# CALIFORNIA COASTAL COMMISSION

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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).

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

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.

### Environmental Baseline

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.

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.

<sup>&</sup>lt;sup>1</sup> 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."

## Reasonably Foreseeable Alternatives

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

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 CEOA review is completed.

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.

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.

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

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.

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.

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.

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.

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.

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.

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.

# 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

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