GRUENEICH RESOURCE ADVOCATES

Clyde S. Murley
cmurley@gralegal.com

November 8, 2004

Nicolas Procos
California Public Utilities Commission
c/o Aspen Environmental Group
235 Montgomery Street, Suite 935
San Francisco, CA 94104

RE: PG&E Diablo Canyon Nuclear Power Plant Steam Generator Replacement Project ("SGRP") Environmental Impact Report

Dear Mr. Procos:

These comments are submitted on behalf of five organizations – San Luis Obispo Mothers For Peace, Sierra Club, Public Citizen, Environment California, and Greenpeace (hereinafter "Joint Parties") – pursuant to Pacific Gas and Electric Company's ("PG&E") application (A.04-01-009) to the California Public Utilities Commission ("CPUC") to replace the steam generators at Diablo Canyon Nuclear Power Plant Units 1 and 2 ("DCNPP"). These comments respond to the CPUC's solicitation of Environmental Impact Report ("EIR") scoping comments contained in the October 1, 2004 Notice of Preparation ("NOP") for the preparation of an EIR for this Project.

Comment 1: The CPUC's NOP inappropriately and unlawfully uses an overly narrow project description and indicated scope of the EIR. The project to be reviewed under CEQA is not merely a construction project; it includes the direct impact of that construction project – expanding the operation of DCNPP by at least a decade.

The most significant threshold issue to be resolved is the proper definition of the Project to be analyzed in the EIR. CEQA does not permit the narrow project description – that the SGRP is just a construction project – proposed by PG&E and the NOP.

CEQA requires that a project subject to preparation of an EIR be defined as "the whole of an action which has the potential for resulting in either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment." (Pub.Res.Code § 21065.) "Project" refers to the "underlying activity being approved by an agency, not just the governmental permits necessary to develop such an undertaking." (14 CCR §15378(c).) In addition, an agency must consider all "reasonably foreseeable consequences" of the action. (*Laurel Heights Improvement*

Association v. Regents of the University of California (1988) 47 Cal.3d 376 (future expansion of a development must be considered because it is foreseeable).

The NOP ignores these basic principles of CEQA and instead sets for an inappropriately and unlawfully narrow description of the project. The Project Description in the NOP is confined to describing the process of removing, transporting, and storing the existing generators and transporting, staging, and installing the new steam generators. (NOP, pgs. 1-3.) This description omits the most critical aspect of the project – that the purpose and direct impact of the SGRP at DCNPP is to extend the operating lifetime of DCNPP for an additional 11 or more years (from 2013/14 to 2023/2024). These facts are undisputed, as is the fact that absent the SGRP, DCNPP will not operate to the end of its current licenses' periods and will instead shut down.

Thus, the threshold issue before the CPUC is straightforward – is this just a minor construction project, requiring analysis of only the construction and installation of the SGRP? Or, is it a project whose definition takes into account the purpose of the project and its direct impact – extending the operation of DCNPP by at least a decade?

The answer to this threshold issue is clear under both CEQA and PG&E's filings, as well as portions of the NOP. Even though the NOP's Project Description defines the project as a narrow construction project, the NOP's Project Purpose and Need section accurately states that the function of this Project is to extend the operating lifetime of DCNPP. (NOP, pg. 1.) Moreover, the NOP properly defines the No Project Alternative as the construction of transmission and generation facilities to replace the output of Diablo Canyon after 2013/2014. (NOP, pg. 5.) This mismatch between the Project Description and the No Project Alternative/Project Purpose and Needs sections of the NOP is prima facie evidence of the inappropriately narrow scope of the Project Description in the NOP. This mismatch also virtually guarantees that the No Project Alternative would be found in the EIR as by definition more harmful to the environment than the Project itself, because of the inappropriately narrow definition of the Project.

Absent the CPUC's approval of PG&E's application, PG&E concedes that DCNPP will not operate to the end of its current license periods; likewise PG&E agrees that a direct impact of the Project will be to extend the operating life of DCNPP until 2024/25. (See, PG&E Revised Testimony Supporting PG&E's Application to replace the Steam Generators in Units 1 and 2 of the Diablo Canyon Power Plant, (May 27, 2004, A.04-01-009) pp. 1-7.)

Thus, the CPUC should take immediate steps to set forth a correct Project Definition, that is lawful under CEQA, corresponds to the filings made by PG&E, and matches the sections in the NOP dealing with Project Purpose and Need and the No Project Alternative.

Comment 2: The project description and scope of the EIR should also consider operation of DCNPP beyond its currently approved license periods.

If the Project proceeds, it is quite possible that PG&E will seek to extend DCNPP's operating lifetime, presumably for at least another 20 years, until 2044/45. Moreover, it is reasonable to assume that the NRC would be receptive to such an application.[1]

Yet, the NOP states that the EIR will not consider the possibility that the SGRP would lead to DCNPP operating beyond its current license period of 2024/25.[2] Such a narrow view of the Project impact is inappropriate and fails to comply with CEQA's mandate to consider fully direct and indirect impacts from a proposed project. (See legal citations above.) The CPUC has discretion to consider this scenario and it should do so.

Comment 3: The EIR must analyze fully all potential impacts associated the Project, including impacts stemming from DCNPP's prolonged operating life.

Once the proper Project Definition and scope of the EIR is resolved, the next step is to ensure that the EIR analyzes fully all potential impacts associated with the Project, including impacts stemming from DCNPP's prolonged operating life. Because this EIR is triggered by the need for the CPUC to make a discretionary decision on PG&E's SGRP application the EIR must analyze the potential significant impacts associated with the extended operating lifetime of DCNPP that would be made possible by the CPUC's approval of the application. There is no disputing that such impacts are reasonably foreseeable.

Unfortunately, the NOP fails to set forth an acceptable range of impacts to be addressed in the EIR. Attachment 1 of the NOP identifies 37 potential issues to be addressed in the EIR. Of the 37 issues, 33 of them appear to pertain solely to the construction phases of the proposed Project.

While the construction phase will certainly have impacts of concern that need to be analyzed, the extended operating life of DCNPP that would occur under the Project undoubtedly needs to be a major focus of the EIR. For example, as explained in Comment 1 above, the Project, if it proceeds, would result in at least a decade of extended operating period of DCNPP. With the extended life, would come:

---

[1] On July 15, 2003, the NRC held a public meeting on license renewal for nuclear power pants. During this meeting Mr. John Tappert, Chief of the Environmental Review section of the NRC's license renewal and environmental impact program, stated "Now, to date, the NRC has received 14 applications for the renewal of 30 power reactor licenses and the NRC has issued renewal licenses to 16 power reactors. All indications are that multiple license renewal applications will continue to be filed with the Commission over the next decade and eventually the entire fleet of nuclear power plants will request license renewal." (Meeting Transcript, p. 12).

[2] NOP, p. 9.

- the production of 11 or more years worth of additional radioactive wastes;
- the need to store the increased amount of such radioactive waste;
- the need to protect these increased amounts of radioactive wastes from possible terrorist attacks, which could well entail additional and/or different measures than those needed to provide equivalent protection from the scenario in which the plant stops operating in 2014;
- the need to protect these increased amounts of radioactive wastes from possible seismic-related accidents, which could well entail additional and/or different measures than those needed to provide equivalent protection from the scenario in which the plant stops operating in 2014;
- risks associated with transporting the additional uranium fuel needed to extend the plant's operation by 11 or more years;
- the need to analyze potentially higher probabilities of catastrophic accidents associated with 11 or more additional years of plant operation;
- the need to analyze potentially higher probabilities and/or consequences of catastrophic accidents associated with seismic events that may exceed existing seismic protection safeguards;
- additional stress on the marine environment impacted by the operation of the plant;
- the need to analyze potential impacts on any rare, threatened, or endangered species that may be associated with 11 or more years of extended plant operation; and
- the need to analyze the adequacy and possible redevelopment of emergency evacuation planning in view of 11 or more years of additional plant operation.

The above list is not meant to exhaustive but rather to indicate that a substantial part of the EIR's analysis will need to address issues outside the scope of the Project's construction phases.

Moreover, as discussed above in Comment 2, in order to comply with CEQA the EIR must also include within its scope the potential environmental impacts associated with a possible NRC license extension through 2045.

To not analyze the potential environmental impacts associated with such extended periods of operation would be inappropriate under CEQA, since that would ignore an extensive period of time during which the potential risks and impacts associated with DCNPP's operation would be imposed. In the case of risks and impacts that are probabilistic in nature, such as terrorism strikes and seismic events, a longer operating period translates into higher probabilities of occurrence and therefore a higher overall assessment of the applicable risks and consequences. This aspect of the Project must be captured in the EIR analysis.

Comment 4: The EIR must identify and analyze a full range of alternative means by which the energy resources that would be expected to be made available by PG&E's DCNPP application could otherwise be supplied.

Consideration of alternatives is at the heart of CEQA. The alternatives analysis allows identification of environmentally superior means of meeting the identified project need. Here again, the Project Definition and scope of the EIR is critical for ensuring an adequate alternatives analysis. The fundamental purpose of the Project is to allow continued (and extended) operation of DCNPP in order to provide electric power to customers in PG&E's service area. Therefore, the alternatives analysis must focus on alternatives to meet customers' electrical needs. The length of the analysis must, as explained above, review alternatives at least through 2024/25, and should also review alternatives available for an extended period, up to 2045, in anticipation of a possible NRC license extension.

By virtue of its active resource procurement proceeding (R.04-04-003), the CPUC has an excellent, timely opportunity to explore serious alternatives to the DCNPP SGRP. The State's recently enacted Energy Action Plan, which the CPUC is largely responsible for creating, provides a suitable policy framework for this exploration.[3] With respect to its own pending steam generator replacement application for its San Onofre Nuclear Generating Station ("SONGS"), Southern California Edison ("SCE") has expressed this exact point: "the SONGS 2&3 SGRP application presents the Commission with a question of long term resource planning for the state, SCE, and SDG&E" (SCE Motion for Order to Show Cause, pg. 3 (April 23, 2004, A.04-02-026).).

The NOP makes no mention of the State's Energy Action Plan or of the CPUC's resource procurement proceeding. It is critically important that the EIR base its considerations of project alternatives, including the No Project Alternative, on a clear understanding of this underlying policy and planning context. There is no reason why the CPUC could not and should not consider the DCNPP SGRP as but one of the possible resource options within this broader context. Indeed, the assigned administrative law judge in R.04-04-003 ordered PG&E to develop PG&E's long term resource plan with and without the SGRP, an approach which, if properly executed, should result in a systematic determination of the realistic alternatives to the Project.

Consideration of such alternatives should include but not necessarily be limited to:

1) Various combinations of energy efficiency, renewable power, distributed generation sources, and clean conventional power sources, whether these sources are supplied by PG&E, other parties, or a mixture of the two;

---

[3] The State Energy Action Plan, among other things, establishes a "loading order" that is to guide the CPUC's and the utilities' consideration of adding resources to meet expected resource needs: first, energy efficiency; second, renewables and distributed generation; third, clean fossil fuel generation; and fourth, transmission and distribution system upgrades.

2) Different project implementation schedules than those proposed by PG&E as long as these different implementation schedules are consistent with PG&E's long-term resource planning and acquisition process; and

3) Consideration of the DCNPP site for installation of non-nuclear generation resources.

This broadened consideration of project alternatives is needed to allow the CPUC to compare the environmental attributes of the DCNPP SGRP with a corresponding set of viable alternatives that avoid or lessen the environmental impacts stemming from extended DCNPP operation.

We are particularly concerned that the CPUC conduct an adequate alternatives analysis because the alternatives analysis that PG&E provided in testimony in support of its Application for the DCNPP SGRP is woefully inadequate. (See, Opening Brief of The Utility Reform Network on the Proposed Steam Generator Replacement Project at Diablo Canyon, pp. 13-19; Opening Brief of San Luis Obispo Mothers for Peace, Sierra Club, Greenpeace, Public Citizen and Environment California, pgs. 20-23, (October 29, 2004, A.04-01-009). In its analysis, PG&E overestimated the cost of market-based replacement power purchases, the cost of renewable generation sources, the levelized cost of replacement generation, and the cost of energy efficiency resources. PG&E failed to acknowledge that the information on energy efficiency in its Testimony conflicted with the Commission's September 2004 Decision 04-09-060 setting increased energy efficiency goals for PG&E and its own 2004 long-term resource plan. Equally troubling, PG&E assumed without foundation that the entire output of DCNPP would be replaced by generation sources, without examining the impact on demand due to energy efficiency and/or migration of PG&E service area load due to municipalization, community choice aggregation and core/non-core service.

Under CEQA, the CPUC must do an independent review of alternatives and cannot rely upon PG&E's inadequate review. Given the policies set forth in the Energy Action Plan, careful consideration of alternatives to the extended operation of DCNPP is critical.

Comment 5: The EIR must analyze the Project need and alternatives in the context of the CPUC's ongoing regulatory mandates and polices; the NOP ignores this broader context that must be addressed in the EIR.

The NOP statement of Project purpose and need simply repeats PG&E's proposed statement of need. (PG&E Application for Diablo Canyon Steam Generator Replacement Projects, Attachment 1 to Chapter 8, pgs. 2-1 to 2-3 and 3-1 (Environmental Assessment, A.04-01-009)) This borrowing from an Applicant is not appropriate under CEQA. The CPUC is responsible for making a discretionary decision in response to PG&E's SGRP Application, a decision that can only be made by reference to the CPUC's statutory responsibility as a regulator of investor-owned energy utilities.

The CPUC's responsibility in this case is to ensure that any application it approves is consistent with its regulatory mandate to provide for sound long term resource planning and acquisition. This mandate is given focus by the state's Energy Action Plan, the State's environmental policies and laws (including CEQA), and the CPUC's resource procurement case (R.04-04-003) in which PG&E is actively participating. The CPUC's decision on PG&E's DCNPP application must be made in relation to these broader mandates, responsibilities, laws, and activities.

Comment 6: The deficient scope of the NOP creates the potential for Responsible and Trustee agencies to misunderstand the full scope of the Project and therefore to improperly confine their comments to the construction phase of the Project. A revised NOP should be issued to ensure adequate opportunity for scoping comments.

CEQA requires the lead agency to issue an NOP to Responsible and Trustee agencies. These agencies typically rely on the lead agency's declared project scope in identifying their scoping concerns.

Unless the NOP is broadened in the ways required by CEQA and indicated in these comments it is likely that the scoping comments issued by Responsible and Trustee Agencies will be improperly narrow. The CPUC should take appropriate action to ensure that these agencies understand the actual scope of the project as identified by our comments and required by CEQA. A revised NOP should be issued to ensure scoping comments that reflect the proper Project and EIR scope.

Comment 7: The EIR should consider and analyze the full range of environmental benefits associated with the No Project alternative.

The public and the environment have been subjected to impacts and risks associated with the operation of the DCNPP for many years. Should the DCNPP SGRP not be approved there would corresponding environmental and public health and safety benefits. These potential benefits should be identified and analyzed in the EIR. These benefits include reduced stress on and at least partial recovery of the marine environment, and reduced risks associated with routine and non-routine releases of nuclear radiation. Non-routine radioactive releases are possible from a variety of sources, including seismic and terrorist events. In view of the growing understanding of the relevant seismology in the DCNPP region and heightened concerns about possible terrorist strikes on commercial nuclear power plants, it is essential that the EIR conduct a careful, thorough study of these issues.

Selected Specific Areas of Potential Environmental Impacts

Below are selected issue-specific impacts that should receive particular attention in the EIR. This list is not meant to be exhaustive of the full range of issues requiring analysis in the EIR.

Comment 9: The EIR needs to fully address potential significant seismic risks associated with the extended operating lifetime of DCNPP that the SGRP would make possible.

Attached to and incorporated into these scoping comments is testimony, along with a list of related literature references, prepared by Dr. Jay Namson on behalf of the Joint Parties. This testimony was filed earlier this year at the CPUC as part of the CPUC's proceeding on PG&E's DCNPP SGRP Application (A.04-01-009).[4] Dr. Namson is a professional seismologist whose doctoral dissertation focused on the DCNPP region on a type of fault that DCNPP has not been designed to withstand. As a result of this work, and based on his subsequent related studies and familiarity with the relevant scientific literature, Dr. Namson has concluded that:

> "...the DCNPP's underlying seismology is significantly different than was assumed by PG&E when it designed and installed the plant's seismic mitigation measures and that as a consequence public health and safety risks may well be significantly greater than previously assumed. Installation of additional seismic mitigation measures, at a significant cost, may therefore be required in order to achieve the degree of seismic protection that was thought to have been achieved by the seismic mitigation measures that are presently in place at DCNPP."[5]

We ask that these documents be made part of the record on which the EIR's analysis of seismic risks is based.

The NOP also fails to recognize that the California Coastal Commission ("CCC") is in the process of reviewing PG&E's seismic study for a proposed nuclear fuel waste storage facility at DCNPP. In April 2004, PG&E was granted a permit to construct the waste storage facility at Diablo Canyon by San Luis Obispo County ("County"). One condition of the permit is that PG&E must update its Long Term Seismic Plan ("LTSP") to incorporate earthquake data developed since the 1988 date of the LTSP and adjust the structural design of the facility as necessary based on the "new" data.[6] In a July 14, 2004 CCC decision on an appeal of the County permit, the CCC found that,

---

[4] Although the Administrative Law Judge hearing the Application declined to allow this testimony to be entered into the evidentiary record in the Application, it is critical that it be considered in the EIR.

[5] Testimony Of Jay Namson, On Behalf Of The San Luis Obispo Mothers For Peace, Sierra Club, Public Citizen, Greenpeace And Environment California, filed before the CPUC in A.04-01-009, August 3, 2004.

[6] Exh. MFP-1, Exh. 2, pg. 8, Condition 18.

> The County's review and approval of the proposed project is based primarily on analyses of seismic data from before 1986. Since that time, new geologic interpretations and new seismic data have been generated from several area earthquakes; however, these new data have not yet been incorporated into the design analyses. Without those data from the past eighteen years, the site's seismic characteristics are not adequately understood, and it cannot be determined that the design adequately reflects seismic hazards, as required by the [Land Use Plan].[7]

Thus two regulatory agencies in California have already found that PG&E's study of seismic hazards at the DCNPP site is inadequate.

Comment 10: The NOP improperly limits its mention of seismic risks to "the storage facility structure."

As already noted in these comments the EIR should contain a full analysis of the seismic risks posed by the extended operation of DCNPP associated with PG&E's DCNPP SGRP application, i.e., this evaluation should cover *all* of DCNPP's facilities and operations. The NOP fails to do this. On page 8 the NOP refers solely to the need to analyze the possible impact associated with long-term seismic exposure of "the storage facility structure." The limited focus on a single structure at DCNPP is not explained and in any case is unjustified.

Comment 11: The EIR needs to fully address the substantially altered terrorism risks associated with operating commercial nuclear power plants and storing radioactive wastes on-site in view of the events of September 11, 2001.

Risks and possible consequences associated with possible terrorist strikes on DCNPP must be reviewed in the EIR, since both the probability and possible consequences of terrorist strikes have increased since September 11, 2001. There are numerous sources of information and studies pertaining to this issue that should be consulted in the course of addressing this issue. Below is a limited selection of sources that should be among those consulted in the course of preparing the sections of the EIR pertaining to terrorism risks and consequences.

1. A National Academy of Sciences study on robustness of dry cask storage systems. This study was undertaken by the National Research Council's Board on Radioactive Waste Management at the request of U.S. Congress. It is sponsored by the Nuclear Regulatory Commission and the Department of Homeland Security. An expert committee has been appointed by the National Research Council to undertake this study and expected to issue a classified report in 2004. An unclassified report will be released as soon as possible after that date. The URL to the home page for this study is http://dels.nas.edu/sfs/index.html. A bibliography is also provided at this website.

[7] Id., pg. 9; see also, RT (9/21/04), pg. 241, 20-22 (The "existing report vintage is 1991 to 1992.")

2. Testimony from the U.S. Government Accountability Office relating to security risks and enhanced security needs at nuclear power plants. This testimony is attached to these scoping comments.

3. Testimony prepared by Dr. Gordon Thompson on behalf of the Joint Parties in the PG&E DCNPP SG Replacement Project application (A.04-01-009). Attached to and incorporated into these scoping comments is testimony, along with a list of related literature references, prepared by Dr. Gordon Thompson filed earlier this year at the CPUC as part of the CPUC's proceeding on PG&E's DCNPP SGRP Application. In this testimony, Dr. Thompson provides an assessment of terrorist-related risks and possible consequences associated with DCNPP.

4. Two additional documents (attached hereto and incorporated in these comments) that describe risks and corrective actions associated with terrorism risks at commercial nuclear power plants:

    a. A Call for Action to Protect the Nation Against Enemy Attack on Nuclear Power Plants and Spent Fuel, San Luis Obispo Mothers for Peace, April 2003.
    b. Supporting Document for A Call for Action to Protect the Nation Against Enemy Attack on Nuclear Power Plants and Spent Fuel, San Luis Obispo Mothers for Peace, prepared by Institute for Research and Security Studies, May 2003.

Comment 12: The EIR should consider bunkered storage of on-site radioactive wastes as a means of reducing the health and safety risks associated with on-site waste storage.

One of the ways to partially mitigate the risks and impacts associated with on-site radioactive waste storage at DCNPP is to build any on-site storage facilities underground. The EIR should consider and analyze this type of on-site storage facility in the context of analyzing and attempting to mitigate the potential impacts associated with the increased amount of radioactive wastes that are associated with the Project.

.....

The Joint Parties appreciate your consideration of these EIR scoping comments on the PG&E DCNPP Steam Generator Replacement Project.

Respectfully submitted,

Clyde S. Murley

Clyde S. Murley
Grueneich Resource Advocates
On behalf of San Luis Obispo Mothers For Peace, Sierra Club, Public Citizen, Environment California, and Greenpeace ("Joint Parties")

(Attachments)

List of Attachments to November 8, 2004 Joint Parties' PG&E DCNPP EIR Scoping Comments

1) *Testimony of Jay Namson on Behalf of the San Luis Obispo Mothers for Peace, Sierra Club, Public Citizen, Greenpeace and Environment California*, August 3, 2004; Filed in California Public Utilities Commission proceeding A.04-01-009.

2) *Testimony of Gordon Thompson on Behalf of the San Luis Obispo Mothers for Peace, Sierra Club, Public Citizen, Greenpeace and Environment California*, August 3, 2004; Filed in California Public Utilities Commission proceeding A.04-01-009.

3) *Preliminary Observations on Efforts to Improve Security at Nuclear Power Plants*, Testimony of Jim Wells, Director, Natural Resources and Environment, U.S. General Accountability Office, Before the Subcommittee on National Security, Emerging Threats, and International Relations, Committee on Government Reform, House of Representatives, September 14, 2004 (GAO-04-1064T).

4) *A Call for Action to Protect the Nation Against Enemy Attack on Nuclear Power Plants and Spent Fuel*, San Luis Obispo Mothers for Peace, April 2003.

5) *Supporting Document for A Call for Action to Protect the Nation Against Enemy Attack on Nuclear Power Plants and Spent Fuel*, prepared for San Luis Obispo Mothers for Peace by Institute for Research and Security Studies, May 2003.