



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
1600 E. LAMAR BLVD
ARLINGTON TX 76011-4511

July 28, 2015

Mr. Edward D. Halpin
Senior Vice President and
Chief Nuclear Officer
Pacific Gas and Electric Company
Diablo Canyon Power Plant
P.O. Box 56, Mail Code 104/6
Avila Beach, CA 93424

SUBJECT: SUMMARY OF ANNUAL ASSESSMENT MEETING WITH PACIFIC GAS AND
ELECTRIC AND PUBLIC OPEN HOUSE REGARDING DIABLO CANYON
POWER PLANT 2014 PERFORMANCE

Dear Mr. Halpin:

This refers to the public Annual Assessment meeting conducted at the Embassy Suites, San Luis Obispo, California on the evening of June 24, 2015, between the NRC and your staff. Approximately 130 members of the public attended and participated in this meeting.

During the meeting, the NRC participants discussed our assessment of Pacific Gas and Electric's (PG&E) performance during 2014 at the Diablo Canyon Power Plant (DCPP). Specifically, the NRC staff provided an overview of our inspection activities, findings, and overall performance assessment for the station. In particular, we discussed with you our assessment of the White Emergency Preparedness Finding and the NRC's subsequent movement of DCPP to the Regulatory Response Column of oversight which became effective in the 4th Quarter 2014. Additionally, the NRC staff provided an overview of our recent inspection activities relative to your current seismic and flooding licensing bases. Finally, we provided a status for the public as to NRC's and Diablo Canyon's actions to date in response to the Mitigating Strategies and Spent Fuel Instrumentation Orders, and the March 2012 10 CFR 50.54(f) Requests for Information relative to seismic and flooding re-evaluations.

During PG&E's presentation, you and your staff discussed PG&E's perspectives regarding your overall performance during 2014, including during two refueling outages. Additionally, your staff briefly discussed PG&E's actions thus far in reviewing the cause and extent of condition relative to the White Emergency Preparedness finding, and your preparations for the supplemental inspection the NRC will conduct later in 2015 to assess those actions. Your staff also described initiatives underway to correct longstanding issues with your 230 kV switchyard insulators, as well as the station's implementation of the FLEX operations and equipment in response to the NRC's post-Fukushima orders.

Copies of the NRC and PG&E presentations from the meeting are included as Enclosures 1 and 2, respectively. During the public comment/question and answer portion of the meeting, over 40 individuals provided their perspectives and asked questions of the NRC and PG&E staffs. While there were a wide range of specific comments and questions posed, several individuals focused on the following topics:

- Recent DCCP event reports regarding the identification that some spent fuel was loaded into dry cask storage casks inconsistent with Technical Specifications;
- Waste confidence assessments, spent fuel storage, and a national spent fuel repository;
- DCCP's performance in 2014 relative to the number of findings;
- DCCP's seismic design basis, seismic re-evaluation activities, and the implementation of the Senior Seismic Hazard Analysis Committee (SSHAC) process; and
- Personal accounts regarding the safety culture at Diablo Canyon, and the contributions to the community provided by PG&E employees.

In addition to the public annual assessment meeting held on the evening of June 24, 2015, the NRC staff hosted a public open house/poster board session earlier in the afternoon at the Embassy Suites location. During that three-hour period, approximately 25 members of the public interacted with NRC staff on a wide range of topics. In particular, subject matter experts from across the NRC were on hand to discuss the following:

- Overall NRC Post-Fukushima agency actions;
- Seismic licensing basis and recent seismic re-evaluations;
- DCCP operating performance;
- DCCP emergency preparedness performance;
- Spent fuel and the DCCP Independent Spent Fuel Storage Installation (ISFSI); and
- NRC's license renewal process.

As stated in the meeting notice for this event, the NRC video recorded the evening meeting with our intention of making the video available for public viewing on the NRC web site. Despite pre-meeting testing of the audio and recording system, a microphone, substituted in the last few minutes before the start of the meeting, created significant electronic noise on the audio track such that the audio recorded from the other microphones was unintelligible. As such the NRC does not plan make the recording of the meeting available on the NRC web site or to other organizations. The NRC regrets this unintended error, and we are taking corrective actions for future video recorded meetings to help preclude such issues from recurring.

E. Halpin

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In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Should you have any questions concerning this matter, we will be pleased to discuss them with you.

Sincerely,

/RA/

Ryan D. Alexander, Acting Chief
Project Branch A
Division of Reactor Projects

Docket Nos.: 05000275, 05000323
License Nos: DPR-80, DPR-82

Enclosures:

1. NRC Presentation
2. PG&E Presentation

ADAMS ACCESSION NUMBER:

SUNSI Rev Compl.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	ADAMS	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Reviewer Initials	RDA
Publicly Avail.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Sensitive	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Sens. Type Initials	RDA
SRI:DCPP	OPA:RIV	DD:DRP	C:DRP/A		
THipschman	LUselding	TPruett	RAlexander		
/RA/ via E	/RA/	/RA/	/RA/		
07/22/2015	07/22/2015	07/22/2015	07/22/2015		


Letter to Edward D. Halpin from Ryan Alexander dated July 28, 2015

SUBJECT: SUMMARY OF ANNUAL ASSESSMENT MEETING WITH PACIFIC GAS AND
ELECTRIC AND PUBLIC OPEN HOUSE REGARDING DIABLO CANYON
POWER PLANT 2014 PERFORMANCE

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Electronic Distribution via Listserv for Diablo Canyon Power Plant




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United States Nuclear Regulatory Commission
Protecting People and the Environment

***Diablo Canyon Power Plant
Annual Assessment Meeting***

**Nuclear Regulatory Commission - Region IV
San Luis Obispo, CA
June 24, 2015**

1



Agenda

- Introduction
- Review of Reactor Oversight Process
- Plant Performance Results for 2014
- Licensee Response
- NRC Closing Remarks

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“Ground Rules”

- **Speak into a microphone**
- **One person talks at a time**
- **Please state your name**
- **Minimize background noise**
 - **Limit side conversations**
 - **Please silence phones**


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NRC Representatives

- **Marc Dapas**
 - **Regional Administrator, Region IV**
- **Tom Hipschman**
 - **Senior Resident Inspector**
- **Jeremy Bowen**
 - **Associate Director, NRR/Japan Lessons Learned Division**
- **Troy Pruett**
 - **Director, Division Reactor Projects**
- **Wayne Walker**
 - **Branch Chief, Division of Reactor Projects**
- **Michael Markley**
 - **Branch Chief,
NRR/Division of Operating Reactor Licensing**

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PG&E Introductions

Ed Halpin

**Senior Vice President &
Chief Nuclear Officer
PG&E Diablo Canyon Power Plant**


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NRC Performance Goals

- **Safety: Ensure adequate protection of public health and safety and the environment.**
- **Security: Ensure adequate protection in the secure use and management of radioactive materials.**

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Diablo Canyon Inspection Activities

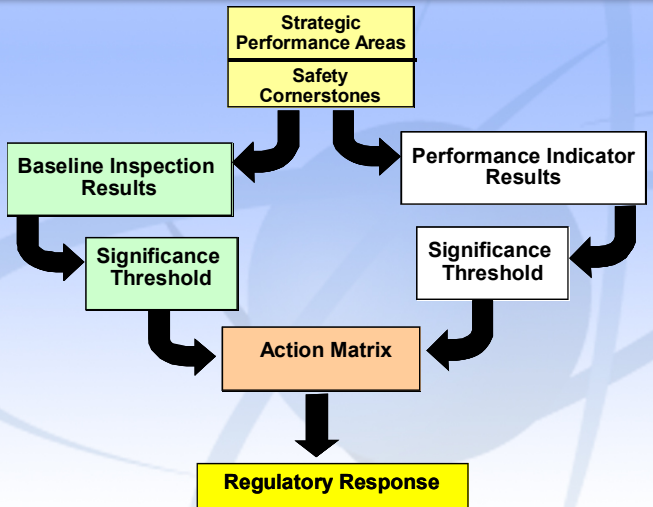
January 1 - December 31, 2014

- Completed approximately 7,300 hours of inspection, oversight, and assessment activities
- Resident Inspectors onsite daily
- Regional Team Inspections
 - Hostile Action Emergency Preparedness Exercise
 - Problem Identification & Resolution

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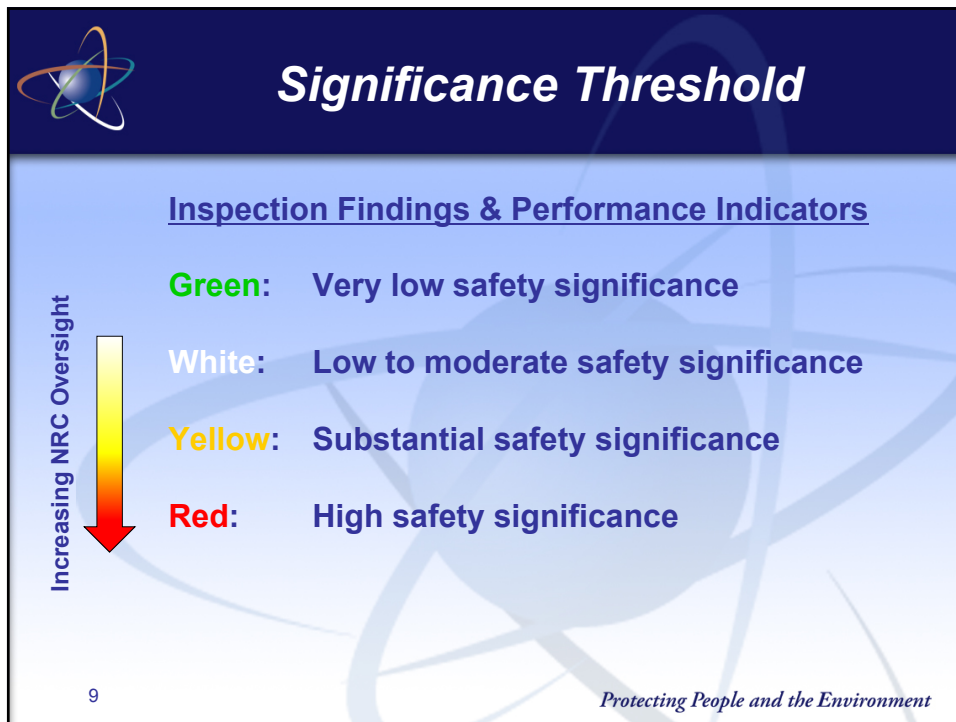
Reactor Oversight Process



```

    graph TD
      A[Strategic Performance Areas  
Safety Cornerstones] --> B[Baseline Inspection Results]
      A --> C[Performance Indicator Results]
      B --> D[Significance Threshold]
      C --> E[Significance Threshold]
      D --> F[Action Matrix]
      E --> F
      F --> G[Regulatory Response]
    
```

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Significance Threshold

Inspection Findings & Performance Indicators

Green: Very low safety significance

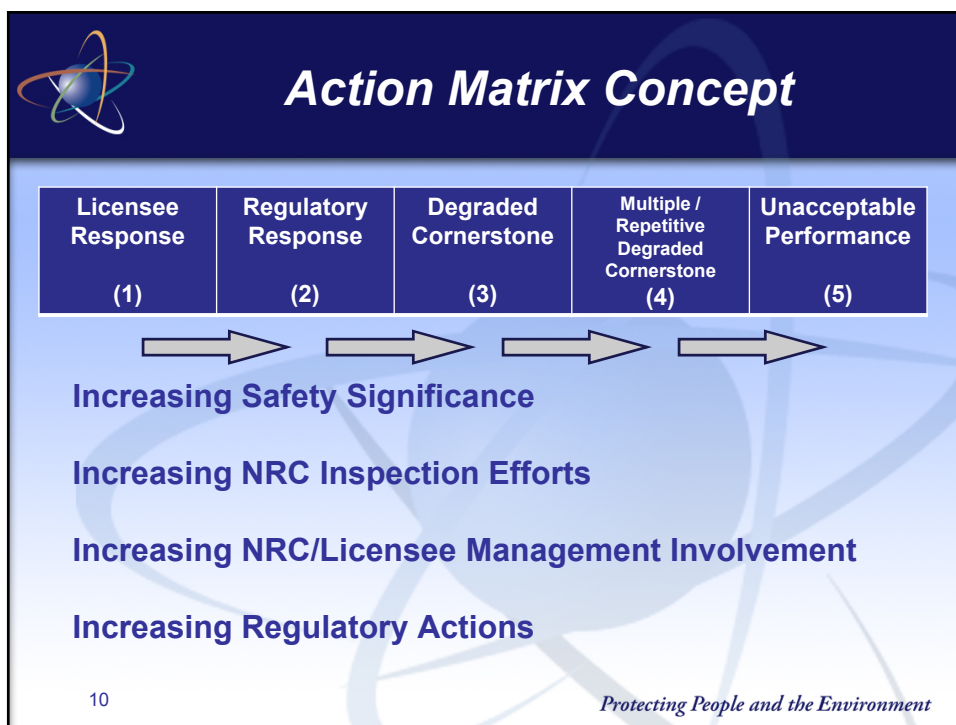
White: Low to moderate safety significance

Yellow: Substantial safety significance

Red: High safety significance

Increasing NRC Oversight

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Action Matrix Concept

Licensee Response (1)	Regulatory Response (2)	Degraded Cornerstone (3)	Multiple / Repetitive Degraded Cornerstone (4)	Unacceptable Performance (5)
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→ → → →

Increasing Safety Significance

Increasing NRC Inspection Efforts

Increasing NRC/Licensee Management Involvement

Increasing Regulatory Actions

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Diablo Canyon Assessment Results

January 1 - December 31, 2014

- **One finding of low to moderate safety significance (WHITE)**
- **All other inspection findings and performance indicators had very low safety significance (GREEN)**

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Safety Significant Finding

- **Failure to obtain prior approval for an emergency plan change that reduced the effectiveness of the emergency plan**
 - **November 2005 – Diablo Canyon removed instructions in emergency plan implementing procedures for making protective action recommendations over the ocean**
 - **Severity Level III violation**
 - **Low to moderate safety significance (White)**

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Diablo Canyon Annual Assessment Summary

January 1 - December 31, 2014

- **PG&E operated Diablo Canyon in a manner that preserved public health and safety**
- **All cornerstone objectives were met with one White finding identified**

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Diablo Canyon Annual Assessment Summary

January 1 - December 31, 2014

- **Due to the White EP Finding, the NRC placed Diablo Canyon in the Regulatory Response Column (2)
– Effective in the 4th Quarter 2014**
- **NRC plans baseline inspections at Diablo Canyon for 2015**
- **NRC will conduct an IP 95001 supplemental inspection**

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Current Licensing Basis Seismic & Flooding Assessments

- **AB-1632/CCCSIP Report**
 - State mandated evaluation (September 2014)
 - Provided to NRC
 - Operability Assessment Inspection Report (December 2014)
- **Flooding and Seismic Walkdowns**
 - NRC staff evaluations were completed
 - March 2014 (seismic)
 - June 2014 (flooding)
 - Verified site can meet requirements for hazard protection

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Fukushima Lessons Learned – Upcoming Milestones

- **Orders**
 - Mitigation Strategies for Beyond-Design-Basis External Events
 - Spent Fuel Pool Level Instrumentation
 - NRC audit scheduled for August 2015
 - Implemented in Fall 2015 (Unit 1) and Spring 2016 (Unit 2)
- **Flooding and Seismic Hazard Reevaluations**
 - Reevaluations submitted in March 2015
 - NRC currently reviewing

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Licensee Response and Remarks

Ed Halpin

**Senior Vice President &
Chief Nuclear Officer
PG&E Diablo Canyon Power Plant**

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NRC Closing Remarks

Marc Dapas

**Regional Administrator
NRC Region IV, Arlington, TX**


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Diablo Canyon Power Plant Annual Assessment Meeting

Scan the QR Code with your mobile device to provide feedback on the meeting



**Nuclear Regulatory Commission - Region IV
San Luis Obispo, CA
June 24, 2015**

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Contacting the NRC

- **Report an emergency**
 - (301) 816-5100 (call collect)
- **Report a safety concern**
 - (800) 695-7403
 - Allegation@nrc.gov
- **General information or questions**
 - www.nrc.gov
 - Select “What We Do” for Public Affairs

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Actions in Response to the Japan Nuclear Accident

- Actions in response to Japan Nuclear Accident
Website: <http://www.nrc.gov/japan/japan-info.html>
- Mailbox for comments on staff actions:
JLD_Public.Resource@nrc.gov
- Office of Public Affairs Point of Contact:
OPA.resource@nrc.gov or 301-415-8200

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NRC Social Media Channels



- Blog:** <http://public-blog.nrc-gateway.gov/>
- Flickr:** <http://www.flickr.com/photos/nrcgov/>
- Twitter:** <https://twitter.com/#!/nrcgov>
- YouTube:** <http://www.youtube.com/user/NRCgov>
- RSS:** <http://www.nrc.gov/public-involve/listserver.html#rss>

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Reference Sources

- **Reactor Oversight Process**
<http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/index.html>
- **Public Electronic Reading Room**
<http://www.nrc.gov/reading-rm.html>
- **Public Document Room**
1-800-397-4209 (Toll Free)

Diablo Canyon Power Plant

NRC End of Cycle Meeting

Ed Halpin

Senior Vice President and Chief Nuclear Officer
PG&E

June 24, 2015



Purpose and Desired Outcome

2

- **Share plant performance information that demonstrates the safe operation of DCP**
- **Communicate important initiatives occurring at Diablo Canyon Power Plant**
- **Continue dialogue with the community about Diablo Canyon**




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Diablo Canyon Power Plant

2014 Performance

Jim Welsch
Site Vice President



The PG&E logo consists of a white square containing a stylized sailboat with a white sail and a black hull. Below the square, the letters 'PG&E' are written in a bold, sans-serif font. A registered trademark symbol (®) is located to the upper right of the square.



2014 Key Statistics

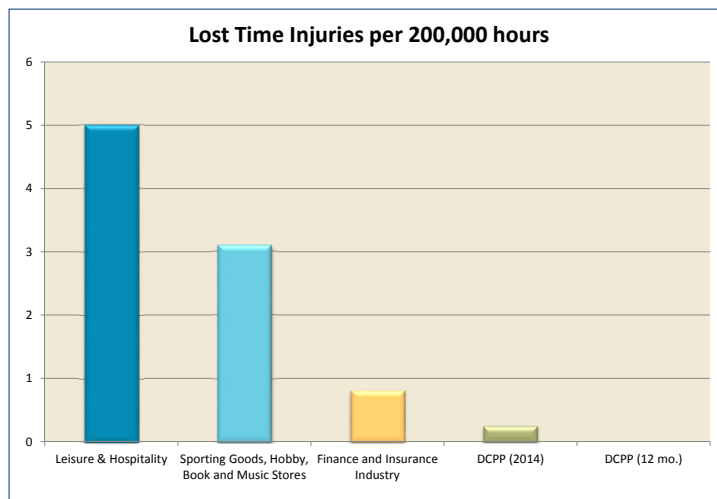
5

Key aspects:

- Diablo Canyon Power Plant provided 20.6% of PG&E's electricity to our 16 million customers in 2014
- DCPD provides the electricity for 3 million people annually
- 2014 OSHA Recordable Injury Rate Actual 2014 OSHA Recordable Injury Rate Actual = 0.24 (one injury - ankle)
- Best performance in safety and efficiency for a double-refueling outage year
- Current 12 month average is **0.0 injuries per 200,000 hours**



Injury Rates for Other Industries



*** 2013 Non-fatal, lost-time injuries (Cal OSHA)**



Refueling Outages in 2014 & 2015

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- **Two successful refueling outages**

- Unit 1: 18th refueling outage (1R18)
 - o 33 days
 - o 1,000 additional employees
- Unit 2 – 18th refueling outage (2R18)
 - o 32 days
 - o 1,000 additional employees
 - o The highest annual net generation in DCPD operating history for a double-refueling outage year.



- **Looking ahead**

- Unit 1 refueling outage (1R19) scheduled for fall 2015
- 500 job seekers attended Hiring Information Fair on June 12, 2015

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Diablo Canyon Power Plant

Emergency Preparedness & Electrical System Investments

Barry Allen
Vice President, Nuclear Services





NRC White Finding

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Key aspects:

- Self-identified and corrected this issue from 2005
- Depth in overall program with County Office of Emergency Services and US Coast Guard provided adequate health and safety precautions for the public
- We are using this opportunity to reflect on the entire Emergency Preparedness Program and initiated an Emergency Preparedness (EP) Licensing Basis Verification Project
- Successful drills in 2014 with our offsite partners to demonstrate that we can protect the health and safety of the public



230 kV Switchyard

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Recommended Actions for 230kV

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Actions Taken:

- Time-based cleaning
- All 230 kV switchyard insulators replaced in 2015
- Los Padres/DCPP Electric Power Reliability Plan



Los Padres/DCPP Electric Power Reliability Plan

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- Holistic approach, outlining actions to improve reliability and capacity of DCPP onsite / offsite power
- Provides an integrated assessment of and recommendations for improving the reliability of electric power to most critical DCPP 4kV buses
- May 2014 - Integrated joint effort between DCPP and PG&E Electric Operations
- October 2014 – Five-year plan based on the principles of meeting compliance, safety, reliability and affordability goals

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Diablo Canyon Power Plant

FLEX Operations

Cary Harbor
Director, Compliance Alliance and Risk



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FLEX Operations

Industry-wide mandate for responding to beyond design basis scenarios at nuclear power plants

- Program, procedures and equipment in place at DCPD by June 2016 to rapidly respond to extended loss of all AC power
 - 230 kV transmission lines in
 - 500 kV transmission lines out/in
 - Six diesel generators

Designed for indefinite/prolonged use





FLEX Equipment

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Emergency Auxiliary Salt Water Pump System



FLEX Equipment

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Backup Generators




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Diablo Canyon Power Plant

Desalination

Tom Jones
Director, Corporate Affairs



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Diablo Canyon: 30+ years of Desal

- **Current excess capacity of over an acre foot per day**
- **PG&E and County entered into contract for emergency water**
- **DCPP is not connected to regional water systems**
- **Countywide drought taskforce & PG&E studying interconnection feasibility over next 120 days**

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Water from Diablo Canyon desal plant could be piped to South County

The power plant's desalination system is currently producing only 40 to 50 percent of its capacity

BY DAVID INEED
dineed@heribusiness.com May 16, 2015

In an effort to provide county residents some measure of drought anxiety relief, San Luis Obispo County and Pacific Gas and Electric Co. will spend the next four months exploring ways that millions of gallons of excess freshwater from Diablo Canyon nuclear power plant's desalination plant might be put to beneficial use.

The plant can produce up to 1.5 million gallons of freshwater daily, but the nuclear plant only produces 40 to 50 percent of that — or about 675,000 gallons a day — to meet plant needs. That leaves about 825,000 gallons available for other uses, said Jeff Stickland, the plant's director of nuclear projects.

The desalinated water is used to meet the plant's daily freshwater needs, including supporting plant operations and providing drinking water for plant employees.

"I think the agreement is a good first step to utilizing that excess water," Stickland said.

The board voted unanimously Tuesday to appoint South County supervisors Adam Hill and Lynn Compton to a subcommittee that will coordinate with the county's Drought Task Force.



Diablo Canyon nuclear power plant

JOE JOHNSTON — johnston@heribusiness.com Buy Photo



Diablo Canyon: 30+ years of Desal

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Running below 50% capacity

Small footprint –
about the size of a
small retail store, like
auto parts store or
drug store.



Diablo Canyon Power Plant

Beyond Power

Ed Halpin
Chief Nuclear Officer
Senior Vice President



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Focus on People

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Focus on Human Performance plus training opportunities for employees results in reinforced workplace expectations and shared cultural values.

- Facilitative Leadership
 - 396 employees have taken the training
 - Sustainable: 13 employees have become certified Trainers offering courses at DCPD; one Master Trainer, who is growing the number of certified Trainers on site
- Crucial Conversations
 - 525 employees have taken the training through end of 2014; 329 have taken or retaken the class this year as a refresher.
 - 17 employees have become certified Crucial Conversations Trainers
- Knowledge Transfer Program



Beyond Power

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- Enhance community understanding through tours and talks – directly reaching over 8,600 people in 2014
- The plant is the largest property taxpayer in San Luis Obispo County – nearly \$27 million in 2013/2014
- More than \$13.8 million going to local schools
- Diablo Canyon contributed more than \$800,000 in 2014 to charities
- PG&E employees volunteered thousands of hours of their own time



Above: Ed Halpin offered Facilitative Leadership training to SLO Chamber of Commerce.

Below: Diablo Canyon employees and their families clean up trails at Montana de Oro on Earth Day.



Thank You

