

An aerial photograph of the Diablo Canyon nuclear power plant. The plant's containment domes and various buildings are visible on a coastal plain. To the left, the ocean features rocky shorelines and waves crashing against a breakwater. In the background, rolling green hills and mountains rise under a clear sky. The text "Diablo Canyon", "Independent", and "Safety Committee" is overlaid in a large, bold, dark blue font.

Diablo Canyon
Independent
Safety Committee

Public Meeting
September 30 and October 1, 2020

Avila Lighthouse Suites



Diablo Canyon Power Plant: State of the Plant Update

Cary Harbor
Station Director
10/22/2020



Together, Building
a Better California

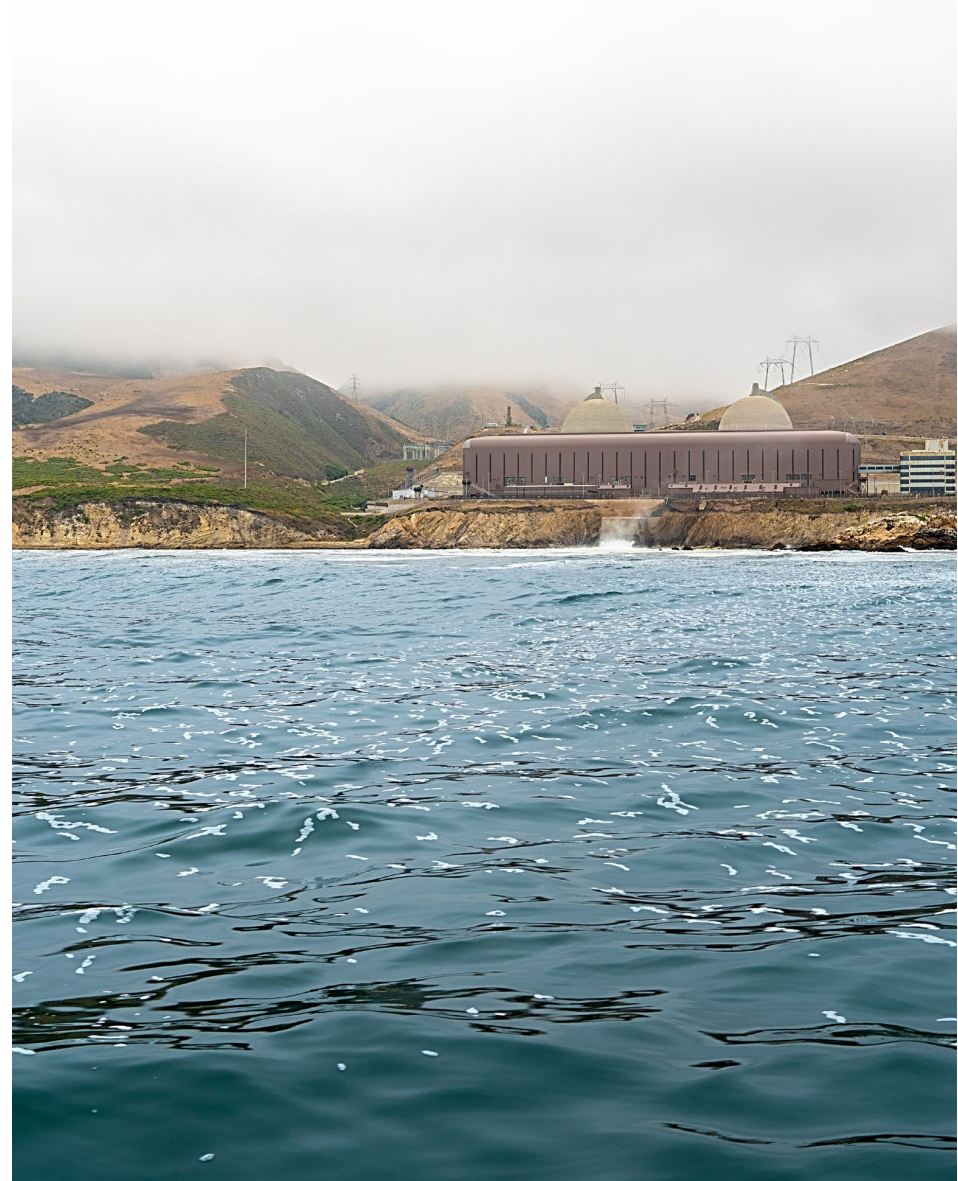
Station Update

Key Upcoming Activities



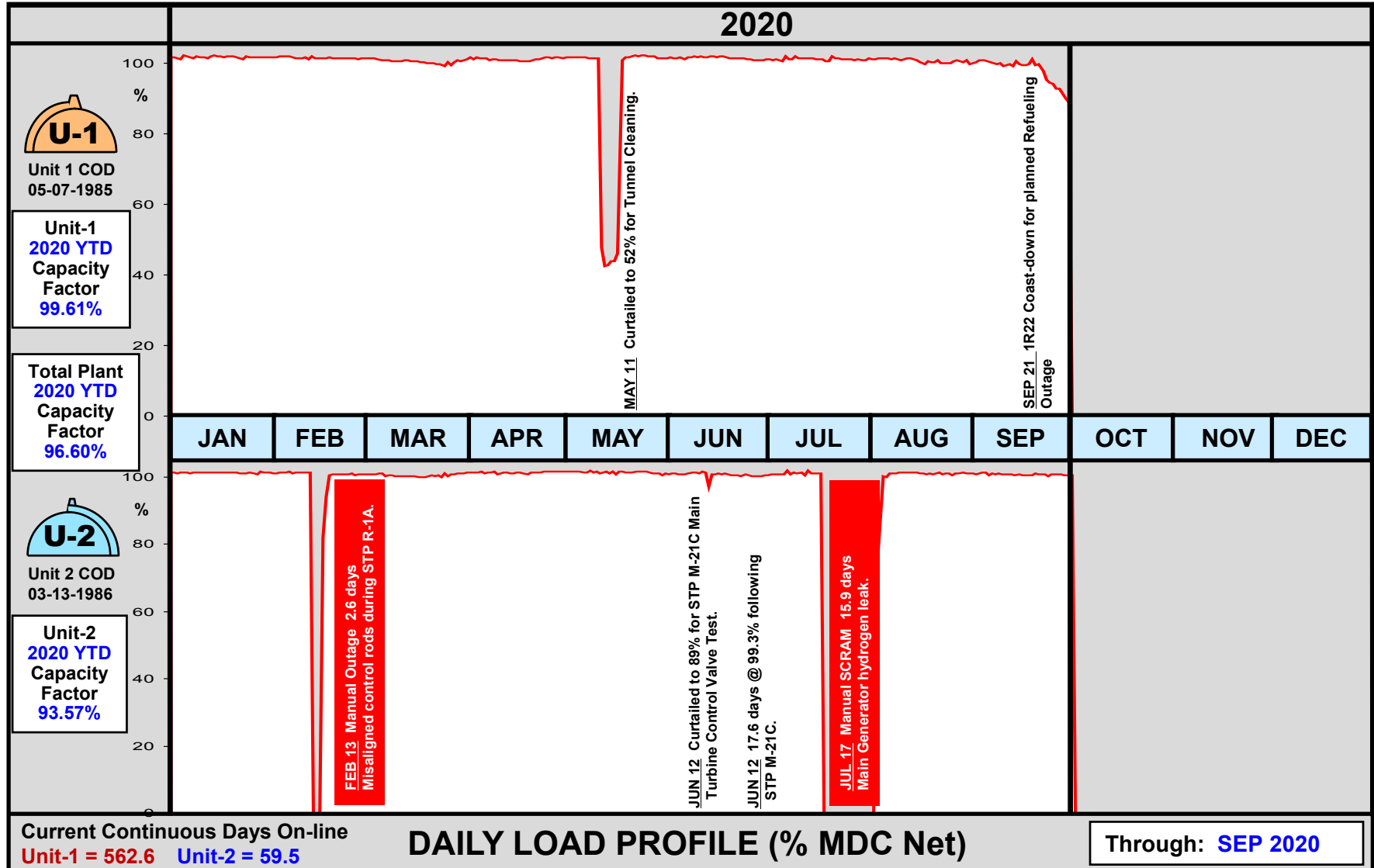
Plant Operation

- Unit 1 refueling Outage 1R22 is in progress.
- Unit 2 is offline for Main Electric Generator maintenance.
- All NRC Performance Indicators (PIs) are “Green”.



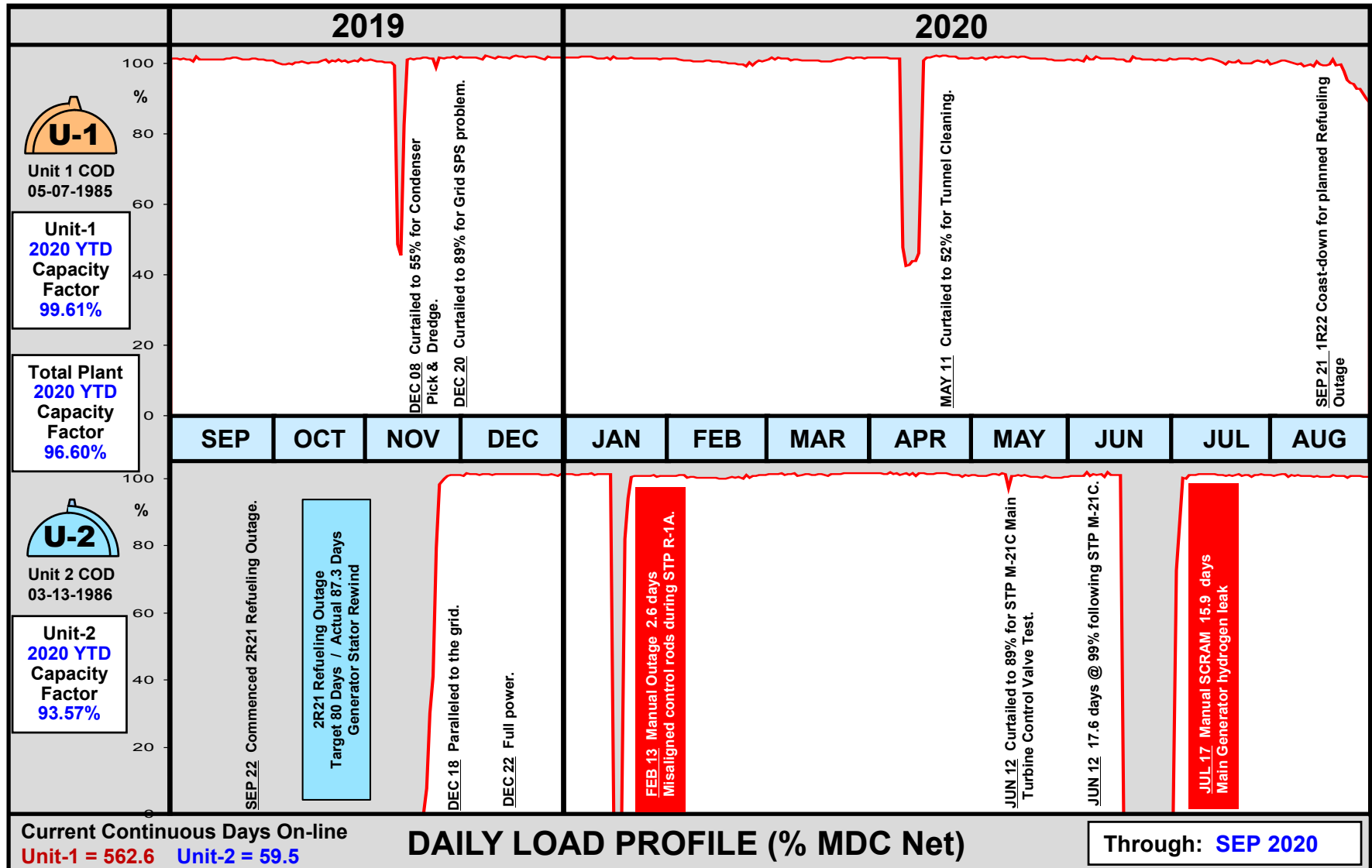
Daily Load Profile: Calendar Year 2020

Daily Capacity Factor Power History Curves



Daily Load Profile: Past 12 Months

Daily Capacity Factor Power History Curves





Station Update

Station Organizational Changes

- Completion of Tier 1 Retention Agreement.
- Launched Tier 2 Retention Agreement.

COVID-19 Response

- No impact on Diablo Canyon Power Plant safe operations.

Wildfire Update

- No impact on Diablo Canyon Power Plant safe operations.





Station Update

Upcoming Station Activities

- NSOC Site Review - conducted remotely November 16-19, 2020
- Emergency Planning Drill Rehearsal scheduled for 12/2/2020
- INPO Corporate Evaluation Exit December 11, 2020
- Unit 2 curtailment to support condenser and tunnel cleaning scheduled for February, 2021
- Operator License Class is forecast to complete in February, 2021



Thank you

Cary Harbor
CDH2@pge.com

DCPP Performance Based on NRC Performance Indicators

Russ Prentice
Director, Risk and Compliance
October 22, 2020



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July 2020– October 2020

- This presentation covers approximately 4 months of NRC inspections involving ~1800 hours of inspection time.
- DCPP remains in the highest performance category for all NRC Performance Indicators.
- There have been no findings or violations of more than minor significance since the last DCISC update.

NRC Performance Indicators

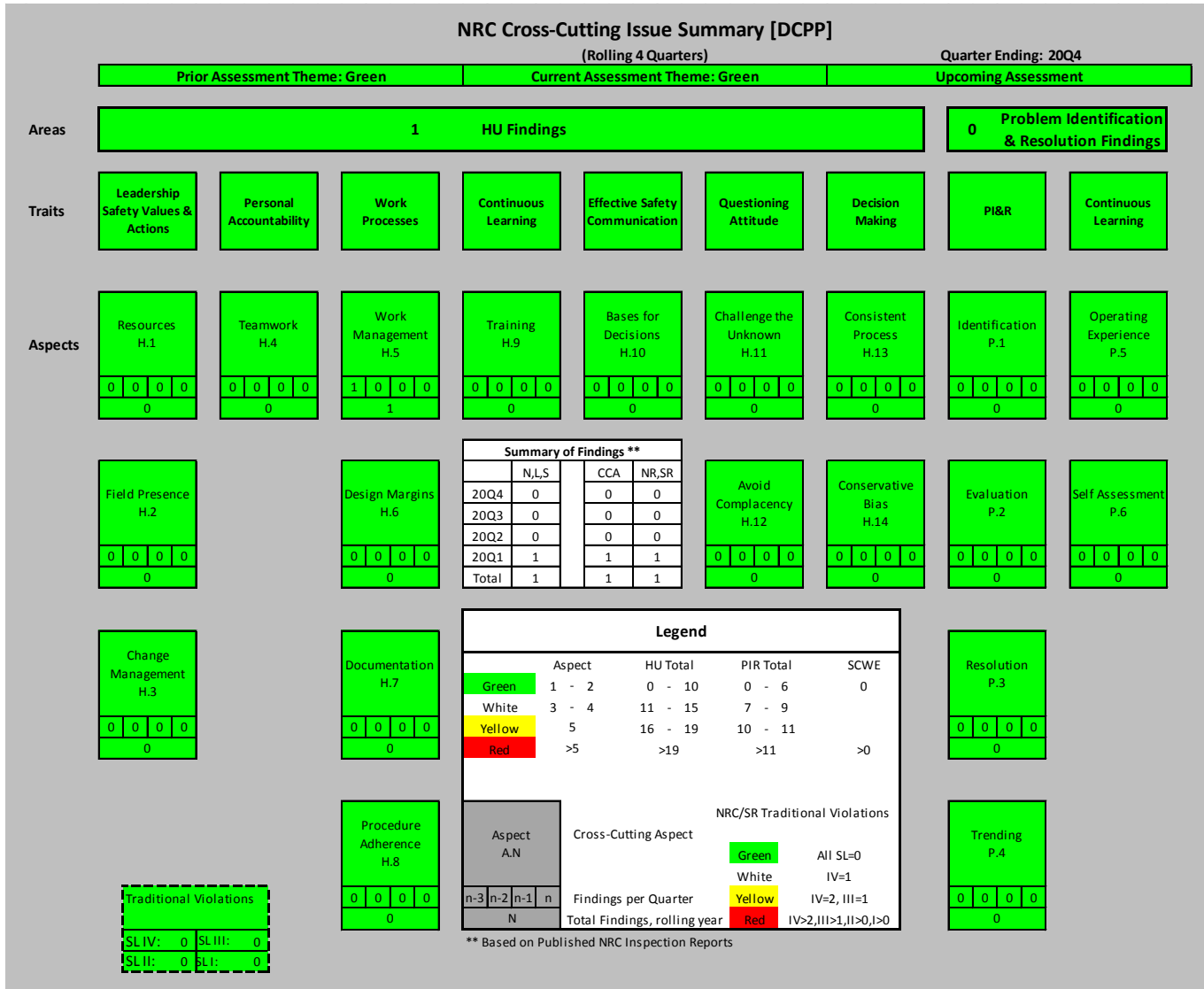
Unit 1	Unit 2	
G	G	Unplanned Scrams per 7000 Critical Hrs
G	G	Unplanned Power Changes per 7000 Critical Hrs
G	G	Unplanned Scrams with Complications
G	G	Safety System Functional Failures
G	G	Mitigating Systems Performance Index, Emergency AC Power System
G	G	Mitigating Systems Performance Index, High Pressure Injection System
G	G	Mitigating Systems Performance Index, Heat Removal System
G	G	Mitigating Systems Performance Index, Residual Heat Removal System
G	G	Mitigating Systems Performance Index, Cooling Water Systems
G	G	Reactor Coolant System Activity
G	G	Reactor Coolant System Leakage
G	G	Drill/Exercise Performance
G	G	ERO Drill Participation
G	G	Alert & Notification System
G	G	Occupational Exposure Control Effectiveness
G	G	RETS/ODCM Radiological Effluent

July 2020 – October 2020

- There have been no findings or violations of more than minor significance since the last DCISC update.

NRC Violations – Cross-Cutting Aspects

Rolling 4-Quarter Cross-Cutting Aspect Performance



July 2020 – October 2020

- **One Licensee Event Report (LER) was submitted during this time period.**
 - Unit 2 LER 2020-002-00, was submitted on September 15, 2020, regarding a manual reactor trip, and the subsequent actuation of the auxiliary feedwater system (as expected). Unit 2 was manually tripped in accordance with plant procedures due to increased main electric generator hydrogen usage. The LER was not directly associated with the main generator hydrogen issue, but the manual reactor trip and actuation of the auxiliary feedwater system are required to be reported in accordance with 10 CFR 50.73(a)(2)(iv).



DCPP Performance Summary

July 2020 - October 2020

- DCPD remains in the highest performance category for all NRC Performance Indicators.
- The following Inspection Reports were issued since the last DCISC meeting:
 - 2nd Quarter 2020 Integrated Inspection Report (2020-002, 7/22/2020)
 - 2020 Updated Inspection Plan (2020-005, 9/01/2020)

Status of License Amendment Requests

License Amendment Requests approved since the last DCISC update:

- Auxiliary Feedwater (AFW) System – On August 31, 2020, the NRC issued Amendments 236 and 238 to TS 3.7.5.
- Unit Staff Qualifications – On September 11, 2020, the NRC issued Amendments 237 and 239, which relocated the Unit Staffing requirement details of TS 5.3.

Thank you

Russ Prentice

Russell.Prentice@pge.com

Diablo Canyon Power Plant

Control Rod Misalignment

Root Cause Evaluation

Pat Nugent, Director of Engineering Services

Diablo Canyon Independent Safety Committee

October 22, 2020



Together, Building
a Better California

Initial Event & Initial Correction Summary

- Unit 2 was shut down on February 13 to correct reactor control rod events discovered during routine testing. This is NOT a Safety issue (see first bullet below).
 - At all times, control rods remained capable of inserting completely into the core to automatically or manually trip the reactor if required.
 - Equipment was replaced but the root cause of the problem could not be identified at that initial event.
 - Procedure changes were made that direct stopping the routine test while control rods are still in their acceptance range if a deviation occurs during testing.
 - Diagnostic tests were developed for use during the next refueling outage to ascertain the root cause.

Second Event and Correction Approach

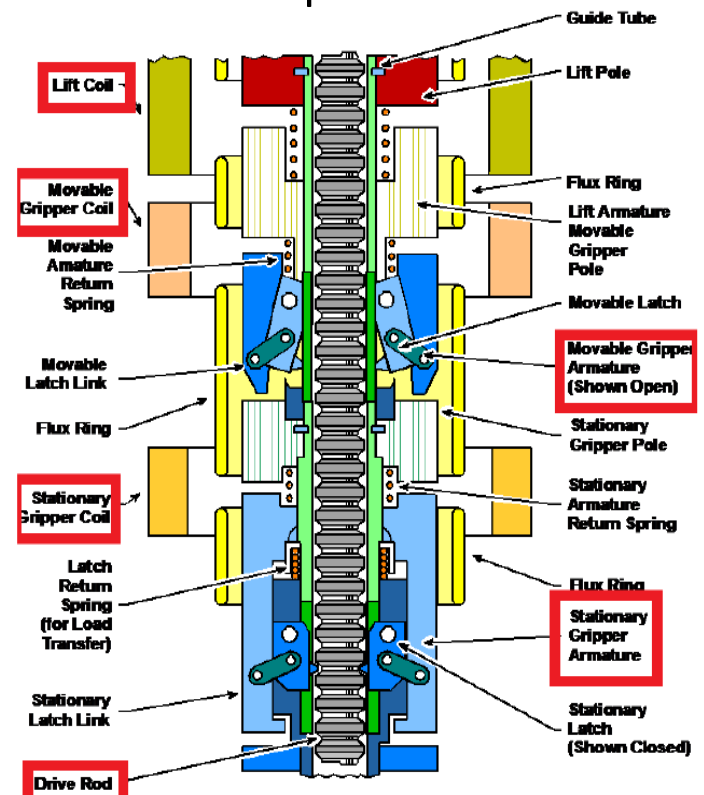
- On June 12 the event returned, but shutdown was not required
 - Control rods remained within their test acceptance range
 - Diagnostics performed led to discovery of the root cause
 - Corrective actions to prevent recurrence were established
- A root cause evaluation was performed to address the equipment problem

Root Cause Evaluation: A formal investigation that uses industry-accepted analysis methods to determine the root cause(s) of a problem.

- The initial root cause evaluation was revised following troubleshooting performed in response to the second event providing **clear identification and correction of the root cause.**

Event 1 Summary – What Happened

- On February 13, 2020, four control rods failed to withdraw following control rod movement testing
 - Resulted in a mismatch of greater than 12 steps between control rods' indicated position and their demand positions, requiring a shutdown per the plant's Technical Specifications.
- During the shutdown, an attempt to withdraw a different control rod bank identified the same issue, validating the rod control system event location.
- The rod control system's safety function to trip and allow all control rods to insert into the reactor core to safely shut down the reactor was never affected by this event.



Event 1 - Immediate Actions

- Troubleshooting using the vendor troubleshooting manual was performed and identified a malfunctioning control card in the circuit.
 - The malfunctioning card was visually inspected for anomalies and foreign material – none were identified.
- The malfunctioning card was replaced and maintenance verification testing was performed to verify the functionality of the card. No issues were identified during the post-maintenance testing.

Root Cause Investigation – Event 1

- A root cause evaluation was performed by DCPD with input from the rod control system vendor (Westinghouse) following the first event.
- The malfunctioning control card was tested in the DCPD rod control training lab and by the vendor; the event could not be re-created.
- Review of data collected during troubleshooting and rod control maintenance during previous refueling outage identified an elevated voltage in logic circuit.
 - This voltage is not a normally monitored parameter or part of acceptance criteria for card function.
- The initial root cause was indeterminate.
 - Procedure changes were made to stop testing while rods were still in their acceptance range if deviation occurred.
 - Diagnostic tests were developed for use in the next refueling outage to ascertain the root cause.

Event 2 Summary – What Happened

- On June 12, 2020, four control rods failed to withdraw following a downpower to perform main turbine valve testing.
 - The event occurred during the ramp from reduced power back to full power.
 - Resulted in mismatch between control rods.
 - Based on lessons learned during Event 1, the mismatch was identified and limited so that a shutdown was not required.
- The rod control system's safety function to trip and allow all control rods to insert into the reactor core to safely shut down the reactor was never affected by this event.

Event 2 - Immediate Actions

- Troubleshooting using the diagnostic testing developed from the February 2020 event identified the same card as the source of the event and identified elevated voltage on the ground bus that was not present after the February 2020 event.
- Troubleshooting identified a high resistance connection between the ground bus and the control card.
 - Installed electrical jumper from the control card to the ground bus to eliminate the voltage.

Final Cause and Corrective Actions

- **Root Cause**

An improper crimp on an original factory equipment ring lug, greater than 40 years old, had degraded over time. This resulted in a high resistance connection in the jumper between the control card chassis connector and the ground bus. This caused intermittent logic failures on the card resulting in logic timing failures.

- **Corrective Action to Prevent Recurrence**

Replace the ground bus jumper circuit including the degraded ring lug connection.

Additional Corrective Actions

Corrective Action 1:

Develop and implement a plan to acquire test data from the A410 slave cyclor decoder lift card during refueling outage 2R22. The intent of the test is to acquire data to demonstrate no signal anomalies at the input or output on this card.

Corrective Action 2:

Perform a visual-only inspection of the backside of the Unit 2 A410 card connector and wiring (termi-point connections) looking for less than adequate connections during the 2R22 refueling outage. Note: Card, pins and connector on card side were inspected when card was replaced on February 14, 2020.

Summary

- Cause of February 2020 event could not be determined due to intermittent nature of problem.
 - Actions were identified to perform additional troubleshooting during next refueling outage.
 - Actions were identified to stop testing within rod allowed operating limits.
- June 2020 event was controlled within operating limits and did not require plant shutdown.
 - Troubleshooting using diagnostic testing from first event corrective actions identified problem with same card.
 - Developed method to troubleshoot while on line without de-energizing rod control to preserve evidence.
 - Troubleshooting indicated high resistance in the card connection to the ground bus.
 - Testing in the rod control training lab verified that high resistance in card connection to ground bus will result in rod control timing errors.

Thank you

Pat Nugent, Director of Engineering Services
PXN2@pge.com

DCISC Decommissioning Planning Update for DCPD

Tom Jones, Director of Strategic Initiatives
October 22, 2020



What is the NDCTP?

Nuclear Decommissioning Cost Triennial Proceeding (NDCTP):

- Established by CPUC to examine Nuclear Decommissioning (ND) issues
- Filed December 13, 2018; previous filing was March 2016
- Establishes annual revenue requirement for ND expense

NDCTP includes:

- Decommissioning cost estimate (DCE) and updated assumptions
- Review of decommissioning projects completed since previous NDCTP filings (only for Humboldt Bay in this filing)
- ND Trust Fund rate of return assumptions and funding requirements

DCPP DCE Milestone Scope/Costs

No.	Milestone Scope Description
Unassigned Cost Milestones	
1	Program Management, Oversight, and Fees
2	Security Operations
3	Waste/Transportation/Material Management (Excluding: Breakwater, RPV/RVI Segmentation, & Large Component Removal)
Discrete Cost Milestones	
4	Power Block Modifications
5	Site Infrastructure
6	Large Component Removal (including waste/transportation)
7	Reactor/Internals Segmentation
8	Spent Fuel Transfer to ISFSI
9	Turbine Building
10	Auxiliary Building
11	Containment
12	Fuel Handling Building
14	Balance of Site
15	Intake Structure
16	Discharge Structure
17	Breakwaters
18	Non-ISFSI Site Restoration
19	Spent Fuel Transfer to DOE
20	ISFSI Demolition and Site Restoration

**Total Cost in
2020\$ = \$5.3B**

**Proposed
Settlement
Agreement
2020\$ = \$4.3B***

* Assumes a flat 3% escalation per year of all costs from the Proposed Settlement Agreement

**Trust fund
balances end of
Q2 2020 = \$3.6B**

NDCTP Status and Projected Timeline

NDCTP Status:

- Hearings for the 2018 filing concluded in September 2019
- A settlement agreement with parties was proposed in January 2020 to reduce the decommissioning cost estimate to \$4.3B* (2020\$)
- On August 6, 2020 the CPUC voted to extend the statutory deadline of the NDCTP proceeding to December 12, 2020
- Proposed decision is needed by November 13, 2020 to meet the statutory deadline

* Assumes a flat 3% escalation per year of all costs from the Proposed Settlement Agreement

2018 NDCTP Results and Future Filings

2018 NDCTP settlement approval would result in:

- Detailed project descriptions for permitting
- Proceeding with Nuclear Regulatory Commission (NRC) licensing efforts
- Proceeding with detailed planning and engineering work

2021 NDCTP

- Update with available results of licensing, permitting, and proposed repurposing
- Updated information on dry cask storage system
- Decision on contracting strategy
- Indicative bids and other requirements from the 2018 final decision

2024 NDCTP

- Last update prior to licenses expiring
- Will include results from issued permits (e.g., permitting conditions, mitigation) and licensing approvals

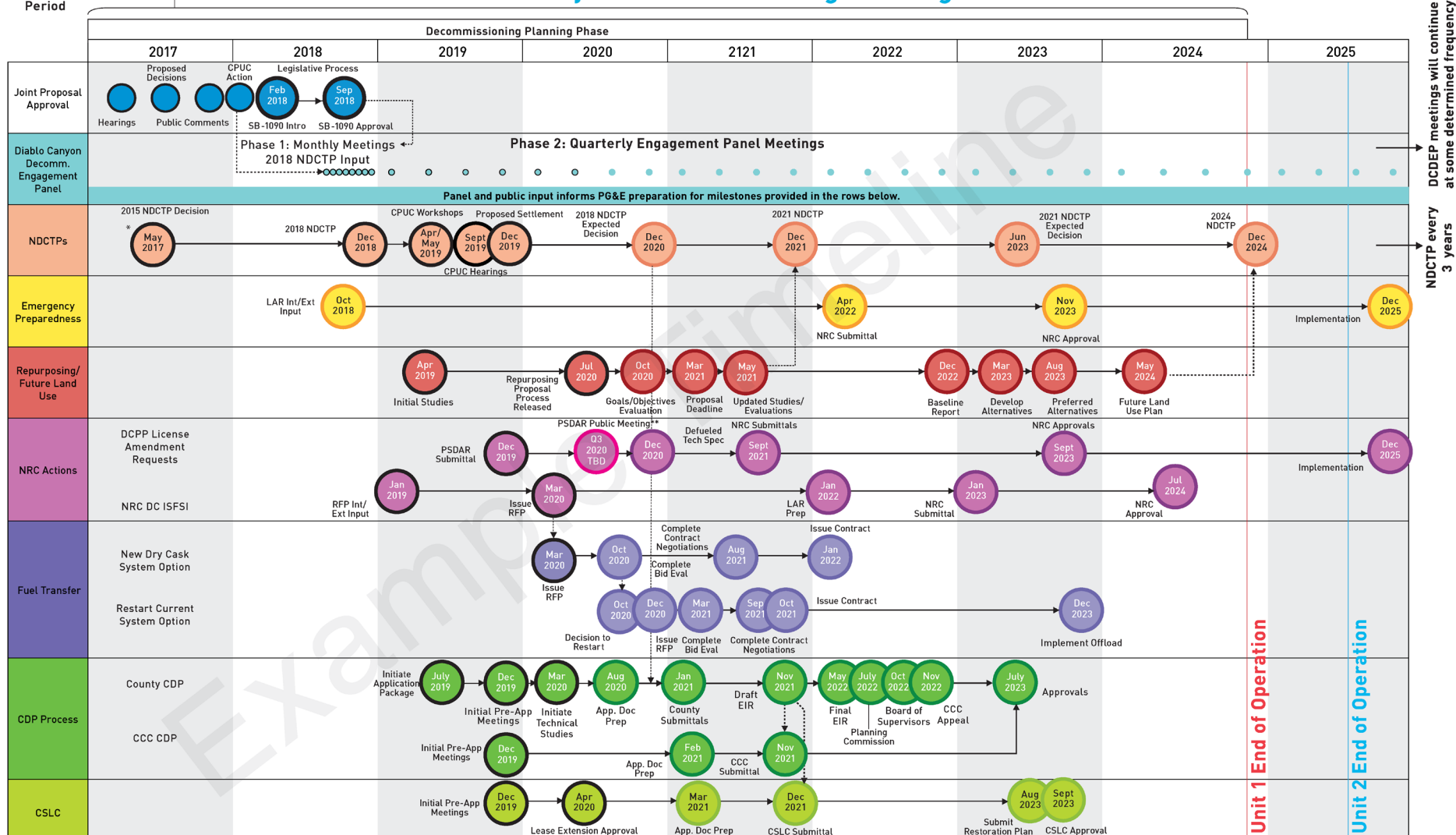
Pre-Shutdown
Period

Chart to be updated quaterly | Published Date: 09/04/2020

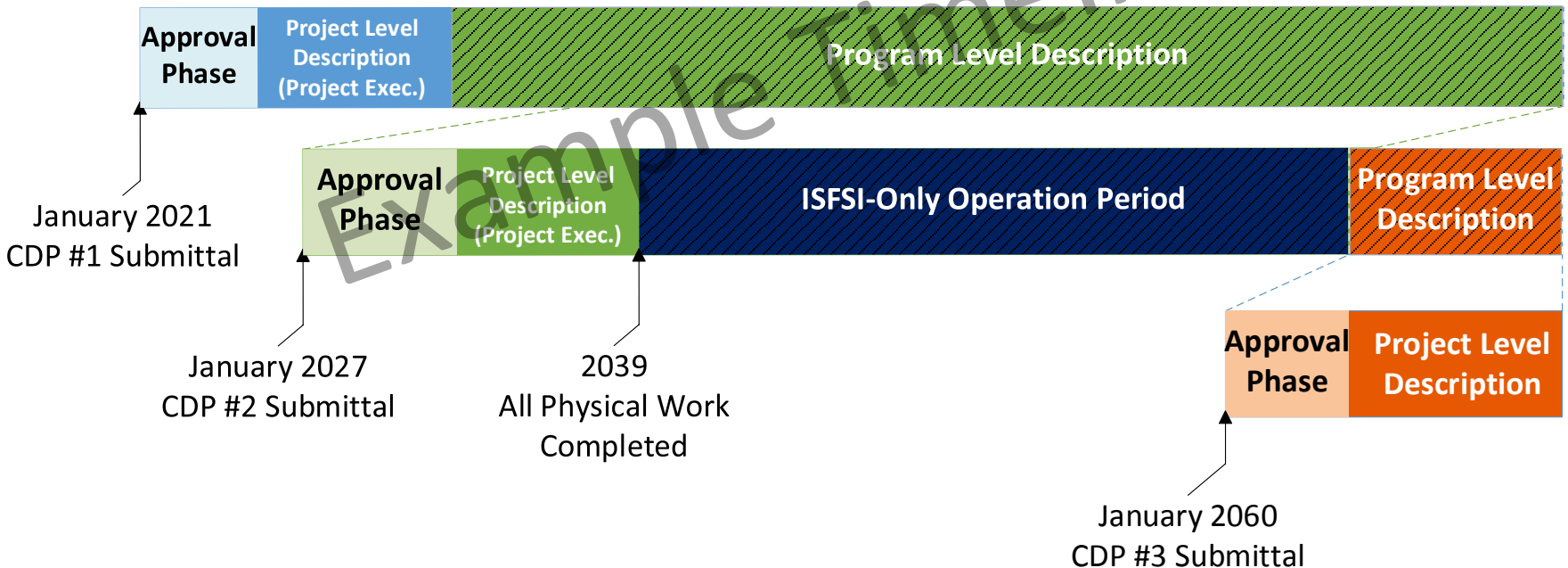
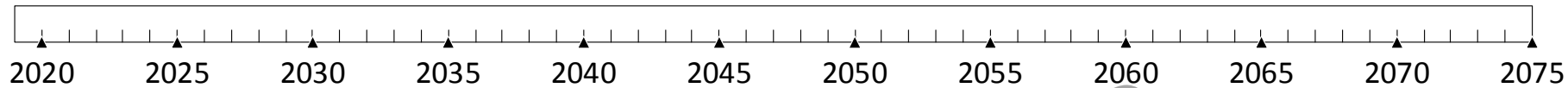
NRC – Nuclear Regulatory Commission
PSDAR – Post-Shutdown Decommissioning Activities Report
RFP – Request for Proposal

Project and Permit Phasing

Submittal I:
Shutdown, Decommissioning,
and Initial Site Restoration

Submittal II:
Final Site Restoration and
License Termination

Submittal III:
ISFSI Decommissioning
and Restoration



Highlights of Ongoing Work

- **Permitting**
- **NRC Submittals**
- **Expedited Spent Fuel Transfer Request For Proposal**
- **Contracting Strategy**
- **Indicative bids**
- **Public Engagement**
- **Planning/Scheduling Work**
- **Procedures/Processes**
- **Benchmarking**
- **NDCTP Support**

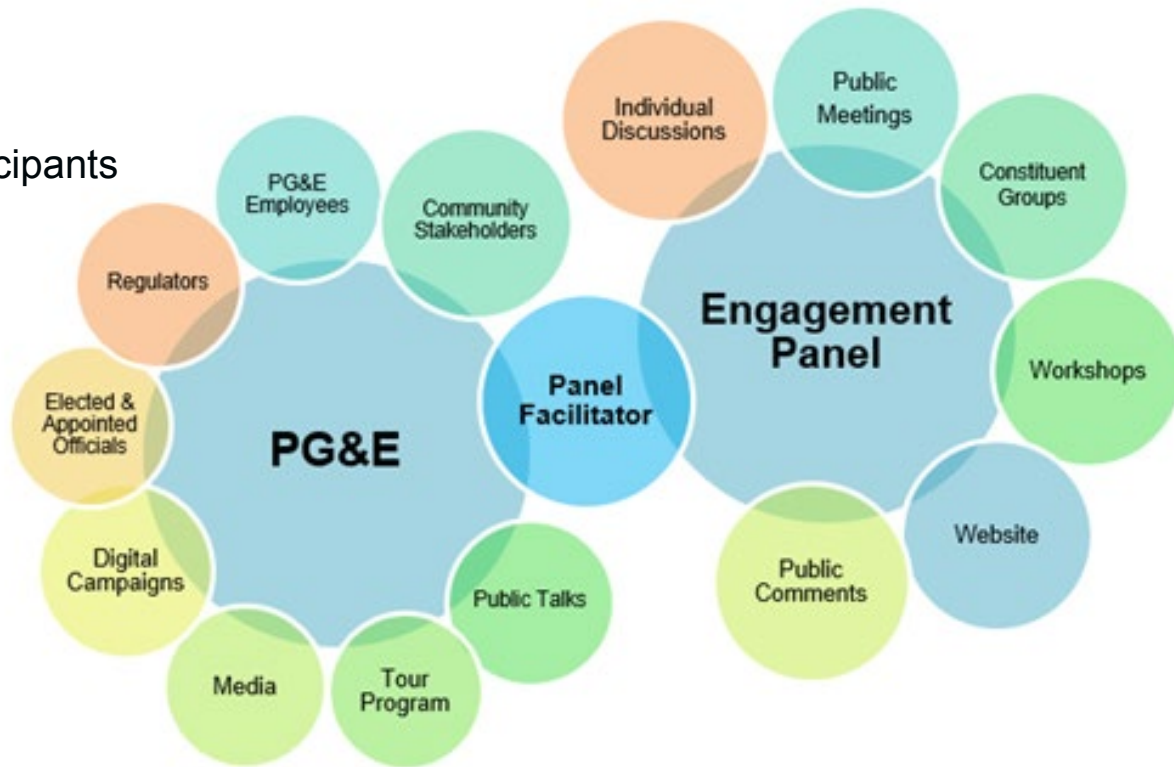
Contracting Strategy

- In the 2018 NDCTP proposed settlement agreement, PG&E agreed to finalize its contracting strategy prior to the 2021 NDCTP submission and that the DCE presented in the 2021 NDCTP will reflect this contracting strategy
- A Request for Information for contracting strategy was issued on August 4, 2020
- The contracting strategy evaluation will consider at least five options currently planned or being employed by other entities for decommissioning, and any additional options proposed:
 - Self-Perform/Self Manage
 - Decommissioning General Contractor (DGC)
 - Hybrid (Combination of Self-Perform and DGC)
 - License Stewardship
 - License Transfer Asset Sale
- Evaluations and approval will continue into Q3 2021

CPUC Order from A.16-08-006 – Joint Proposal

- 13. Pacific Gas and Electric Company will take no action with respect to any of the lands and facilities, whether owned by the utility or a subsidiary, before completion of a future process including a public stakeholder process; there will be local input and further Commission review prior to the disposition of Diablo Canyon facilities and surrounding lands. (pages 60-61)

- 11 Diablo Canyon Decommissioning Engagement Panel public meetings and 7 days of workshops
- 2018 – May 2020:
 - 261 tours with over 5,400 participants
 - Website visits
 - Speakers Bureau:
 - 185 presentations
 - 10,874 people reached
- Tribal outreach is ongoing
 - yak tityu tityu yak tihini
- COVID-19 mitigations:
 - Developed virtual tours: approximately 5,800 views
 - Pecho Coast Trail and Lighthouse; Lands; Marina
 - Enhanced website
 - Virtual presentations & public meetings



B. Additional Areas of Agreement Related to Diablo Canyon DCE

7. Diablo Canyon Independent Safety Committee and Diablo Canyon Decommissioning Engagement Panel

Though not included among the disputed issues raised by any of the Settling Parties, the record for the 2018 NDCTP includes information addressing whether the Diablo Canyon Independent Safety Committee (DCISC) should have an ongoing oversight role after permanent shutdown of DCPD and whether the Diablo Canyon Decommissioning Engagement Panel (DCDEP) as currently composed effectively meets the objectives of the stakeholder process directed by the Commission in D.18-01-022. If the Settlement Agreement is approved, the DCISC charter would be revised to allow it to continue in its safety oversight role until all of the DCPD spent nuclear fuel has been moved from wet storage to dry storage and funding for and effectiveness of the DCDEP would be addressed in the 2021 NDCTP.

Questions

Thank you

Tom Jones
tom.jones@pge.com

Status of Spent Fuel Cask Request for Proposal

Philippe Soenen

Decommissioning Environmental and Licensing Manager

October 22, 2020



Status of Request for Proposal

- **Key RFP Inputs**

- Diablo Canyon Decommissioning Engagement Panel Strategic Vision recommendations IV.G.2.a thru e
 - Expedite spent fuel offload
 - Seismic requirements
 - High burn-up fuel
 - 80-year design life
 - Marine environment
 - In-place inspection capability
 - Minimize dose to workers and public
- Operating experience from developing RFP for and operation of current ISFSI

- **California Energy Commission (CEC) input**

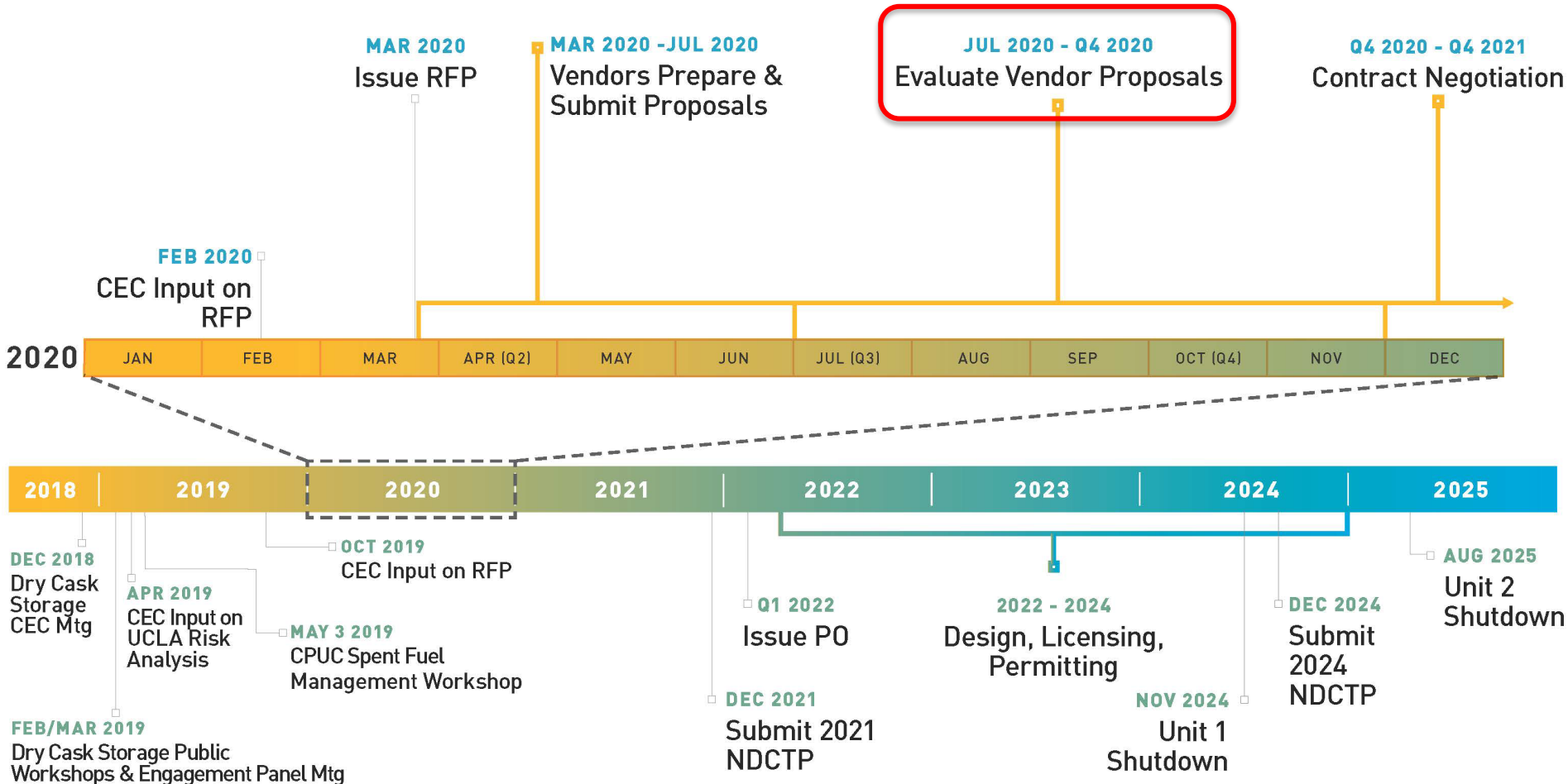
- Reviewed the UCLA risk assessment, RFP, and technical evaluation criteria
- Participated in multiple technical evaluation meetings
- CEC comments up to this point have been resolved to their satisfaction

Status of Request for Proposal

- **Evaluation of proposals received from qualified vendors is ongoing**
 - Multiple proposals are responsive to the site-specific requirements for DCPD
 - Material to be stored, seismic spectra, and offload timeframe are consistent with the proposed settlement agreement
 - Details of the proposals, evaluation criteria, and scores are business confidential
 - Technical and Commercial evaluations were completed separately and are now combined for a recommendation to PG&E Senior Leadership for their evaluation and subsequent approval to start negotiations
 - Approval to start negotiations is forecast for 4th quarter 2020
 - Negotiations may be with all, or a subset of, the proposals received
 - Contract negotiations are forecast to take up to a year



Request for Proposal Timeline



PG&E will use a request-for-proposal process to develop a holistic GTCC waste and SNF storage strategy.

CEC: California Energy Commission
CPUC: California Public Utilities Commission
NDCTP: Nuclear Decommissioning Cost Triennial Proceeding
RFP: Request for Proposal
UCLA: University of California, Los Angeles

Questions

Update on Emergency Preparedness Programs & Changes Made in Response to the COVID-19 Pandemic

Michael A. Ginn

Emergency Preparedness Manager

October 22, 2020



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Recent & Upcoming Program Activities

2020 Emergency Preparedness Training, Drill & Key Events Schedule	
Date	Event
8/22/2020	Early Warning System Annual Siren Test
8/25/2020	Focused Area Drill
8/28/2020	Emergency Response Organization (ERO) Proficiency Training
9/14-17/2020	NRC Emergency Preparedness (EP) Baseline Program Inspection
9/28/2020	ERO In-Facility Key Decision Maker Training
10/1/2020	ERO In-Facility Key Decision Maker Training
12/2/2020	ERO Full Scope Drill
12/9/2020	Annual Onsite Medical Drill
12/9/2020	Semi-Annual Health Physics (HP) Drill

Other Completed Activities

2020 Emergency Preparedness Training, Drill & Key Events Schedule	
Date	Event
1/8/2020	ERO Tabletop Training Drill for 60-Minute Responders
1/23/2020	Sierra Vista Regional Medical Center Training
2/19/2020	Unannounced Off-Hours ERO On-Call Verification Test
3/3/2020	Focused Area Drill
3/5/2020	ERO In-Facility Team Training & Drill
3/12/2020	ERO In-Facility Team Training & Drill
5/25/2020	Unannounced Off-Hours ERO On-Call Verification Test
6/10/2020	Semi-Annual Health Physics (HP) Drill
7/11/2020	Unannounced Off-Hours ERO On-Call Verification Test

Health Physics Drill June 10, 2020



Emergency Response Organization

All ERO responsibilities remain in place as **essential workers** during COVID-19, including:

- Notify Supervisor of any changes in status (e.g. medical leave, family leave, illness, etc.) that may impact employee's ability to fulfill ERO responsibilities
- While on-call:
 - Remain fit for duty
 - Remain able to respond within your required timeframe
 - Remain able to receive notification by pager & cell phone
 - If unable to respond or unfit for duty (including illness):
 - Obtain a qualified replacement immediately
 - Notify ERO Team leader

Personal Protective Equipment

Face Coverings:

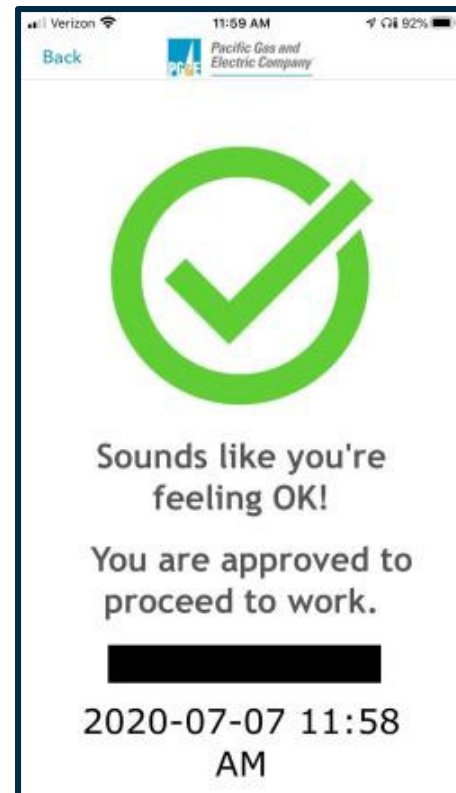
- All Emergency Response Facilities (ERFs) have masks staged and ready for use, with each position binder

When MUST I wear a face covering for work?			
 IN THE FIELD		 AT A PG&E FACILITY	
	At a work site where you are within 6 feet of other crew members or the public		In common areas (e.g. bathroom, breakroom, training room, etc.)
	During work breaks (e.g. rest, food and water, etc.) if within 6 feet of other crew members or the public (Coverings can be removed to eat or drink)		In elevators
	At a customer's house or business		In hallways and entranceways
	At a tailboard or other meeting with other employees outdoors at PG&E location		At a workstation that is within 6 feet from others
	At a work site with no other people in the area		In parking lots
OPTIONAL		OPTIONAL	At your workstation and at least 6 feet from others
 WHILE DRIVING		 AT HOME	
	With others in the vehicle	OPTIONAL	Working at home
OPTIONAL	By yourself		

Personal Protective Equipment

Screening process questions & LiveSafe App health checks performed

- Touchless thermometers are also available, if needed

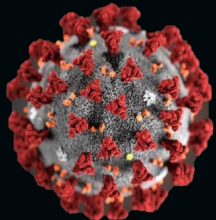


Frequent ERO Information Updates

Virtual muster meetings are provided as Teams take the on-call duty

- Updates include:
 - COVID-19 status & changes (PG&E / DCPD / State / County)
 - Industry & internal Operating Experience – event reports / drills
 - Reinforcement of ERO standards & expectations
 - Any Response Impacts: Equipment, Weather, Scheduled Events
 - Dynamic Learning Activity (Quiz)

COVID-19 UPDATES



EP

VIRTUAL DLA



EP

DUTY IMPACTS



EP

COVID-19 Communications & Outreach

- Maintaining daily communications with San Luis Obispo County Public Health Department and Office of Emergency Services (OES)
- Participating in weekly Nuclear Energy Institute (NEI) COVID-19 industry coordination and emergency preparedness calls for benchmarking with NRC Headquarters updates
- Conducting bi-weekly coordination calls with FEMA Region IX, NRC Region IV, State of California Emergency Services, CA Department of Public Health and San Luis Obispo County

NRC EP Program Inspection

- NRC Region IV conducted an emergency preparedness baseline program inspection at Diablo Canyon emergency response facilities from **9/14 - 9/17, 2020**
- NRC inspection procedures used for this inspection were:
 - [71114.02 – Alert and Notification System Evaluation](#)
 - [71114.03 – Emergency Response Organization Staffing and Augmentation System](#)
 - [71114.04 – Emergency Action Level and Emergency Plan Changes](#)
 - [71114.05 – Maintenance of Emergency Preparedness](#)
 - [71151 – Performance Indicator Verification](#)
- No violations or findings were identified

Emergency Preparedness Exercise

- On 9/18/2020 the NRC approved the station request to conduct the next emergency preparedness evaluated exercise on **9/15/2021**
 - The State of CA and San Luis Obispo County OES also received approval from FEMA
- The new exercise date will help to ensure continued focus on practices recommended by the CDC and the State of California to limit the spread of COVID-19
 - Diablo Canyon ERO & State and County emergency services remain in a state of readiness and are available and capable to rapidly respond to any potential emergency that could impact the plant

Thank you

Michael A. Ginn

michael.ginn@pge.com



DIABLO CANYON
Decommissioning Engagement Panel

DIABLO CANYON DECOMMISSIONING ENGAGEMENT PANEL

*Presentation to Diablo Canyon
Independent Safety Commission (DCISC)*

*October 23, 2020
Lauren R. Brown, Ph.D.*



DIABLO CANYON
Decommissioning Engagement Panel

MISSION AND PURPOSE

Mission Statement

The Diablo Canyon Decommissioning Engagement Panel will review information and provide direct input on behalf of the local community to Pacific Gas and Electric Company (PG&E), and inform regulatory agencies and other stakeholders on Diablo Canyon Power Plant decommissioning plans and activities.

Purpose

- The Panel is convened as a volunteer, non-regulatory body created to foster and encourage open communication, public involvement and education on Diablo Canyon Power Plant decommissioning plans and activities
- It is intended to serve as a forum for the local community to provide direct input to PG&E and regulatory agencies on matters related to Diablo Canyon Power Plant decommissioning

The DCDEP Charter adopted May 24, 2018 and revised August 2020, available in its entirety at www.DiabloCanyonPanel.Org



DIABLO CANYON
Decommissioning Engagement Panel

2020 AREAS OF FOCUS FOR DCDEP

1. Changes in DCDEP membership
2. Public Meeting – March 11, 2020
 - A. SLO County CEQA / EIR process
 - B. CPUC Tribal Land Transfer Policy
 - C. RFP process for Dry Cask Storage
3. Public Meeting – June 24, 2020
 - A. Transportation of non-radiological and low-level radiological materials from decommissioning
 - B. Risk Analysis by B. John Garrick Institute for Risk Sciences at UCLA
4. Public Meeting – October 28, 2020
 - A. Water Resources at Diablo Canyon: Breakwater & Marina, Intertidal Area, Desalination Plant



DIABLO CANYON
Decommissioning Engagement Panel

CHANGES IN DCDEP MEMBERSHIP

1. Three new members

- A. Timothy Auran, M.D., B.S. in Mechanical Engineering**
Interventional radiologist at Radiology Associates in SLO
Background includes internship at Westinghouse on design of naval nuclear reactors
- B. Patrick Lemieux, Ph.D. Mechanical Engineering**
Professor of Mechanical Engineering at Cal Poly
Memberships include Distributed Wind Energy Association
- C. Charlene Rosales, attended Cal Poly**
Deputy Director/COVID Manager for Mission Community Services Corporation
Prior position: Director of Governmental Affairs, SLO Chamber of Commerce

2. One switch to Ex-Officio Membership

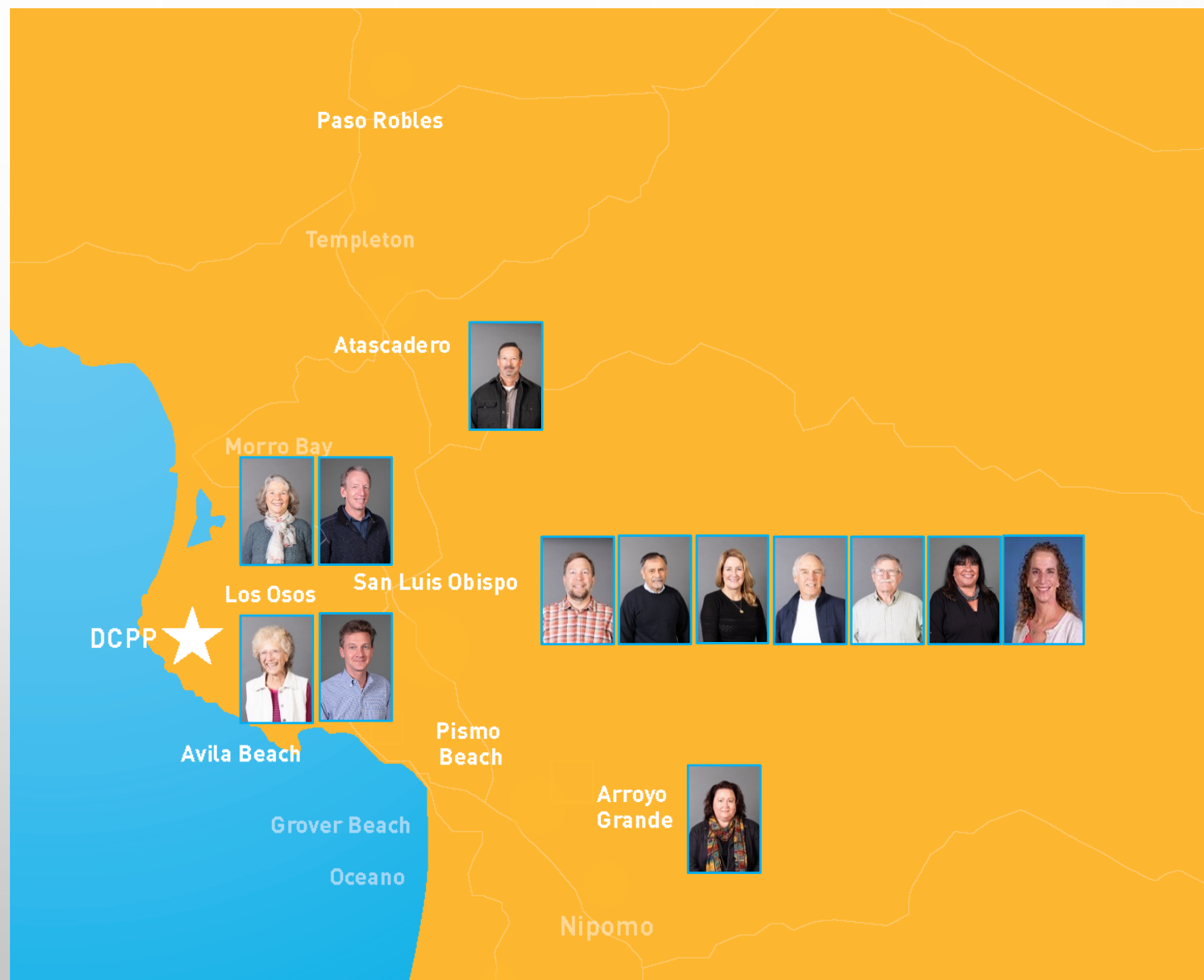
- A. Trevor Keith, B.S. Ecology, M.A. City and Regional Planning**
Director of SLO County Planning and Building Department



DIABLO CANYON Decommissioning Engagement Panel

- Patrick Lemieux – Morro Bay - 2023
- David Baldwin – Atascadero -2021
- Linda Seeley – Los Osos - 2022
- Trevor Keith – San Luis Obispo-Ex-Officio
- Scott Lathrop – San Luis Obispo - 2021
- Kara Woodruff – San Luis Obispo - 2023
- Alex Karlin – San Luis Obispo-2021
- Lauren Brown – San Luis Obispo - 2022
- Sherri Danoff – Avila Beach – 2022
- Charlene Rosales – San Luis Obispo - 2023
- Timothy Auran – Avila Beach Area - 2023
- Dena Bellman – Arroyo Grande - 2021
- Maureen Zawalick (PG&E) – San Luis Obispo

CURRENT DCDEP MEMBERS





DIABLO CANYON
Decommissioning Engagement Panel

PUBLIC MEETING ON MARCH 11, 2020

1. SLO County CEQA / EIR process – Presented by Trevor Keith, Director of SLO County Planning

Summary

- Public Process – Planning Commission, Board of Supervisors, Coastal Commission
- County of SLO likely will be Lead Agency and prepare an Environmental Impact Report
 - Consider Mitigation and Alternatives Relative to Impacts
 - One concern: Does the County have adequate staff to handle this expeditiously?
- Public Involvement- Environmental Review and Public Hearings Appealable to Coastal Commission



DIABLO CANYON
Decommissioning Engagement Panel

PUBLIC MEETING ON MARCH 11, 2020

2. CPUC Tribal Land Transfer Policy – presented by Dena Bellman, Scott Lathrop and Kara Woodruff

Summary

- A. Per Governor's Executive Orders and the CPUC Tribal Policy, when excess lands are disposed of by an Investor-Owned Utility, recognized Native American Tribes with ancestral claims must be given the right of first refusal to obtain such lands.
- B. The Vision Document from the DCDEP reflects strong community input that these Diablo Canyon lands with its ecological, scenic and cultural resources, should be conserved in perpetuity, with sustainable public access. The document also affirms that the request for land ownership by the local Native American community should be acknowledged and considered as a valid claim for historical reasons.
- C. How the Diablo Lands issue is ultimately resolved is likely to be an important aspect of DCDEP activities in the several years ahead, hopefully resulting in a 'win-win' outcome.



DIABLO CANYON
Decommissioning Engagement Panel

PUBLIC MEETING ON MARCH 11, 2020

3. RFP process for Dry Cask Storage

Summary

- A. +/- 110 new casks
- B. Request sent to manufacturers in March 2020
- C. Estimated cost: >\$200 million
- D. DCDEP made several recommendations to PG&E regarding RFP criteria, which were incorporated
- E. California Energy Commission reviewed RFP and provided input
- F. Criteria include transfer of SNF within 4 years of unit shutdown, accommodates seismic, high burn-up fuel, 80-year design life, marine environment, in-place inspections, minimize dose to workers and public, and subject to NRC and other regulatory approvals.
- G. Contract negotiation projected to be complete by April 2021
- H. P.O. projected to be submitted in Jan. 2022 (as per 6/24 update)

DCDEP will be attentive to DCISC evaluation of eventual cask selection.



DIABLO CANYON
Decommissioning Engagement Panel

PUBLIC MEETING ON JUNE 24, 2020

1. Transportation of non-radiological and low-level radiological materials from decommissioning

Summary

- A. Results of the independent risk analysis (as requested by DCDEP) by the UCLA Garrick Institute
- B. Three basic routes evaluated: 1). Southern route through Avila; 2) northern route through Montana de Oro; 3) barging, utilizing a retained marina and further transport to ultimate destinations in Utah, Nevada , Idaho, Arizona and /or Texas
- C. Conclusions:
 - A. Southern Truck Route has lower risk than the Northern Truck Route
 - B. Rail transport has overall lower risk than trucking
 - C. Lowest overall risk: keep marina in place and barge on the first leg of the route.



WHAT'S COMING UP..

October 28, 2020 Meeting

- Marine Resources of Diablo Canyon
 - Tidepools
- Breakwater and Marina
 - History
 - Current state
 - Dismantling realities
 - Barging
- Seawater Desalination
 - Operations
 - Future options
 - Constraints



Diablo Canyon Decommissioning Engagement Panel

Upcoming Topics of Interest

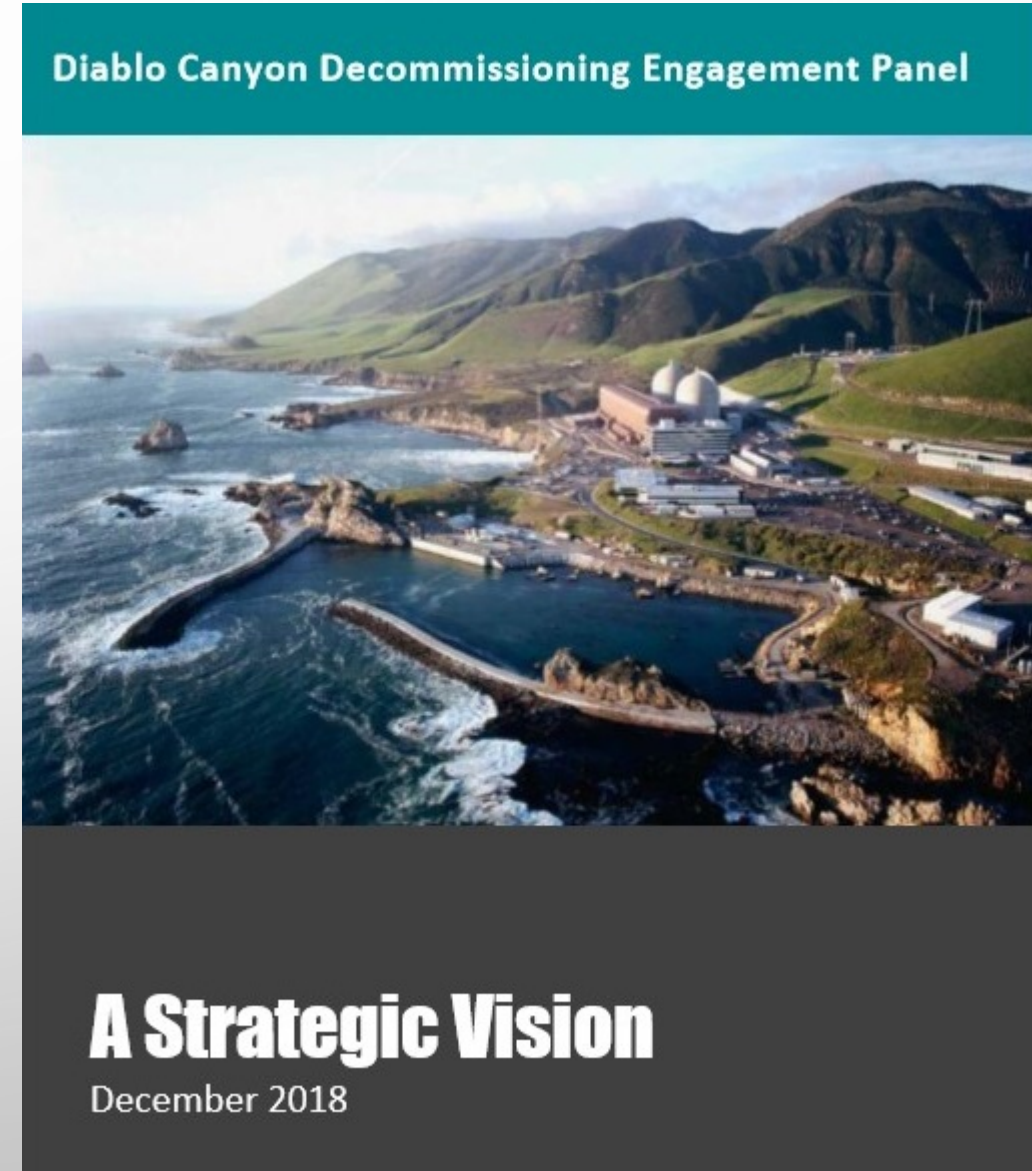
- CPUC Ruling on the 2018 Nuclear Decommissioning Cost Triennial Proceeding
- Management, Storage and Transportation of Spent Nuclear Fuels Update



STRATEGIC VISION

DIABLO CANYON Decommissioning Engagement Panel

- Strategic Vision was prepared by the DCDEP as a “living document”
 - Will be amended and refined as the public outreach and decommissioning process continues
- Contains Visions, Goals and Recommendations
 - Reflects the input received from the public at meetings, workshops, on-line comments, and emails
 - Over 1,000 public comments received to date
- Strategic Vision was first released in January 2019
 - Revised in May 2019, February 2020, and July 202. The July 2020 update will be resubmitted with PG&E’s 2021 NDCTP.
- Submitted to PG&E and to the CPUC
- Available on the Engagement Panel Website
 - <https://diablocanyonpanel.org/>





DIABLO CANYON
Decommissioning Engagement Panel

THANK YOU

Panel Resources: www.DiabloCanyonPanel.Org

Questions? Please contact me:

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July 21-22, 2020 Fact-finding Report

Per F. Peterson, Member, and R. Ferman Wardell, Consultant

1. Meet with NRC Senior Resident Inspector
2. Compressed Air System Review with System Engineer
3. Observe Plant Health Committee Meeting (Cancelled)
4. 2019 Radioactive Effluent Release Report & Radiological Environmental Operating Report
5. Containment Concrete Inspection with Camera Drone
6. Equipment Reliability Process Update
7. Operations Issue on Misposition Errors (Equipment Control Status)
8. DCPD Use of Social Media in Context of Emergency Response
9. Buried Piping and Tanks Program
10. Slight Rise in Unit 1 Power Operation Just Prior to its Curtailment to 89% Power Operation to Address an Issue with Supplemental Grid Protection
11. Update on INPO Evaluation Actions
12. Meet with DCPD Officer



Meet with NRC Senior Resident Inspector

- Chris Newport Leaving DCPD in Sept or Oct (Don Krause)
- John Reynoso Left DCPD in June (Ayesha Athar)
- Items Discussed:
 - Unit 2 Shutdown Due to Hydrogen Leak in Generator
 - Three Open Issues:
 - Debris in Battery Cell
 - Emergency Diesel Generator Scaffold
 - DCPD's COVID Cases
 - NRC Resident On-Site Every Day



Compressed Air System Review with System Engineer

- **Compressed Air System (CAS) Includes Two Subsystems:**
 1. **Instrument Air System – Safety Class 2 (Non-Seismic & No Emergency Power)**
 - Supplies Air-Operated Valves & Instruments
 - Three Primary Full Capacity Air Compressors
 - Four Backup Compressors
 2. **Service Air System – Not Safety Related**
 - Two Non-Safety Outdoor Compressors
- **System Health Is Yellow: Component Aging & Parts Obsolesce**
- **Compressors Replaced to Address Yellow Health**
- **System Engineer Appeared Knowledgeable and Proactive**



2019 Radioactive Effluent Release Report & Radiological Environmental Operating Report

- Release Report described the measured/calculated quantities of radioactive gaseous effluents, liquid effluents, and direct radiation
- DCPD maintains the release of radioactive effluents to the environment As Low As Reasonably Achievable (ALARA).
- No offsite direct radiation receptors with significant occupancy
- | <u>Effluent Type</u> | <u>Calculated Radiation Dose</u> | <u>Percent of T.S.</u> |
|----------------------|----------------------------------|------------------------|
| Liquid | 0.000157 millirem | 0.0010% |
| Gaseous | 0.000031 millirad | 0.0010% |
- Radiological Environmental Monitoring Report measures & assesses the levels of radiation or radioactivity in the environment
- No abnormal levels of radioactivity detected



Containment Concrete Inspection with Camera Drone

- DCPD had been performing its 10-year exterior Containment inspections visually
- Personnel rappelling down the vertical sides of the building
- Changed to using a drone-mounted high-resolution camera with a telephoto lens
- Three dimensional stereoscopic photos, which are reviewed by qualified inspectors for cracks in the concrete
- No significant cracks have been detected using either inspection method



Equipment Reliability Process Update

- **DCPP Equipment Reliability (ER) Is Green (Healthy)**
- **DCPP ER Is in Top Industry Quartile**
- **Unit 1 Showing Strong Performance**
 - Main Feedwater Pump Vibration
 - Forced Shutdown Due to Control Rod Drive System Malfunction
- **Unit 2 Needing Corrective Action**
 - Reactor Trip Due to Special Protection System
 - Main Feedwater Pump Bearing Vibration
 - Auxiliary Saltwater Pump Motor Vibration
- **Unit 2 Under Improvement Plan – Green Expected 4Q2020**



Operations Misposition Issue (Equipment Status Control)

- DCISC Last Reviewed in July 1, 2020 Public Meeting
- July 21-22, 2020 Follow-up Fact-finding Meeting
- Operations Plant Status Control Action Plan & Effectiveness Review
- Effectiveness Review Not Begun During FF Meeting
- Review the Plan and Effectiveness Review 4Q2020



DCPP Use of Social Media in Context of Emergency Preparedness

- **PG&E Use of Social Media (Instagram, Facebook, Twitter) Controlled by Corporate Office**
- **DCPP Emergency Use of Social Media Is Also Controlled By Corporate**
- **In Emergency Corporate Website Replaced with DCPP Emergency Website**
- **DCPP Coordinates Its Emergency Social Media with SLO County**



Buried Piping and Tanks Program

- Assurance of Structural & Leakage Integrity of Buried Piping & Tanks
- DCCP Has Relatively Small Number of Buried Components
 - Condensate Polishing
 - Auxiliary Saltwater
 - Liquid Radwaste
 - Diesel Fuel Oil
 - Oily Water and Turbine Sump
- Periodic Tests, Inspections & Leakage Detection
- Satisfactory Results Assuring Leak Tightness & Structural Integrity



Slight Rise in Unit 1 Power Operation Just Prior to its Curtailment to 89% Power Operation to Address an Issue with Supplemental Grid Protection

- Instrumentation Error – Not An Actual Rise in Power



Meet with DCPD Officer

- **DCISC FFT Met with Jim Welsch, DCPD Senior Vice President and Chief Nuclear Officer**
- **Discussed Items from This Fact-finding Meeting and Other Items of Mutual Interest**



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August 19-20, 2020 Fact-finding Report

Peter Lam, Member, and Richard McWhorter, Consultant

- 1. Meet with Nuclear Regulatory Commission (NRC) Senior Resident Inspector**
- 2. License Amendment Request to Facilitate Auxiliary Feedwater Inspections**
- 3. Unit 2 Forced Outage**
- 4. Fire Protection and Detection Systems**
- 5. Attend Corrective Action Review Board Meeting**
- 6. Evaluation for Extending the Unit 1 Steam Generators Secondary Side Inspections**
- 7. Containment Ventilation and Hydrogen Mitigation Systems**
- 8. DCISC Member Meet with DCPD Officer**
- 9. Employee Concerns Program**
- 10. NRC Inspection Finding on Emergency Siren Maintenance**
- 11. Status of Responding to the COVID-19 Pandemic**
- 12. Self-Assessment Program**
- 13. Attend Plan of the Weekend Review Meeting**



Meet with NRC Senior Resident Inspector

- **Resident Inspector Assignment Changes**
- **July Unit 2 Forced Outage**
- **Unit 2 Auxiliary Feedwater (AFW) Leak and Unit 1 Inspection Plans**
- **COVID-19 Pandemic Response**



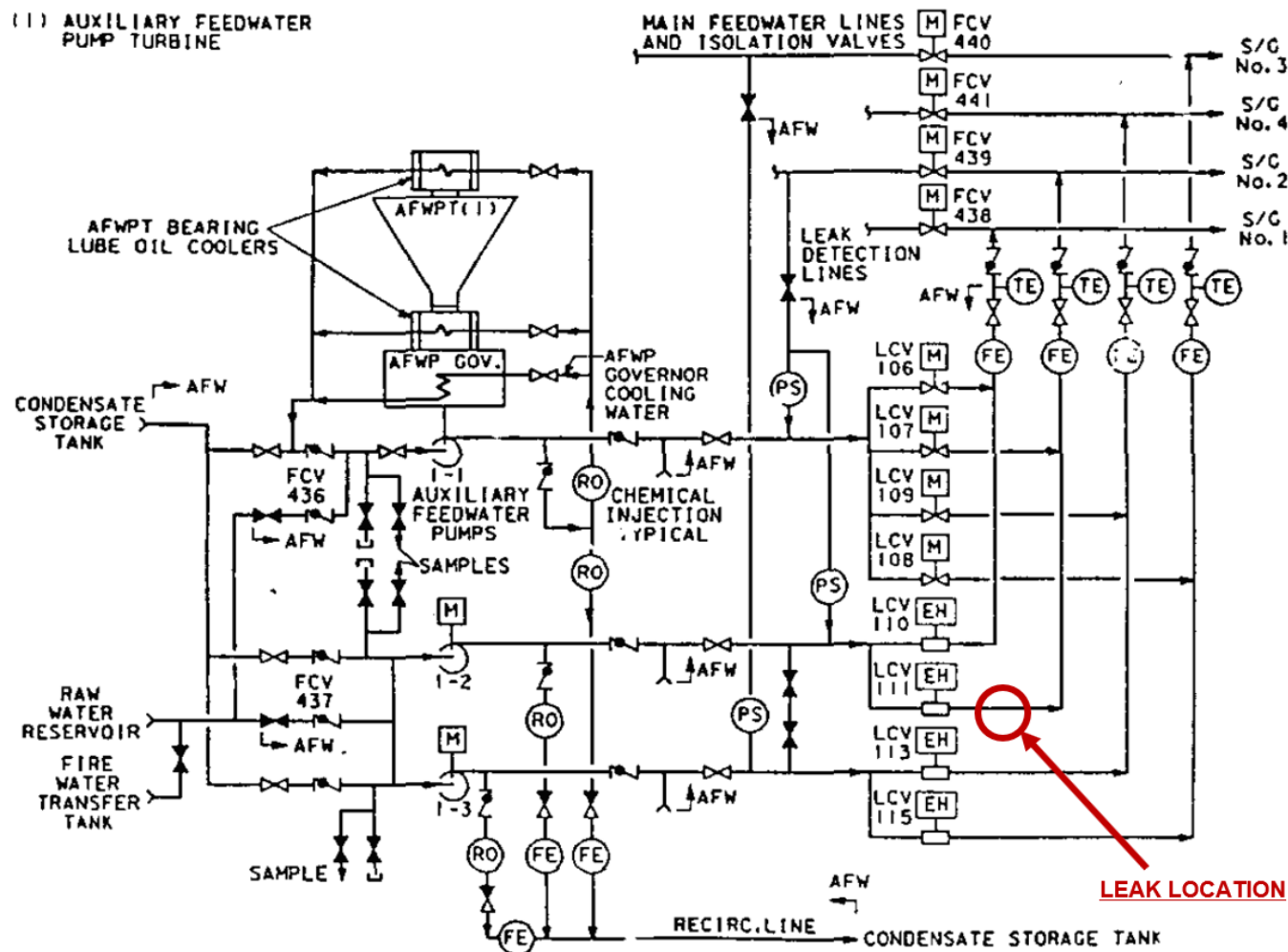
License Amendment Request to Facilitate Auxiliary Feedwater Inspections

- **AFW Provides Water Source to Steam Generators (SGs) in Emergency and During Plant Shutdown with RCS Temp > 350 DegF**
- **During Unit 2 Forced Outage on July 23, Leak Found on AFW Pump Discharge Piping Outside Near Unit 2 Containment**
- **Unit 2 Cooled Down to < 350 DegF**
- **Insulation Removed; 3/8" Diameter Hole Found Amidst Heavy Corrosion on Pipe Exterior**
- **Additional Piping Inspected, Zero Other Leaks, Six Areas Where Pipe Thickness Less Than Allowed by Codes**

Cont'd.



LAR to Facilitate Auxiliary Feedwater Inspections (con't)



Cont'd.



License Amendment Request to Facilitate Auxiliary Feedwater Inspections (Continued)

- Leak Caused by Corrosion Under Wetted Insulation
- Vulnerable Area, Routinely Wetted by Water Falling from SG PORV Drains
- Unit 2 Cooled Down to < 350 DegF (AFW no longer required) and Repaired
- Extent of Condition Found Sections of Pipe on Unit 1 that Could Be Susceptible, but Less Likely
- Management Decided Not to Wait Until Planned Outage (October) to Further Inspect Unit 1

Cont'd.



License Amendment Request to Facilitate Auxiliary Feedwater Inspections (Continued)

- **Under Existing Tech Specs – If Inspections Found Defects Making Pipe Inoperable, Shutdown Within Six Hours**
- **DCPP Concluded the Applicable Tech Spec Was Unnecessarily Conservative For This Specific Situation**
- **Considered Regulatory Alternatives and Decided to Submit to the NRC an Exigent (Urgent, Non-Emergency) Tech Spec Change Request**
- **Change Would Allow One SG Flow Path to a Single SG to be Inoperable for Seven Days; Only Applicable Until Next Outage**

Cont'd.



License Amendment Request to Facilitate Auxiliary Feedwater Inspections (Continued)

- Safety Evaluation Included Risk Insights
- Increase in Core Damage Probability Less Than 1×10^{-6} per Year
- Increase in Large Early Release Probability Less Than 1×10^{-7} per Year
- LAR Approved and Amendment Issued on August 31
- PG&E Inspected Unit 1 Piping the Same Day; No Code Defects
- Conclusion – Only Minor Safety Concerns with DCCP's Approach to Performing AFW Piping Inspections
- DCISC Should Review Final Root Cause Evaluation When Completed



Unit 2 Forced Outage

- **July 17, 2020, Main Generator Hydrogen Pressure Decreasing; Stator Closed Cooling Water (SCCW) System Conductivity Increasing**
- **Investigations Concluded Hydrogen Leak to SCCW System Inside Main Generator (Refurbished in 2019)**
- **Initial Inspections Found Leak at Weld Flaw on Transition Box Between SCCW Inlet Header and Manifold**
- **Repaired and Unit Returned Online on August 2, 2020**
- **Conclusion – Forced Outage Was Properly Managed**



Fire Protection and Detection Systems

- **System Performance ‘White’**
- **Firewater System Healthy, ‘White’ Due to Awaiting Results of Effectiveness Monitoring for Deluge Valve Replacements**
- **Impairments – Goal of Zero; Routinely Met; Occasionally One or Two. Significant Improvement.**
- **Fire Detection Systems Generally Healthy**
- **Maintaining Training for Fire Response Personnel During COVID**
- **Conclusion – Increased Attention Has Significantly Improved System Performance, Now Excellent**



Observe Corrective Action Review Board (CARB) Meeting

- **Regular Reviews of Corrective Action Documents**
- **Reviewed Root Cause Evaluation (RCE) for Debris in Battery Cell and Interim RCE for Leak on AFW Piping**
- **Conclusion – Meeting Met Intended Objectives**



Evaluation for Extending Unit 1 SG Secondary Inspections

- **Follow-up Item from March Fact-Finding Meeting**
- **DCPP Proposed to Extend Secondary Side Inspections from Three to Six Cycles; No Change to Primary Side Inspections**
- **Engineering Reviewed and Recommended Against Extending**
- **Risk Assessment was Medium (Forced Outage Possibility); Vendor Would Not Endorse**
- **Outage Management Team (Plant Health Committee) Approved Extension**
- **FFT Reviewed Basis and Documentation, Agreed Risk Very Low; Basis for Management's Decision Not Well Documented**
- **Conclusion – Decision to Extend Acceptable; However, Basis Should be Better Documented**



Containment Ventilation and Hydrogen Mitigation Systems

- **System Serves to Limit Containment Temperature and Pressure**
- **Five Containment Fan Cooler Units (CFCUs) Cooled By Component Cooling Water; Two Required in Accident**
- **System in Good Health; No Recent Failures**
- **CFCU Corrosion Led to One Replacement per Unit; Remaining CFCUs Currently Being Inspected and Repaired as Needed**
- **Hydrogen Mitigation Systems in Good Health**
- **Conclusion – Systems in Good Health**



Dr. Lam Meeting with CNO, Jim Welsch

- **Discussed Items from the Fact-Finding Meeting and Other Subjects of Interest**



Employee Concerns Program

- **Impartial Investigation Group for Concerns Raised by Employees**
- **Recent Change in Manager's Position**
- **Includes Informal/Formal Investigations, Anonymous Notifications, and NRC Allegations Referred to PG&E**
- **2019 Numbers Generally Consistent with Past**
- **Group Heavily Involved in Reviewing COVID Impacts**
- **Conclusion – Program Continued to Function Well in Reviewing and Investigating Employee Concerns. No Significant Nuclear Safety Issues.**



NRC Inspection Finding on Early Warning Siren Maintenance

- **Follow-up Item from February 2020 Public Meeting**
- **January 2020 NRC Inspection Report Opened ‘Unresolved Item’**
- **Concern About Documentation of Change in Battery Replacement Periodicity from Three to Five Years**
- **Change Was Appropriate; Minor Error in Documentation**
- **Conclusion – DCPP Failed to Properly Update Document; No Technical Issues with Change in Periodicity of Battery Replacements**



Status of Responding to the COVID-19 Pandemic

- **Self Screening, Social Distancing, Hygiene, and Remote Work Actions Continued to Appear Effective; Few Active Cases**
- **Recent Unit 2 Forced Outage Completed Without Any Major COVID-Related Issues**
- **Emergency Response Exercise Scheduled for August 2020 Postponed; NRC Approved Extension to 2021**
- **Conclusion – Actions Appeared Proper; DCISC Should Continue to Monitor**



Self-Assessment Program

- **Types of Self-Assessments With Numbers Performed in Last 12 Months:**
 - **Formal Self-Assessments – 8**
 - **Quick Hit Self-Assessments – 41**
 - **Benchmarking – 30**
- **Results Entered into Corrective Action Program**
- **Copies Regularly Provided to and Reviewed by DCISC**
- **QV Recently Identified Issue with Failures to Perform Procedurally-Required Self-Assessments**
- **Conclusion – Active and Effective Program**



Observe Plan of the Weekend (POWER) Meeting

- **Meeting Convened Every Thursday Afternoon to Review All Work Completed that Day and Plans for Weekend Work**
- **Agenda Items Included: Emergent Work, Night Shift Support, Weekend Work List, Clearances Needed, Operations Concerns, Weekend Priorities, Etc.**
- **Conclusion – Meeting was Effectively Facilitated with Clear Informational Exchanges Across a Large Number of Activities**



August 19-20, 2020 Fact-finding Report

Peter Lam, Member, and Richard McWhorter, Consultant

- 1. Meet with Nuclear Regulatory Commission (NRC) Senior Resident Inspector**
- 2. License Amendment Request to Facilitate Auxiliary Feedwater Inspections**
- 3. Unit 2 Forced Outage**
- 4. Fire Protection and Detection Systems**
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- 7. Containment Ventilation and Hydrogen Mitigation Systems**
- 8. DCISC Member Meet with DCPD Officer**
- 9. Employee Concerns Program**
- 10. NRC Inspection Finding on Emergency Siren Maintenance**
- 11. Status of Responding to the COVID-19 Pandemic**
- 12. Self-Assessment Program**
- 13. Attend Plan of the Weekend Review Meeting**



September 9-10 2020 Fact-finding Report

Robert J. Budnitz, Member, and R. Ferman Wardell, Consultant

1. Nuclear Regulatory Commission (NRC) Licensing Issues Status
2. Outage 1R22 Safety Training for Operators
3. Meet with DCPD Site Vice-President Paula Gerfen
4. Auxiliary Feedwater System License Amendment Request
5. Refueling Outage 1R22 Safety Plan
6. Meet with NRC Senior Resident Inspector
7. Control Rod Issues
8. Postponed/Cancelled Projects
9. Nuclear Instrumentation Systems
10. Overall Probabilistic Risk Assessment Program Update
11. Operational Decision-Making Program
12. Employee Retention Participation Update



NRC Licensing Issues Status (Red = Open)

- Containment Debris (GSI-191)
- EDG Health and Performance
- 230kV Emergency Power
- **Open Phase Power – Awaiting NRC Approval & 2021 Inspection**
- Control Room Habitability
- NRC White Finding for Inoperability of Valve SI-1-8982B Interlock
- NRC Assessment of the DCPD March 2015 Local Intense Precipitation and Tsunami Analysis
- **Cyber Security – Complete with NRC Inspection in March 2021**
- Spent Fuel Pool Evaluation
- Auxiliary Feedwater System License Amendment Request
- **Refueling Water Storage Tank Water Level – Awaiting NRC Action**
- **Scaffolding Issues – Resolved, Awaiting NRC Action**
- **Debris in Battery Cell – Resolved, Awaiting NRC Action**



Refueling Outage 1R22 Safety Training for Operators

Licensed and Non-Licensed Operators (taught by Operations Trng)

- Outage Operating Experience
- Outage Operating Procedures
- Outage Safety Schedule and Checklist
- Shutdown Procedures
- Drain to Vessel Flange Procedure
- Human Performance Tools
- Reactor Vessel Refueling Level Instrumentation System

Cont'd.



Refueling Outage 1R22 Safety Training, cont'd.

Licensed Operators Only (Taught by Reactor Engineering)

- New Core Design Features
- Moving to Shorter Cycles After Refueling Outage 1R23
- Core Behavior with Time
- All Rods Out Operation
- Fuel Mechanical Design
- Fuel Pellet Design Features

- Remote Training was Satisfactory
- Instructors were Effective



Meet with Site Vice-President Paula Gerfen

- **Fact-finding Agenda Items**
- **Other Items of Mutual Interest**



Auxiliary Feedwater System License Amendment Request

Unit 2

- July 23, 2020 Forced Outage on Unit 2 – Control Rod Issue
- Leak Found on the AFW Pump Discharge Piping
- Heavy Corrosion Under Insulation
- Six Additional Pipe Wall Thickness Problem Areas
- Repairs Performed
- Root Cause: Moisture Beneath Insulation Caused By Changed Design/Operating Conditions
- Extent of Condition: Look At Unit 1

Cont'd.



Auxiliary Feedwater System License Amendment Request, cont'd.

Unit 1

- 100% Power
- License Amendment Request (LAR) Approved By NRC to Inspect/Repair Unit 1 AFW Piping at Power
- Inspection Revealed No Repairs Necessary



Refueling Outage 1R22 Outage Safety Plan

- Refueling Outage 1R22: October 4 to November 14, 2020
- Plan Provides Information on Outage Safety Requirements & Highlights Risk Areas (N is the minimum equipment needed to maintain a key safety function):
 - **Green** – DID greater than $N+1$, with more than one backup means of support
 - **Yellow** – DID equals $N+1$ (normal DID) with one backup means of support
 - **Orange** – DID equals N, but minimum DID is not met, and compensatory measures must be in place - special permission required
 - **Red** – DID less than N - key safety functions are not supported - prohibited

Cont'd.



Refueling Outage 1R22 Outage Safety Plan, cont'd.

Equipment & Plant Conditions in Shutdown Risk Conditions:

- Shutdown Cooling: Remains 'Green' (Low Risk)
 - Inventory Control: A 'Yellow' Condition Will Occur When the Reactor Coolant Level is at Reduced Inventory
 - Reactivity Control: A 'Yellow' Condition Will Occur in Reactivity Control Due to No Dilution Flow Paths Isolated
 - Support Systems (Heat Sink): Support Systems Will Have Four 'Yellow' Time Windows.
 - Containment Closure/CFCU Will Remain 'Green'
 - Vital AC Power Will Have Two 'Yellow' Time Windows
 - Spent Fuel Pool Cooling/Support Will Remain 'Green'
-
- Conclusion: Outage Safety Plan Is Effective in Assuring Safety



Meet with NRC Resident Inspector

- **Met with New Resident Inspector, Ayesha Athar**
 - **DCISC Origins, Charter & Makeup**
 - **NRC's COVID-19 On-Site Schedule (every day/weekends)**
 - **Fire Protection Issue: Painted Sprinklers**
 - **Auxiliary Saltwater System Valve Protection**
- **Meetings with NRC Resident Inspectors Are Beneficial**



Control Rod Issues

- February 13, 2020 Forced Outage 2X22 Due to Four Misaligned Control Rods
- Troubleshooting: Bad Circuit Card – Card Replaced
- Plan to Test Remaining Cards During Outage 2R22
- June 12, 2020 Another Similar Unit 2 Control Rod Issue
- Investigation Revealed Bad Wire Crimp At Circuit Card
- Resolution Satisfactory – System Operating Normally



Postponed/Cancelled Projects

- Project Review Working Group (PRWG) Was Formed in 2017 Using Staff from Operations, Engineering, & Work Control
- Reviewed Entire Portfolio of Future Capital Projects
- Total of 45 Projects Cancelled
- DCISC Found Acceptable the Process & Cancelled Projects for Maintaining Operational Safety
- DCISC Reviewed This Again in September 2020:
 - DCPD Had Validated the Previous List
 - Two Additional Cancellations:
 - Main Annunciator Upgrade
 - Emergency Diesel Generator Governor Replacement (2)
- DCISC Found Acceptable Again



Nuclear Instrumentation System

- **Nuclear Instrumentation System (NIS):**
 1. **Excore Nuclear Instrumentation System (NIS)**
 - a. **Provides Indication of Reactor Power**
 - b. **Source Range Detectors**
 - c. **Intermediate Range Detectors**
 - d. **Power Range Detectors**
 - e. **Post Accident Detectors**
 2. **Incore Instrumentation System**
 - a. **Movable Incore Detector System (MIDS)**
 - 1) **Monitors Nuclear Power Distribution in the Core**
 - b. **Incore Thermocouple System**
 - 1) **Monitors Fluid Exiting Reactor Core**
- **NIS Is in Good Health on Both Units**



Overall Probabilistic Risk Assessment (PRA) Program Update

- Program Is to Maintain the Station's PRA, Upgrade It As Needed, & Apply It to Address Safety & Reliability Issues Affecting the Plant.
- Status of the PRA
- Support for Plant Safety Decision-Making
- Outage & Out-of-Service Safety Management
- Supporting the Exigent LAR
- Spent Fuel Risk Study
- Reorganization of the PRA Group
- Conclusion: DCPD PRA Group Is Doing Excellent Work



Operational Decision-Making (ODM) Program

- ODM Used to Make Decisions Involving Degraded Conditions with Reductions in Operating/Safety Margins or Encroachment on System/Component Reliability
- ODM Used Only When Unit Is in Stable Condition
- DCISC Reviewed Five ODMs:
 1. Vibration Limits for Main Feedwater Pump 1-1
 2. Elevated Condenser Pressure Drop
 3. Special Protection System Status for Service
 4. Ocean Swell Condition Response
 5. Unit 2 Rod Control Troubleshooting At Power
- Conclusion: ODM Procedure & Five ODMS Were Satisfactory



Employee Retention Participation Update

- **Three Tiers of Retention:**
 1. **Tier One: 2017 - 8/2020. Approximately 90% Signup**
 2. **Tier Two: 2019 - 8/2023. Approximately 86% Signup**
 3. **Third Phase: 9/2023 – 8/2025. Ramp Down Staffing**

- **Experience with Employees Leaving:**
 - **~50 Employees Left Before the End of Tier One**
 - **~24 Employees Left Following End of Tier One**
 - **~50 Were Expected to Leave After September 1, 2020**
 - **~40 Are Retiring Now**

- **Program Generally Proceeding As Planned**
- **Needed Operators & I&C/Electrical Technicians Staying**



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