

CALIFORNIA COASTAL COMMISSION

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May 31, 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 San Onofre Nuclear Generating Station (SONGS) – Draft Environmental Impact Report (DEIR) – State Clearinghouse No. 2004101008)

VIA FACSIMILE (949) 203-6410

Dear Mr. Barnsdale:

Thank you for the opportunity to comment on the above-referenced DEIR. The proposed project, which involves Southern California Edison (SCE) replacing the existing steam generators at SONGS, is located within the coastal zone and will be subject to the review and permitting requirements of the California Coastal Commission.

Our overall comment on the DEIR is that several key aspects of the proposed project are not adequately described or evaluated for purposes of CEQA review. The document 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 adverse environmental effects of the proposed project and the measures that would mitigate those effects. In each of our comments below, we have recommended specific revisions that would allow the DEIR to better conform to CEQA requirements and provide the level of information needed to make informed decisions about the proposed project. Many of these comments are similar to those we provided for the similar proposed steam generator replacement project the PUC is reviewing at the Diablo Canyon Nuclear Power Plant, since the two DEIRs share many of the same shortcomings.

Jurisdiction and Standard of Review

- 1) As noted above, the project will require review and permitting by the Coastal Commission, and the DEIR correctly notes in several places that the standard of review for the coastal development permit will be the California Coastal Act. In at least one section, however (at page D.5-11), the document refers to several policies in Chapter 11 of the Coastal Act. Please note that neither these policies nor that chapter exists. That same section also refers to the local land use plan, which for this proposed project does not provide the standard of review for Coastal Act conformity. We recommend these references be deleted.

Overall Adequacy of Information

- 2) Many descriptions and analyses in the DEIR lack adequate information upon which to make informed decisions about the proposed project. The document admits to the many challenges presented by the proposed project and the project site, but it does not adequately describe how these challenges will be addressed. The document's most significant shortcomings arise from several key problems – it describes a project in which little information is provided about potential locations for storing the original steam generators, no certainty about the feasibility of methods proposed to transport the generators, and inadequate analyses of potential hazards along likely transport routes. For example, regarding the storage locations, the DEIR states that the preferred location is a single facility in Utah, but it provides no information about whether the site is feasible or available. It then states that alternative storage locations include several on the SONGS site, but provides no details about where they are or whether concerns about their space constraints or seismic suitability make them infeasible.

This lack of adequate information throughout the document creates another problem in that many of the mitigation measures described in the DEIR are actually elements of the proposed project that must be evaluated during CEQA review, not after. These measures represent the type of information necessary to conduct CEQA review so that decision-makers can make informed decisions about the proposed project. For example, the DEIR states that there could be landslides in portions of the transport route caused by moving the heavy generators along certain areas. The proposed mitigation measure to address this issue is to review existing geotechnical reports at least a year before the scheduled transport to determine whether they provide sufficient information to ensure the routes are stable, and to provide new geotechnical reports if more information is needed. This is the type of review expected during CEQA, not after, particularly since the proposed measure refers initially to existing and available reports. It is also appropriate and necessary to evaluate this type of study during CEQA since that evaluation could result in substantial changes to either the proposed transport route or the need for significant structural improvements along the route. Putting these measures off until after CEQA is complete would not conform to the basic purposes of CEQA and does not provide decision-makers with adequate information on which to base their decisions.

In sum, the level of information presented in the DEIR is far short of what is necessary for CEQA review. It is particularly troubling to see this lack of information for this proposed project since the consequences of ignorance are so high and the problems with the steam generators that led to the proposed project have been known for several years. The DEIR contains far too many information gaps for a proposed project involving a nuclear power plant in the midst of millions of Californians next to California's coast and its main north-south transportation route. We therefore recommend the document be revised throughout so that the analyses necessary to determine whether preferred and alternative project sites and transport routes are feasible are incorporated into CEQA review.

Environmental Baseline

- 3) The DEIR uses the remaining term of the power plant's NRC operating license as the basis for the proposed project's environmental baseline. This creates a baseline scenario in which the generators currently operating at SONGS would operate until the end of the license term in 2022. The DEIR therefore evaluates only those incremental changes that would be caused by replacing the generators before that date – e.g., moving equipment in and out of the power plant, performing relatively short-term construction projects, etc. This baseline assumption is flawed however, because it does not reflect actual conditions at SONGS and does not conform to CEQA's requirement that the environmental setting used in the DEIR be based on existing physical conditions¹. This single flaw requires substantial revisions be made throughout the rest of the document.

The remaining license term is not an existing physical condition, and using it as the foundation for the baseline in this DEIR ignores another very real physical condition – the degraded state of the existing generators – that provides the primary reason for the proposed project. The physical condition of the existing generators and associated infrastructure is far more relevant to the CEQA review than the remaining term of the operating license.

Using the steam generators' existing physical conditions as a key part of the power plant's environmental baseline is further supported by the DEIR's use of those same conditions as the basis for its "No Project Alternative". It only makes sense that if the "No Project Alternative" is based on what will happen at the power plant in 2009, the "Project Alternative" should be based on the same thing.

We therefore recommend that the DEIR be revised so that the environmental baseline is based on the actual existing physical condition of the generators rather than on the remaining term of the NRC license. This revised baseline should then be applied to the relevant evaluations in the DEIR, particularly those related to water quality and marine biology. This approach would allow conformity 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."

Reasonably Foreseeable Alternatives

- 4) Although the remaining NRC license term does not provide an appropriate foundation for the project's physical baseline, it does serve as an appropriate basis to differentiate between three reasonably foreseeable SONGS operating scenarios – first, the power plant operating under the “No Project Alternative”, which would occur if the generators are not replaced (i.e., operating only until 2009); second, the power plant operating with new generators until the end of the existing license term (i.e., operating until 2022); and finally, the power plant operating with new generators and with an extension of the NRC license (i.e., operating until approximately 2050, assuming a forty-year operating life for the new generators). This approach represents the three reasonably foreseeable scenarios that could result from this CEQA review and using it would allow the DEIR to provide the comprehensive evaluation needed for CEQA conformity.

Although the DEIR describes the likelihood of a license extension as “remote and speculative” due to various regulatory and technical hurdles, this does not appear to be accurate. While the DEIR notes that SCE 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 SCE an incentive that would increase the likelihood of such a request. Given that these new and costly generators would have an expected operating life well beyond the approximately twelve years that would remain in the license term after they are installed, it would be clearly prudent for SCE to request a license extension and it is clearly and reasonably foreseeable to assume SCE will request such an extension. This is further supported by the number of nuclear power plants around the country that have performed similar steam generator replacements and have obtained license extensions.

We therefore recommend that the DEIR be revised to include the three reasonably foreseeable scenarios described above as part of the document's environmental evaluations and alternatives analyses. These scenarios should also be applied to the DEIR's assessments of cumulative and indirect impacts.

Adverse Effects on Marine Biological Resources and Water Quality

- 5) The DEIR notes that the existing power plant uses a once-through cooling system, which uses up to hundreds of millions of gallons of ocean water per day. The document briefly describes some of the adverse effects related to use of this water; however, it 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.

We recommend at least two main revisions to the DEIR's sections on marine biology and water quality. First, the DEIR's description and evaluation of marine biology and water quality effects should be revised based on the necessary changes noted above regarding *environmental baseline and reasonable alternatives*. These revisions should specifically describe and evaluate the different impacts to the marine environment that would result from the three scenarios described in the previous comment. We also recommend the DEIR be revised to consider a far wider and more detailed range of feasible alternative cooling mitigation options than the few briefly mentioned in the DEIR.

Geologic and Seismic Hazards

- 6) The DEIR contains little of the geologic data and analyses necessary for this level of CEQA review. The document addresses only in a very general way the seismic hazards at the proposed project site, the geologic hazards along the proposed transport routes, the implications of landslides, poorly consolidated fill, coastal hazards, and other concerns that could substantially affect both the feasibility and the success of the proposed project and its alternatives. We request that the DEIR revise these analyses to provide a more thorough and comprehensive evaluation of the potential hazards and the necessary responses to those hazards. The revisions should include the following:
- The ground motion expected at the site by a design-basis earthquake (the 1-in-2000 year event) should be adequately characterized and used as the basis for the original steam generator storage facilities.
 - The stability of areas of known poorly consolidated fill along Old Highway 101, some of which are causing structural distress on the road, should be fully evaluated to determine whether this alternative route is feasible.
 - The landslide hazards along the alternative routes have not yet been adequately analyzed. We also note that the "landslide areas" shown on Figure D.5-2 are incorrect. The areas highlighted may be the headscarp of some of the landslides, but the landslides themselves are much larger semi-circular features easily visible on the photograph, heading in some cases near Old Highway 101 and extending into the surf zone. Quantitative slope stability analyses should be provided to demonstrate that these landslides will not be reactivated and that new landslides will not form landward of the existing headscarps when loaded during transport of the new steam generators.
 - The DEIR states that the anticipated maximum wave height from a locally-generated tsunami is about six feet and the maximum tsunami runup is about 15.5 feet. The revised DEIR should provide the basis of these statements. We note, too, that the DEIR describes these tsunami figures as being based on those generated by local offshore faults. We recommend the DEIR also evaluate the maximum heights from non-local seismic events.

Public Access

- 7) The proposed project would limit public access to the shoreline for substantial periods of time over the course of the proposed work; however, the DEIR does not adequately describe the various impacts to public access or evaluate feasible measures that might mitigate for those impacts. The revised DEIR should describe the numbers of likely shoreline users during periods when use of and access to the shoreline would be affected, the types of activities that would likely be affected, and feasible mitigation measures to address those impacts.

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
Southern California Edison – David Kay
Mothers For Peace – Rochelle Becker, David Weisman