PUBLIC UTILITIES COMMISSION
505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

Notice of Preparation
Environmental Impact Report
for the
Diablo Canyon Power Plant
Steam Generator Replacement Project
Proposed by Pacific Gas & Electric Company
Application No. 04-01-009

A. Introduction

Pacific Gas & Electric Company (PG&E) has filed an application (A. 04-01-009) with the California Public Utilities Commission (CPUC) to replace the steam generators at Diablo Canyon Power Plant (DCPP) Units 1 and 2. The CPUC has decided to prepare an Environmental Impact Report (EIR) for the Steam Generator Replacement Project in order to evaluate the potential environmental impacts of this project under the California Environmental Quality Act (CEQA).

As required by CEQA, this Notice of Preparation (NOP) is being sent to interested agencies and members of the public. The purpose of the NOP is to inform recipients that the lead agency is beginning the preparation of an EIR and to solicit information that will be helpful in the EIR process. This notice includes a description of the project that PG&E proposes to undertake, a summary of potential project impacts, the times and locations of public scoping meetings, and information on how to provide comments to the CPUC.

B. Project Purpose and Need

According to PG&E, the purpose of the proposed project is to replace the original steam generators in Units 1 and 2, allowing DCPP to remain in service until the end of the current terms of the Nuclear Regulatory Commission (NRC) licenses for Units 1 and 2. Under their current licenses, Unit 1 is authorized to operate until 2021, and Unit 2 until 2025. However, the existing steam generators are currently predicted to reach the end of their operating life within the next several years. The original steam generators will eventually reach a state where, under applicable NRC regulations, the steam generators must be replaced, or the plant must be shut down.

C. Project Description

The proposed project would be located at the DCPP facility, seven miles northwest of Avila Beach and 12 miles southwest of San Luis Obispo, California (see **Figure 1**). As proposed by PG&E, the proposed project would consist of replacing the original steam generators for DCPP Units 1 and 2, which went into operation in 1985 and 1986, respectively. As illustrated in **Figure 2**, each DCPP unit has four steam generators, which are large heat exchangers that convert heat from the reactor into steam to drive the turbine generators and produce electricity. Each DCPP unit produces a nominal 1,110 net megawatts of electric power, enough to power approximately 1.1 million homes. See **Figure 3** for an illustration of the nuclear power generation process.

The steam generators are massive and complex components requiring specialized manufacturing, transport, and installation. The proposed replacement steam generators would be the same dimensions as the original steam generators, approximately 68 feet in height, 16 feet in diameter at the steam dome, and approximately 360 tons in weight.

Replacement of the DCPP steam generators includes four major phases that are described in detail below, and they include: transportation of the replacement steam generator to DCPP; replacement steam generator preparation and staging; original steam generator removal, transportation and storage; and replacement steam generator installation.

Transportation of the Replacement Steam Generators to DCPP

The replacement steam generators would be fabricated by an international vendor and would be transported by a heavy load ship to a California port (Long Beach or San Pedro) where they would be unloaded to a barge. From the barge, the replacement steam generators would be delivered to either the DCPP Intake Cove or Port San Luis, where they would be unloaded. The steam generators would then be transported by land to a replacement steam generator storage facility at DCPP, a new temporary facility located south of Units 1 and 2. PG&E requests that the Port San Luis and the Intake Cove unloading locations be equally considered in case a currently-unforeseen future event renders one option infeasible.

- **Port of San Luis Transport Option.** This option would involve transport of the replacement steam generators from Port San Luis to the DCPP Avila gate and then along the 7-mile access road to the new temporary storage facility. Because the DCPP access roads were designed, built, and used for the transport of the original steam generators, PG&E believes they would withstand heavy loads without complication or inconvenience.

- **Intake Cove Transport Option.** The replacement steam generators would be delivered by barge directly to DCPP under this option. However, space constraints at the existing Intake Cove may require the delivery to be made on smaller barges each carrying two steam generators. The replacement steam generators would then be transported approximately one mile to the temporary storage facility. Equipment and methods used for offloading are very similar for both options, with the exception of smaller barges possibly being used at the Intake Cove.

PG&E requests that the CPUC analyze and approve each of these transportation options because PG&E believes that either option could ultimately be used.

Replacement Steam Generator Preparation (Staging)

PG&E would use existing DCPP facilities to the greatest extent practicable. Additional temporary facilities, however, would be required to support design, staging, and preparation activities. All such facilities would be built according to appropriate codes with full consideration for employee health and safety, as well as utilities and service systems. All temporary facilities would be located in close proximity on previously developed and/or disturbed areas within the temporary staging area (TSA) (see **Figure 4**). Office space, warehouse, mock-up, weld-testing, and laydown areas would be constructed within the TSA to accommodate most project activities. Many activities that would be associated with steam generator replacement are already authorized by existing permits and approvals.

The steam generators would be staged before their installation in the temporary replacement steam generator storage facility within the TSA. In this storage facility, the replacement steam generators would be prepared for installation and housed until the steam generator replacement outage. The temporary

warehouse and laydown area would be used for the storage of any required material and to provide additional space to temporarily stage any materials. Mock-up facilities would be used to train personnel in techniques used to remove and install the steam generators. In addition, replacement team office space, containment access facilities, security processing facilities, decontamination facilities, and parking would be required within the project site.

Original Steam Generator Removal, Transportation, and Storage

Original steam generator removal includes staging at DCPP and transportation of the original steam generators to a new storage facility for containment on-site for the remaining life of the power plant. Several steps are associated with removal, transportation, and storage of the original steam generators. These steps would be performed in conformance with applicable industry and regulatory standards and would generally be followed in reverse for the installation of the replacement steam generators.

- **Removal and Replacement of Steam Generators.** PG&E's preferred method for removal of the original steam generators is in one piece through the equipment hatch of the containment structure. The original steam generators would be hauled out of the containment building using electrically powered hydraulic cranes along with the polar gentry's crane. Then a steel runway system would facilitate transport out of the containment building through the equipment hatch and onto a hydraulic platform trailer that would transport the original steam generators over the auxiliary building roof and through the fuel handling building. Finally, the original steam generator would be lowered onto a transporter and secured for transfer to the new on-site storage facility.
- **Storage of Original Steam Generators.** PG&E identifies the least-cost method of original steam generator disposal to be on-site storage for the remainder of the plant life and subsequent decommissioning with the remaining plant equipment. This procedure would be conducted in accordance with all applicable NRC regulations. Proper storage of the original steam generators involves exterior decontamination and application of a protective plastic coating to prevent loss of loose material and use of a storage facility designed to block the dispersion of gamma rays.

Replacement Steam Generator Installation

While staging in the temporary storage facility, preparatory work would be performed on the replacement steam generators by the installation contactor. After transporting each replacement steam generator from the temporary storage facility and aligning it in essentially the reverse method by which the original steam generator was removed, each replacement steam generator would be fitted and welded to the reactor coolant system loops. After each steam generator is attached, PG&E would install supports, and weld main-stem piping and other connections. Full compliance with applicable industry and regulatory standards would be ensured throughout installation of the replacement steam generators.

D. Project Location

The DCPP occupies a 760-acre site of PG&E owner-controlled land on the California coast in San Luis Obispo County adjacent to the Pacific Ocean. DCPP is located within the San Luis Mountains directly southeast of Montana de Oro State Park, seven miles northwest of Avila Beach and 12 miles southwest of San Luis Obispo, California. **Figure 1** provides an overview of the area that would be affected by the proposed project, including the entire proposed transportation corridor.

E. Potential Environmental Effects

In accordance with the guidelines of CEQA, the CPUC intends to prepare an EIR to evaluate potential significant environmental effects of the proposed project, and to propose mitigation measures to reduce any significant effects identified. The EIR will also study the environmental impacts of the alternatives to the replacement steam generator transport routes and temporary staging area locations, and original steam generator storage facility locations, and propose mitigation to reduce these effects.

Based on preliminary evaluation of the proposed project and review of documents submitted by PG&E and other parties to the CPUC's proceeding, completion of the proposed project may have a number of potentially significant environmental effects. Potential impacts to the existing environment include those listed in **Attachment 1**. No determinations have yet been made as to the significance of these potential impacts; such determinations will be made in the EIR after the issues are considered thoroughly. **Attachment 2** includes CEQA Checklist questions that would be evaluated in an EIR if they cover issues relevant to the project. In addition to analysis of the issues listed in **Attachment 1** and other relevant issues raised in the scoping process, the EIR will evaluate the cumulative impacts of the project in combination with other present and planned projects in the area.

Mitigation Measures. PG&E has proposed to implement the project in a way that would reduce or eliminate potential environmental impacts of the project. The effectiveness of the PG&E proposal will be evaluated in the EIR, and additional measures (mitigation measures) will be developed to further reduce impacts, if required. When the CPUC makes its final decision on the project, it will define the mitigation measures to be adopted as conditions of project approval, and it will require implementation of a mitigation monitoring program.

F. Alternatives

In addition to mitigation measures, the EIR will evaluate alternatives to the proposed project that could reduce or avoid impacts of the proposed project. Alternatives could include different transport routes for the replacement steam generators, different locations for the temporary staging area for the replacement steam generators, or alternative locations for storage of the original steam generators.

In compliance with CEQA, a Draft EIR must describe a reasonable range of alternatives to the project or project location that could feasibly attain most of the basic project objectives and avoid or lessen any of the significant environmental impacts of the proposed project. Additionally, the No Project Alternative must also be analyzed in the Draft EIR; this alternative describes the situation that would likely occur in the absence of the proposed project. Further, the EIR must evaluate the comparative merits of the alternatives.

Project-related activities within the DCPP site boundaries will need to comply with existing NRC programs. Therefore, the primary alternatives to the proposed project would consist of alternative routes to transport the steam generators to DCPP or alternative locations for the temporary staging area and original steam generator storage facility. PG&E discussed the No Project Alternative and several project alternatives in its Proponent's Environmental Assessment (PEA); these include the following:

Transport Option Alternatives:

- Unloading the units at Port San Luis, and transporting them across Avila Beach Road to the DCPP Main Gate, and along the DCPP access road for approximately seven miles to the replacement steam generator storage facility.
- Unloading the units at the DCPP Intake Cove and using existing roads to transport the steam generators one mile to the replacement steam generator storage facility.

No Project Alternative:

- Replacement transmission facilities (including construction of new regional transmission lines and installation of other transmission system enhancements at existing facilities).
- Replacement generation facilities (including construction of natural gas-fired power plants).
- Combinations of replacement transmission and generation.
- No Action Alternative (assumes that no action would be taken to replace the electrical capacity of DCPP).

In addition to the PEA alternatives listed above, additional alternatives may be evaluated in the Draft EIR based on input from agencies and the public and additional independent analysis by the CPUC environmental team.

G. Public Scoping Meetings

The process of determining the scope, focus, and content of an EIR is known as scoping. Scoping helps identify the range of actions, alternatives, environmental effects, methods of assessment, and mitigation measures to be analyzed in depth and eliminates from detailed study those issues that are not relevant. Though not required under CEQA, scoping meetings are one of the methods used to identify concerns of affected parties in an informal setting.

The CPUC will conduct two public scoping meetings in San Luis Obispo. The purpose of these meetings is to present information about the proposed project and the CPUC's decision-making process, and to listen to the views of the public on the range of issues relevant to the preparation of the Draft EIR.

Public Scoping Meetings

Date	**Wednesday, October 27, 2004**
Time	**2:30 pm – 4:30 pm** and **7 pm – 9 pm**
Location	**San Luis Obispo Library** **Community Room** 995 Palm Street San Luis Obispo, CA 93401
Directions	*From the north:* - Take U.S. 101 south - Take the exit toward Santa Rosa Street - Turn right onto CA-1 / Olive Street - Turn right onto CA-1 Santa Rosa Street. Continue to follow Santa Rosa Street - Turn right onto Palm Street. End at 995 Palm Street *From the south:* - Take U.S. 101 north - Take the CA-1 N exit toward Morro Bay / Hearst Castle - Turn slightly right onto Osos Street - Corner of Palm Street and Osos Street (995 Palm Street)

H. Scoping Comments

At this time, the CPUC is soliciting information regarding the specific topics and alternatives that should be included in the EIR.

Certain issues that are a part of the overall Proceeding for the project remain outside the CEQA process and this environmental review. The following topics should not be included in scoping comments: (1) cost of the project (this will be examined in the General Proceeding); and (2) whether the CPUC should favor or discourage development of nuclear power infrastructure.

Suggestions for submitting scoping comments are presented at the end of this section. **All comments must be postmarked by November 1, 2004.** You may submit comments in a variety of ways: (1) by U.S. mail, (2) by email, (3) by fax, or (4) by attending a Public Scoping Meeting (see above) and making a verbal statement or submitting a written comment at the meeting.

By Mail: If you send comments by mail, please use first-class mail and be sure to include your name and a return address. Please send written comments on the scope of the EIR to:

Nicolas Procos
California Public Utilities Commission
c/o Aspen Environmental Group
235 Montgomery Street, Suite 935
San Francisco, CA 94104
Fax and voicemail: (805) 888-2750

By Electronic Mail: Email communications are welcome; however, please remember to include your name and return address in the email message. Email messages should be sent to diablocanyon@AspenEG.com.

By Fax: You may fax your comment letter to our information line, (805) 888-2750. Please remember to include your name and return address in the fax.

A **Scoping Report** will be prepared, summarizing all comments received (including oral comments made at the Scoping Meetings). This report will be posted on the project website and copies will be placed in local libraries. In addition, a limited number of copies will be available upon request to the CPUC.

Suggestions for Effective Participation in Scoping

Following are some suggestions for preparing and providing the most useful information for the EIR scoping process.

1. **Review the description of the project** (see Sections B and C of this Notice of Preparation and the maps provided). Additional detail on the project description is available in PG&E's Proponent's Environmental Assessment (see website address below).

2. **Review the CEQA impact assessment questions** (see **Attachment 2**).

3. **Attend the scoping meetings** to get more information on the project and the environmental review process (see times and dates above).

4. **Submit written comments** or attend the scoping meetings and **make oral comments**. Explain important environmental issues that the EIR should cover.

5. **Suggest mitigation measures** that could reduce the potential impacts associated with PG&E's proposed project.

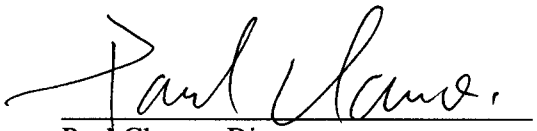
6. **Suggest alternatives** to PG&E's proposed project that could avoid or reduce the impacts of the proposed project.

I. For Additional Project Information

Internet Website: Information about this application and the environmental review process will be posted on the Internet at: http://www.cpuc.ca.gov/environment/info/aspen/diablocanyon/diablocanyon.htm. This site will be used to post all public documents during the environmental review process and to announce upcoming public meetings. PG&E's Proponent's Environmental Assessment (PEA) is available for review on the project website.

Project Information Hotline. You may request project information by leaving a voice message or sending a fax to (805) 888-2750.

The California Public Utilities Commission hereby issues this Notice of Preparation of an Environmental Impact Report.



October 1, 2004
Date

Paul Clanon, Director
Energy Division
California Public Utilities Commission

Attachment 1

Summary of Potential Issues or Impacts: PG&E DCPP Steam Generator Replacement Project

Environmental Issue Area	Potential Issues or Impacts
Aesthetics	• Short-term visibility of equipment at Port San Luis and along transport routes (e.g., Avila Beach Road). • Temporary light and glare would be present in the unloading area should the replacement steam generators be unloaded during nighttime hours. • Duration of visibility of temporary facilities, materials, equipment, and debris.
Agricultural Resources	• No issues identified.
Air Quality	• Transport of replacement steam generators and installation activities would require heavy-duty diesel and gasoline powered equipment, which would produce short-term air emissions (fugitive dust, vehicle and equipment exhaust). • Additional exhaust emissions from increased temporary worker commuting trips.
Biological Resources	• Project is located in a coastal setting with a wide range of biological diversity that could be impacted. • Activities at the unloading areas, the transport routes, and the work sites could impact rare, threatened, or endangered species in the project area. • Temporary impacts to fish, avian, benthic, and sea mammal species may occur, especially near the replacement steam generator unloading locations.
Cultural and Paleontological Resources	• Impacts to known and unrecorded prehistoric and historic resources during transport.
Geology and Soils	• Short-term geological stability along transport access road when traversing natural drainage crossings, steep slopes, or landslide areas. • Excavation and reinforcement potentially necessary for barge unloading areas and roadways. • Long-term exposure of the storage facility structure to seismic hazards from a large-magnitude earthquake in the region (e.g., San Simeon earthquake); fault rupture or strong ground shaking could damage the facilities.
Hazards and Hazardous Materials	• Small spills or inadvertent releases of hazardous materials during transport and replacement activities. • Staging activities could encounter contaminated soils, and workers and the public may be affected if improper handling or disposal of contaminated materials occurs during soil disturbance and release. • Safety risks to workers and the public if proper radiation protection practices are not implemented during handling and disposal of radioactive waste, including removal and storage of the original steam generators. • Design of the facility to safely protect the public and the environment from inadvertent or terrorist-induced release of radioactive material. • Handling, transport, and storage of the original steam generators need to comply with radioactive waste regulations.

Environmental Issue Area	Potential Issues or Impacts
Hydrology and Water Quality	• Risk of water contamination and sedimentation from barge docking, mooring, and unloading of the replacement steam generators. • Drainage crossings and roadway improvements may be needed to reinforce the transport route, which could increase uncontrolled runoff, destabilization of slopes, and erosion. • Handling, transport, and storage of the original steam generators would also increase the likelihood of radioactive waste coming in contact with groundwater or surface water.
Land Use and Planning	• The project unloading and transport would occur on land managed by the Port San Luis Harbor District and San Luis Obispo County. • Possible conflicts with land use plans, ordinances, standards, regulations, and policies. • Impacts to sensitive land uses near the unloading area, especially Port San Luis.
Noise	• Transport activities near the Port San Luis Harbor may cause noise disruptions at residences, commercial sites, and beaches. The impact to residences would be especially notable if transport work would occur at night to minimize disruption of traffic.
Population and Housing	• Project would involve a large force of temporary workers, which would require accommodations in surrounding communities. • Possible disruption of Port San Luis operations from temporary workers camping near the unloading location.
Public Services and Utilities	• Possible damage to existing underground or overhead utilities by transport of the replacement steam generators along transport routes. • Capacity of emergency services to respond to any demands that could result from accidents, including disruption of utilities, hazardous materials spills, or improper handling of radioactive waste.
Socioeconomics and Environmental Justice	• Potential of work-related impacts (housing and traffic) to disrupt businesses and activities near the unloading location at Port San Luis Harbor. • Potential for disproportionate exposure to potential risks related to nuclear waste handling, disposal, or storage, including risks of attracting terrorist activities, to communities in the disposal area or along the disposal route.
Recreation	• Potentially reduced quality of recreational experiences at fishing and boating facilities at the unloading site of Port San Luis Harbor. • Transport of replacement steam generators could disrupt access to harbor facilities and the shoreline. • Project-related traffic, housing for short-term work-force, and the effects of noise and dust may adversely affect the use and enjoyment of nearby recreation facilities.
Transportation and Traffic	• Temporary closure of the parking areas of Port San Luis. • Potential to cause closure of other thoroughfares, the loss of travel lanes, loss of parking, and impediments to emergency and public service vehicles. • Potential disruptions to recreational boat or ship traffic near the points of unloading the replacement steam generators. • Addition of traffic to local roadways due to increased number of temporary workers may impact already congested portions of Avila Beach Drive, State Highway 1, and U.S. Highway 101.
Other Issues Not Considered Under CEQA	• Cost of the project to the ratepayers. • Replacing the steam generators and upgrading the infrastructure could provide an incentive for extending the operable life of the nuclear facility beyond its current license.

Attachment 2

Environmental Checklist

Following are the questions included in the California Environmental Quality Act's (CEQA) environmental checklist. These are issues that may be evaluated in an Environmental Impact Report, if they are determined to be relevant to the project.

I. AESTHETICS. Would the project:

- Have a substantial adverse effect on a scenic vista?
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
- Substantially degrade the existing visual character or quality of the site and its surroundings?
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

II. AGRICULTURE RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- Conflict with existing zoning for agricultural use, or a Williamson Act contract?
- Involve other changes in the existing environmental which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

- Conflict with or obstruct implementation of the applicable air quality plan?
- Violate any air quality standard or contribute substantially to an existing or projects air quality violation?
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?
- Expose sensitive receptors to substantial pollutant concentrations?
- Create objectionable odors affecting a substantial number of people?

IV. BIOLOGICAL RESOURCES. Would the project:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites?
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

V. CULTURAL RESOURCES. Would the project:

- Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?
- Directly or indirectly destroy a unique paleontological resource or site unique geologic feature?
- Disturb any human remains, including those interred outside of formal cemeteries?

VI. GEOLOGY AND SOILS. Would the project:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - — Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to the California Division of Mines and Geology Spec. Pub. 42)
  - — Strong seismic ground shaking?
  - — Seismic-related ground failure, including liquefaction?
  - — Landslides?
- Result in substantial soil erosion or the loss of topsoil?
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?

VII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

- Emit hazardous emissions or handle hazardous or acutely hazardous material, substances, or waste within one-quarter mile of an existing or proposed school?
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or pubic use airport, would the project result in a safety hazard for people residing or working in the project area?
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

VIII. HYDROLOGY AND WATER QUALITY. Would the project:

- Violate any water quality standards or waste discharge requirements?
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount or surface runoff in a manner which would result in flooding on- or off-site?
- Create or contribute runoff water which would exceed the capacity of existing or planned storm-water drainage systems or provide substantial additional sources of polluted runoff?
- Otherwise substantially degrade water quality?
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows?
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
- Inundation by seiche, tsunami, or mudflow?

IX. LAND USE AND PLANNING. Would the project:

- Physically divide an established community?
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

- Conflict with any applicable habitat conservation plan or natural community conservation plan?
- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

X. NOISE. Would the project result in:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
- For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

XI. POPULATION AND HOUSING. Would the project:

- Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extensions of roads or other infrastructure)?
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

XII. PUBLIC SERVICES AND UTILITIES.

- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
  - — Fire protection?
  - — Police Protection?
  - — Schools?
  - — Parks?
  - — Other public facilities?
- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?
- Comply with federal, state, and local statutes and regulations related to solid waste?

XIII. RECREATION. Would the project:

- Increase the use of existing neighborhood, and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

XIV. TRANSPORTATION/TRAFFIC. Would the project:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections?
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?
- Result in inadequate emergency access?
- Result in inadequate parking capacity?
- Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

GENERAL ISSUES:

- Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?
- Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)
- Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

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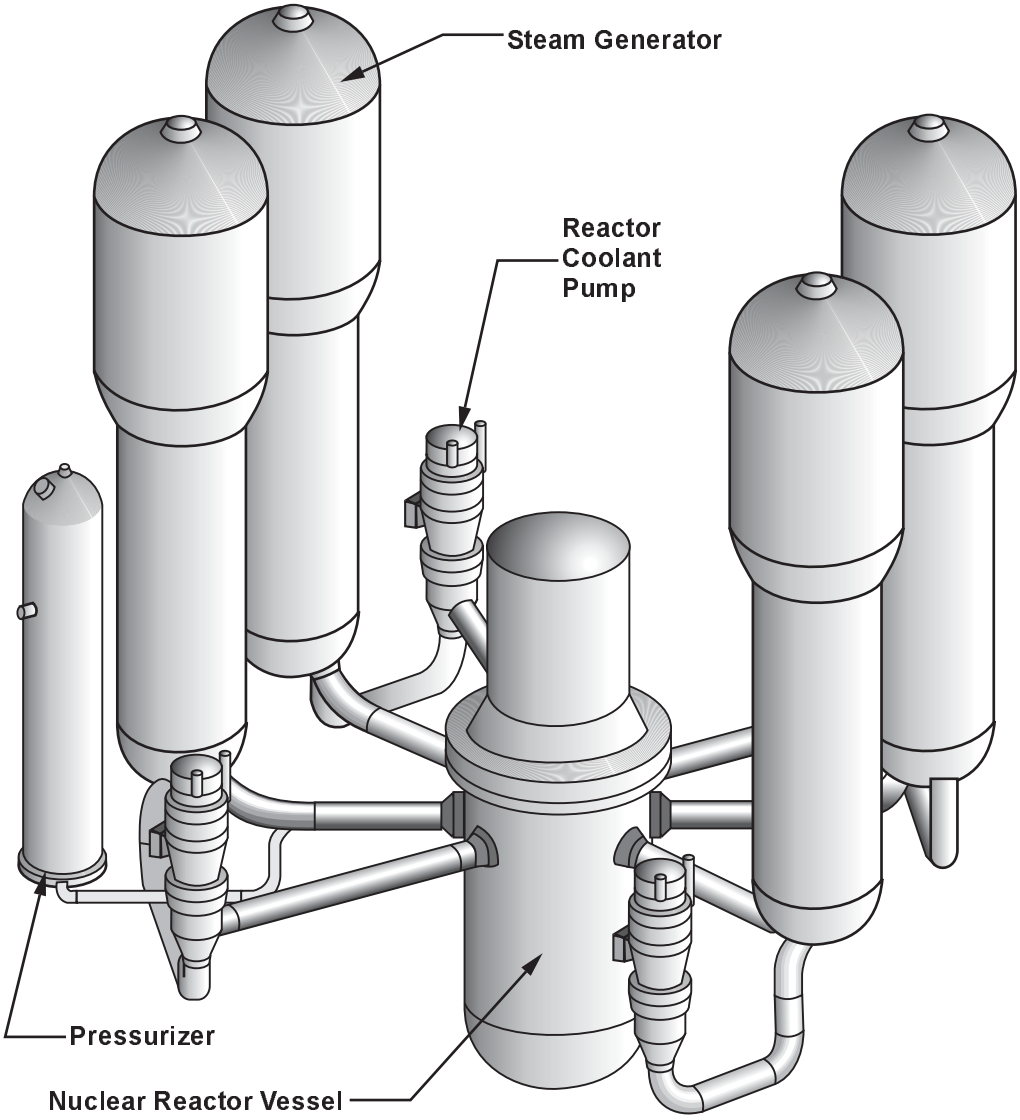
Project Location Map

DCPP Steam Generator Replacement

Figure 1



Weight	360 tons
Height	68' (over six stories)
Diameter	16 feet
Number of Tubes	3,900 tubes

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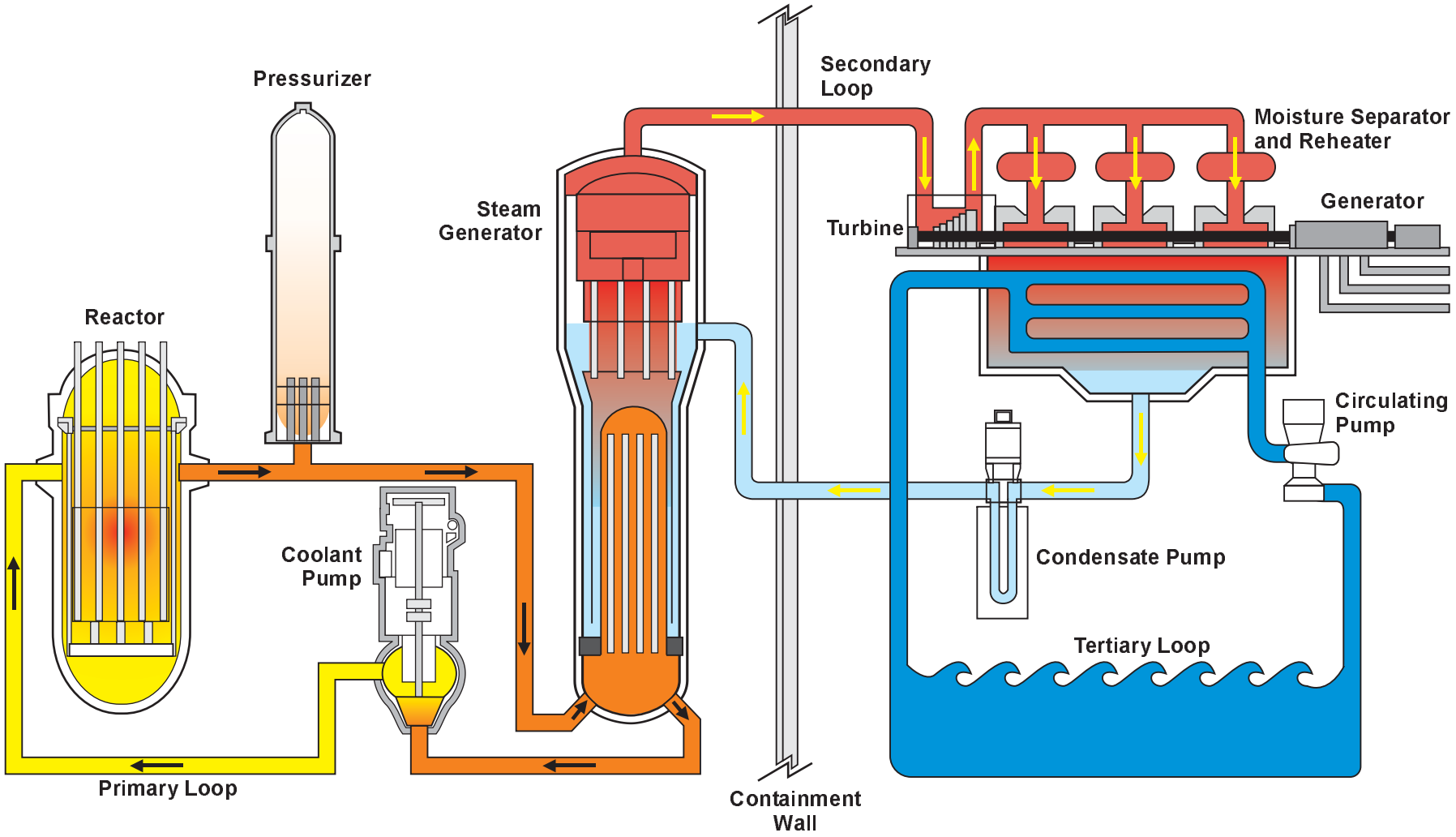
Original Steam Generator-Dimensions and Operating Parameters

DCPP Steam Generator Replacement

Figure 2



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Typical Nuclear Power Plant Steam Supply System

DCPP Steam Generator Replacement

Figure 3

LEGEND

SGRP Temporary Facilities

1 Original Steam Generator Storage Facility (OSGSF), Potential Options

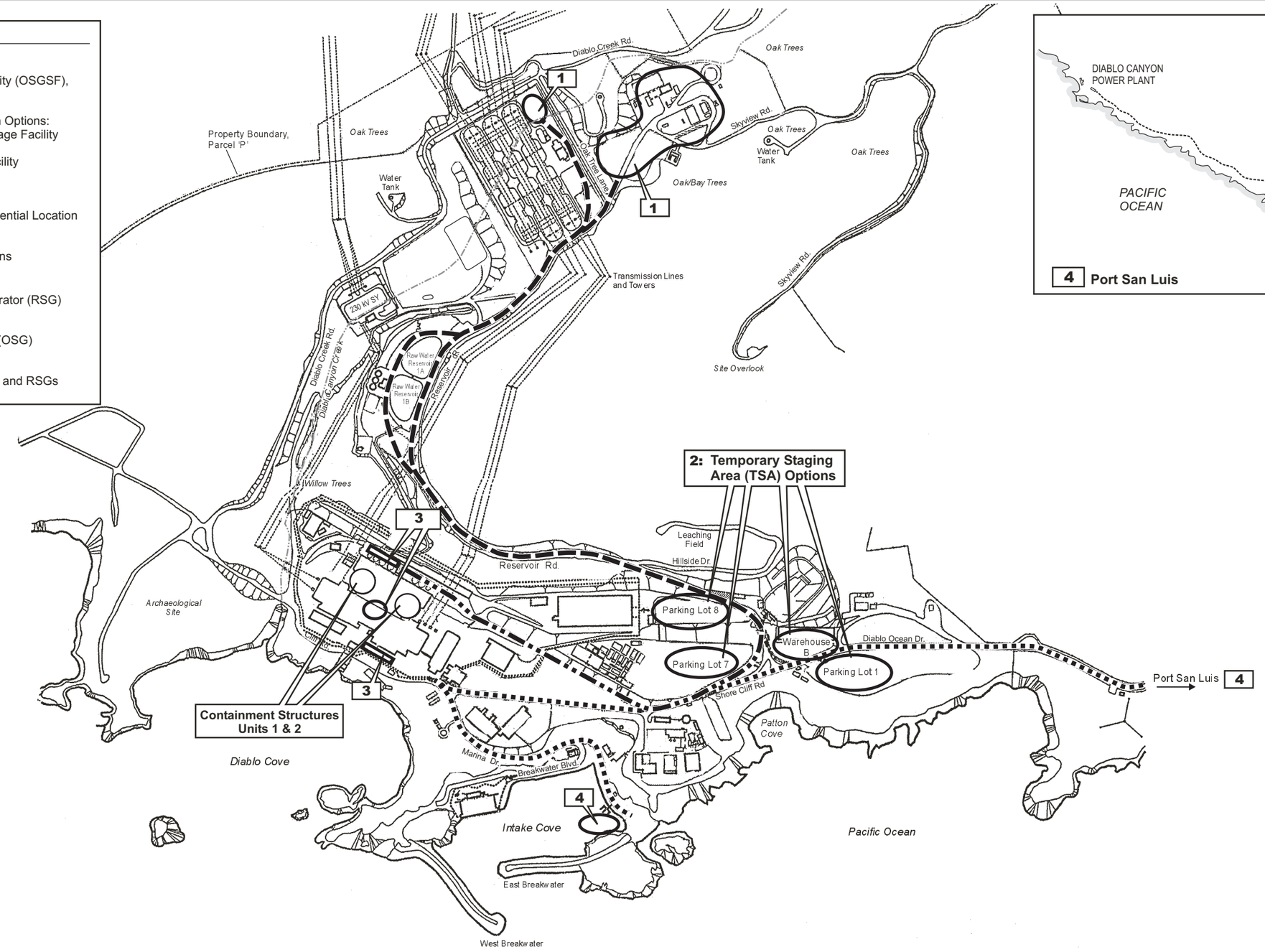
2 Temporary Staging Area (TSA) Location Options:
- Replacement Steam Generator Storage Facility
- Contractor Office
- Fabrication, Mock-up, Weld Test Facility
- Warehouse
- Laydown Area

3 Containment Access Facility (CAF), Potential Location Options

4 Proposed Barge Offload Location Options

SGRP Heavy Haul Route

- Replacement Steam Generator (RSG) Proposed Haul Route
- Original Steam Generator (OSG) Proposed Haul Route
- Haul Route for Both OSGs and RSGs



Source: PG&E

Aspen Environmental Group	**PG&E Diablo Canyon Steam Generator Replacement Project California Public Utilities Commission**	**Temporary Facilities**	**DCPP Steam Generator Replacement** Figure 4