG&E facility improvements and expansion plans. It is recommended that the Proponents should identify and evaluate early on with PG&E potential future impacts to PG&E facilities and the potential for those facilities to accommodate future electricity and gas demand.

IV. Access and Maintenance

PG&E owns and operates electric and gas transmission lines and distribution facilities, substations and other PG&E facilities and properties along the proposed project boundaries. To promote the safe and reliable maintenance and operation of utility facilities, the CPUC has mandated specific clearance requirements between utility facilities and surrounding objects or construction activities. To ensure compliance with these standards, the Proponents should coordinate with PG&E early in the development of their project plans. Any proposed development should provide for unrestricted utility access and prevent easement encroachment where possible that might impair the safe and reliable maintenance and operation of PG&E's facilities. The proposed tunnel mud spoil storage locations appear to potentially conflict with several PG&E facilities, if not closely coordinated. These material storage areas should not be located in such a way as to prevent PG&E access to overhead or underground facilities, or conflict with regulatory standards for line clearance, vegetation management, and other requirements.

In addition to the need to avoid intersecting gas pipelines in siting the project's facilities, the construction and dewatering activities have the potential to detrimentally impact PG&E's facilities. For example, studies may need to be performed to ensure that vibration from the tunnel boring

activities or ground subsidence does not detrimentally impact the reliability and safety of the gas transmission and distribution facilities.

Also of interest are the habitat restoration projects proposed in the ROAs. The ROA areas overlap with many PG&E facilities, and proposals to create habitat pose many concerns for PG&E's ability to access and maintain our facilities. For example, PG&E facilities are developed and constructed for the particular environment that they are situated in. Inundation of currently dry areas resulting in submersion of portions of PG&E electric structures, including transmission or distribution poles, could require replacement with new poles developed for a wet environment in addition to presenting new access challenges. Likewise, earthwork and ground disturbance, including inundation, could create subsidence or other impacts affecting underground gas pipelines, requiring engineering testing and possibly modifications/replacement. In addition, modifications to waterways to create navigable waters could require raising the height of overhead lines to comply with regulatory requirements, incurring significant costs. As the ROAs are only being reviewed in the EIR/EIS at a programmatic level, proposed habitat restoration projects would require separate environmental review, and PG&E should be consulted with at the earliest opportunity to determine the feasibility and costs of probable relocations or retrofits of utility facilities.

V. Utility Coordination

The Draft EIR/EIS states in the Public Service and Utilities Section that the Proponents "would work with utility owners during the final engineering design and construction of the project to relocate utilities or protect them in place." There are many requirements that must be satisfied in either relocating or protecting utility infrastructure, including, for example CPUC General Orders 95, 112-E, and 131-D, North American Electric Reliability Corporation reliability standards, and CAISO outage scheduling, planning, approval, and other requirements. In addition, there may be other permits and authorizations required by resource agencies in the design and construction of utility facilities including but not limited to incidental take authorization for federal- or state-listed species (U.S. Fish and Wildlife Service, California Department of Fish and Wildlife), Clean Water Act section 401 water quality certification (California Regional Water Quality Control Boards), Clean Water Act section 404 permit (U.S. Army Corps of Engineers), Streambed Alteration Agreement (California Department of Fish and Wildlife), and concurrence with the cultural resource findings by the California State Historic Preservation Officer. To ensure satisfaction of these requirements and minimize delays, PG&E recommends that the Proponents coordinate with PG&E during all project phases including the environmental document/project report, permitting, engineering and design, right-of-way acquisition, and construction phases.

VI. Electric and Magnetic Fields (EMFs)

One area of the Draft EIR/EIS that should be corrected to avoid misinforming the public is the discussion of EMFs. To assist CDWR to appropriately discuss EMFs in a manner consistent with the approach taken by other CEQA lead agencies including the CPUC, we have provided below a summary of reports regarding possible health effects of EMF, a discussion of how EMF has

generally been addressed under the California Environmental Quality Act (CEQA), and a description of the EMF exposure reduction measures that could be incorporated into the design of electric transmission projects necessitated by the project, if required by the CPUC.

EMF is a term used to describe electric and magnetic fields that are created by electric voltage (electric field) and electric current (magnetic field). Power frequency EMF is a natural consequence of electrical circuits, and can be either directly measured using the appropriate measuring instruments or calculated using appropriate information. Attachment A: Electric and Magnetic Fields provides a detailed explanation of EMF.

A. Possible Health Effects of EMF

The possible effects of EMF on human health have come under scientific scrutiny. Hundreds of EMF studies have been conducted over the last 20 years in the areas of epidemiology, animal research, cellular studies, and exposure assessment. There is a consensus among the medical and scientific communities that there is insufficient evidence to conclude that EMF causes adverse health effects. Neither the medical nor scientific communities have been able to provide any foundation upon which regulatory bodies could establish a standard or level of exposure that is known to be either safe or harmful. As a result, the CPUC and the California Department of Health Services (CDHS) have not concluded that exposure to magnetic fields from utility electric facilities is a health hazard.

A number of nationally recognized multi-discipline panels have performed comprehensive reviews of the body of scientific knowledge on EMF. Attachment A, Electric and Magnetic Fields, summarizes reports from the National Institute of Environmental Health Sciences, National Research Council/National Academy of Sciences, World Health Organization, International Agency for Research on Cancer, American Cancer Society, and American Medical Association. These reports conclude that insufficient scientific evidence exists to warrant the adoption of specific health-based EMF mitigation measures.

B. EMF and the California Environmental Quality Act

EMF are matters of public interest but not regarded as potentially significant physical, environmental effects under the California Environmental Quality Act (CEQA). Section 15145 of the CEQA Guidelines states that if a lead agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact. This CEQA Guidelines section is relevant to EMF because there is ongoing scientific study of long-term health risks from EMF exposure, with no definitive evidence that exposure to EMF adversely affects public health. As summarized in Attachment A: Electric and Magnetic Fields, many reports have concluded that the potential for health effects associated with EMF exposure is too speculative to allow the evaluation of impacts or the preparation of mitigation measures. Correspondingly, the CPUC has repeatedly recognized that EMF is not an environmental impact to be analyzed in the context of CEQA because (1) there is no agreement among scientists that EMF does create a potential health risk, and (2) there are no defined or adopted CEQA standards for defining health risk from EMF. See, e.g., CPUC Decision No. 04-07-027 (Jul. 16, 2004); Delta DPA Capacity

Increase Substation Project Final MND and Supporting Initial Study (November 2006), A.05-06-022, section B.1.14.1, page B-31, adopted in D.07-03-009 (March 1, 2007).

C. EMF Measures Required by the CPUC

While the CPUC has repeatedly recognized that EMF is not an environmental impact to be analyzed in the context of CEQA, in response to scientific uncertainty and public concern regarding EMF, the CPUC issued Decision D.06-01-042, which specifically requires PG&E and other utilities to consider "no-cost" and "low-cost" measures, where feasible, to reduce magnetic field exposure from new or upgraded utility facilities. Appendix A: Electric and Magnetic Fields provides background on the CPUC's process to arrive at the decision.

To comply with CPUC requirements, two main "no-cost" and "low-cost" measures have been considered in the design of transmission projects:

- The first measure considered is optimal phasing. Optimal phasing involves inverting the phasing of one circuit on the same towers so that the magnetic fields emitted by the circuits cancel each other out more effectively.

- The second measure is increasing height of the line by increasing tower height.

PG&E would comply with the CPUC's "no-cost, low-cost" EMF reduction policy with respect to any electric facilities necessitated by construction of the project.

Consistent with the authorities discussed above, we recommend that CDWR refrain from assessing EMF exposure as a potential environmental effect in the Final EIR/EIS, and instead include a discussion of the issue in an informational appendix to the Final EIR/EIS that could include some or all of the information discussed and cited in Appendix A to this letter.

VII. CONCLUSION

PG&E is committed to working with the BDCP Proponents on the proposed water conveyance facilities and related facilities while maintaining its commitment to provide safe, reliable and affordable gas and electric service to PG&E customers. We look forward to working with the Proponents to help advance these important goals for California.

Please contact Valerie Winn by telephoning 415-973-3839 or emailing her at VJW3@pge.com if you have any questions concerning our comments.

Very truly yours,

Diane Ross-Leech

Attachment A