

DIABLO CANYON INDEPENDENT SAFETY COMMITTEE

Report on

Fact-Finding Meeting at DCP on May 7 and 8, 2025

by

Robert Budnitz, Member, and Richard McWhorter, Consultant

1.0 SUMMARY

The results of the DCISC May 7 and 8, 2025, Fact-Finding Meeting at the Diablo Canyon Power Plant (DCPP) in Avila Beach, CA, are presented. The subjects addressed and summarized in Section 3 are as follows:

1. Workplace Seismic Safety
2. High-Pressure Turbine Replacement Update and Plant Tour
3. Chemistry Program
4. Meet with DCP Officer
5. Foreign Material Exclusion Program
6. Intake Structure Tour
7. Observe 0730 Senior Leadership Team Outage Briefing
8. Large Transformers
9. Observe Outage Scope Review Team and Daily Notification Review Team Meeting
10. Observe Corrective Action Review Board Meeting
11. Station Update
12. Management Observation Program

2.0 INTRODUCTION

This Fact-Finding Meeting at the DCP was held to evaluate specific safety matters for the DCISC. The objective of the evaluation was to determine if Pacific Gas and Electric's (PG&E's) performance is appropriate and whether any areas revealed observations which are important enough to warrant further review, follow-up, or presentation at a public meeting. These safety matters include follow-up and/or continuing review efforts by the Committee, as well as those identified as a result of reviews of various safety-related documents.

Section 4 – Conclusions, highlights the conclusions of the Fact-Finding Team (FFT) based on items reported in Section 3 – Discussion. These highlights also include the FFT's suggested follow-up items for the DCISC, such as scheduling future Fact-Finding Meetings on the topic, presentations at future public meetings, and requests for future updates or information from DCP on specific areas of interest, etc.

Section 5 – Recommendations, presents specific recommendations to the DCISC and PG&E proposed by the FFT. These recommendations will be considered by the DCISC. After review and approval by the DCISC, this Fact-Finding Report, including its recommendations, will be provided to PG&E. The Fact-Finding Report will also appear in the DCISC Annual Report.

3.0 DISCUSSION

3.1 Workplace Seismic Safety

The DCISC FFT met with Mike Brass, Maintenance Services Director; Ron Layugan, Facilities Maintenance Supervisor; and Brian Johnson, Construction Maintenance Supervisor, to receive an update on the status of workplace seismic safety activities at DCP. The DCISC last reviewed workplace seismic safety during its March 2025 Fact-Finding Meeting (Reference 6.1), when it concluded the following:

DCP provided an update on corrective actions being taken in response to the DCISC's identification of an unbraced cabinet in December 2024. Corrective actions are expected to be completed in May 2025, and the DCISC should review the issue again after that date.

Following the identification of an unbraced cabinet during the DCISC's July 2024 review and upon entering the issue into the Corrective Action Program, corrective actions were made by DCP. These included adding proper bracing to the cabinet, improved training/awareness for personnel on workplace seismic safety, and reviewing other installations for extent of condition. However, in December 2024 during a DCISC Fact-Finding meeting with the DCP Senior Vice-President and Chief Nuclear Officer, an unbraced cabinet was found in their office which had not been found in previous inspections; however, this cabinet had been requested to be relocated prior to this discovery. This new discovery of unbraced cabinet was entered into the Corrective Action Program. Also as a result of the December 2024 review, the DCISC made the following recommendation to PG&E:

PG&E should review why an extent of condition for an unbraced cabinet found by the DCISC in July 2024 did not prevent the identification of a similar condition by the DCISC in December 2024 (P12/24FF-3.6).

The purpose of this meeting was to inquire about the status of corrective actions taken in response to the December 2024 issue and the subsequent recommendation made to PG&E by the DCISC. Mr. Brass reported that actions taken in response to the July 2024 review appeared to be ineffective in this particular case most likely because workers performing workplace seismic inspections skipped completing the inspection of the CNO's office when they found it locked after hours. In response to the new deficiency identified in December 2024, the following actions were completed under Notification 51271829, a copy of which was provided to the FFT:

- The controlling site document, "Standards for Bracing Office Furniture, Cabinets, and Storage Racks," was revised to incorporate lessons learned and new requirements. The

FFT was provided with and reviewed a copy of the revised standard, “Standards for Bracing Office Furniture, Cabinets, and Storage Racks,” Revision 3, dated April 29, 2025, and found it to be satisfactory.

- A new checklist for inspecting workplaces and identifying seismic hazards in offices and similar areas was prepared and incorporated as an attachment in the above document.
- The site Construction Manager prepared a definitive list of all areas on site that should be inspected for compliance with the revised standard. An owner was also designated for each area on the list who will be required to inspect the area for earthquake hazards annually.
- The list of all areas requiring periodic inspections and their owners was incorporated into a new preventive maintenance activity that would be required to be performed annually. The new preventive maintenance activity included provisions for automatic notification of each area owner of the requirement to perform and document the area inspections.
- A full round of inspections was completed using the new checklist and the full list of applicable areas that should be inspected. Mr. Brass reported that multiple cabinets were found not to be secured in a way that met the standards. These deficiencies were entered as Notifications in the Corrective Action Program. Most were promptly corrected, but a few uniquely configured cabinets required engineering assistance to devise new methods for bracing.

The FFT concluded that the above actions were appropriate and should prevent the recurrence of similar issues in the future.

Conclusions: DCPD provided an update on corrective actions being taken in response to the DCISC’s identification of an unbraced cabinet in December 2024. Corrective actions appeared appropriate and should prevent the recurrence of similar issues in the future. The DCISC will continue to regularly review the status of this program under its Open Items List item number SC-12.

Recommendations to the DCISC: None.

Recommendation to PG&E: The following previous recommendation to PG&E was reviewed during this Fact-Finding Meeting and is recommended for closure: PG&E should review why an extent of condition for an unbraced cabinet found by the DCISC in July 2024 did not prevent the identification of a similar condition by the DCISC in December 2024 (P12/24FF-3.6).

3.2 High-Pressure Turbine Replacement Update and Plant Tour

The DCISC FFT met with Mike Brass, Maintenance Services Director, for an update on the status of replacement of the Unit 1 High-Pressure (HP) Turbine and a tour of the turbine

replacement work area. The DCISC last reviewed the HP Turbine work areas during its April 2025 Fact-Finding Meeting (Reference 6.2), when it concluded the following:

The planned replacement of DCPD Unit 1's High-Pressure Turbine was proceeding satisfactorily. Due to the discovery of higher-than-expected erosion on internal sealing surfaces, DCPD had implemented a contingency plan for increasing the scope and duration of the work. The FFT considered that this type of proactive pre-planning was commendable and enhanced safety by providing a methodical approach to resolving a major issue with minimal disruption to other outage activities. The DCISC Fact-Finding Team toured the work area and found that it was clean, well-organized, and provided a safe work environment for employees.

Mr. Brass began by briefing the FFT on the status of the project to replace the HP Turbines on both units. The scope of work consisted of replacing all the turbine internal stationary and rotating elements while reusing the existing casings. The major components being replaced with new components included the one-piece rotor and eight semi-circular stationary blade assemblies (four upper and four lower) for each unit.

Mr. Brass reported that since the DCISC's April visit, all casing modifications had been completed, and the stationary blade assemblies had been installed into the upper and lower casings. Alignment of the stationary blade assemblies was in progress, the process of which required installing the upper casing and using a laser measuring tool internally to check the stator blade alignments (prior to rotor installation). The FFT was able to observe the status of the alignment work and found that the work area for the HP Turbine replacement was clean, well-organized, and provided a safe work environment.

Conclusions: The planned replacement of DCPD's High-Pressure Turbine was proceeding satisfactorily. The DCISC Fact-Finding Team toured the work area and found that it was clean, well-organized, and provided a safe work environment for employees.

Recommendations to the DCISC or PG&E: None.

3.3 Chemistry Program

The DCISC FFT met with Dave Cortina, Chemistry Manager, for an update on the DCPD Chemistry Program and Department. The DCISC last reviewed this topic during its August 2021 Fact-Finding Meeting (Reference 6.3), when it concluded the following:

DCPD's Chemistry Program is rated Green (Good) with performance in the first industry quartile. This is good performance.

The DCPD Chemistry Program maintains proper water chemistry in the plant's primary and secondary systems to minimize corrosion and biofouling and to manage reactor reactivity in the reactor core. The Chemistry Department is responsible for determining which chemicals, and in

what amounts, and processes (e.g., filtration, ion exchange resin, polishing, evaporation, etc.) to use to maintain desired chemistry levels. Proper water and steam chemistry is crucial to maintain the health of the Steam Generator (SG) tubes and to prevent corrosion in other piping systems such as Condensate, Feedwater, and Reactor Coolant.

The nuclear industry measures the performance of Chemistry Programs by use of the Chemistry Effectiveness Index (CEI). The CEI combines multiple measurements of chemistry parameters into an 18-month rolling composite that is reflective of the time spent operating outside of industry defined targets for a representative set of primary and secondary chemistry parameters. The CEI range is from 0 representing ideal performance to 100 representing worst performance.

Mr. Cortina reported that the CEI for Unit 1 had been steady at zero for the last 24 months. On Unit 2, the CEI returned to zero at the end of April 2025 following an 18-month period when the CEI was 1.3. The non-zero Unit 2 CEI was driven by an October 2023 minor excursion of contaminants in the Steam Generators that was caused by Main Condenser tube leakage of seawater into the Condensate System in combination with problems that occurred in the Condensate Polisher system. He explained that DCP's Condensate Polishing system can normally be relied upon to remove Condensate impurities arising from Condenser tube leakage as high as 60 gallons per day. During the October 2023 event, Unit 2's Main Condenser tube leakage was about 30 gallons per day when the in-service Condensate Polishers began to release contaminants into the Condensate System which in turn allowed sulfates in the SGs to reach about 5 parts per billion (ppb) before corrective actions could be completed. While this value was well below established limits for taking further actions, it was still undesired and drove the CEI to move from zero to 1.3 for 18 months.

Following the 2023 problem, Mr. Cortina reported that DCP has been working to replace the ion-exchange beds on all Unit 2 Condensate Polisher vessels. At the time of the FFT's meeting, six of eight bed replacements had been completed. He also noted that Unit 1's Condensate Polisher beds contained a different ion-exchange material than the type that was prone to the issues that affected Unit 2. Additionally, DCP completed modifications to upgrade the Condensate Polishing system control computers over the last two years.

The FFT inquired about the current status of Main Condenser tube leakage, and Mr. Cortina reported that Unit 1 had a small leak, about 15 gallons per day, prior to its shutdown for Refueling Outage 1R25. As a part of the scope of work for that outage, which was in progress during the FFT's meeting, the Main Condenser tubes were to be tested and plugged as needed, and the tube sheet would be inspected for coating deficiencies. He also stated that DCP's Main Condenser tubes were an early vintage of titanium dating back to original construction and generally have performed well. Replacing the tubes with more updated materials was considered but deemed not to be cost-effective in support of only five years of extended operations. Additionally, there was a significant design margin still present in the system which would allow for additional tube plugging if needed in the future without impacting the thermal performance of the Main Condenser. The FFT inquired if there had been any issues affecting the maintenance of chemistry in the Reactor Coolant System, and Mr. Cortina reported that there had been no major issues with chemistry in any primary systems.

The FFT also discussed staffing and qualifications within the Chemistry Department and found that staffing and qualification levels were good. Mr. Cortina also described the relationship between his department and the Radiation Protection (RP) Department, who often cross-train and qualify technicians to allow the sharing of resources. Current staffing levels were about 20 for the Chemistry Department and 25 for the RP Department.

The FFT concluded that DCP's Chemistry Program was performing well in maintaining the chemistry of primary and secondary systems such that corrosion would be minimized in plant piping systems and the Steam Generators.

Conclusions: DCP's Chemistry Program was performing well with no major issues.

Recommendations to the DCISC or PG&E: None.

3.4 Meet with DCP Officer

The DCISC FFT met with Maureen Zawalick, Vice President, Business and Technical Services, for an update. The DCISC last met with a DCP officer during its Fact-Finding Meeting in April 2025 (Reference 6.4) when it concluded the following:

The regular meetings with DCP Officers and Directors continue to be beneficial for both organizations.

The participants discussed the current meeting agenda items and other items of mutual interest.

Conclusions: The regular meetings with DCP Officers and Directors continue to be beneficial for both organizations.

Recommendations to PG&E or DCISC: None.

3.5 Foreign Material Exclusion Program

The DCISC FFT met with Mike Brass, Maintenance Services Director, and Ken Pazdan, General Maintenance Manager, to review the status of DCP's Foreign Material Exclusion (FME) Program. The DCISC last reviewed the FME Program during its May 2022 Fact-Finding Meeting (Reference 6.5), when it concluded the following:

DCP's performance in Foreign Material Exclusion during Refueling Outage 1R23 was very good.

The purpose of DCP's FME Program is to prevent the undesired and potentially harmful intrusion of foreign materials into plant systems or components. Situations in which this intrusion can most likely occur are during maintenance when normally closed systems and environments are open or during inspections or tests under similar conditions. In such situations, it is important to maintain

control of tools, fasteners, repair parts, replaced parts, safety items, residue resulting from the work, items attached to clothing, and anything else that could become loose and enter a system or environment. The vast majority of FME problems typically occur during plant outages when many system repairs, modifications, inspections, and tests are performed.

DCPP's FME Program is governed by procedure AD4.ID6, "Foreign Material Exclusion Program," Revision 28, dated January 15, 2025, a copy of which was provided to and reviewed by the Fact-finding Team. Mr. Brass reported that the procedure underwent a major revision in 2024 that was driven by several activities to benchmark DCPP's program against others in the industry. The revisions served to align terminology with that used elsewhere in the industry, provide criteria for performance metrics, and clarify definitions, responsibilities and instructions in order to drive the program more towards prevention of problems. The procedure retained the previous classifications of FME issues as follows:

<u>Classification</u>	<u>Description</u>
Condition	A minor or administrative error involving FME practices or processes
Threat	An error in FME implementation occurred that if it had not been detected would have resulted in an Event
Event	A significant event (injury, equipment damage, generation loss, etc.) occurred that was caused by inadequate FME implementation

The FFT inquired about the FME program results for Refueling Outages 1R24 and 2R24, and Mr. Brass reported that there was good performance in FME activities during both outages. At the FFT's request, he provided the following data for the classification of FME issues that were recorded during the outages:

	<u>Conditions</u>	<u>Threats</u>	<u>Events</u>
1R24	15	1	0
2R24	3	0	0
1R25	2	0	0

The FFT inquired as to the nature of the issue classified as a Threat during Refueling Outage 1R24, and PG&E provided a copy of the related Notification (SAPN 51213375). The issue consisted of the finding of debris in the cooling ducts of the motor for Component Cooling Water Pump 1-2. It was concluded that a rag was likely left in the motor following maintenance, and the rag later moved through the cooling ducts without causing any damage to the motor.

Regarding Refueling Outage 1R25 which was in progress at the time of the FFT's meetings, Mr. Brass reported that there were two trends in FME Program deficiencies that had been observed and were being tracked for correction. Minor deficiencies had been observed in controls for the FME Area established in support of the Unit 1 Main Generator internal inspections, and there were two occasions of foreign material being introduced into the Reactor Cavity. The items that were

introduced into the Reactor Cavity were promptly reported and removed, the sources located, and corrective actions implemented. The FFT concluded that DCP's FME Program was performing well with no major issues.

Conclusions: DCP's Foreign Material Exclusion Program was performing well with no major issues.

Recommendations to the DCISC or PG&E: None.

3.6 Intake Structure Tour

The DCISC FFT met with Mike Brass, Maintenance Services Director, and Steve Pengilly, Nuclear Environmental Services Supervisor, for a tour of the Intake Structure and outage work in that area. The DCISC last toured the Intake Structure during its August 2023 Fact-Finding Meeting (Reference 6.6), when it concluded the following:

The DCISC Fact-Finding Team toured the DCP Intake Structure and observed that equipment was in good condition, except for a non-safety Circulating Water Pump seal leak, which was being managed.

At the request of the FFT, Messrs. Brass and Pengilly guided the team in touring the outside Intake Structure area as well as the areas inside the structure where the Circulating Water and Auxiliary Saltwater Pumps for both units were located. At the time of the tour, Unit 1 was in the fourth week of Refueling Outage 1R25 with most major work activities in the area having been completed and cleanup in progress. Areas toured included:

- Top Deck (19' Level) – Traveling Screens, Auxiliary Saltwater Pump Snorkels, Bubble Curtain Equipment
- Middle Level (-2' Level) – Unit 1 Circulating Water Pumps, Screen Wash Pumps and Piping, Auxiliary Saltwater Pumps

Selected pictures of areas toured by the FFT were as follows:



Mr. McWhorter and Dr. Budnitz at Traveling Screens



Auxiliary Saltwater Pump 1-1

Overall, the FFT found that the Intake Structure was clean, orderly, and well lit, with equipment in good condition. Concrete was found to be in good condition with only small amounts of unrepaired degradation from its exposure to the weather and saltwater.

Conclusion: A tour of the Intake Structure found it to be in good condition with only small amounts of concrete degradation.

Recommendations to the DCISC or PG&E: None.

3.7 Observe 0730 Senior Leadership Team Outage Briefing

The DCISC FFT attended the 0730 Senior Leadership Team (SLT) Outage Briefing. The DCISC last observed a 0730 SLT Outage Briefing during its April 2025 Fact-Finding Meeting (Reference 6.7), when it concluded the following:

The April 28, 2025, 0730 Senior Leadership Team Outage Briefing was conducted efficiently and effectively. Major issues and action items were concisely discussed and appropriate direction given by senior leaders.

The SLT Outage Briefing was facilitated by Dan McBride, Operations Director and Shift Outage Director. The purpose of the meeting was to provide the SLT with a forum to review the status of outage activities and review or approve decisions as desired. The desired outcome was stated as, “The leadership team will have personal accountability for making effective decisions and appropriately managing the risk associated with executing the refueling outage and protecting the running unit.”

The FFT was provided with a copy of the meeting agenda which included:

- Reviewing the Desired Outcome
- Previous Meeting Plus/Deltas and Action Items
- Safety, Human Performance, and Radiation Dose Updates
- Plant Status (both outage and operating units)
- Outage Status (schedule, key activities, critical path, high risk activities, discovery items, etc.)
- Emerging Issues Update
- Project Update
- Observation Insights
- Notification Review Team Package Review
- Roundtable and Leadership Message

The FFT observed that the meeting was conducted efficiently with an appropriate focus on managing risk for both the outage and operating units. Major issues and action items were concisely discussed and appropriate direction given by senior leaders.

Conclusions: The May 8, 2025, 0730 Senior Leadership Team Outage Briefing was conducted efficiently and effectively. Major issues and action items were concisely discussed and appropriate direction given by senior leaders.

Recommendation to the DCISC or PG&E: None.

3.8 Large Transformers

The DCISC FFT met with Do Vo, Transmission System Engineer, for an update on the health of Large Transformers at DCP. Dauphine Hou, Harpreet Bhalla, and Jerry Bischof from the California Department of Water Resources (DWR) participated remotely in the meeting. The DCISC last reviewed this system during its July 2023 Fact-Finding Meeting (Reference 6.8), when it concluded the following:

DCPP’s Large Transformers were in acceptable health overall. Several significant maintenance activities are planned during upcoming refueling outages to address

minor issues. The planned maintenance should be sufficient to ensure that the health of the major transformers is sufficient to support a possible extension of operations beyond 2025.

Mr. Vo reported that the health of all the Large Transformers at DCPD was currently good. One of the best indicators of transformer health was the dissolved gas measurements made of oil samples taken from the transformers during outages. The most recent dissolved gas measurements for all DCPD Large Transformers, including Main Transformers, Auxiliary Transformers, and Start-up Transformers (14 in total), found the units to be in generally good condition and with normal monitoring results. Additionally, power factor testing continued to be performed on all transformers every third refueling outage with no deficiencies recently identified, and online gas monitors for the transformers did not indicate any major problems.

Issues affecting Unit 1's Large Transformers, recently completed actions, and planned future actions were as follows:

<u>Transformer</u>	<u>Actions</u>
Main A	Completed full drain/inspection/repair/refill in 1R24 (fall 2023)
Main B, C	Planned full drain/inspection/repair/refill in 1R26 (late 2026)
Main A, B, C	Completed Conservator Bladder Tank repairs in 1R24
Aux 1-1	Completed fan repairs in 1R24 and small leak repair in 1R25 (spring 2025)
Aux 1-2	Completed full drain/inspection/repair/refill in 1R24
Startup 1-1	Completed full drain/inspection/repair/refill and Load Tap Changer replacement in 1R24
Startup 1-2	Completed fan repairs in 1R24

Issues affecting Unit 2's Large Transformers, recently completed actions, and planned future actions were as follows:

<u>Transformer</u>	<u>Actions</u>
Main A, B	Completed full drain/inspection/repair/refill in 2R24 (spring 2024)
Main C	Completed Conservator Bladder Tank repairs in 2R24
Aux 2-1, 2-2	No Major Issues
Startup 2-1, 2-2	Completed full drain/inspection/repair/refill in 2R24

In addition to the above actions, major work activities had been completed on all the Large Transformers to remove external corrosion buildup and recoat external surfaces. The FFT inquired about the results of the internal inspections listed above, Mr. Vo reported that all internal inspections found the transformers to be in good shape internally. For Startup Transformer 2-2, some corrosion was found on connections which were cleaned and tested to confirm that resistance readings across the connections remained satisfactory.

The FFT inquired about the status of a previous plan to obtain the services of an outside consultant to review the health of the Large Transformers and prepare a long-term lifecycle management plan to identify any other actions that may be needed considering the possibility of extended operations.

Mr. Vo reported that the consultant's work was complete, and a final draft of the lifecycle management plan was in review. He explained that the plan generally confirmed that the Large Transformers were in good health based on the consultant's analysis of past data and inspections. The draft report's pending recommendations included performing additional test data reviews, considering the use of new oil additives, and planning for the possible replacement of several of the smaller, older-design transformers should plant operations be extended beyond 2030.

Lastly, Mr. Vo reported that the station was continuing with its plans to refurbish all six spare high voltage transformers and relocate them to an area near the 500kV Switchyard which would be less susceptible to saltwater mist deposition and subsequent corrosion. He stated that work to prepare the location to which the spares would be moved was almost complete, and the transformer moves were expected to occur during the upcoming summer of 2025.

Conclusions: DCP's Large Transformers were in acceptable health overall. During recent refueling outages, several significant maintenance activities were completed which should be sufficient to ensure that the health of the Large Transformers is adequate to support operations through 2030.

Recommendation to the DCISC or PG&E: None.

3.9 Observe Outage Scope Review Team and Daily Notification Review Team Meeting

The DCISC FFT observed a combined meeting of the DCP Outage Scope Review Team (OSRT) and Daily Notification Review Team (DRT). The DCISC last observed a similar meeting during its May 2024 Fact-Finding Meeting (Reference 6.9), when it concluded the following:

The May 8, 2024, meeting of the Outage Scope Review Team and Daily Notification Review Team was conducted efficiently and effectively. The team appropriately reviewed and dispositioned approximately 80 Notifications from the previous shift.

Notifications are electronic documents used in the Corrective Action Program by plant personnel to identify and record plant problems, large or small, for tracking to resolution. Notifications are coded as either "DAs" or "DNs." DAs are for conditions adverse to quality. DNs are for work-only situations in which known corrective actions are to take place. Each day, some 50-100 Notifications are initiated, and each one is promptly reviewed by Work Control and the Control Room Shift Manager. Following the initial reviews, the multi-departmental Notification Review Team meets each weekday to review and approve disposition of the previous day's Notifications. Notifications that may impact plant equipment, operability, reportability, or personnel safety are further reviewed by a separate DRT (such as this meeting) held later in the day.

The FFT was provided a copy of the procedure governing the functions of the DRT, AD7.ID2, "Daily Notification Review Team (DRT) & Standard Plant Priority Assignment Scheme," Revision 45, dated March 12, 2025. The primary responsibility of the DRT is to review equipment-related Notifications for completeness and to direct the creation of any required work orders or tasks with an appropriate designation of work priority. During outage periods (as was

the case during this meeting), the DRT meeting is combined with the OSRT meeting. The functions of the Outage Scope Review Team (OSRT) are covered under procedure AD8.ID5, “Outage Scope Determination and Control Process,” Revision 6, dated October 7, 2024, a copy of which was also provided to the FFT. The primary responsibility of the OSRT is identifying, approving, and controlling refueling outage scope and ensuring outage work is appropriately prioritized. The FFT observed that combining the two meetings into a single meeting appeared to be an efficient process and allowed for new Notifications to be reviewed for work order creation and prioritization simultaneously with determining whether the work order would be added to the scope of the outage in progress at the time of the meeting (Refueling Outage 1R25 in this case). Essentially, the combined OSRT/DRT functioned as the management group who decided whether equipment deficiencies discovered during the outage would be corrected before the end of the outage or deferred for later correction following the outage.

The OSRT/DRT meeting was facilitated by Byron Briley, Work Control Supervisor, and the team reviewed about 40 Notifications from the previous shift and about 20 “bring back” (re-review) Notifications during the meeting. Each member had an opportunity to review the Notifications prior to the meeting and appeared knowledgeable about the notifications under review. Prioritizations for corrective maintenance work orders and decisions about outage scope additions appeared appropriate.

Conclusions: The May 8, 2025, meeting of the Outage Scope Review Team and Daily Notification Review Team was conducted efficiently and effectively. The team appropriately reviewed and dispositioned approximately 40 Notifications from the previous shift.

Recommendation to the DCISC or PG&E: None.

3.10 Observe Corrective Action Review Board

The DCISC FFT observed a Corrective Action Review Board (CARB) meeting. The DCISC last observed a CARB during its May 2024 Fact-Finding Meeting (Reference 6.10), when it concluded the following:

The May 9, 2024, DCPD Corrective Action Review Board (CARB) meeting covered items on the agenda efficiently while allowing adequate time for any participants to question and discuss items of interest in more detail. There was good participation by CARB attendees.

The FFT was provided a copy of the procedure governing the functions of the CARB, OM4.ID15, “Corrective Action Review Board (CARB),” Revision 32, dated October 15, 2024. The CARB’s purpose is to provide a venue for station management to demonstrate commitment to Corrective Action Program (CAP) excellence. The CARB fulfills a need for senior management oversight of the CAP, and this oversight function includes:

- Reviewing Root Cause Evaluations (RCEs) for accuracy, completeness and alignment of the problem, causes, and corrective actions

- Approving extensions to the due dates for Corrective Actions to Prevent Recurrence
- Approving Effectiveness Evaluations for CAP resolutions
- Periodically reviewing CAP metrics to ensure the CAP is meeting management expectations
- Reviewing and dispositioning requests for changes to Cause Evaluations
- Reviewing Notifications screened by the Notification Review Team, which performs the initial screening of all Notifications

The membership of the CARB consists of regular and alternate members designated in writing by the Station Director, and CARB meetings are held as necessary, typically on a weekly basis. This meeting was facilitated by Dennis Hammond, Senior Advising Performance Improvement Coordinator. The agenda for this meeting included the following:

- Safety Minute
- Facilitative Leadership Minute
- Review Desired Outcomes
- Verify Quorum
- Review Previous Meeting Minutes, Action Items, and Evaluation
- Review of Institute of Nuclear Power Operations Event Report 24-02 Response
- Review Oldest Open Corrective Action Notification Task Assignments
- Review Selected Open Significance Level 1 and 2 Work Group Evaluations
- Review Condition Reports
- Review Action Items and Meeting Evaluation

The FFT observed that the meeting was effectively managed, covering items on the agenda efficiently while allowing adequate time for any participants to question and discuss items of interest in more detail. There was good participation by all CARB attendees.

Conclusions: The May 8, 2025, DCPD Corrective Action Review Board (CARB) meeting covered items on the agenda efficiently while allowing adequate time for any participants to question and discuss items of interest in more detail. There was good participation by CARB attendees.

Recommendation to the DCISC or PG&E: None.

3.11 Station Update

The DCISC FFT met with Justin Rogers, Station Senior Director, for a Station Update. The DCISC last received a Station Update during its April 2025 Fact-Finding Meeting (Reference 6.11), when it concluded the following:

DCPD's update on recent station activities was informative, and no new major issues were identified.

Mr. Rogers provided an update on the following recent activities at DCPD as follows:

- Power Production – Unit 1 began its 25th Refueling Outage on April 13 and was in day 26 of the outage at the time of the FFT’s meetings. Unit 2 continued to operate at 100% power with no major issues.
- Major Projects – Projects being completed as a part of Refueling Outage 1R25 were generally proceeding as planned, including:
 - Removal of Reactor Vessel embrittlement Capsule B (removal successfully completed on April 21 and capsule shipped to offsite laboratory in early May)
 - Repairs to the roof of the Condensate Storage Tank
 - Reactor Vessel 10-year In-Service Inspections
 - Digital Rod Control System replacement
 - Intake Structure Traveling Screen replacements
 - High-Pressure Turbine replacement (with expanded repair scope)
 - Main Condenser expansion joint replacement
 - Fuel Transfer equipment upgrades (partial project to be finished during Refueling Outage 1R26 in the fall of 2026)
- Human Performance – One significant injury occurred shortly after the start of Refueling Outage 1R25 when a contract employee fell from a ladder in Containment and suffered a broken foot. Otherwise, human performance had been good during the outage to date.
- Regulatory Performance – Mr. Rogers reported that the NRC completed two specialist inspections, Radiation Protection and In-Service Inspection, with no issues identified.

Conclusion: DCPD’s update on recent station activities was informative, and no new major issues were identified.

Recommendations to the DCISC or PG&E: None.

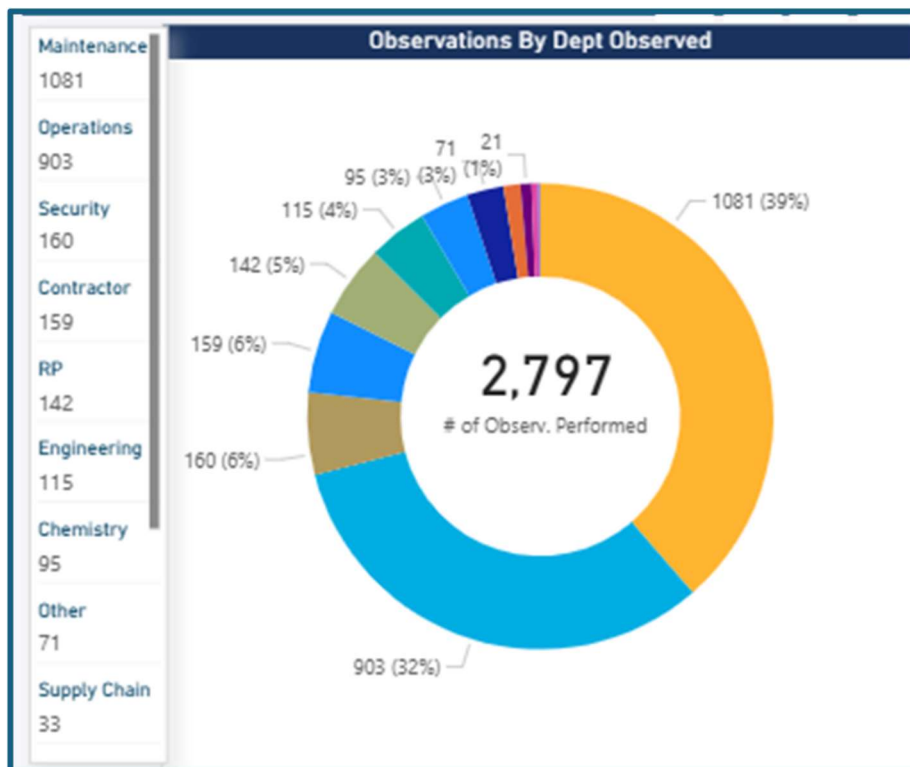
3.12 Management Observation Programs

The DCISC FFT met with Blair Jones, Chief of Staff and Director of Strategy, Performance Improvement (PI), Organizational Effectiveness, and Engagement, and Bill Lalone, PI and Corrective Action Program (CAP) Manager, for an update on the status of the Management Observation Program at DCPD. The DCISC last reviewed the Management Observation Program during its December 2023 Fact-Finding Meeting (Reference 6.12), when it concluded the following:

DCPD’s Management Observation Program was being properly implemented. A large number of observations were being completed, and the observations provided

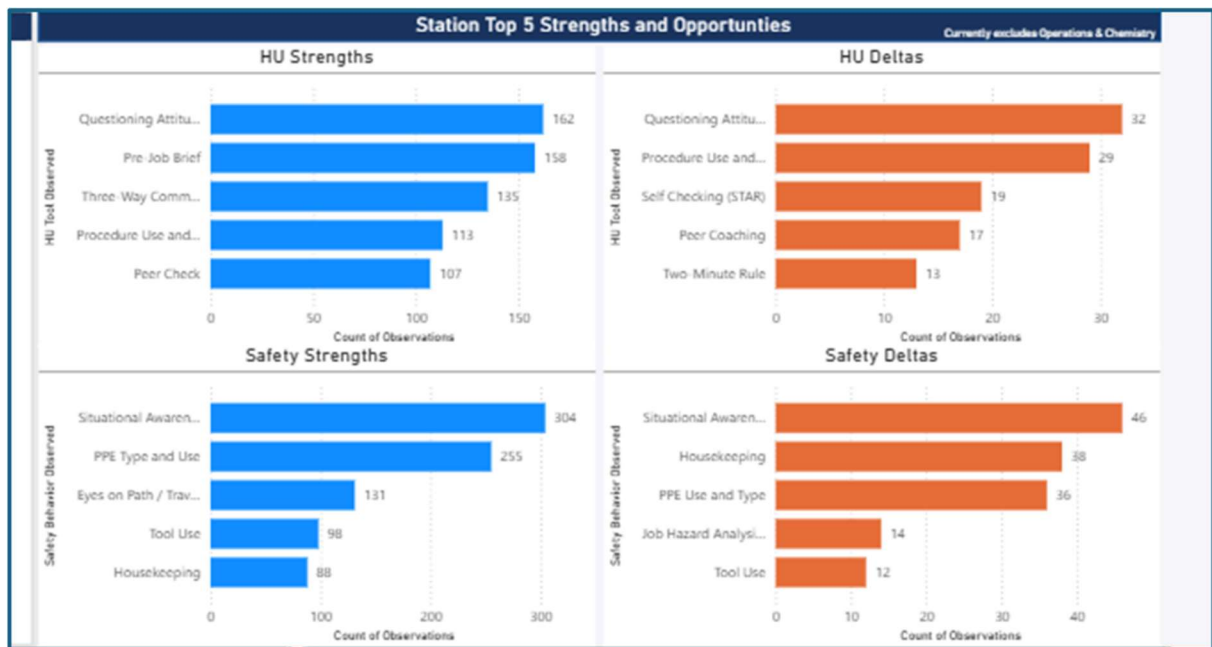
valuable insights into human performance strengths and opportunities at the station.

Mr. Lalone reported that DCP's Management Observation Program continued to be focused on establishing requirements for supervisors to routinely observe employees in the field and discuss their observations with employees in a collaborative fashion. Observation activities generally fell into four areas: 1) general plant observations, 2) line leadership observations (mostly Operations and Maintenance Departments), 3) equipment reliability "What Excellence Looks Like" observations, and 4) management observations of training activities. The management observations during training activities were a part of the industry-accredited training program and tracked separately from the station-wide observation program. The data from all other observations were rolled into a station-wide observation program tracking system. He briefly reviewed the use of the program's tracking software which produced reports showing the number of observations by department, classified the observations as strengths or opportunities, and further classified each observation by the types of strengths or opportunities that were observed (e.g., safety, tool use, situational awareness, communications, self-checking, etc.). The station-wide report showed that there were 2,797 observations performed at the station in the period from January 1 to May 12, 2025, (including portions of Refueling Outage 1R25) broken down by department as follows:



Station Observations by Department (4.5 months)

The FFT noted that the number of observations above was about twice that which was observed for a comparable period during the DCISC's last review in December 2023 and judged this to be an indicator of an active and effective program. The station-wide report's classification of observations and strengths and opportunities was as follows:



Station Observation Strengths and Opportunities (over 120 days)

Mr. Lalone further explained that observations were documented and rolled up into reports that were discussed at departmental Observation Review Meetings (ORMs). The ORM were typically held twice per month to review the results of all observations, and departmental Performance Improvement Coordinators (PICOs) participated in the ORM. The ORM and the topics covered were tracked in part via the Performance Improvement Status Summaries prepared by the Performance Improvement Department as well as by other individual departments. PG&E also regularly provides copies of the Performance Improvement Status Summaries to the DCISC in its monthly documents distribution.

The FFT inquired about staffing in Mr. Lalone's group, and he reported that the Performance Improvement group was staffed with eight individuals and one supervisor. Four of the staff served as PICOs to individual departments, and the others served in various other roles including regularly leading the preparation of Cause Evaluations for various station issues that were documented in the Corrective Action Program.

Conclusions: DCP's Management Observation Programs were being properly implemented. A large number of observations were being completed, and the observations provided valuable insights into human performance strengths and opportunities for improvement at the station.

Recommendations to the DCISC or PG&E: None.

4.0 CONCLUSIONS

- 4.1 DCPD provided an update on corrective actions being taken in response to the DCISC's identification of an unbraced cabinet in December 2024. Corrective actions appeared appropriate and should prevent the recurrence of similar issues in the future. The DCISC will continue to regularly review the status of this program under its Open Items List item number SC-12.**
- 4.2 The planned replacement of DCPD's High-Pressure Turbine was proceeding satisfactorily. The DCISC Fact-Finding Team toured the work area and found that it was clean, well-organized, and provided a safe work environment for employees.**
- 4.3 DCPD's Chemistry Program was performing well with no major issues.**
- 4.4 The regular meetings with DCPD Officers and Directors continue to be beneficial for both organizations.**
- 4.5 DCPD's Foreign Material Exclusion Program was performing well with no major issues.**
- 4.6 A tour of the Intake Structure found it to be in good condition with only small amounts of concrete degradation.**
- 4.7 The May 8, 2025, 0730 Senior Leadership Team Outage Briefing was conducted efficiently and effectively. Major issues and action items were concisely discussed and appropriate direction given by senior leaders.**
- 4.8 DCPD's Large Transformers were in acceptable health overall. During recent refueling outages, several significant maintenance activities were completed which should be sufficient to ensure that the health of the Large Transformers is adequate to support operations through 2030.**
- 4.9 The May 8, 2025, meeting of the Outage Scope Review Team and Daily Notification Review Team was conducted efficiently and effectively. The team appropriately reviewed and dispositioned approximately 40 Notifications from the previous shift.**
- 4.10 The May 8, 2025, DCPD Corrective Action Review Board (CARB) meeting covered items on the agenda efficiently while allowing adequate time for any participants to question and discuss items of interest in more detail. There was good participation by CARB attendees.**
- 4.11 DCPD's update on recent station activities was informative, and no new major issues were identified.**
- 4.12 DCPD's Management Observation Programs were being properly implemented. A large number of observations were being completed, and the observations provided**

valuable insights into human performance strengths and opportunities for improvement at the station.

5.0 RECOMMENDATIONS

Recommendations to the DCISC:

5.1 None.

Recommendations to PG&E:

5.2 The following previous recommendation to PG&E was reviewed during this Fact-Finding Meeting (Section 3.1) and is recommended for closure: PG&E should review why an extent of condition for an unbraced cabinet found by the DCISC in July 2024 did not prevent the identification of a similar condition by the DCISC in December 2024 (P12/24FF-3.6).

6.0 REFERENCES

- 6.1 “Diablo Canyon Independent Safety Committee Thirty-Fifth Annual Report on the Safety of Diablo Canyon Nuclear Power Plant Operations, July 1, 2024 – June 30, 2025,” Scheduled for approval at the October 2025 DCISC Public Meeting, Volume II, Exhibit D.7, Section 3.6, “Workplace Seismic Safety.”
- 6.2 Ibid., Exhibit D.9, Section 3.2, “High-Pressure Turbine Replacement Update and Plant Tour.”
- 6.3 “Diablo Canyon Independent Safety Committee Thirty-second Annual Report on the Safety of Diablo Canyon Nuclear Power Plant Operations, July 1, 2021 – June 30, 2022,” Approved September 28, 2022, Volume II, Exhibit D.2, Section 3.8, “DCPP Chemistry Program.”
- 6.4 “Diablo Canyon Independent Safety Committee Thirty-Fifth Annual Report on the Safety of Diablo Canyon Nuclear Power Plant Operations, July 1, 2024 – June 30, 2025,” Scheduled for approval at the October 2025 DCISC Public Meeting, Volume II, Exhibit D.9, Section 3.11, “Meet with DCPP Officer.”
- 6.5 “Diablo Canyon Independent Safety Committee Thirty-second Annual Report on the Safety of Diablo Canyon Nuclear Power Plant Operations, July 1, 2021 – June 30, 2022,” Approved September 28, 2022, Volume II, Exhibit D.9, Section 3.14, “Foreign Material Exclusion Program.”
- 6.6 “Diablo Canyon Independent Safety Committee Thirty-Fourth Annual Report on the Safety of Diablo Canyon Nuclear Power Plant Operations, July 1, 2023 – June 30, 2024,”

Approved October 10, 2024, Volume II, Exhibit D.3, Section 3.10, “Intake Structure Tour.”

- 6.7 “Diablo Canyon Independent Safety Committee Thirty-Fifth Annual Report on the Safety of Diablo Canyon Nuclear Power Plant Operations, July 1, 2024 – June 30, 2025,” Scheduled for approval at the October 2025 DCISC Public Meeting, Volume II, Exhibit D.9, Section 3.7, “Observe 0730 Senior Leadership Team Outage Briefing.”
- 6.8 “Diablo Canyon Independent Safety Committee Thirty-Fourth Annual Report on the Safety of Diablo Canyon Nuclear Power Plant Operations, July 1, 2023 – June 30, 2024,” Approved October 10, 2024, Volume II, Exhibit D.1, Section 3.7, “Large Transformers.”
- 6.9 Ibid., Exhibit D.9, Section 3.3, “Observe Outage Scope Review Team and Daily Notification Review Team Meeting.”
- 6.10 Ibid., Exhibit D.9, Section 3.11, “Corrective Action Review Board.”
- 6.11 “Diablo Canyon Independent Safety Committee Thirty-Fifth Annual Report on the Safety of Diablo Canyon Nuclear Power Plant Operations, July 1, 2024 – June 30, 2025,” Scheduled for approval at the October 2025 DCISC Public Meeting, Volume II, Exhibit D.9, Section 3.12, “Station Update.”
- 6.12 “Diablo Canyon Independent Safety Committee Thirty-Fourth Annual Report on the Safety of Diablo Canyon Nuclear Power Plant Operations, July 1, 2023 – June 30, 2024,” Approved October 10, 2024, Volume II, Exhibit D.5, Section 3.10, “Management Observation Programs.”