

**Pre-submittal Meeting
Pacific Gas and Electric Company
License Amendment Request for Diablo Canyon
Power Plant (DCPP)**

**Proposed Changes to Emergency Response
Organization Staffing and Augmentation Times**

August 23, 2018



***Pacific Gas and
Electric Company***[®]



Participants

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- Maureen Zawalick, PG&E Director of Risk & Compliance
- Mike Ginn, PG&E Emergency Preparedness Manager
- Hossein Hamzehee, PG&E Manager of Regulatory Services
- Jordan Tyman, PG&E Manager of Risk Management and Cyber Security
- Michael Richardson, PG&E Regulatory Services Supervisor
- Tracey Vardas, PG&E Emergency Preparedness Senior Advising Coordinator
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Agenda

- Purpose
- License Amendment Request (LAR) Scope
- Engineering & Design Considerations
- Background
- Schedule
- Summary
- References
- Questions

Purpose

To outline proposed Diablo Canyon Power Plant (DCPP) Emergency Plan changes and the considerations used in development of the License Amendment Request (LAR), including:

- Regulatory Requirements
- Regulatory Guidance
- Recent NRC Approvals of Industry Submittals

- Extending augmentation times increases the population of eligible personnel available to fill response positions and adds more expertise to the emergency response organization.
- The LAR includes an analysis of NUREG-0654 Table B-1 functions as implemented in the Emergency Plan between the last approved and current revisions.
- California Governor's Office of Emergency Services and the County of San Luis Obispo Office of Emergency Services have been informed of the proposed changes.

LAR Scope (continued)

- Extends facility activation time for Technical Support Center (TSC), Operational Support Center (OSC) and Emergency Operations Facility (EOF) to 90 minutes
- Transfers two maintenance personnel from on-shift to 60 minute responders
- Maintains an Operations Advisor as a 60 minute responder to provide additional on-shift support to the Control Room for plant operations oversight
- Re-aligns the site Field Monitoring Team (FMT) configuration



Engineering & Design Considerations

The improvements to staffing, equipment, procedures and training that have occurred since the initial approval of the DCPD Emergency Plan have resulted in significant increase in on-shift capabilities and knowledge.

- Use of DCPD real-time radiation monitoring system
- Upgrade from P-250 to Plant Process Computer (PPC)
- Upgrade from Emergency Assessment and Response System (EARS) to EARS / Meteorological Information and Dose Assessment System (MIDAS)
- Addition of Automated Call-Out Systems with redundancy
- Upgrades to procedures and EALs (NEI 99-01, R6)

Background

Licensees LARs and associated NRC Safety Evaluations on similar scope thoroughly evaluated such as:

- Susquehanna (ML030830543)
- Fermi (ML112450464)
- River Bend (ML012710218)
- Watts Bar (ML041810056)
- Point Beach (ML16118A154)
- Duane Arnold (ML17220A026)
- Monticello (ML17349A916)
- Prairie Island (ML17362A202)
- South Texas Project (ML18158A212)
- Sequoyah (ML18159A461)

Background (continued)

The LAR was developed consistent with the following NRC approved regulations and requirements:

- 10 CFR 50.47(b)
- 10 CFR 50.54(q)
- 10 CFR 50, Appendix E
- 10 CFR 50.90



Schedule

- PG&E LAR submittal to NRC September 2018
- PG&E requests approval within one year of submittal
- PG&E proposes a 180 day implementation period

Summary

Based on the technical, functional, and staffing analyses performed, PG&E has concluded that the requested changes:

- Maintain the required Emergency Plan functions and capabilities
- Continue to ensure the protection of public health and safety
- Comply with applicable regulatory requirements

References

- Regulatory Guide 1.219, “Guidance on Making Changes to Emergency Plans for Nuclear Power Reactors,” Revision 1
- Nuclear Regulatory Commission (NRC) Interim Staff Guidance NSIR/DPR-ISG-01, “Emergency Planning for Nuclear Power Plants”
- Nuclear Energy Institute (NEI) 10-05, “Assessment of On-Shift Emergency Response Organization Staffing and Capabilities”
- NUREG-0654/FEMA-REP-1, “Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants,” Revision 1
- Regulatory Information Summary (RIS) 2016-10, “License Amendment Requests for Changes to Emergency Response Organization Staffing and Augmentation”
- NRC Letter to NEI, “Alternative Guidance for Licensee Emergency Response Organizations”
- DCPPE Emergency Plan, Revision 3.03, was approved by the NRC by Safety Evaluation Report (SER) Supplement 20, December, 1983
- The current DCPPE Emergency Plan is Revision 4.18

References (continued)

Functional Area	Major Tasks	Emergency Positions	Shift Staffing	60 Minutes	90 Minutes
1. Plant Operations and Assessment of Operational Aspects	Control Room Staff	Unit Shift Supervisor (SRO) Operations Advisor Control Room Operator (RO) Non-Licensed Operator (NO)	2 ---- 4 5	---- 1 ---- ----	---- ---- ---- ----
2. Emergency Direction and Control	Classification	Shift Manager Site Emergency Coordinator (TSC) Emergency Director (EOF)	1 ---- ----	---- ---- ----	---- 1 1
3. Notification & Communication	Licensee Local/State Federal	Shift Foreman/RO Shift Phone Talker (SRO/RO/NO) Shift Foreman/RO	1* 2 1*	---- ---- ----	---- ---- ----
		Agency/ENS Communicator (TSC) Communications Advisor (TSC) Communications Coordinator (EOF) Offsite Communicator (EOF)	---- ---- ---- ----	---- ---- ---- ----	1 1 1 1
4. Radiological Assessment	Dose Assessment	WC Shift Foreman (SRO) Rad Data Processor (TSC) Radiological Manager (EOF) Dose Assessor (EOF)	1* ---- ---- ----	---- ---- ---- ----	---- 1 1 1
	Offsite Surveys	FMT Leader FMT Driver	---- ----	---- ----	2 2
	On-Site(out-of-plant) Surveys	Team Leader Team Driver	---- ----	1 1	---- ----
	In-plant Surveys	RP Technician	2	2	2
5. Plant System Engineering, Repair, and Corrective Actions	Technical Support	WC Shift Foreman (SRO) / STA Reactor Engineer (TSC) Electrical Engineer (TSC) Mechanical Engineer (TSC)	1 ---- ---- ----	---- ----- ---- ----	---- 1 1 1
	Repair and Corrective Actions	Mechanical Maintenance (OSC) Electrical Maintenance (OSC) I&C Maintenance (OSC) OSC Director (OSC)	---- ---- ---- ----	1 1 ---- ----	---- ---- 1 1
6. In-Plant PAs	Radiation Protection	RP Technician	2*	1	1
7. Firefighting	--	Fire Department	5	Local Support	Local Support
8. 1 st Aid and Rescue Ops	--	Industrial Fire Officers	2*	Local Support	Local Support
9. Site Access Control and Accountability	Security & Accountability	Security Personnel	Per Security Plan	Local Support	Local Support
TOTAL:			22	8	21

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

Questions?