

PG&E Letter DCL-22-018
PG&E Letter DIL-22-007

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Diablo Canyon Units 1 and 2
Docket No. 50-275, OL-DPR-80
Docket No. 50-323, OL-DPR-82
Docket No. 72-26, Materials License No. SNM-2511
Diablo Canyon Independent Spent Fuel Storage Installation
Responses to NRC Requests for Additional Information on "License Amendment
Request 21-04, Proposed Changes to the Diablo Canyon Power Plant Emergency
Plan for Post-Shutdown and Permanently Defueled Condition"

Reference:

1. PG&E Letter DCL-21-062, DIL-21-007, "License Amendment Request 21-04, Proposed Changes to the Diablo Canyon Power Plant Emergency Plan for Post-Shutdown and Permanently Defueled Condition," dated October 8, 2021 (ML21284A003)
2. Email from NRC Project Manager, Samson Lee, "Request for additional information – Diablo Canyon proposed changes to emergency plan for post-shutdown and permanently defueled condition (EPID: L-2021-LLA-0190)," dated March 2, 2022 (ML22061A219)

Dear Commissioners and Staff:

In Reference 1, Pacific Gas and Electric Company (PG&E) submitted License Amendment Request 21-04, to propose revisions to the Diablo Canyon Power Plant Emergency Plan to reflect the post-shutdown and permanently defueled condition. In Reference 2, the Nuclear Regulatory Commission provided requests for additional information (RAIs) regarding Reference 1. The Enclosure to this letter provides PG&E responses to the RAIs.

PG&E makes no new or revised regulatory commitments (as defined in NEI 99-04) in this letter.

If you have any questions or require additional information, please contact Mr. Philippe Soenen at (805) 459-3701.

I state under penalty of perjury that the foregoing is true and correct.

Executed on March 23, 2022.

Sincerely,



Maureen R. Zawalick
Vice President, Decommissioning and Technical Services

Enclosure

cc: Diablo Distribution
cc/enc: Nicholas A. Hernandez, NRC Acting Senior Resident Inspector
Wade Horton, Administrative Officer, County of San Luis Obispo
Office of Emergency Services
Samson S. Lee, NRR Senior Project Manager
Scott A. Morris, NRC Region IV Administrator
Gonzalo L. Perez, Branch Chief, California Dept of Public Health
Michael Warren, Manager, Radiological Preparedness Unit,
California Governor's Office of Emergency Services

Responses to NRC Request for additional information – Diablo Canyon proposed changes to emergency plan for post-shutdown and permanently defueled condition (EPID: L-2021-LLA-0190)

Background

By letter dated October 8, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21284A003), Pacific Gas and Electric Company (PG&E, the licensee) submitted a license amendment request (LAR) for proposed changes to the Diablo Canyon Power Plant (DCPP) Emergency Plan (E-Plan) for U.S. Nuclear Regulatory Commission (NRC) review and prior approval, pursuant to Title 10 of the Code of Federal Regulations (10 CFR) Section 50.54(q). The proposed changes would revise the staffing for certain emergency response organization (ERO) positions, based on receipt by the NRC of certification under 10 CFR 50.82(a)(2) that the DCPP reactors had permanently ceased operations and permanently removed fuel from the reactor vessels. The NRC staff has reviewed the license amendment request (LAR) and determined that additional information is required to complete the review. The NRC staff's requests for additional information (RAIs) are listed below. The staff may have additional RAIs. The NRC staff held a draft RAI clarification call with the PG&E staff on March 2, 2022. The PG&E staff requested, and NRC agreed, to an RAI response by April 1, 2022.

The NRC staff considers that timely responses to RAIs help ensure sufficient time is available for staff review and contribute toward the NRC's goal of efficient and effective use of staff resources. Please note that if you do not respond to this request by the agreed upon date or provide an acceptable alternate date, we may deny your application for amendment under the provisions of 10 CFR, Section 2.108. If circumstances result in the need to revise the agreed upon response date, please contact me at (301) 415-3168 or via e-mail Samson.Lee@nrc.gov.

Regulatory Requirements and Guidance:

- 10 CFR 50.47(b)(1) requires that each principal response organization has staff to respond and to augment its initial response on a continuous basis.*
- 10 CFR 50.47(b)(2) requires that the on-shift facility licensee has adequate staffing to provide initial facility accident response in key functional areas is maintained at all times and timely augmentation of response capabilities is available.*
- Associated guidance in NUREG-0654, Section II.B, Evaluation Criterion B.1.a states that the site-specific ERO is developed.*

RAI-1

Issue:

Enclosure 1, "Evaluation of the Proposed Changes," Section 5.2.5.a, "Major Tasks: Technical Support/Accident Analysis," of the LAR states, in part:

The PG&E analysis of the proposed post-shutdown On-Shift and Augmented ERO Staffing Assessment concluded that in a permanently defueled condition, the TSC [Technical Support Center] Engineering Advisor will be qualified to provide engineering support in response to a Fuel Handling Accident (FHA) in the fuel handling building or an event resulting in damage to the Spent Fuel Pool (SFP) integrity or loss of SFP cooling or inventory. As a result of this analysis, PG&E proposed that the TSC Engineering Advisor would assume the functions of engineering support and therefore, has proposed to eliminate both the currently approved Mechanical and Electrical Engineering 60-minute response positions and replacing those emergency positions with a proposed 90-minute response position of a TSC Engineering Advisor. [emphasis added]

The current ERO staffing for the DCPD was approved by the NRC in a letter dated August 21, 2019 (ADAMS Accession No. ML19196A309) and is based on the guidance provided in a letter to the Nuclear Energy Institute dated June 12, 2018 (ADAMS Accession No. ML18022A352), that provided alternative guidance (referred to as the Revised Table B-1) to nuclear power plant licensees for Evaluation Criterion II.B in NUREG-0654, for minimum ERO on-shift and augmentation staffing.

However, the guidance in Revised Table B-1 identifies engineering support augmenting the on-shift staff within 60 minutes of the declaration of an Alert or higher emergency classification level (ECL). This is consistent with the current DCPD E-Plan staffing, as well as the current precedence of other decommissioning sites implementing these types of proposed changes to the ERO staffing.

As proposed, the minimum engineering staffing will not allow the facilities to perform the intended functions within 60 minutes (e.g., Plant System Engineering is provided by the TSC Engineering Advisor with a 90-minute response).

Request:

Describe how the augmented engineering staffing will continue to be aligned with the current DCPD E-Plan to ensure the continued effective and timely implementation of the major task of Technical Support/Accident Analysis within 60 minutes of the declaration of an Alert or higher ECL.

PG&E Response to RAI-1:

To ensure the continued effective and timely implementation of the major task of Technical Support/Accident Analysis, the proposed Diablo Canyon Power Plant (DCPP) Emergency Plan (E-Plan) is revised to designate the Technical Support Center (TSC) Engineering Advisor as a minimum staff 60-minute responder (i.e., within 60 minutes of the declaration of an Alert or higher emergency classification level [ECL]).

Qualifications for the TSC Engineering Advisor position selection criteria will align with the current position requirements. As discussed in Enclosure 1, Section 5.2.5a of the license amendment request, the Attachment 4 Task Analysis concluded that all of the TSC Engineers' responsibilities and tasks can be eliminated. As such, no new tasks are being added to the TSC Engineering Advisor position and the Engineering function will continue to be maintained by the TSC Engineering Advisor without competing priorities. Revised DCPP E-Plan, Sections 5.19 and 5.22, markup and clean pages are provided in the Attachments of this Enclosure to reflect this change.

RAI-2

Issue:

Enclosure 1, Section 5.2.5.b, "Major Tasks: Repair and Corrective Actions," of the LAR, states, in part:

The PG&E analysis of the proposed post-shutdown On-Shift and Augmented ERO Staffing Assessment concluded that in a permanently defueled condition, the OSC [Operations Support Center] Director would assume the function of repair and corrective actions (e.g., Mechanical and Electrical Maintenance) as a 90-minute responder. As a result of the OSC Director assuming these functions, the OSC Mechanical and Electrical Maintenance Coordinators would be eliminated as 60-minute responders from the currently approved DCPP E-Plan. [emphasis added]

However, the guidance in Revised Table B-1 identifies Mechanical Maintenance and Electrical Maintenance personnel augmenting the on-shift staff within 60 minutes of the declaration of an Alert or higher ECL. This is consistent with the current DCPP E-Plan staffing as well as consistent with the current precedence of other decommissioning sites implementing these types of proposed changes to the ERO staffing.

As proposed, the minimum maintenance staffing will not allow the facilities to perform the intended functions within 60 minutes (e.g., maintenance support is provided by the OSC Director with a 90-minute response with Mechanical Maintenance and Electrical/Instrumentation and Controls (I&C) Maintenance positions called-in as needed to support repair and corrective actions).

Request:

Describe how the augmented maintenance staffing will continue to be aligned with the current DCPPE-Plan to ensure the continued effective and timely implementation of the major task of Repair and Corrective Actions within 60 minutes of the declaration of an Alert or higher ECL.

PG&E Response to RAI-2:

To ensure the continued effective and timely implementation of the major task of Repair and Corrective Actions, the proposed DCPPE-Plan is revised to maintain the Operations Support Center (OSC) Director as a minimum staff 60-minute responder (i.e., within 60 minutes of the declaration of an Alert or higher ECL). In addition, one qualified Mechanical Maintenance technician and one qualified Electrical Maintenance technician will be minimum staff 60-minute OSC responders. Revised DCPPE-Plan, Sections 5.7.3, 5.19, 5.20, and 5.23, markup and clean pages are provided in the Attachments of this Enclosure to reflect these changes.

Enclosure
Attachment 1
PG&E Letter DCL-22-018
PG&E Letter DIL-22-007

**Revised Diablo Canyon Power Plant Emergency Plan, Sections 5.7.3, 5.19,
5.20, 5.22, and 5.23, Markup**

~~5.7.6~~ ~~Operations Coordinator~~

~~The Operations Coordinator is responsible for the following activities:~~

- ~~1) Coordinating operation's response outside the Control Room.~~
- ~~2) Ensuring the Control Room is updated on status of OSC team assignments.~~

~~5.7.75.7.2~~ ~~Onsite Field Monitoring Teams (FMTs)~~ ~~RP Technicians~~

~~The onsite Field Monitoring Team is~~ RP Technicians are responsible for the following activities:

- 1) Performing radiation surveys around the plant site and obtaining appropriate samples for analysis.
- 2) Maintaining initial communications with the ~~Site RP Coordinator~~ Radiological Manager and subsequently with the FMT Coordinator for reporting of monitoring results and maintaining cognizance of the emergency situation.

~~5.7.85.7.3~~ ~~Maintenance~~ Technicians, RP, Chemistry and Operations Personnel

The following personnel provide support in planning and performing tasks in their disciplines.

- 1) Mechanical Maintenance personnel
- 2) Electrical Maintenance personnel
- ~~3) Technical Maintenance personnel~~
- ~~4) Radiation Protection personnel~~
- ~~5) Chemistry personnel~~
- ~~6) Operations personnel~~

5.8 ~~EMERGENCY OPERATIONS FACILITY (EOF)~~

The principal functions of the EOF are to provide for strategic planning and control. The principal functions of the EOF staff are:

- 1) Control and Coordination

The EOF utility staff, under the direction of the Emergency Director (ED), manages and coordinates all PG&E technical direction and control of the integrated emergency response effort.

When activated, the EOF determines status of notifications, provides Protective Action Recommendations (PARs) and Public Information releases under the ED's authority.

- 2) Liaison/Interface

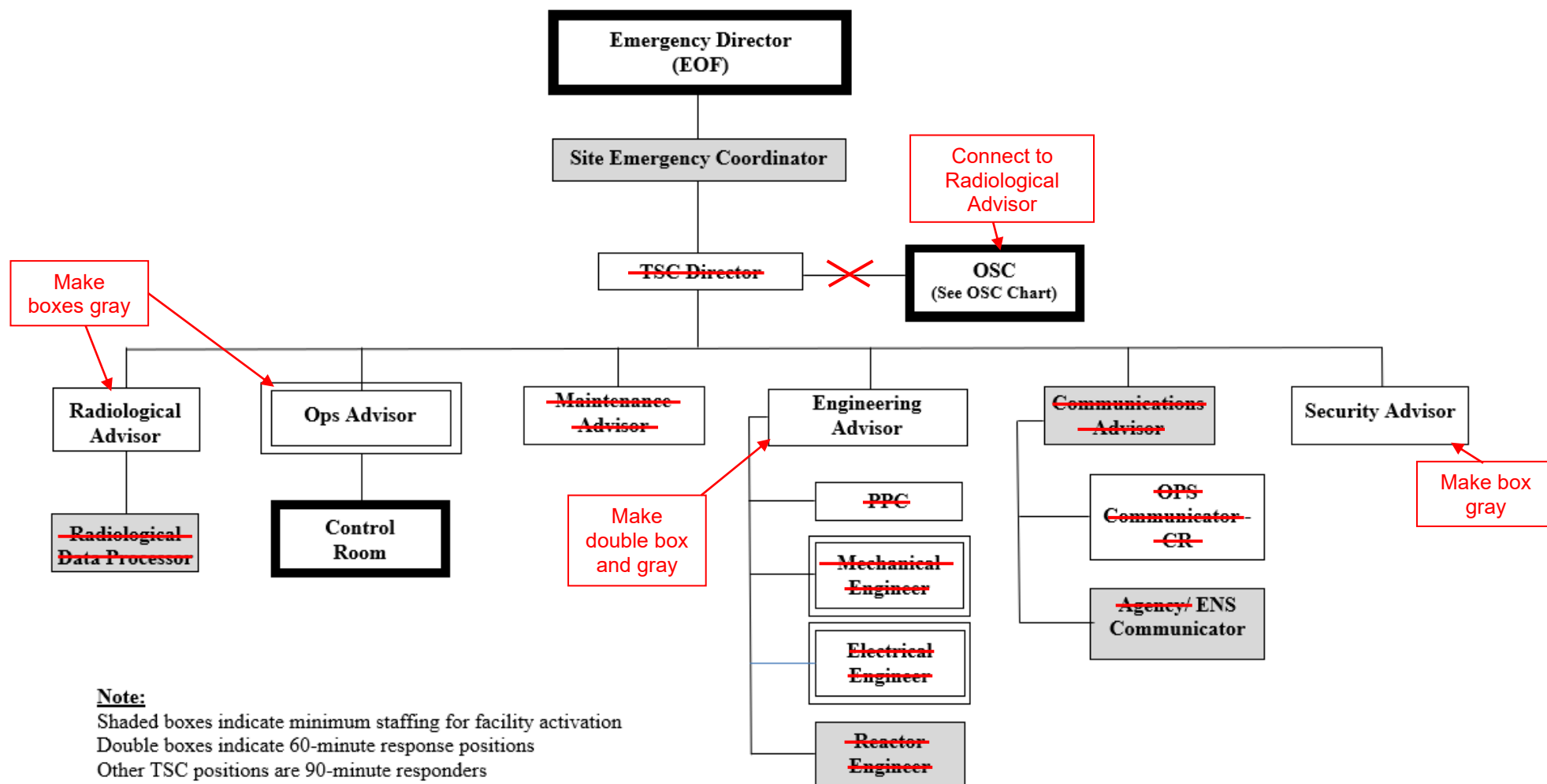
**E-Plan Section 5 - Diablo Canyon Power Plant Emergency Plan
Organizational Control of Emergencies**

<u>Functional Area</u>	<u>Major Tasks</u>	<u>Emergency Positions</u>	<u>Shift Staffing</u>	<u>60 Minutes</u>	<u>90 Minutes</u>
<u>1. Plant Operations and Assessment of Operational Aspects</u>	<u>Control Room Staff</u>	<u>Shift Supervisor (qualified as CFH)</u> <u>CFH</u> <u>NCO</u> <u>Operations Advisor (CR/TSC)</u>	<u>1</u> <u>1</u> <u>3</u> <u>---</u>	<u>---</u> <u>---</u> <u>---</u> <u>1</u>	<u>---</u> <u>---</u> <u>---</u> <u>---</u>
<u>2. Emergency Direction and Control</u>	<u>Command and Control</u>	<u>Shift Supervisor</u> <u>Site Emergency Coordinator (TSC)</u> <u>Emergency Director (EOF)</u> <u>EOF Director (EOF)</u>	<u>1*</u> <u>---</u> <u>---</u> <u>---</u>	<u>---</u> <u>---</u> <u>---</u> <u>---</u>	<u>---</u> <u>1</u> <u>1</u> <u>1</u>
<u>3. Notification and Communication</u>	<u>Licensee, Local/State, Federal</u>	<u>CFH/NCO</u>	<u>1*</u>	<u>---</u>	<u>---</u>
		<u>ENS Communicator (TSC)</u>	<u>---</u>	<u>---</u>	<u>1</u>
		<u>Communications Coordinator (EOF)</u>	<u>---</u>	<u>---</u>	<u>1</u>
		<u>Engineering Liaison (EOF)</u>	<u>---</u>	<u>---</u>	<u>1</u>
		<u>Government Relations Coord. (EOF)</u>	<u>---</u>	<u>---</u>	<u>1</u>
		<u>Advisor to the County (EOF)</u>	<u>---</u>	<u>---</u>	<u>1</u>
<u>4. Radiological Assessment</u>	<u>Dose Assessment</u>	<u>CFH/RP Technician</u>	<u>1*</u>	<u>---</u>	<u>---</u>
		<u>Radiological Manager (EOF)</u>	<u>---</u>	<u>---</u>	<u>1</u>
		<u>Dose Assessor (EOF)</u>	<u>---</u>	<u>---</u>	<u>1</u>
	<u>Offsite Surveys</u>	<u>FMT Coordinator (EOF)</u>	<u>---</u>	<u>---</u>	<u>1</u>
		<u>FMT Leader (RP Technician) (EOF)</u>	<u>---</u>	<u>---</u>	<u>2</u>
		<u>FMT Driver (EOF)</u>	<u>---</u>	<u>---</u>	<u>2</u>
	<u>Onsite (out-of-plant) Surveys</u>	<u>RP Technician (OSC)</u>	<u>---</u>	<u>1*</u>	<u>---</u>
	<u>In-plant Surveys</u>	<u>RP Technician (OSC)</u>	<u>2</u>	<u>1</u>	<u>---</u>
<u>5. Plant System Engineering, Repair, and Corrective Actions</u>	<u>Technical Support</u>	<u>Radiological Advisor (TSC)</u>	<u>---</u>	<u>---</u>	<u>1</u>
		<u>CFH</u>	<u>1*</u>	<u>---</u>	<u>---</u>
		<u>Engineering Advisor (TSC)</u>	<u>---</u>	<u>1</u>	<u>---</u>
		<u>Operations Advisor (CR/TSC)</u>	<u>---</u>	<u>1*</u>	<u>---</u>
	<u>Repair and Corrective Actions</u>	<u>Radiological Advisor (TSC)</u>	<u>---</u>	<u>---</u>	<u>1*</u>
		<u>OSC Director (OSC)</u>	<u>---</u>	<u>1</u>	<u>---</u>
		<u>Mechanical Technician (OSC)</u>	<u>---</u>	<u>1</u>	<u>---</u>
		<u>Electrical Technician (OSC)</u>	<u>---</u>	<u>1</u>	<u>---</u>
<u>6. In-Plant Protective Actions</u>	<u>Radiation Protection</u>	<u>RP Technicians (OSC)</u>	<u>2*</u>	<u>1</u>	<u>---</u>
<u>7. Firefighting</u>	<u>---</u>	<u>Fire Department</u>	<u>5</u>	<u>Local Support</u>	<u>Local Support</u>
<u>8. First Aid and Rescue Operations</u>	<u>---</u>	<u>Industrial Fire Officers</u>	<u>2*</u>	<u>Local Support</u>	<u>Local Support</u>
<u>9. Site Access Control and Personnel Accountability</u>	<u>Security and Accountability</u>	<u>Security Personnel</u>	<u>Per Security Plan</u>	<u>Local Support</u>	<u>Local Support</u>
TOTAL:			12	7	16

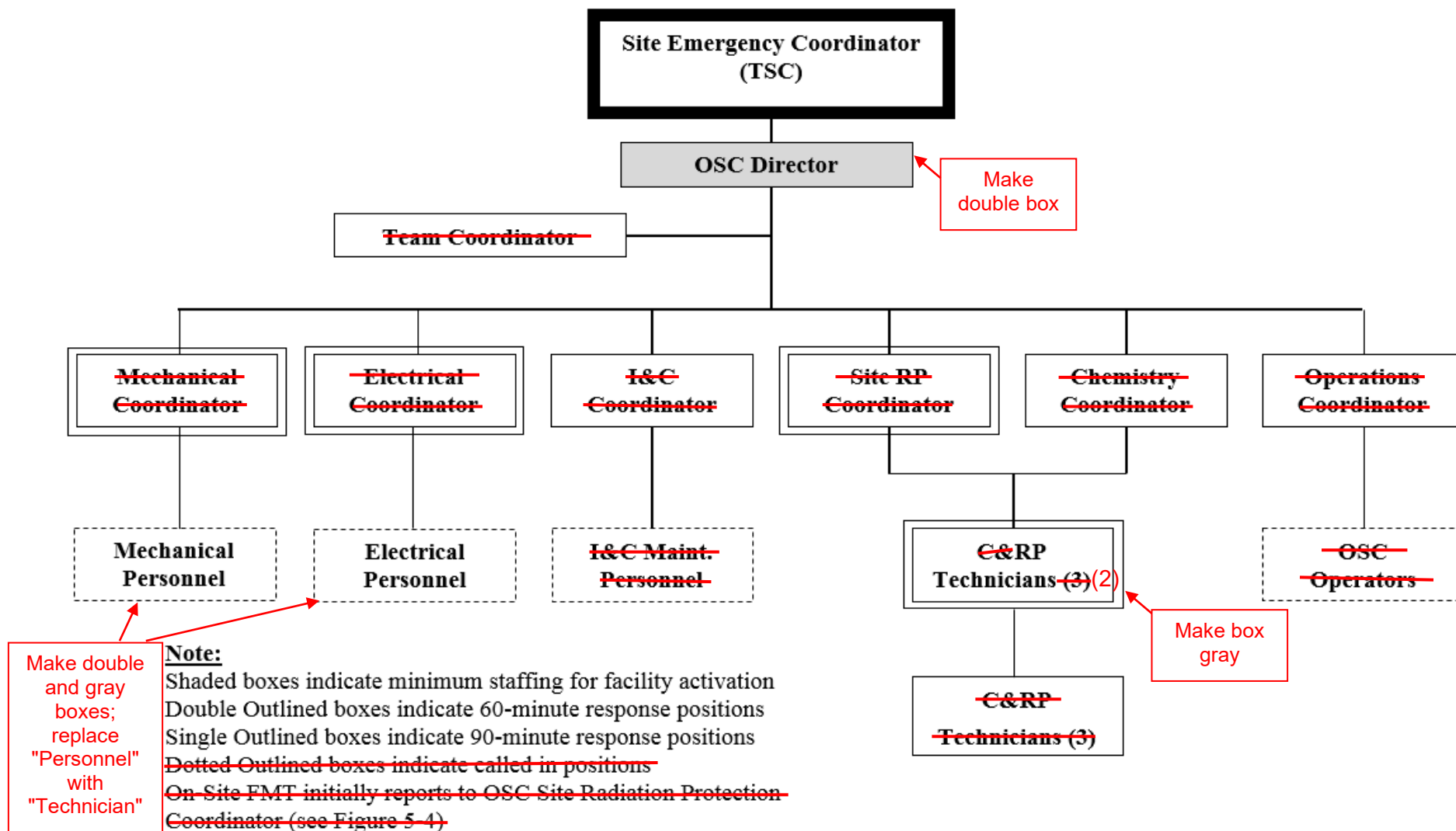
* May be performed by someone filling another position having functional qualifications.

<u>Emergency Response Facility</u>	<u>Minimum Staff</u>
<u>TSC</u>	<u>Site Emergency Coordinator</u> <u>Radiological Advisor</u> <u>Engineering Advisor</u> <u>Operations Advisor</u> <u>ENS Communicator</u> <u>Security Advisor</u>
<u>OSC</u>	<u>OSC Director</u> <u>RP Technicians</u> <u>Mechanical Technician</u> <u>Electrical Technician</u>
<u>EOF</u>	<u>Emergency Director</u> <u>EOF Director</u> <u>Radiological Manager</u> <u>Dose Assessor</u> <u>FMT Coordinator</u> <u>Offsite FMT</u> <u>Engineering Liaison</u> <u>Communications Coordinator</u> <u>Advisor to the County</u> <u>Government Relations Coordinator</u>
<u>JIC</u>	<u>None</u>

5.22 FIGURE 5-2, TSC ORGANIZATION



5.23 FIGURE 5-3, OSC ORGANIZATION



Enclosure
Attachment 2
PG&E Letter DCL-22-018
PG&E Letter DIL-22-007

**Revised Diablo Canyon Power Plant Emergency Plan, Sections 5.7.3, 5.19,
5.20, 5.22, and 5.23, Clean**

- 6) Planning and coordinating resources to conduct assessment, maintenance, repair or installation of special equipment.
- 7) Providing technical advice to evaluation personnel in the TSC.
- 8) Coordinating plant access and ensuring personnel entering a potentially hazardous plant area are informed of:
 - a) Plant status.
 - b) Potential hazards.
 - c) Safety and radiation protection provisions.
 - d) Appropriate protective equipment required.
- 9) Maintaining the capability of communicating with personnel engaged in operations, maintenance or chemistry and radiation protection emergency response activities.
- 10) Assisting the Control Room and TSC/OSC in communicating with response teams.

5.7.2 RP Technicians

RP Technicians are responsible for the following activities:

- 1) Performing radiation surveys around the plant site and obtaining appropriate samples for analysis.
- 2) Maintaining initial communications with the Radiological Manager and subsequently with the FMT Coordinator for reporting of monitoring results and maintaining cognizance of the emergency situation.

5.7.3 Maintenance Technicians

The following personnel provide support in planning and performing tasks in their disciplines.

- 1) Mechanical Maintenance personnel
- 2) Electrical Maintenance personnel

5.8 EMERGENCY OPERATIONS FACILITY

The principal functions of the EOF are to provide for strategic planning and control. The principal functions of the EOF staff are:

- 1) Control and Coordination

The EOF utility staff, under the direction of the Emergency Director (ED), manages and coordinates all PG&E technical direction and control of the integrated emergency response effort.

5.19 TABLE 5-1, DCPD ON-SHIFT AND AUGMENTED ERO

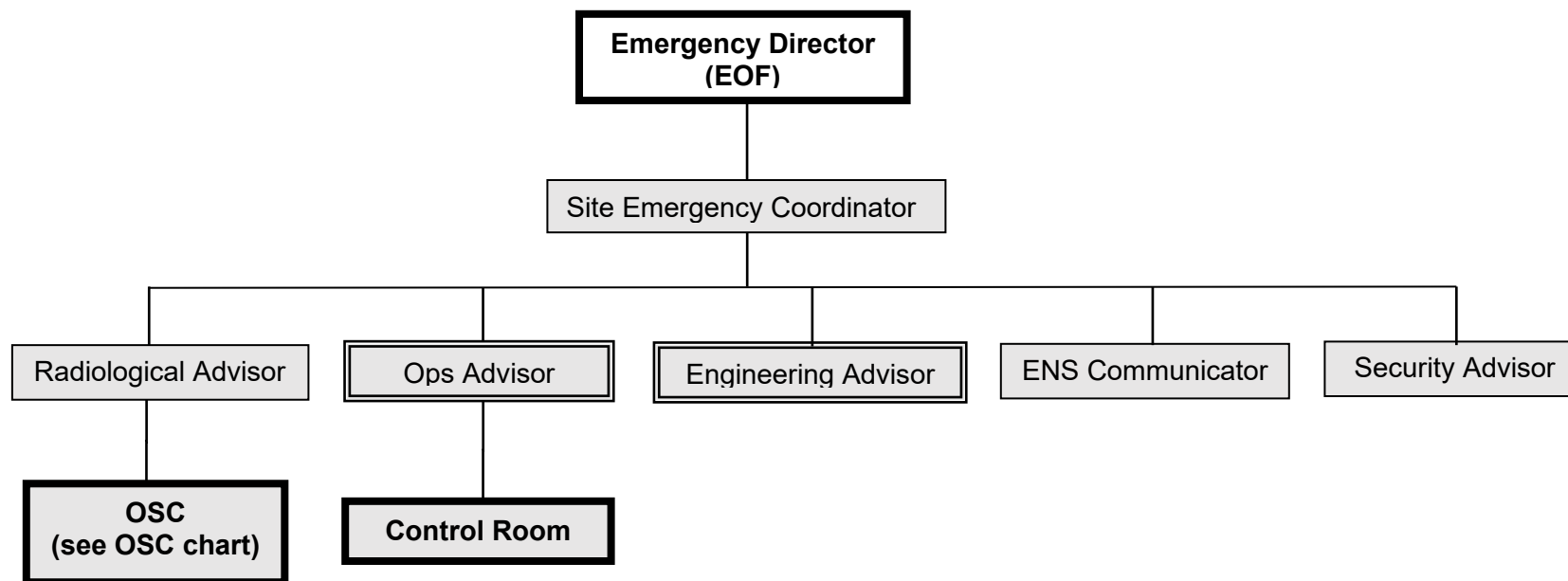
Functional Area	Major Tasks	Emergency Positions	Shift Staffing	60 Minutes	90 Minutes
1. Plant Operations and Assessment of Operational Aspects	Control Room Staff	Shift Supervisor (qualified as CFH)	1	---	---
		CFH	1	---	---
		NCO	3	---	---
		Operations Advisor (CR/TSC)	---	1	---
2. Emergency Direction and Control	Command and Control	Shift Supervisor	1*	---	---
		Site Emergency Coordinator (TSC)	---	---	1
		Emergency Director (EOF)	---	---	1
		EOF Director (EOF)	---	---	1
3. Notification and Communication	Licensee, Local/State, Federal	CFH/NCO	1*	---	---
		ENS Communicator (TSC)	---	---	1
		Communications Coordinator (EOF)	---	---	1
		Engineering Liaison (EOF)	---	---	1
		Government Relations Coord. (EOF)	---	---	1
		Advisor to the County (EOF)	---	---	1
4. Radiological Assessment	Dose Assessment	CFH/RP Technician	1*	---	---
		Radiological Manager (EOF)	---	---	1
		Dose Assessor (EOF)	---	---	1
	Offsite Surveys	FMT Coordinator (EOF)	---	---	1
		FMT Leader (RP Technician) (EOF)	---	---	2
		FMT Driver (EOF)	---	---	2
	Onsite (out-of-plant) Surveys	RP Technician (OSC)	---	1*	---
	In-plant Surveys	RP Technician (OSC)	2	1	---
5. Plant System Engineering, Repair, and Corrective Actions	Technical Support	Radiological Advisor (TSC)	---	---	1
		CFH	1*	---	---
		Engineering Advisor (TSC)	---	1	---
		Operations Advisor (CR/TSC)	---	1*	---
	Repair and Corrective Actions	Radiological Advisor (TSC)	---	---	1*
		OSC Director (OSC)	---	1	---
		Mechanical Technician (OSC)	---	1	---
		Electrical Technician (OSC)	---	1	---
6. In-Plant Protective Actions	Radiation Protection	RP Technicians (OSC)	2*	1	---
7. Firefighting	---	Fire Department	5	Local Support	Local Support
8. First Aid and Rescue Operations	---	Industrial Fire Officers	2*	Local Support	Local Support
9. Site Access Control and Personnel Accountability	Security and Accountability	Security Personnel	Per Security Plan	Local Support	Local Support
TOTAL:			12	7	16

* May be performed by someone filling another position having functional qualifications.

5.20 TABLE 5-2, AUGMENTED ERO MINIMUM STAFFING FOR FACILITY ACTIVATION

Emergency Response Facility	Minimum Staff
TSC	Site Emergency Coordinator Radiological Advisor Engineering Advisor Operations Advisor ENS Communicator Security Advisor
OSC	OSC Director RP Technicians Mechanical Technician Electrical Technician
EOF	Emergency Director EOF Director Radiological Manager Dose Assessor FMT Coordinator Offsite FMT Engineering Liaison Communications Coordinator Advisor to the County Government Relations Coordinator
JIC	None

5.22 FIGURE 5-2, TSC ORGANIZATION



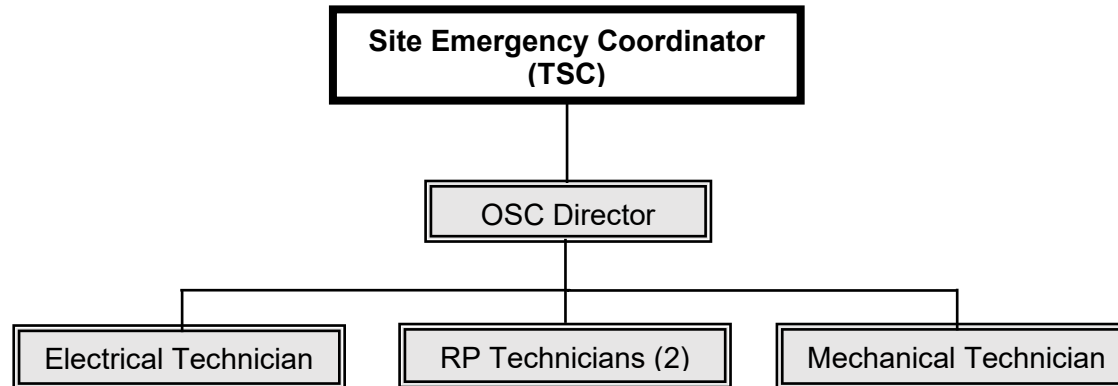
Note:

Shaded boxes indicate minimum staffing for facility activation

Double boxes indicate 60-minute response positions

Other TSC positions are 90-minute responders

5.23 FIGURE 5-3, OSC ORGANIZATION



Note:

Shaded boxes indicate minimum staffing for facility activation
Double boxes indicate 60-minute response positions
Other OSC positions are 90-minute responders