Comment Set D
California State Lands Commission

STATE OF CALIFORNIA — ARNOLD SCHWARZENEGGER, *Governor*

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

PAUL D. THAYER, *Executive Officer*
(916) 574-1800 FAX (916) 574-1810
California Relay Service From TDD Phone **1-800-735-2922**
from Voice Phone **1-800-735-2929**

Contact Phone: **(916) 574-1833**
Contact FAX: **(916) 574-1835**

May 4, 2005

File Refs: SCH# 2004101001,
PRC 4307, PRC 4449 and G 13-01

Ms. Nadell Gayou
The Resources Agency
901 P Street
Sacramento, CA 95814

Mr. Andrew Barnsdale
California Public Utilities Commission
c/o Aspen Environmental Group
235 Montgomery Street, #935
San Francisco, California 94104

Dear Ms. Gayou and Mr. Barnsdale:

Subject: Pacific Gas and Electric Company's (PG&E) Proposed Diablo Canyon Power Plant (DCPP) Steam Generator Replacement Project, San Luis Obispo County

Staff of the California State Lands Commission (CSLC) has reviewed the Draft Environmental Impact Report (DEIR) for the above-proposed project. Under the California Environmental Quality Act (CEQA), the California Public Utilities Commission (CPUC) is the Lead Agency and the CSLC is a Responsible and/or Trustee Agency for any and all projects that could directly or indirectly affect sovereign lands, their accompanying Public Trust resources or uses, and the public easement in navigable waters. **D-1**

As general background, the CSLC has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable rivers, sloughs, lakes, etc. The CSLC has certain residual and review authority for tide and submerged lands legislatively granted in trust to local jurisdictions (Public Resources Code §6301 and §6306). All tide and submerged lands, granted or ungranted, as well as navigable rivers, sloughs, etc., are impressed with the Common Law Public Trust.

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The Public Trust is a sovereign public property right held by the State or its delegated trustee for the benefit of all the people. This right limits the uses of these lands to waterborne commerce, navigation, fisheries, open space, recreation, or other recognized Public Trust purposes. A lease from the CSLC is required for any portion of a project extending onto State-owned lands that are under its exclusive jurisdiction. D-1

As outlined in the DEIR, the Proposed Project would replace the original steam generators at DCPP Units 1 and 2. Each DCPP unit consists of four steam generators, for a total of eight steam generators at the site, all of which would be replaced as part of the Proposed Project. The four major phases of PG&E's Diablo Canyon Power Plant Steam Generator Replacement Project are as follows: 1) replacement steam generator (RSG) transport, 2) replacement steam generator staging and preparation, 3) original steam generator removal, transport and storage, and 4) RSG installation and testing of the RSGs.

The RSG Transport is one phase that involves the Fabrication and Transport to Port San Luis as outlined in Section B.3.1.1 of the DEIR. The RSGs will be transported from an overseas manufacturer to a southern California port via heavy-load ship and will be offloaded to a barge for travel to Port San Luis, and final transport with a ground transporter along Avila Beach Drive and the DCPP Access Road to a temporary staging area within the DCPP site. This component involves entering the Port during high-tide conditions using an established transport route. This portion of the project will occupy sovereign lands legislatively granted, with minerals reserved to the State, to the Port San Luis Harbor District, pursuant to Chapter 647, Statutes of 1955, as amended. Therefore, CSLC authorization will not be required for the proposed project. However, all necessary approvals and permits should be obtained from the Port San Luis Harbor District. This does not constitute, nor shall it be construed as a waiver of any right, title or interest by the State of California or any grantee of the State, in any lands under their respective jurisdiction.

Additionally, the DEIR describes a RSG Offloading Alternative (C.4.2). This alternative involves the delivery of the RSG's by barge from a southern California port directly to the Intake Cove offshore at Diablo Canyon. Once inside the Cove, the barge would anchor just west of the boat dock, and the RSG's would be offloaded and transported along existing roads. For your information, the CSLC has issued two leases (PRC 4307 and PRC 4449) to PG&E for water intake structures, a breakwater and for a cooling water discharge channel. Since the analysis for this alternative does not contain a plan view similar to Figure B-8 in the DEIR, we are unable to determine whether or not the existing boat dock is located within the CSLC's leasing jurisdiction. Since it appears that the alternative offloading is preferred over the proposed project offloading, a plan view of the Intake Cove offloading needs to be included in the DEIR. Once staff has reviewed the plan, we will advise whether or not a lease will be required. If so, Table A-2 and related text on page A-14 of the DEIR will need to be revised to reflect this information.

Further, the DEIR is unclear as to vessel (tug) anchoring needs. A vessel(s) anchoring plan should be included in the DEIR. The plan should provide a map of the proposed anchor spread and anchor locations or offshore temporary mooring locations D-2

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for each work vessel, and a narrative description of the anchor setting and retrieval procedures to be employed that will result in minimal impacts on the ocean bottom. The ocean bottom should then be characterized and described in the DEIR as to sandy or hard-bottom habitat, existing biological conditions, and any potential impact and mitigation that may be necessary. D-2

The first and second paragraphs in Section D.1.2.1 Environmental Baseline on page D.1-1 of the DEIR indicate that the environmental setting used to determine the impacts associated with the Proposed Project are those that existed in October 2004. The second paragraph indicates that this baseline includes an operating power plant. Then, the third paragraph on page D.1-2 of the DEIR indicates that the existence of the operating power plant and its ongoing effects on the environment are not a consequence of the Proposed Project. This reasoning, and the analyses contained in the DEIR, are flawed for the following reasons and supplemental information and analyses will be necessary prior to any required CSLC action. D-3

1. There is no information or discussion in the DEIR to explain the potential net differential impacts that may result due to the operational characteristics of the new versus the old generators. Are the new generators more "efficient"? Will they require a different (greater or smaller) volume of cooling water? Will the new thermal load, volume, size, spatial characteristics of the thermal plume be different (greater or smaller) or impact a different area than the existing operations of the power plant? What are these potential differential impacts, and what mitigation may be necessary? This information and analysis must be provided for public review and comment, not just as a response to comment in the FEIR.

2. Items 1 through 4 in Section D.3.1.5.1 Cooling Water Thermal Discharge Plume on pages D.3-17 and D.3-18 of the DEIR (and the subsequent paragraphs conclude that the environmental impact of the thermal plume from the existing power plant and generators is greater than originally anticipated (and greater than previously analyzed in a CEQA document or by the CSLC when the original lease was issues for the power plant). As a result, greater impacts to public Trust resources have occurred which are not quantified as part of the environmental setting baseline upon which impacts are based in the DEIR. D-4

While the third paragraph concludes that a negotiated settlement / Consent Judgement was entered into, neither the Consent Judgement, nor an analysis of the net increased impact, lost habitat values or equivalence between those lost values and the habitat values resulting from permanent protection of 5.7 miles of near-shore marine habitat (which presumably are part of the existing environmental setting anyway) are included in the DEIR as part of the environmental setting for the Proposed Project. The only way that the permanent protection of the 5.7 miles can be considered to "mitigate" for the impacts to Public Trust resources described in Items 1-4 mentioned above is if existing habitat values are actually increased to offset the greater loss that resulted from the greater than anticipated original impacts. This information and analyses needs to be included in the DEIR. D-5

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This letter is not intended, nor shall it be construed as, a waiver or limitation of any right, title, or interest of the State in any lands under the jurisdiction of the State Lands Commission. If there are any questions concerning the CSLC's jurisdiction, please contact Barbara Dugal, Public Land Manager, at (916) 574-1833. Questions concerning comments on the DEIR should be directed to Stephen L. Jenkins at (916) 574-1814 or jenkins@slc.ca.gov.

Sincerely,

Stephen L. Jenkins, Asst. Chief
Division of Environmental Planning
and Management

cc: Port San Luis Harbor District
Harbor Manager
P.O. Box 249
Avila Beach, CA 93424

Barbara Dugal

Responses to Comment Set D
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D-1 The comment is noted. If the project is approved, PG&E would be required to coordinate and obtain permits with the affected jurisdictions, including the Port San Luis Harbor District, as appropriate. Draft EIR page A-14, Table A-2, presents a comprehensive list of permits that may be required for the Proposed Project. The Port San Luis Harbor District has been added to Table A-2. The changes are reflected in the Final EIR.

Regarding the plan view for the RSG Offloading Alternative, operations of the RSG Offloading Alternative would be very similar, if not the same, as the Proposed Project. However, spacing constraints in the Intake Cove may require the use of smaller barges, each carrying two steam generators, rather than one large barge. This would increase the amount of time needed to offload the RSGs. See Section B.3.1.1 (and Figures B-8 and B-9) of the Draft EIR for a description of offloading operations/techniques for the Proposed Project and alternatives.

D-2 The comment is noted. As described in Section B.3.1.1, of the Draft EIR, vessel anchoring operations will be in compliance with applicable regulations such as the Federal Title 33, which regulates Navigation and Navigable Waterways and includes the International Navigation Rules Act of 1977 (33 CFR 80-82), the Inland Navigation Rules Act of 1980 (33 CFR 84-90), and the Maritime Transportation Security Act, the California Harbors and Navigation Code, and the Port San Luis Harbor District Code of Ordinances.

In addition, other measures will be taken to assure that marine life and ocean bottom are not impacted. At the time of docking, a diver would perform an underwater survey to ensure that the barge would not impact any sensitive marine life or be damaged by any underwater obstacles. Impact B-4 (Section D.3.3.2 of the Draft EIR) describes the potential invertebrate marine organism impacts from RSG barge offloading activities. The Draft EIR found that the impacts are considered adverse but not significant (Class III), and no mitigation is required. Revised text has been included in Section D.3.4.1 of the Final EIR to characterize the marine environment at the Intake Cove.

D-3 Refer to Master Responses MR-1 (Baseline) and MR-2 (License Renewal). The purpose of the Draft EIR is to inform decision-makers and the public about the significant effects of the Proposed Project on the physical environment and possible ways to minimize these effects [14 CFR §1512 (a)]. As described in MR-1 (Baseline), this Draft EIR analyzes the incremental changes that would be caused by the steam generator replacement project (Proposed Project). These incremental changes are mainly limited to the short-term effects of steam generator replacement activities and the long-term presence of the OSF Storage Facility. The existence of the operating nuclear power plant through the NRC authorized license period and its ongoing effects are not a consequence of the Proposed Project and, therefore, are not analyzed in this Draft EIR.

As described in MR-1 (Baseline), the engineering design and parameters associated with the replacement steam generators would be very similar to the original steam generators (see Section B.2.4 of the Draft EIR). There would be no planned or anticipated change to the height, width, thermal output, and power generation from replacing the steam generators at DCPP. As a result, the potential operating issues associated with the new steam generators would be the same as the existing baseline conditions.

D-4 The EIR provided a lengthy discussion of the existing marine biological baseline, as well an evaluation of potential impacts associated with the proposed Steam Generator Replacement Project. Issues surrounding the DCPP cooling water system, specifically marine organism entrainment, impingement and thermal plume impacts were thoroughly discussed in the Environmental Setting section of the EIR, specifically in Section D.3.1.5.

DCPP Units 1 and 2 have current operating licenses until September 2021 and April 2025, respectively, and are considered part of the environmental baseline. The operation of DCPP under these licenses is considered part of the environmental setting (i.e., the baseline), and is not subject to review as part of this EIR process. The EIR provided information related to ongoing DCPP cooling water system issues (see Section D.3.1.5) in order to fully disclose environmental issues associated with the DCPP that are part of the current baseline.

In order to fully understand environmental baseline conditions associated with the DCPP, environmental issues associated with facility operations at the time of the NOP were disclosed in the Environmental Setting section of the EIR. Numerous comments were received on the Notice of Preparation (NOP) relating to existing baseline "impacts" with commenters stating that continued operation of the DCPP would result in environmental impacts. Section D.3.1.5 of the EIR clearly states that ". . . existing thermal plume, impingement and entrainment issues would not change under this Proposed Project, and therefore, would be considered part of the baseline conditions of the project." Given the need for full disclosure under CEQA, the EIR correctly identified baseline conditions associated with the DCPP cooling water system, but did not identify these issues as project impacts.

D-5 Please see Response D-4 and Master Response MR-4 (Consent Judgment). Section D.3.1.5 of the Draft EIR outlines issues associated with the DCPP cooling water system that are considered to be part of the environmental baseline for the Proposed Project. The discussion does not attempt to portray that the Consent Judgment would correct the environmental damage that was summarized in this section, but provides an overview of the major marine biological resource issues associated with the DCPP that are also considered to be part of the environmental baseline. The degraded marine resource conditions offshore the DCPP are characteristic of the marine environment at the time the NOP was published, which under CEQA, defined the baseline against which all potential impacts are to be evaluated.

Regardless of the current status of the proposed Consent Judgment, the EIR identified the significant marine biological issues (part of the baseline) associated with past, present and future operation of the DCPP. Potential impacts associated with the DCPP cooling water system have been evaluated under the No Project Alternative, where impacts associated with the early cessation of the DCPP cooling water system were found to be beneficial.

The EIR has been modified to note that the Consent Judgment evaluation is ongoing and there is no clear timeframe for reaching a settlement and implementation of any of the mitigation or restoration projects identified with the draft Consent Judgment.

Comment Set E
California Coastal Commission

STATE OF CALIFORNIA—THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, *GOVERNOR*

CALIFORNIA COASTAL COMMISSION
45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE AND TDD (415) 904-5200
FAX (415) 904-5400

May 5, 2005

Mr. Andrew Barnsdale
California Public Utilities Commission
c/o Aspen Environmental Group
235 Montgomery Street, Suite 935
San Francisco, CA 94104

RE: Comments on Proposed Steam Generator Replacement at Diablo Canyon Power Plant (DCPP) – Draft Environmental Impact Report (State Clearinghouse No. 2004101001)

VIA FACSIMILE (805) 888-2750

Dear Mr. Barnsdale:

Thank you for the opportunity to comment on the above-referenced Draft EIR. The comments herein related primarily to the adequacy of the document for purposes of CEQA, but also focus on revisions necessary to allow more efficient review of the proposed project's conformity to the Coastal Act. Portions of the proposed project are located within the coastal zone and within the jurisdiction of both the County of San Luis Obispo and the Coastal Commission; therefore, the project may require two coastal development permits – one from the County for upland portions of the proposal and another from the Coastal Commission for portions in or over coastal waters. Further, the proposal is within the Commission's appeal jurisdiction; therefore, the County's permit decision may be appealed to the Commission pursuant to Coastal Act Section 30603(a). E-1

Our overall comment on the EIR is that several key aspects of the proposed project are not adequately described or evaluated for purposes of CEQA review. The EIR does not yet provide the level of information necessary to achieve one of the main purposes of CEQA – to inform decision-makers of the likely environmental consequences of their decisions and identify measures that will mitigate adverse consequences. In each of our comments below, we have recommended specific revisions to the EIR that would allow it to better conform to CEQA requirements and provide the level of information needed to make informed decisions about the proposed project.

Jurisdiction and Applicable Regulations

1) As noted above, the proposed project will likely require coastal development permits from both the County and the Coastal Commission; however, the Draft EIR mentions only the County's permit. Any in-water or over-water development, such as dock construction, dredging, or other activities in either the Avila Beach area or in the area of the DCPP complex would require review by the Coastal Commission to determine conformity to the Coastal Act. Please add the Coastal Act as an applicable regulation and the Coastal

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Commission's permit jurisdiction to the appropriate sections of the EIR – e.g., Section D.7.2's description of applicable regulations for water quality, permits listed in Table A-2, etc. Additionally, and as noted above, you may also wish to note in the EIR that any coastal development permit decision by the County may be appealed to the Coastal Commission. E-1

Environmental Baseline E-2

2) The Draft EIR (at page ES-2) states that one of the key considerations used to establish the document's environmental baseline is the remaining term of the power plant's NRC licenses. Unit 1 is licensed until 2021, and Unit 2 is licensed until 2025. The EIR assumes for purposes of its environmental analyses a baseline scenario in which the generators currently operating at the DCPP would operate until the end of those license terms. The EIR therefore evaluates only those incremental changes that would be caused by replacing the generators – e.g., moving equipment in and out of the power plant, performing relatively short-term construction projects, etc. However, this baseline assumption – that the existing generators will operate through the remaining term of the NRC licenses – is faulty, as it does not reflect actual conditions at DCPP and does not conform to CEQA's requirement that the environmental setting used in the EIR be based on existing physical conditions[1].

   The remaining term of the licenses is not an appropriate foundation for this proposed project's environmental baseline, especially since the baseline selected in this EIR leaves out a much more significant physical condition – the degraded state of the existing generators. The cracked condition of the existing generators and associated infrastructure is a far more relevant baseline physical condition than the remaining term of the two operating licenses, and in fact, the generators' degraded condition is the primary reason the project is being proposed.

   We therefore recommend that the EIR use the actual existing physical condition of the generators as the foundation of the environmental baseline rather than use the remaining term of the NRC licenses. The revised baseline should then be applied to the relevant evaluations in the EIR, particularly those related to water quality and marine biology. This would conform to the CEQA requirement and would provide a more accurate and suitable basis for comprehensively evaluating the proposed project and comparing its effects with those of other alternatives.

[1] Section 15125(a): "An EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to an understanding of the significant effects of the proposed project and its alternatives."

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Reasonably Foreseeable Alternatives

E-3

3) While the remaining term of the NRC licenses described above is not an appropriate foundation for the environmental baseline, it does serve as an appropriate basis for another aspect of CEQA review, that of the alternatives analyses. The EIR should consider the different environmental effects that would result from three reasonably foreseeable DCPP operating "lifespans" – first, the power plant's operating life with the "no project alternative" that would occur if the generators are not replaced (i.e., through 2013-14); second, its operating life with generator replacement and with the existing operating licenses (i.e., through 2021 and 2025); and finally, its operating life with generator replacement and with an extension of the licenses (i.e., through approximately 2050, assuming a forty-year operating life for the new generators). This would allow the necessary comprehensive evaluation of three reasonably foreseeable scenarios that could occur due to the decisions resulting from this CEQA review.

   While the EIR notes that PG&E has not yet requested an extension of its operating licenses and that such a request would involve a number of considerations, it also notes that approval of this proposed generator replacement project could provide PG&E an incentive that would increase the likelihood of such a request. Given that these new and costly generators would have an expected operating life that goes well beyond the fifteen to twenty years remaining in the current license terms, it is clearly prudent for PG&E to request a license extension and clearly foreseeable to assume PG&E will request such an extension.

   We therefore recommend that the EIR be revised to include the three reasonably foreseeable scenarios described above as part of the document's environmental evaluations and alternatives analyses.

Alternative Locations

E-4

4) In addition to the alternative scenarios discussed above, we recommend the EIR include additional alternatives related to the proposed location for storing the original generators. The document considers five potential locations within the DCPP complex, each with significant site-related problems.

   Section D.5 of the EIR describes the problems associated with the five proposed sites – each is located on fill, which creates more substantial seismic-related hazards compared to other parts of the DCPP complex, and each is subject to varying degrees of erosion, flooding, undermining, or instability due to a location over or near Diablo Creek or near steep slopes. The EIR then describes several proposed mitigation measures that could address the problems with the eventually selected site. These measures consist primarily of doing detailed seismic and geotechnical studies to determine what additional structural measures might be needed to adequately stabilize the selected site. These additional measures could include construction of large retaining walls, slope cutbacks, bunkers, or other substantial structures, any of which could result in additional significant environmental impacts due to the proximity of the sites to the creek and steep slopes. However, the studies would not be done until well after CEQA review is completed.

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California Coastal Commission

Given the importance of selecting an appropriate site for storing the generators and the potential that any of the five proposed sites would require substantial modification or construction of large structural features, it is important to evaluate their seismic and geotechnical conditions during CEQA review rather than after so that the results can be used to inform the decision-making process. Additionally, it is reasonably foreseeable that given the characteristics and problems of the five proposed sites, they could all be found to be unsuitable. However, without the results of the seismic and geotechnical studies, this would not be determined until well after CEQA is completed and various permitting decisions are made. This is just the type of problem CEQA requirements are meant to avoid, and it is therefore necessary to evaluate the seismic and geotechnical characteristics of the proposed sites now rather than later. To do otherwise would be a misapplication of CEQA. E-4

We therefore recommend that the EIR evaluate the detailed seismic and geotechnical necessary to determine the structural stability of each site and the structural mitigation measures that would be necessary to ensure each site's required level of stability.

5) Related to the comment above is our concern that one of the criteria used to select the five proposed storage sites does not conform to CEQA requirements and is defined by issues other than feasibility, environmental effects, or other valid concerns. The criterion, one of several in Section C.3.2 of the EIR that were used to determine acceptable alternatives, is titled "Regulatory Feasibility". It is defined, in relevant part, as: "Does the alternative have the potential to avoid lands that have regulatory restrictions that may substantially limit the feasibility or permitting of the replacement and subsequent storage of the steam generators?" While "regulatory feasibility" is a valid factor to consider during CEQA review, it appears that it may have been improperly defined and misapplied in this Draft EIR in order to inappropriately limit the sites being considered to those outside the coastal zone. Further, using the criterion as defined in this document results in the evaluation of only the questionable sites mentioned above and the exclusion of other sites that would likely be feasible and would result in fewer adverse environmental impacts. E-5

The criterion cited above differs substantially from the definition of "feasible" in Section 15364 of the CEQA Guidelines, which states: "'Feasible' means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." The criterion in the EIR also differs substantially from the one used in a recent PUC review of the San Diego Gas & Electric Company's Rainbow Valley transmission line. That review describes regulatory feasibility as follows: "The regulatory criterion balances whether the Project could be accomplished within the framework of existing governmental regulations and policies within a reasonable period of time based on project objectives." That definition meshes well with the CEQA definition, unlike the one used in this Draft EIR.

The use of this significantly different criterion has also resulted in five proposed sites that are less geologically stable and less secure than other apparently suitable locations. Those five sites also happen to be just outside the coastal zone boundary, which may slightly ease the proposed project's regulatory requirements but appears to increase the adverse environmental effects associated with each site. However, even when measured against this inappropriate

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definition of regulatory feasibility, other sites that happen to be within the coastal zone would likely fare well, since they are not subject to regulatory restrictions that "substantially limit their feasibility". This is shown, for example, by the Coastal Commission's recent approval of the above-noted ISFSI project for long-term storage of spent nuclear fuel at a location within the DCPP complex and within the coastal zone. In its approval of that project, the Commission made a number of findings related to the site's suitability for that type of use and noted the relative lack of the types of environmental constraints that are present in the five proposed generator storage sites. Part of the Commission's approval of the ISFSI project was based on that site's geologic characteristics being similar to the already heavily studied power plant site. The uncertainties mentioned above associated with the five proposed storage sites would likely not be a factor for other potential locations at or near the ISFSI site or the power plant, since the geologic characteristics of those locations are known to be sufficiently stable and would not require as-of-yet unknown additional structural mitigation measures. These sites would likely provide additional benefits in that they are closer to the core transportation and security systems of the DCPP. E-5

We recommend, therefore, that the definition of "regulatory feasibility" in the EIR be revised to more closely align with the CEQA definition and that the revised definition be applied to other sites throughout the DCPP complex that may exhibit better environmental, geologic, and safety characteristics.

Adverse Effects on Marine Biological Resources and Water Quality

6) The Draft EIR describes the existing power plant's use of up to over 2.5 billion gallons of ocean water per day for cooling and briefly relates some of the adverse effects related to use of this water. [Note: to provide a sense of scale, 2.5 billion gallons would cover an area of about twelve square miles with water one foot deep.] The document, however, does not provide the level of detail necessary to adequately describe the adverse effects of this cooling water use and does not consider the opportunities made possible by this proposed project to avoid or reduce these adverse effects. E-6

The EIR states that the current power plant operations are authorized by an NPDES permit from the Regional Water Quality Control Board. Please note that this NPDES permit was set to expire several years ago and has not yet been updated, in large part due to a number of unresolved issues related to the power plant's adverse effects on water quality and marine biological resources. The Regional Board and other parties have identified extensive impacts to the local and regional marine ecosystem, but have not yet agreed on the steps necessary to mitigate these impacts. Additionally, the EIR erroneously references a draft Consent Judgment being considered by the Board to resolve these issues as if it were a final, approved document. The scope of issues yet to be resolved through that Consent Judgment may result in a final document that is substantially different from draft version currently under consideration.

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Among the issues still requiring resolution is whether the proposed types and levels of mitigation being considered in the draft Consent Judgment conform to applicable legal and regulatory requirements. These include state requirements for conservation easements and recent changes at the federal level to Section 316(b) of the Clean Water Act, which is used to regulate power plant cooling systems such as the one at DCPP. E-6

Because of the EIR's lack of detail and the unresolved issues related to DCPP's effects on marine biology and water quality, we recommend several revisions to those sections of the EIR. First, the EIR's description and evaluation of marine biology and water quality effects should be revised based on Comments 2 and 3 above regarding environmental baseline and reasonable alternatives. These revisions should specifically include an evaluation of the different impacts to the marine environment that would result from the three scenarios described in Comment 3. E-7

We also recommend the EIR be revised to consider a far wider and more detailed range of feasible alternative cooling mitigation options than the few briefly mentioned in the EIR. The EIR states only that the Regional Board staff determined in its draft review that while the cooling system's entrainment effects are significant, screens and filters that would reduce entrainment are only experimental and therefore not "demonstrated available technologies", and that the cost of installing a closed cooling system would be wholly disproportionate to the resulting benefit. These preliminary findings were driven largely by the Clean Water Act's "Best Technology Available" standard and occurred under the previous version of the 316(b) rule mentioned above. Application of the revised rule may require different findings than those in the current Regional Board draft document. Further, the EIR's description of this issue does not provide sufficient information to determine conformity to other applicable requirements, such as the Coastal Act's policy that marine biological resources be "maintained, enhanced, and where feasible, restored", and that the adverse effects of entrainment be minimized. E-8

There are a number of other cooling methods and mitigation measures not considered in the EIR that may be feasible for Diablo Canyon's operations. For example, an upcoming workshop sponsored by the California Energy Commission (Advanced Cooling Strategies Conference on June 1 & 2, 2005) will include sessions on wet/dry-cooling, air-cooling, spray-cooling, closed loop-cooling, and others. Some of these may be feasible at Diablo Canyon, and any of them would reduce the existing level of significant adverse effects to the marine ecosystem. It is therefore appropriate and necessary for the EIR to evaluate these alternatives as part of this proposed project review.

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California Coastal Commission

Closing

Again, thank you for the opportunity to comment. Please contact me at 415-904-5248 or at tluster@coastal.ca.gov if you have questions or would like additional information.

Sincerely,

Tom Luster
Energy and Ocean Resources Unit

cc: CEQA State Clearinghouse
San Luis Obispo County – James Caruso
Mothers For Peace – Rochelle Becker, David Weisman

Responses to Comment Set E
California Coastal Commission

E-1 As the commenter notes, the Proposed Project will likely require coastal development permits from both the County and the California Coastal Commission (CCC). As stated in the Draft EIR, Section D.8, the federal authority for protection of coastal resources is under the federal Coastal Zone Management Act, and is delegated to the State under the California Coastal Act (CCA). Additionally, under Local Ordinances and Policies (Section D.8.2), the Draft EIR does state that the Proposed Project falls under the jurisdiction of San Luis Obispo County and the Port San Luis Harbor District. Therefore, the County of San Luis Obispo Local Coastal Programs or Plans (LCPs), which implements the requirements of the CCA, would apply to the Proposed Project.

As noted in the comment, the Draft EIR only mentions the County's permit in Table A-2. The CCC has been added to the appropriate sections of the Final EIR, such as Table A-2. Changes are reflected in the Final EIR. In addition, it has been noted that the coastal development permit by the County may be appealed to the Coastal Commission.

E-2 Please refer to Master Response MR-1 (Baseline).

E-3 Please refer to Master Responses MR-1 (Baseline) and MR-2 (License Renewal). The comment recommends that the Draft EIR be revised to include scenarios of foreseeable DCPP operation under alternative "lifespans," including an extension of the NRC licenses. As stated in Section D.1.2.2 of the Draft EIR, PG&E is still evaluating the feasibility of applying for a license renewal. Ongoing DCPP operations are part of the baseline of the Proposed Project, but they are not part of the Proposed Project. The Proposed Project consists of the replacement of the original steam generators at DCPP, and the Draft EIR examines a reasonable range of alternatives to this project, as required by CEQA. Therefore, in accordance with CEQA, the EIR need not consider alternatives to ongoing operation, although the lifespan of DCPP operation would be shortened under the No Project Alternative. The EIR provides adequate analysis to inform decision-makers and the public about the significant effects of the Proposed Project and its alternatives, including the shortened DCPP lifespan that would occur under No Project Alternative.

E-4 Please see Response C-10. The commenter requests the EIR to include additional alternatives for OSG storage because it is "reasonably foreseeable" that all five potential sites "could be found to be unsuitable" due to geotechnical considerations. However, the commenter provided no information to support the conclusion that the sites are likely to be found unsuitable. The geotechnical analysis of the alternative OSG storage sites found all would be exposed to similar seismic hazards from ground shaking and slope instability, but the potential impacts could be mitigated to less than significant levels by proper engineering design using additional geotechnical evaluation.

The commenter also requests "detailed seismic and geotechnical studies" to determine the impacts of the proposed geotechnical mitigation measures. Section 15126.4(a)(1)(B) of the CEQA Guidelines states that, "Where several measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular alternative should be identified." The mitigation measures proposed to reduce the potential impacts regarding geology, soils, and paleontology resources are discussed in detail in Sections D.5.3 and D.5.6. As

required by Section 15126.4(a)(1)(B), the basis for selecting these mitigation measures is also presented. The comment states that CEQA requires that the mitigation measures regarding slope stability should be accomplished immediately. CEQA, however, provides an agency with some flexibility in terms of when and in what manner mitigation measures will be implemented. Section 15126.4(a)(1)(B) of the CEQA Guidelines states that, "Formulation of mitigation measures should not be deferred until some future time. However, measures may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way." Mitigation Measure G-3a specifically refers to Design Earthquake standards and Mitigation Measure G-4a specifically states that stability analysis shall be performed in accordance with applicable building codes. The mitigation measures therefore fully comply with the CEQA Guidelines and CEQA case law which holds that conditions requiring compliance with environmental standards are common and reasonable mitigation measures. *Sundstrom v. County of Mendocino*, 202 Cal.App.3d 296, 308 (1988).

Further, mitigation measures need not specify precise details of design and can leave exact design details to the technical personnel designing the structure. Where a significant environmental impact is recognized and where mitigation measures have been identified that would reduce the impact to less than insignificant, specific design measures can be imposed later without requiring additional environmental review. *Ocean View Estates Homeowners Association v. Montecito Water District*, 116 Cal.App.4th 396, 400-401(2004). Mitigation Measure G-3a requires the facility be designed to safely withstand seismic effects and Mitigation Measure G-4a requires PG&E to develop an engineering design to withstand the impacts caused by potential landslides. These requirements would be incorporated into building design at the appropriate time, when building design is prepared and approved.

E-5 Please see Response E-4. The commenter states that the definition of "regulatory feasibility" in the EIR results in five alternative sites for the OSG Storage Facility "outside the coastal zone boundary, which may slightly ease the Proposed Project's regulatory requirements but appears to increase the adverse environmental effects associated with the site." However, the commenter provides no information to support a conclusion that an alternative site within the coastal zone boundary would have lesser impacts.

The comment states that the feasibility criterion regarding alternatives addressed in the EIR are improperly defined, yet the comment does not specifically state how the definition of feasibility in the EIR is inconsistent with CEQA. CEQA Guidelines Section 15126.6 (a) requires that an EIR examine a reasonable range of alternatives and the EIR does, in fact, examine such a range of alternatives for the Proposed Project. Four different on-site locations for OSG storage were examined in the Draft EIR. As explained in Sections C.5.1 and C.5.4, no feasible off-site locations could be found for the OSG Storage Facility. The range of alternatives required in an EIR is governed by the "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice [CEQA Guidelines Section 15126.6 (f)]. The CPUC, therefore, has the discretion to select a range of feasible alternatives, based on their compliance with most of the basic project objectives. The CPUC has done exactly that by specifically identifying the legal, regulatory and jurisdictional limitations that may affect the feasibility for alternative sites for the OSG storage facility. CEQA Guidelines Section 15126.6(f)(1). Section C.3.2 defines the specific regulatory and jurisdictional limitations mentioned in Section 15126.6(f)(1) that are used by the

CPUC to determine the feasibility of alternatives. All of the criteria identified in Section C.3.2 relate directly to CEQA feasibility criteria.

The comment also states that citing regulatory restrictions that substantially limit feasibility of alternatives is inappropriate. CEQA, however, specifically allows for the use of feasibility criteria to eliminate alternatives that are faced with extensive regulatory restrictions. CEQA states that a lead agency may rely on adopted land use policies, regulatory limitations and jurisdictional boundaries when assessing whether an alternative site is feasible or not. Section 15126.6(f)(1) The EIR, therefore, properly cites regulatory limitations in Section C.3.2 to determine feasibility of OSG storage on-sites locations. Feasibility is further defined in Section 15364 of the CEQA Guidelines as, "capable of being accomplished in a successful manner within a reasonable period of time taking into account economic, environmental, legal, social and technological factors." The Proposed Project could be significantly delayed by locating an OSG storage site in the Coastal Zone due to the lengthy Coastal Commission approval process. This approval process could prevent the Proposed Project from being accomplished within a reasonable period of time. It is fully appropriate, therefore, for the CPUC to conclude that if approval cannot be successfully accomplished within a reasonable time frame, that an alternative is infeasible.

The comment also states that the feasibility criterion regarding regulatory feasibility used in the San Diego Gas and Electric Company Rainbow-Valley Transmission Line EIR substantially differs from the regulatory and legal feasibility criteria used in the Proposed Project EIR. The Proposed Project alternatives screening methodology and the Rainbow-Valley criterion, however, are actually very similar as both take into account regulatory restrictions and project objectives and time frame.

E-6 Existing baseline issues related to ongoing operation of the DCPP include the use of water for cooling, and these are the baseline conditions against which the impacts of the Proposed Project have been evaluated. Section D.3.1.5 of the EIR clearly states that ". . . existing thermal plume, impingement and entrainment issues would not change under this Proposed Project, and therefore, would be considered part of the baseline conditions of the project." Please also see Master Responses MR-1 (Baseline) and MR-3 (Jurisdiction).

The Consent Judgment process described in Section D.3.1.5 of the EIR outlines existing issues associated with the DCPP cooling water system and the efforts to regulate its operation. The Consent Judgment process is ongoing and separate from the proceeding for the Proposed Project. The discussion does not attempt to portray that the Consent Judgment would correct the environmental damage that was summarized in this section, but provides an overview of the major marine biological resource issues associated with the DCPP that are also considered to be part of the environmental baseline. The analysis of Proposed Project impacts does not rely on resolution of the Consent Judgment.

The EIR has been modified to note that the RWQCB has directed staff to evaluate additional alternatives. This evaluation is ongoing and there is no clear timeframe for reaching a settlement and implementation of any of the mitigation or restoration projects identified with the draft Consent Judgment. See information in Master Response MR-4 (Consent Judgment).

E-7 As noted in Response E-6 above, existing environmental impacts associated with the DCPP cooling water system currently exist and are considered as the environmental baseline under CEQA. Please also see Master Response MR-1 (Baseline).

Given the assumed baseline, it should be noted that the EIR also identified impacts associated with the No Project Alternative, where the DCPP would cease operations before the end of the current license periods. The No Project Alternative would be beneficial due to a cessation of the cooling water system and associated marine organism impingement/entrainment and thermal plume impacts. Regardless of the resolution of the Consent Judgment, cessation of DCPP cooling water system operations would result in a beneficial environmental impact on marine biological resources.

E-8 As described in Master Response MR-1 (Baseline), the existing power plant operations are considered part of the baseline conditions, which also includes the existing once-through cooling system at DCPP.

Comment Set F
San Luis Obispo County Air Pollution Control District

AIR POLLUTION CONTROL DISTRICT
COUNTY OF SAN LUIS OBISPO

May 5, 2005

Andrew Barnsdale, CPUC
c/o Aspen Environmental Group
235 Montgomery Street, Suite 935
San Francisco, CA 94104

SUBJECT: APCD Comments on Draft EIR for the Proposed Diablo Canyon Power Plant Steam Generators Replacement Project

F-1

Dear Mr. Barnsdale:

The San Luis Obispo County Air Pollution Control District (APCD) appreciates the opportunity to provide comments on the draft environmental impact report (DEIR) for the Pacific Gas & Electric's (PG&E) proposed project. The proposal is to replace the steam generators for the two reactors at the Diablo Canyon Power Plant (project), the construction of 90,000 square feet of temporary facilities, and the construction of a holding facility for the old steam generators. The DEIR addresses several of the APCD comments that were included in our November 8, 2004 letter on the Notice of Preparation for the proposed project. The APCD looks forward to working with the County of San Luis Obispo, PG&E, and the California Public Utilities Commission (CPUC) on implementing the air quality mitigation measures necessary to bring the impacts of the proposed project to a level of insignificance.

CONSTRUCTION EMISSIONS

General Comments

In general, the Air Quality section is relatively understandable; however, the emission tables are somewhat unclear and clarification is needed. The DEIR has emission tables for each of the activities that will take place during the replacement steam generator (RSG) project. What is unclear is whether some or all of these activities will occur concurrently. As such, daily and quarterly total emission tables are needed to clearly identify all the emissions that will occur for all activities that occur simultaneously. Those emission tables need to be compared to the APCD's construction based CEQA Significance Thresholds and additional mitigation is necessary if those scenarios indicate threshold exceedences.

There is also an inconsistency in the DEIR's discussions about the maximum number of days that RSG transport activities shall occur. In paragraph two on Page D.2-7, it is stated that, "The duration of transport activity would be about two to four days for each of the two separate shipments." In paragraph four on that same page, it is stated that, "Quarterly emissions from all transport activities are calculated by assuming that no more than five days of transport trips would occur...." The inconsistency needs to be corrected and the emissions analysis needs to reflect the worst case scenario.

F-2

One final general comment before getting into specifics is that the daily emissions associated with the transport activities are estimated to be 571 lbs of NOx/day. This substantially exceeds

F-3

3433 Roberto Court • San Luis Obispo, CA 93401 • 805-781-5912 • FAX: 805-781-1002
info@slocleanair.org ❖ www.slocleanair.org

Comment Set F, cont.
San Luis Obispo County Air Pollution Control District

the APCD's construction based CEQA threshold of 185 lbs/day. Section 2.3, Comparison to Standards, in the 2003 APCD's CEQA Air Quality Handbook states: F-3

> State and federal ambient air quality standards have been established to protect public health and welfare from the adverse impacts of air pollution; these standards are listed in Table 2-2. Industrial and large commercial projects are sometimes required to perform air quality dispersion modeling if the District determines that project emissions may have the potential to cause an exceedance of these standards.

Due to the large exceedence of the APCD's daily NOx threshold, dispersion modeling for NO_2 needs to be performed and the results included in this EIR. Should the dispersion modeling indicate that the transport activities could result in an exceedence of the State NO_2 standard, additional project modifications (e.g. scheduling changes) need to be defined and agreed upon in coordination with the APCD.

Specific Comments F-4

Below is a list of specific comments on the text included in the Air Quality section of the DEIR. Text recommended for removal is identified by using the strikeout font and additional text is highlighted by using the underline font. In some instances, the identified changes are small and a brief explanation is included.

1. Section D.2.3.2 Replacement Steam Generator Transport

a. Modify the last paragraph on Page D.2-6: The third sentence of the original paragraph needs to be removed because it is speculative in nature and suggests that short term impacts to this toxic air contaminant (TAC) are of little consequence. This project is just one of many projects that have subjected the Avila Beach community to significant diesel impacts.

> Diesel particulate matter from the heavy-duty equipment is a TAC that can cause both chronic and carcinogenic health effects. CARB lists this pollutant, and others routinely emitted as byproducts of fuel combustion, as a TAC with no identified threshold level below which there are no significant effects. ~~The hazardous effect would occur only if exposure is prolonged (over several years) and sensitive receptors are located near the sources~~. Diesel emissions from equipment may also create objectionable odors.

b. Fourth line in first paragraph discussing short-term acrolein exposures on Page D.2-7: F-5

> Remove the words, "small quantity of."

This text needs to be removed because it speculates that the concentrations of acrolein will be low when in fact, the health risk assessment is the tool that is needed to identify the acrolein

Comment Set F, cont.
San Luis Obispo County Air Pollution Control District

concentrations that can be expected as a result of the transport activities and the results will be used to determine the appropriate mitigation in consultation with the APCD. F-5

c. Modify the third paragraph on Page D.2-7: The APCD revision to this paragraph is necessary as a result of the County's ozone attainment status and the APCD's effort to maintain this attainment status. F-6

> Because San Luis Obispo County is a nonattainment area for ~~ozone and~~ particulate matter for CAAQS, these emissions would temporarily contribute to the existing violations of ~~ozone and~~ particulate matter standards in the region. In addition, although the County was designated to be in attainment for the ozone CAAQS in 2004, the APCD's goal is to maintain that attainment status. With the substantial short-duration (two separate four day operations) ozone precursor emissions during transport activities, mitigation is important to reduce the ozone that is generated from this project's emissions. To characterize the air quality impact, independent emission calculations were prepared based on the level of activity anticipated by the Applicant for a typical day of transport. The estimated emissions are shown in Table D.2-7.

d. Modify the first paragraph on page D.2-8: The APCD has air quality monitoring stations that continuously measure ambient concentrations of air pollutants to determine if standard exceedences have occurred. The emissions inventory discussion in the original paragraph is not directly pertinent to attainment status and therefore the APCD deleted the second and third sentences of this paragraph. **Also remove the emissions inventory discussion in Section D.2.4.4 Original Steam Generator Disposal Alternative.** F-7

> Daily emissions of NOx would be potentially significant (Class II - Significant but mitigated), as shown in Table D.2-7, primarily as a result of tugboat operations associated with shipping the RSGs and stabilizing the barge. ~~Emissions of contaminants (NOx, VOC, CO, SO2, and diesel-related particulate matter) that would routinely occur in the exhaust of most marine vessels are included by SLOAPCD in the regionwide inventory that is the basis for regional attainment. However, the SLOAPCD emission inventory for attainment planning does not include tugboat activity (CARB, 2004b).~~

e. Modify the second paragraph on page D.2-8: The second sentence needs to be removed in the original paragraph because even with proposed emission control requirements, the daily significance threshold for NOx emissions will be significantly exceeded during the short duration of the transport activities. The APCD recognizes that an off-site mitigation project(s) will occur with mitigation measure A-1c (Offset tugboat NOx emissions with an off-site mitigation program), however, such a project(s) that is in place when the transport activities occur can not fully offset the peak daily emissions. Instead, off-site project(s) will offset the total 1.5 tons of F-8

Comment Set F, cont.
San Luis Obispo County Air Pollution Control District

excess NOx emissions over its lifetime. The APCD would prefer to have concurrent daily peak offsets, but the tug boat emissions are so large that there is likely no comparable local daily offset project available. Therefore, the APCD settles for the next best mitigation option, offsetting the short-duration 1.5 tons of total excess emissions over a much longer period of time.

F-8

> The potentially significant emissions shown above are based on the use of newer, or lower-emitting, transport equipment as part of a Diesel Combustion Emission Control Plan and the use of double occupancy vehicles or a vanpool by all commuters in worker vehicles. ~~If the transport equipment is poorly maintained or if out-of-date engines are used, then the off-road equipment emissions from transport would be likely to temporarily exceed the 185 pound per day significance criteria for daily emissions~~. To manage the emissions from transport and all other construction-type activities, the Applicant has committed to implementing best management practices (BMPs) that are considered to be a part of the Proposed Project (PG&E, 2004c), including:

f. List of best management practices (BMP) on Page D.2-8:

F-9

The following practice needs to be removed since it is no longer considered a BMP:

> i. Use of Caterpillar pre-chamber diesel engines (or equivalent) together with proper maintenance and operation to reduce emissions of NOx where feasible;

The following two idling limitations need to be added because they are new BMPs:

> ii. Drivers of any diesel powered vehicle shall not idle the diesel engine(s) for greater than five minutes at any location, except as noted in Subsection (d) of the California Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. Signs shall be posted in appropriate areas to remind drivers of the five-minute idling limit;
>
> iii. Operators of any equipment with a diesel powered off-road engine(s) shall not idle these engines for greater than five minutes at any location. Signs shall be posted in appropriate areas to remind operators of the five-minute idling limit.

g. First paragraph on Page D.2-9:

Replace "CBACT" with "BACT" throughout this paragraph and any other instance in the EIR since it is the APCD's current acronym for best available control technology for construction equipment.

Comment Set F, cont.
San Luis Obispo County Air Pollution Control District

h. Second paragraph on Page D.2-9:

F-10

The current cost of reducing one ton of excess NOx is $13,600. This value is consistent with the California State Carl Moyer Memorial Air Quality Standards Attainment Program. The APCD has been active in implementing voluntary emission reduction projects for seven years and the increase in the mitigation value reflects the fact that over time the cost effectiveness of emission reductions from projects has increased as less effective projects are those that remain.

To simplify the off-site mitigation program, this paragraph needs to be updated as follows:

> The SLOAPCD recommendation to address the residual impact of tugboat emissions would be accomplished by an Applicant-funded mitigation program that provides emission reductions (or offsets) at non-project sources in the Avila Beach and Port San Luis communities. The level of funding recommended by SLOAPCD ~~would be~~ is calculated based on the quantity of daily project NOx emissions exceeding the threshold (SLOAPCD, 2004). ~~Preliminary i~~Information in Table D.2-7 indicates that ~~approximately~~ 1.544 tons of NOx in excess of the thresholds would be generated by the short-term transport activity (i.e., 386 pounds over the threshold for eight days total). ~~According to 2004 cost data provided by SLOAPCD for this Proposed Project, t~~ The current APCD cost of reducing one excess ton of NOx is ~~currently around $8,500~~ $13,600. ~~The precise amount of funding or specific offsetting approach needed~~ Therefore, PG&E shall provide $21,000 to mitigate the excess tugboat NOx emissions. ~~would depend on the type of tugboats used and the specific operating schedule, and it should be determined through negotiation with the SLOAPCD. It would be appropriate to conduct this effort after a detailed offloading and transport plan is developed by PG&E. The reductions would be funded through grant programs managed by the SLOAPCD like the Carl Moyer Heavy Duty Engine Emission Reduction Program, which sponsors projects reducing NOx and PM10 from a wide range of sources such as marine vessels, agricultural engines, and stationary engines.~~ These funds shall be used to fund a grant program managed by PG&E that is like the Carl Moyer Heavy-Duty Engine Emission Reduction Program, which sponsors projects reducing NOx and PM10 from a wide range of sources such as marine vessels, agricultural engines, and stationary engines. Should PG&E choose to allow the APCD to manage this program, PG&E shall provide APCD with the $21,000 in mitigation funds plus a 15% ($3,150) administration fee. This figure is based on the information contained in the DEIR. Should significant deviations from this estimate occur, the project proponent and the APCD shall meet and modify the mitigation value. By Pproviding ~~approximately~~1.544 tons of NOx emission reductions (Mitigation Measure A-1c) ~~and~~ over a period of time far greater than the short-duration impacts and by implementing Mitigation Measures A-1a and A-1b ~~would fully mitigate~~, the APCD shall consider the NOx impacts caused by transport activities ~~so that no impact to air quality standards would occur (Class II)~~ to be mitigated (Class II – Significant but mitigated).

Comment Set F, cont.
San Luis Obispo County Air Pollution Control District

i. Third and fourth paragraph on page D.2-9: To more accurately characterize the short-term odor and diesel PM impacts from this project the following changes need to be made:

F-11

~~TAC emissions and odors from transport activities could cause a significant impact according to the SLOAPCD primarily due to the proximity of the activities to homes in Avila Beach and Port San Luis where children or elderly may reside (Class II). The short-term effects are of particular interest, given that transport activities would be unlikely to cause long-term effects. Because of the short duration, the effects of diesel particulate matter and odors would not be significant.~~

The SLOAPCD recommends a detailed analysis of acrolein emissions from diesel powered equipment and ambient concentrations (SLOAPCD, 2004). In order to assess the acute health hazards of acrolein, detailed information would be needed about the specific tugboats and heavy duty on-land equipment that would be used and their operating schedules. It is appropriate to conduct this analysis after a detailed offloading and transport plan is developed. To ensure that surrounding receptors would not be exposed to substantial acrolein concentrations, Mitigation Measure A-1d is recommended. Depending upon the results of the health hazard analysis, public access in the immediate vicinity of offloading activities may need to be temporarily restricted to reduce this potential impact to a less than significant level. Since these activities are close to residences and public areas in Avila Beach and Port San Luis, Mitigation Measure A-1d also addresses diesel odor impacts during the transport activities.

j. Last paragraph on Page D.2-9: Remove the word "yet" in the third line of this paragraph as its inclusion marginalizes the short-term emission impacts.

k. Modify mitigation measure A-1c: To better define this mitigation measure and its timing, the following modifications are needed:

F-12

Offset tugboat NOx emissions with an off-site mitigation program. PG&E shall develop and implement or fund an off-site mitigation program that ~~would~~ will provide ~~approximately~~ 1.544 tons of NOx reductions from existing sources in the Avila Beach and Port San Luis communities. PG&E shall initiate this program such that the emission reduction project(s) is in place prior to the RSG transport activities. PG&E shall accomplish this either by developing and implementing a program of reductions (e.g., installing diesel engine or marine vessel emission control systems) or by providing mitigation funding to the SLOAPCD for emission-reducing projects identified by the SLOAPCD (e.g., through the Carl Moyer Program). If PG&E elects to implement its own emission reductions, then the approach shall be developed in cooperation with SLOAPCD and CPUC staff.

Comment Set F, cont.
San Luis Obispo County Air Pollution Control District

F-13

l. **Modify mitigation measure A-1d:** Start the first sentence of this measure with, "At least 60 days prior to the start of transport activities." This addition ensures that there will be sufficient time to evaluate the potential acute hazard and define appropriate mitigation.

2. **Section D.2.4 Environmental Impacts and Mitigation Measures for the Alternatives:** Air quality mitigation measures for the proposed alternatives are adequately addressed with the necessary DEIR changes that are identified in this letter.

3. **Section D.2.6 Mitigation Monitoring, Compliance, and Reporting Table:** This table needs to be updated based on the necessary DEIR changes that are identified in this letter.

F-14

OPERATIONAL EMISSIONS

Although the air quality impacts of the proposed construction project will be addressed with the implementation of the mitigation measures defined in the final EIR (FEIR), the resulting extended operational impacts for the plant were not assessed in the EIR. Should the replacement steam generator project not move forward, Units 1 and 2 are estimated to be rendered inoperable in 2013 and 2014 respectively. The Units have valid licensing through 2021 and 2025 respectively. The proposed replacement steam generator project enables the Diablo Power Plant to continue operation under its current license for an additional 8 years for Unit 1 and 11 years for Unit 2. Without this project, the operational air quality impacts of the plant would be eliminated by 2014. The proposed project will therefore increase the total operational emissions of the Diablo Power Plant and as such need to be evaluated and mitigated in this EIR. One known impact from extended plant life is the emissions generated from vehicle trips supporting the operation. To address this impact, a mitigation measure similar to A-1a (Develop and implement a trip reduction plan) needs to be included throughout the duration of the current plant licensing.

Again, thank you for the opportunity to comment on this proposal. If you have any questions or comments, or if you would like to receive an electronic version of this letter, feel free to contact me at 781-5912.

Sincerely,

Andy Mutziger
Air Quality Specialist

AJM/sll

cc: James Caruso, San Luis Obispo County Department of Planning and Building

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Responses to Comment Set F
San Luis Obispo County Air Pollution Control District

F-1 The primary general comment concerns construction activities that could occur concurrently. According to PG&E's responses to CPUC's requests for this information, the major phases of activities would not overlap (Draft EIR, page D.2-11 and Data Response to AQ-1, October 21, 2004). Staging and preparation activities, including construction of temporary facilities and construction of the OSG Storage Facility, would occur before the RSGs are delivered, meaning that RSG transport emissions (shown in Tables D.2-7 and D.2-8) would occur while relatively little other activity occurs. Based on the expected sequential nature of the project, the emissions of these separate phases would not occur concurrently.

The Final EIR includes revisions showing daily and quarterly emissions in an effort to clarify the emissions of the separate phases. Not all of these emissions were quantified in the Draft EIR because, CPUC was unable to obtain from PG&E equipment activity projections or precise scheduling for all project activities. Because of the information gap, the impacts of some phases were described qualitatively in the Draft EIR. The Final EIR includes additional quantification of staging and preparation emissions based on probable construction activity as predicted by the California Air Resources Board's URBEMIS 2002 program. The separate phases are summarized here for improved clarification.

- Emissions from the RSG transport phase are quantified in the Draft EIR Tables D.2-7 and D.2-8 and compared to SLOAPCD's CEQA Significance Thresholds. This phase would occur after RSG staging and preparation and prior to OSG removal, transport, and storage.
- Emissions from RSG staging and preparation, including building about 90,000 square feet of temporary facilities, are presented quantitatively in revisions to this Final EIR; this phase would occur earliest, and it would be completed prior to RSG transport. Construction activities for facilities of this size exceed the 2.5-ton CEQA Significance Threshold for quarterly NOx emissions. The recommended measures (Mitigation Measures A-1a and A-1b) include the Best Available Control Technology for construction equipment (CBACT), which would address the impacts. Because the emissions do not exceed the 6.0-ton threshold, there would not be a need for further mitigation (see SLOAPCD CEQA Air Quality Handbook page 6-4 and Section D.3.3.3 of the Draft EIR).
- Emissions from OSG removal, transport, and storage are quantified for daily transportation activity in the Draft EIR Table D.2-10, and emissions from construction of the OSG Storage Facility are quantified in revisions to this Final EIR. Construction of the OSG Storage Facility would occur at the time of RSG staging and preparation activities and are quantified with emissions from that phase. Although storage facility construction would not overlap with RSG transport (Draft EIR page D.2-12), the Draft EIR accounted for the possibility of this activity overlapping with construction of RSG staging and preparation facilities. The recommended measures (Mitigation Measures A-1a and A-1b with A-2a) would address the impacts (Section D.2.3.4 of the Draft EIR).
- Emissions from the final phase of RSG installation are described qualitatively based on impacts that would occur during earlier phases (Section D.2.3.5 Draft EIR). Emissions would be similar to those related to RSG Staging and Preparation and OSG Removal,

Transport, and Storage. Implementation of Mitigation Measures A-1a (Develop and implement a trip reduction plan) and A-1b (Develop and implement a diesel combustion emission control plan), would make the air quality impact (Impact A-1, Replacement activities would cause emissions from transport and construction equipment) less than significant (Class II).

F-2 Worst-case scenarios are reflected by Draft EIR Tables D.2-7 and D.2-8. Although the transport activities are expected to require about two to four days per shipment, the air quality analysis in PG&E's PEA (PEA page 5-13 and Table 5.3-3) and the Draft EIR allows for one extra day in the estimate of worst-case quarterly emissions (Table D.2-8).

F-3 Daily emissions from RSG transport (Table D.2-7) exceed the 185 lb/day CEQA Significance Threshold as a result of tugboat emissions. All other transport activities (i.e., non-tugboat emissions) would be reduced by Mitigation Measures A-1a (Develop and implement a trip reduction plan) and A-1b (Develop and implement a diesel combustion emission control plan) to levels below the threshold. Although the exceedance of the threshold caused by the tugboat emissions would be large, this impact would occur no more than five days per shipment, and implementation of Mitigation Measure A-1c (Offset tugboat NOx emissions with an offsite mitigation program) would provide NOx reductions to fully offset the emissions. The recommended mitigation would reduce tugboat emissions to a net increase of zero.

Dispersion modeling would not normally be necessary for this type of project because of the following reasons: onshore, non-tugboat emissions (shown in Table D.2-7) would be below the significance thresholds; tugboat activity would occur for only a few days; offsets would be provided as mitigation to tugboat emissions (Mitigation Measure A-1c); and other routine marine vessel activity is likely to cause similar emissions of NOx in the vicinity of Port San Luis in the environmental setting. To fully respond to this comment, a screening-level dispersion modeling analysis using the U.S. EPA model SCREEN3 was used.

Dispersion modeling normally involves assumptions about source exhaust stacks, meteorology, surrounding terrain, and ambient pollutant chemistry. Ambient impacts from tugboat emissions of NOx were examined here because all other non-tugboat emissions would occur over a vast area and would be under the significance thresholds. For this exercise, emissions of both tugs (combined average 16.3 lb/hr NOx) were assumed to exhaust from one 10-inch stack at 700°F, 12-feet above ground level, and about 8,000 actual cubic-feet per minute (PG&E 2004b, Attachment 12). Conservatively (worst-case scenario) assuming 100 percent conversion of tugboat NOx to NO_2, complex nearby terrain, and worst-case single hour meteorology, the maximum 1-hour NOx concentration computed by SCREEN3 is about 460 $\mu g/m^3$, which is below the State NO_2 standard of 470 $\mu g/m^3$. A more refined analysis taking into account the limited conversion of NOx to NO_2 would reveal much lower NO_2 impacts.

F-4 This Final EIR includes the suggested revision to Section D.2.3.2 of the Draft EIR.

F-5 This Final EIR includes the suggested revision to Section D.2.3.2 of the Draft EIR.

F-6 This Final EIR includes the suggested revision to Section D.2.3.2 of the Draft EIR. This comment also causes a revision to Table D.2-4 and numerous other minor revisions where violations of ozone were erroneously characterized as existing.

F-7 This comment proposes to eliminate discussion of the regionwide emission inventory on the basis that the inventory is not directly pertinent to attainment status in SLOAPCD. The Final EIR includes the suggested revisions to Sections D.2.3.2 and D.2.4.4.

F-8 This Final EIR includes the suggested revision to Section D.2.3.2 of the Draft EIR.

F-9 The list of best management practices in Section D.2.3.2 of the Draft EIR is a reflection of the Applicant's commitment, and the limitations recommended by the comment are not part of the Applicant's current proposal. The recommendation to add idling limitations for controlling diesel emissions is instead added to Mitigation Measure A-1b.

The recommendation to replace the acronym for construction control measures, "CBACT," with "BACT" would not clarify the analysis. BACT is a term that is applied to the best available control technology for permanent stationary sources, and it has a specific regulatory definition that does not apply to any of the Proposed Project's sources.

F-10 This Final EIR includes revisions to Section D.2.3.2 of the Draft EIR and Mitigation Measure A-1c to implement the suggestions of the comment.

F-11 This comment recommends that statements about the long-term effects of odors and diesel particulate matter should be removed without providing further recommendations regarding diesel particulate matter. The comment correctly implies that Mitigation Measure A-1d would coincidentally address odor impacts in the effort to minimize health risk effects. Rather than delete the discussion of TAC and odor impacts from Section D.2.3.2 of the Draft EIR, the Final EIR includes clarification of the TAC and odor conclusions to be consistent with this comment.

F-12 This Final EIR includes the suggested revisions to Mitigation Measure A-1c. See also Response F-10.

F-13 This Final EIR includes the suggested revisions to the measures including Mitigation Measure A-1d.

F-14 Please see Master Response MR-1 (Baseline). The Proposed Project is intended to allow the facility to operate through its currently approved license periods. The Draft EIR considers the effects of operation of the power plant through the license periods. However, these effects already exist in the environment and are appropriately described as part of baseline conditions.

The air quality consequences if the Proposed Project is not approved are described in Section D.2.5, as the No Project Alternative. This Final EIR includes a clarification to the discussion of the No Project Alternative that shows how emissions from DCPP workers' vehicles commuting to the site would cease, along with other operational emissions. Because the Proposed Project would not involve a permanent change in the workers' employed at DCPP, the Proposed Project would not increase the total operation emissions of DCPP (see Section D.2.3.5 of the Draft EIR). See also the Master Response MR-1 (Baseline) for an explanation of treatment of the Proposed Project versus the No Project Alternative.