# **EXHIBIT 4 – CCC LETTER**

## CALIFORNIA COASTAL COMMISSION

ENERGY, OCEAN RESOURCES AND FEDERAL CONSISTENCY 455 MARKET STREET, SUITE 300 SAN FRANCISCO, CA 94105-2421 VOICE (415) 904-5200 FAX (415) 904-5400



December 7, 2023

Mr. Tom Jones
Senior Director – Regulatory, Environmental and Repurposing
Pacific Gas & Electric Company
Diablo Canyon Power Plant
P.O. Box 56
Avila Beach, CA 93424

**RE:** Pacific Gas & Electric Company's Requested Nuclear Regulatory Commission License Renewal for Diablo Canyon Power Plant, San Luis Obispo County – Incomplete Consistency Certification

Dear Mr. Jones:

Thank you for your submittal of the above-referenced consistency certification for the Diablo Canyon nuclear power plant license renewal that Pacific Gas and Electric Company ("PG&E") is seeking from the Nuclear Regulatory Commission. The California Coastal Commission (Commission) received your consistency certification on November 8, 2023.

Our review shows the certification is not yet complete, for the reasons provided below. Pursuant to the Coastal Zone Management Act's ("CZMA's") implementing regulations at 15 CFR 930.58, we will need the information requested herein to allow adequate consideration of the likely coastal effects of the proposed federal action. Accordingly, and pursuant to 15 CFR 930.60(a), the Commission's six-month review period has not commenced and will not commence until we receive the missing necessary data and information.<sup>1</sup>

Pursuant to requirements of the CZMA, we have identified below the information needed for PG&E's consistency certification to be deemed complete. We are happy to discuss the information requests and review process identified in this letter, and we recommend you coordinate with us on the requests herein prior to your next submittal.

### **Required Additional Information Requests and Analyses**

**Standard of review:** Pursuant to CZMA Section 307(c)(3), the Commission's federal consistency review is to consider whether the proposed federal action would "affect any land or water use or natural resource of the coastal zone" and whether the activity would be consistent with the enforceable policies of the state's approved California Coastal

<sup>&</sup>lt;sup>1</sup> In addition, SB 846, with which the state authorized and supported Diablo Canyon's proposed extended operations, requires submittal of a complete application. It states, in relevant part: "Notwithstanding any other law, the state agency shall take final action on the application or request to extend the operations of the Diablo Canyon powerplant within 180 days of submission of a <u>complete</u> application or request." [emphasis added]

Management Program ("CCMP"). The main enforceable policies of the CCMP are the Chapter 3 policies of the Coastal Act. Cal. Public Resources Code § 30008. When a project requires a federal license or permit, for purposes of the CZMA, the Commission must consider the impacts of the project as a whole under the Chapter 3 policies. Section 307(c)(3)(A) further requires the applicant to provide to a state agency a copy of the consistency certification, "with all necessary information and data," for the purpose of state concurrence with or objection to the applicant's certification.

An action by the NRC to approve the proposed license extension would affect several coastal uses and resources that are components of the CCMP; however, as discussed below, PG&E's consistency certification does not adequately address these effects. Additionally, the certification states that particular CCMP enforceable policies<sup>2</sup> are not applicable to the proposed federal action because PG&E's license extension does not include "development," as that term is defined in in the CCMP (Coastal Act section 30106).3 However, the threshold for the Commission's consistency review for projects requiring a federal license or permit is not "development," but is any "activity . . . affecting any land or water use or natural resource of the coastal zone." 16 U.S.C. § 1456(c)(3)(A) [emphasis added]. The proposed extension of the operating license would affect a variety of coastal uses and resources beyond those acknowledged by PG&E in its consistency certification, and the Commission must evaluate those effects for consistency with the applicable policies of the CCMP. Moreover, as described below, the extended intake and discharge of seawater that would be carried out as part of license renewal constitutes "development" within the meaning of Section 30106. It is also reasonably foreseeable that the proposed license extension includes other uses and activities that likely constitute "development" within the meaning of Section 30106 – for example, intake cove dredging and a new or expanded spent fuel facility.4 Please amend the certification's analyses to include assessments of the proposed extended operations' consistency with all relevant CCMP policies and for all CCMP policies applicable to all other known or reasonably anticipated development resulting from license extension (as further described below).

Additionally, the certification applies standards of review to several specific CCMP policies differently than those prescribed by the policies. For example, and as detailed below, the certification states that the entrainment of marine life from Diablo Canyon's use of

<sup>&</sup>lt;sup>2</sup> These include, for example, CCMP Sections 30212, 30240, 30250, 30251, 30252, and 30253.

<sup>&</sup>lt;sup>3</sup> Section 30106 states, in relevant part: "'Development' means, on land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density or intensity of use of land, including, but not limited to, subdivision pursuant to the Subdivision Map Act (commencing with Section 66410 of the Government Code), and any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with Section 4511)..."

<sup>&</sup>lt;sup>4</sup> These are examples and not intended to be exhaustive.

seawater does not adversely affect coastal resources because entrainment does not result in population-level effects; however, the standard of review for CCMP policies 30230 and 30231 in determining if coastal resources are affected due to entrainment is based on whether there is a loss or reduction of marine life productivity. Further, the certification in some instances relies on other standards that do not necessarily apply to this review for CCMP consistency. For example, it references NRC's Generic Environmental Impact Statement ("GEIS") to describe some of the expected environmental effects of its proposed extended operations;<sup>5</sup> however, the standards used in the GEIS are generally not relevant to determine conformity with the applicable policies of the CCMP.

Please revise the certification to apply the appropriate standards of review in the relevant analyses – i.e., whether results of the proposed federal action would affect any coastal use or resource and whether other known or anticipated development associated with the proposed license extension would be consistent with relevant CCMP policies.

**Scope of review:** The federal action being evaluated by the NRC is a 20-year license extension for operating Diablo Canyon Power Plant. Our review will therefore consider effects on coastal uses and resources for that 20-year period. PG&E's certification states in several places that it intends to operate for about five years and appears to evaluate the project's effect over just that shorter operating period (see, for example, the alternatives analysis described below). Where necessary, please augment the certification with analyses that consider the effects on coastal resources and uses over the full 20-year license period requested in PG&E's application to the NRC.

"Development" related to proposed license extension: PG&E states that it plans no activities that constitute "development" under the Coastal Act and states that certain CCMP policies (such as Sections 30212, 30240, 30250, 30251, 30252, and 30253) specifically referring to development are inapplicable. However, as noted above, some activities resulting from the proposed federal action would constitute "development" under the Coastal Act and additional development activities may also be triggered by the extension of power plant operations. Therefore, please describe and evaluate any known or potential development activities that would result from relicensing and extended operations. This may include installation of new or expanded structural components, equipment, or infrastructure to assure safe and reliable operations during the extension period – e.g., upgraded seismic safety components based on results of upcoming safety

<sup>&</sup>lt;sup>5</sup> Generic Environmental Impact Statement for License Renewal of Nuclear Plants. NRC. 2013a. NUREG-1437, Vols. 1. Revision 1. ADAMS Accession No. ML13106A241. June 2013.

<sup>&</sup>lt;sup>6</sup> In its consistency certification, PG&E argues that material presented by Commission staff at a February 10, 2023 Listening Session implied that staff determined that there is no development associated with any license extension. This misconstrues the material that Commission staff presented. That material discussed the process and timeline specifically for the Commission's consistency certification review process, which is different than the Commission's CDP review process. Commission staff did not determine that there would be no development requiring a CDP for a license extension.

<sup>&</sup>lt;sup>7</sup> We will discuss with you separately the requirements and process for any CDP that may be needed, which could include a combined review process by which federal consistency and permitting review are conducted simultaneously with the same hearing and in the same 180-day review period established in SB 846.

and reliability reviews. Please include these types of development in the requested description and analyses.

**Additional documentation:** We have requested below several studies and analyses that we will need to evaluate the proposed license extension for CCMP conformity. In addition to those requested documents, we plan to rely in part on information contained in the 2023 San Luis Obispo County Draft Environmental Impact Report ("DEIR") on Diablo Canyon decommissioning. That document provides detailed descriptions and maps of existing site conditions, areas of sensitive habitats, wildlife species, and other baseline information we will use in our evaluation of this certification.

**Filing fee:** In 2008, the CCMP was amended to require filing fees for consistency certifications. As provided in that amendment, "[t]he filing fees for federal consistency certifications constitute necessary data and information within the meaning of 15 C.F.R. Sections 930.58(a)(2) and 930.76(a)(3)." The Commission's fees for consistency review are determined in the same manner as for coastal development permit applications. We understand from our conversation earlier today that PG&E will soon be submitting the necessary fee of \$367,750 based on project costs as described in the current Coastal Commission Filing Fee Schedule, Section 13055(a)(5)(B), available at this link:

https://documents.coastal.ca.gov/assets/cdp/CDP Application Form Energy.pdf

**Procedural Controls:** Section 9.6 of the Environmental Report accompanying PG&E's certification states that DCPP would have procedural controls in place to protect sensitive resources during operation, including the following: Best Management Practices (BMPs), avoidance/minimization measures, and environmental reviews prior to conducting any ground-disturbing activities. Please provide all information related to these procedural controls.

**Requirements of Other Resource Agencies:** Please provide anticipated timelines for receiving approval of all permits, permissions, or approvals required by resource agencies for license renewal. Additionally, please provide any studies or supplemental information specifically prepared as part of any application to another resource agency for license renewal that was not included in your consistency certification submittal to the Commission.

### Public Access and Recreation (CCMP Sections 30210 through 30224)

The certification states that license renewal would be consistent overall with the CCMP's public access and recreation policies because it does not involve development and would be a continuation of existing operations. As noted above, however, the standard of review is not just whether there is "development," as defined by the CCMP but also whether the federal action would affect any coastal use or resource. For this proposed federal action, approval of a license extension would eliminate substantial public access and recreation opportunities that would otherwise occur but for the license extension. For example, and as noted in the certification, Diablo Canyon includes an Owner Controlled Area ("OCA") around the facility and a security zone extending 2,000 yards (or just over one mile) offshore in coastal waters adjacent to the facility. But for this proposed license renewal, that security zone would be eliminated or reduced in size much sooner than otherwise and would allow public access and recreation within those coastal waters. Additionally, and as noted in the above-referenced DEIR for Diablo Canyon decommissioning, PG&E states that it intends to reduce the size of that OCA by about 2034 when decommissioning is complete to encompass only the remaining

facilities – primarily the spent fuel facility – pursuant to NRC requirements. With the proposed license extension, decommissioning and the opportunities for public coastal access and recreation will be delayed.

The certification also concludes without adequate analysis that it would not be appropriate to require the public access needed for CCMP conformity due to concerns about public safety, fragile coastal resources, or agriculture. However, as the Coastal Commission has determined in previous CDP and consistency reviews at Diablo Canyon, public access and recreation is both allowed and required on Diablo Canyon lands to ensure conformity with these policies, and PG&E has successfully accommodated public access and recreation while taking into account concerns about public safety and protection of fragile coastal resources and agriculture. Therefore, for those policies where PG&E has made this conclusion of consistency, please analyze public access and recreation opportunities to ensure that the proposed relicensing "will be conducted in a manner consistent with the [CCMP]," as required under CZMA Section 307(c)(3)(A).

#### Protection of Marine Biological Resources (CCMP Sections 30230 and 30231)

PG&E's certification states, in part, that license renewal would be consistent with Section 30230 because "it will not increase the capacity or output of the Plant or involve any change in operations compared to existing conditions, such that OTC entrainment, impingement, and thermal impacts would not increase, and the protection of the beneficial uses of the receiving water will continue during the LR period." The certification also states that license renewal will be consistent with Section 30231 because "existing operations will remain unchanged and will be governed by a wastewater discharge permit, as are current operations at the plant."

These statements do not fully acknowledge the requirements of Sections 30230 and 30231. For example, Section 30230 requires that marine resources be maintained, enhanced, and where feasible restored. It also requires that uses of the marine environment be conducted in a manner that sustains biological productivity in coastal waters. A key aspect of those policies applicable to the proposed license renewal is that the biological productivity of coastal waters be maintained and, where feasible, restored by minimizing the adverse effects of entrainment.

The proposed license renewal would result in substantial losses of marine life productivity that, but for the proposed extension, would not occur. The certification cites PG&E's most recent entrainment study showing that Diablo Canyon's use of seawater for cooling results in a loss of productivity equal to almost 700 acres of rocky reef habitat each year. However, the actual loss is substantially higher, as that study used a calculation based on a 50% confidence level instead of the 95% confidence level now used by the Coastal Commission and other state agencies to determine the type and extent of entrainment impacts resulting from seawater intakes. Applying the 95% confidence level results in a loss of productivity during each year of operations roughly equal to that provided by well over 1,000 acres of reef habitat.

<sup>&</sup>lt;sup>8</sup> The certification further states in this regard that SB 846 determined that Diablo Canyon is considered an existing facility under 14 CCR 15301; however, this regulation relates to review under the California Environmental Quality Act, not the Coastal Commission's CZMA review.

<sup>&</sup>lt;sup>9</sup> PG&E conducted entrainment studies in 1996-1999 and in 2008-2009.

The certification also references a mitigation measure PG&E has used to partially address this impact – i.e., participation in the interim mitigation program that is part of the State Water Resources Control Board's ("Water Board's) Once-Through Cooling ("OTC") Policy. The certification states that PG&E demonstrates compliance with that Water Board program by paying an annual in-lieu fee that is then directed to be used for various projects. It is not clear, however, that those projects adequately address the extent of entrainment losses noted above or provide suitable compensatory mitigation. Additionally, that interim mitigation program was developed to address the relatively short-term impacts that occur during the few years power plants need for transitioning to cooling methods that do not rely on seawater, not the 20 years that could result from PG&E's proposed license extension. Finally, the Commission retains its independent authority to ensure consistency with the policies of the CCMP.

We plan to use the above-referenced 2008-09 entrainment study to evaluate the license extension's expected adverse effects on marine life productivity and to identify mitigation measures necessary to conform to CCMP Sections 30230 and 30231. Please inform us if PG&E would instead prefer to collect additional entrainment data and conduct an updated entrainment study. As part of our mitigation assessment, please also specify the type and scope of mitigation projects have been implemented using PG&E's in-lieu fee funds and provide an assessment of the compensation for the above-referenced annual productivity losses provided by those programs. Please include with that assessment other feasible mitigation measures PG&E would consider implementing to address any mitigation shortfalls.

We understand, too, that PG&E and other resource agencies have identified that Diablo Canyon's thermal discharge is having adverse effects on nearby populations of black abalone, a species of special biological significance protected under the Endangered Species Act. Please provide relevant studies that describe those effects and identify the mitigation measures PG&E has implemented, or will implement, to avoid and reduce those effects.

Finally, CCMP Section 30231 requires protection and productivity of wetlands. The Environmental Report accompanying PG&E's certification states, in Section 3.7.2.4.1, that two wetland delineations have been conducted in the vicinity of the DCPP site. However, those delineations appear to show a significantly smaller area of CCMP-designated wetlands than wetlands designated by other resource agencies (e.g., the U.S. Army Corps of Engineers and California State and Regional Water Boards). This appears to be incorrect, as wetlands delineated pursuant to the CCMP are based on the presence of at least a single parameter (vegetation, soils, or hydrology) while wetlands delineated pursuant to other resource agencies

<sup>&</sup>lt;sup>10</sup> See the Water Board's Draft Determination to Approve Mitigation Measures for the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (Once-Through Cooling Policy: Diablo Canyon, n.d. This document also identified expected the one-time cost (in 2006 dollars) for creating or restoring 690 acres of this habitat at \$86.25 million. For comparison, it appears that PG&E has paid less than half this amount into the interim mitigation program since it was implemented.

<sup>&</sup>lt;sup>11</sup> As noted in the certification, the State Water Resources Control Board is considering a proposal to extend PG&E's compliance date under the OTC Policy from the end of Diablo Canyon's current NRC licenses to October 31, 2030. However, this is still in draft form and does not encompass the full 20-year license extension period being considered by the NRC.

require evidence of all three parameters. As such, an area with wetlands usually includes more CCMP-delineated wetlands than those designated by other agencies. Please provide additional information on how the wetlands were delineated and revise the results of the delineation as necessary to reflect the CCMP single-parameter method for wetland delineations.

## **Dredging (CCMP Section 30233)**

Section 30233 of the CCMP includes several criteria applicable to proposed dredging activities in coastal waters. As noted above, the certification acknowledges that during the license extension period, PG&E may need to conduct intake cove dredging. While PG&E has not needed to dredge during previous Diablo Canyon operations, it appears that oceanographic conditions may have changed in a manner that will result in additional intake cove sedimentation and the need for periodic dredging to support operations during the license extension period. Please provide any analyses that PG&E has completed describing recent sedimentation rates in the intake cove and expected sedimentation rates during the license extension period. Please also provide any analyses conducted to help determine expected dredging needs and timing during the license extension.

Section 30233 also requires that there be no feasible and less damaging alternatives to the activities such as dredging that may be permitted by this CCMP policy. The alternatives analysis PG&E provided in Section 2.6 of the Environmental Report accompanying the consistency certification appears to consider various alternatives based on just a potential five-year operating period rather than the full 20-year license extension period. Please provide a revised alternatives analysis that incorporates activities expected over the full 20-year period.

## Commercial and recreational fishing (CCMP Section 30234.5)

PG&E's certification states that this CCMP section does not apply to the proposed license extension because there are no fishing or boating industries in the area. However, Section 30234.5 requires that fishing activities overall be acknowledged and protected. As noted above, the license extension would extend for up to 20 years the security zone in coastal waters near Diablo Canyon that, but for the extension, would be reduced or eliminated. This would likely make this area available for commercial and recreational fishing. Please provide an evaluation of fishing opportunities that would otherwise be available near Diablo Canyon and describe what measures PG&E would implement to protect fishing opportunities during an extended licensed operating period.

## **Environmentally Sensitive Habitat Areas (CCMP Section 30240)**

Environmentally Sensitive Habitat Areas (ESHA) are areas in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities. CCMP Section 30240(a) states that ESHA shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. CCMP Section 30240(b) states that development in areas adjacent to ESHA shall not degrade those areas or be incompatible with their continued presence.

PG&E's certification states that the license renewal is consistent with Section 30240 because there is no development associated with the extension. However, the Environmental Report states that PG&E currently employees a Vegetation Management Plan and a Nesting Bird

Management Plan to ensure that plant operations minimize adverse impacts to vegetation and nesting birds. As such, it is reasonably foreseeable that extended plant operations have the potential to affect vegetation and bird species. Please provide a copy of the Vegetation Management Plan and the Nesting Bird Management Plan.

#### Traffic and Circulation (CCMP Sections 30252 and 30253)

CCMP Section 30253(d) requires development to minimize energy consumption and vehicle miles traveled while Section 30252 requires development to facilitate transit services and non-automotive circulation. The typical workforce at the DCPP site consists of approximately 1,633 employees, including 1,222 permanent full-time employees and an additional 411 supplemental staff who support plant operations. Approximately 84 percent of the permanent employees reside in the County of San Luis Obispo, with 11 percent of employees residing in Santa Barbara County and the remaining 5 percent residing in various other locations. During refueling outages, which usually last approximately 35 days per unit, there are typically an additional 500 to 600 temporary contract employees onsite, but there can be as many as 1,000 additional workers depending on the scope and conditions at the time of the outage.

Section 3.9.6 of the Environmental Report discusses transportation in the DCPP region. In 2021 PG&E performed a transportation assessment for DCPP to identify level of service (LOS) based on average daily traffic counts in the immediate area and found that all roadway segments were operating at a LOS of "C", which according to the County of San Luis Obispo (County) is acceptable for rural areas. However, the section concludes by stating that the transportation assessment was related to decommissioning, including construction activities and employment changes. Please clarify how the LOS determined in the decommissioning transportation study relates to anticipated LOS during license renewal, including refueling outages, and whether any roadway segments would operate below an acceptable LOS as a result of license renewal and/or refueling outages.

#### Minimizing risks (CCMP Section 30253)

The proposed extended operations would take place at a location and facility subject to relatively high levels of seismic and other hazards. PG&E's certification states that CCMP Section 30253 does not apply to the proposed license renewal because there is no associated development. As noted above, however, it is reasonably foreseeable that the license extension includes development needed to ensure reliable operations that will result in effects on coastal uses and resources. To allow for adequate review of potential effects, please provide the following hazards-related documents and analyses:

#### Seismic Hazards

- Please provide the document referenced in hazards discussions in Appendix E: PG&E. 2021a. Diablo Canyon Power Plant Units 1 and 2, Updated Final Safety Analysis Report, Revision 26. October 2021. ADAMS Accession Package No. ML21306A142 and any relevant studies to seismic hazards citied therein.
- Please provide an updated analysis or reevaluation of seismic hazards at DCPP which includes new information and science which has emerged since PG&E's last comprehensive evaluation. The analysis should include an assessment of whether the plant design basis continues to protect against seismic hazards, and what additional development (if any) would be necessary to protect plant facilities and operations against

seismic hazards over the proposed relicensing period (at a minimum). The ground-shaking analysis should consider at least the 2,475-yr recurrence interval event (or a deterministic equivalent). Staff understands that a Seismic Review Update required by SB846 is currently underway; subject to staff review, this document may fulfil all or part of the Commission's information needs related to seismic hazards.

#### Tsunami Hazards:

- Please provide the document referenced in hazards discussions in Appendix E: PG&E. 2021a. Diablo Canyon Power Plant Units 1 and 2, Updated Final Safety Analysis Report, Revision 26. October 2021. ADAMS Accession Package No. ML21306A142 and any relevant studies to tsunami hazards citied therewithin
- Please provide a summary of tsunami analyses completed for PG&E and/or NRC focused on Diablo Canyon site completed since 2000.
- Please provide an analysis of impacts (e.g., how operations would be affected, the potential for risk to personnel onsite) from Maximum Considered Tsunami (at least 2,475-year recurrence interval or deterministic equivalent) that also considers the expected sea level rise scenarios over the project life (i.e., relicensing period) and consideration of flow speed and flow depth in analysis of potential impacts to operations and recovery.

#### Waves & Coastal Storms

- Please provide the document referenced in hazards discussions in Appendix E: PG&E. 2021a. Diablo Canyon Power Plant Units 1 and 2, Updated Final Safety Analysis Report, Revision 26. October 2021. ADAMS Accession Package No. ML21306A142 and any relevant studies to waves, coastal storms, and seiche hazards citied therein.
- Please provide an analysis of impacts (e.g., how operations would be affected, the
  potential for risk to personnel onsite) from both 100-year and 500-year total water levels
  and wave overtopping (if applicable) that also considers the potential for sea level rise
  over the project life (relicensing period).

#### Coastal Erosion

- Please provide the document referenced in hazards discussions in Appendix E: PG&E. 2021a. Diablo Canyon Power Plant Units 1 and 2, Updated Final Safety Analysis Report, Revision 26. October 2021. ADAMS Accession Package No. ML21306A142 and any relevant studies to erosion or landslide hazards citied therein
- Please provide an analysis of impacts (e.g., how facilities and operations would be affected, the potential for risk to personnel onsite) from both short-term episodic erosion (e.g., landslides or storm-related) and long-term erosion over the proposed relicensing period (at a minimum) that also considers the potential for accelerated erosion from potential sea level rise.

# Closing

Thank you for your attention to these requests. As noted previously, we are happy to discuss these with you and answer any questions you may have.

Sincerely,

Tom Luster

Tom Luster

Energy, Ocean Resources, and Federal Consistency Division