

DIABLO CANYON
INDEPENDENT SAFETY COMMITTEE

(www.dcisc.org)

The meeting will be webcast in real time at:

http://www.slo-span.org/local_webcast/DCISC/stream_index.htm and through <http://www.dcisc.org>.

Committee Members: Robert J. Budnitz
 Peter Lam
 Per F. Peterson

* * * * *

AGENDA

Wednesday & Thursday
October 18-19, 2017
Avila Lighthouse Suites

Point San Luis Conference Room
First & San Francisco Streets
Avila Beach, California

Morning Session - 10/18/2017 – 9:00 A.M.

I CALL TO ORDER - ROLL CALL

II INTRODUCTIONS

ADVISEMENT

The Committee may consider at any time requests to change the order of a listed agenda item. Information distributed to the Committee at a public meeting becomes part of the public record of the DCISC. A copy of written material, pictures, etc. must be provided to the Committee's Legal Counsel for this purpose. Correspondence received and sent by the Committee is on file with the Office of the DCISC Legal Counsel and copies are available upon request. Devices for attendees who may be hearing impaired are available upon request.

III PUBLIC COMMENTS AND COMMUNICATIONS

Anyone wishing to address the Committee on matters not appearing on the Agenda may do so only at this time. The public may comment on any matter listed on the Agenda immediately following the time the matter is considered by the Committee. *There will be a time limit established by the Presiding Officer for each speaker. No action will be taken by the Committee on matters brought up under this item but they may be referred to staff for further study, response or action.*

IV ACTION ITEMS

- | | | |
|----|--|---------------------|
| A. | DCISC 27th Annual Report on
Safety of Diablo Canyon Operations;
July 1, 2016 - June 30, 2017 | Discussion/Approval |
| B. | Update on Financial Matters, &
Committee Activities During 2017-2018 | Discussion/Action |
| C. | Discussion of Open Items List | Discussion/Action |

V COMMITTEE MEMBER REPORTS AND DISCUSSION

- A. Public Outreach, Site Visits and Other
Committee Activities; Scheduling and Confirmation
of Future Fact-findings and Public Meetings,
Public Plant Tours and Outreach Activities

VI STAFF - CONSULTANT REPORTS &
RECEIVE, APPROVE AND AUTHORIZE TRANSMITTAL
OF FACT-FINDING REPORT TO PG&E

- A. Ferman Wardell:
Fact-finding Topic; Report on and Approval of
July 25-26, 2017 Fact Finding Report
- B. Robert Rathie:
Administrative, Regulatory and Legal Matters

VII ADJOURN MORNING MEETING

Afternoon Session - 10/18/2017 – 1:30 P.M.

VIII RECONVENE FOR AFTERNOON MEETING

IX COMMITTEE MEMBER COMMENTS

X PUBLIC COMMENTS AND COMMUNICATIONS

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XI STAFF - CONSULTANT REPORTS &
RECEIVE, APPROVE AND AUTHORIZE TRANSMITTAL
OF FACT-FINDING REPORT TO PG&E (Cont'd.)

- C. Ferman Wardell:
Fact-finding Topic; Report on and Approval of
August 9-10, 2017 Fact Finding Report
- D. Richard D. McWhorter Jr.:
Fact-finding Topic; Report on and Approval of
September 6-7, 2017 Fact Finding Report

XII INFORMATIONAL DISCUSSION BY THE COMMITTEE

- A. 1) Committee Discussion of Future Plans and Committee Effectiveness:
Including Conduct of Fact Findings and Public Meetings;
Development and Utility of the Annual Report; Outreach to
Government Officials Appointing Members; Engagement of
Consultants for Specific Projects; and the Committee's Interaction
with PG&E

XIII ADJOURN AFTERNOON MEETING

Evening Session – 10/18/2017 – 5:15 P.M.

XIV RECONVENE FOR EVENING MEETING

XV COMMITTEE MEMBER COMMENTS

XVI PUBLIC COMMENTS AND COMMUNICATIONS

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XVII INFORMATION ITEMS BEFORE THE COMMITTEE

A. Informational Presentations Requested by the Committee of PG&E Representatives

- 1) State of the Plant Update including Key Events, Highlights, INPO Evaluation Results, and Station Activities since the DCISC's Last Public Meeting in June 2017
- 2) Performance during the 20th Refueling Outage for Unit 1(1R20) Including Key Activities, Performance Indicators, Results Achieved, Fuel and Steam Generator Inspection Results, Open Items and Plans for the 20th Refueling Outage for Unit 2(2R20)
- 3) Update on the Joint Proposal
- 4) Overview of the Decommissioning Process and Initial Planning

XVIII ADJOURN EVENING MEETING

Morning Session - 10/19/2017 – 9:00 A.M.

XIX RECONVENE FOR MORNING MEETING

XX COMMITTEE MEMBER COMMENTS

XXI PUBLIC COMMENTS AND COMMUNICATIONS

Anyone wishing to address the Committee on matters not appearing on the Agenda may do so only at this time. The public may comment on any matter listed on the Agenda immediately following the time the matter is considered by the Committee. *There will be a time limit established by the Presiding Officer for each speaker. No action will be taken by the Committee on matters brought up under this item but they may be referred to staff for further study, response or action.*

XXII CONSENT AGENDA

Routine items which the Committee can approve with a single motion and vote. A member may request that any item be placed on the regular agenda for separate consideration.

- | | | |
|----|-------------------------------------|---------------|
| A. | Minutes of June 7-8, 2017, Meeting: | Approve |
| B. | Documents Provided to the Committee | Informational |

XXIII INFORMATION ITEMS BEFORE THE COMMITTEE (Cont'd.)

- ### B. Informational Presentations Requested by the Committee of PG&E Representatives (Cont'd.)

- 5) Update on Spent Fuel Storage Technical Issues Including PG&E & Industry Activities Related to Study of Potential Corrosion of Multi-Purpose Canisters (MPCs), Lessons Learned from Spent Fuel Activities at Decommissioned Facilities (including SONGS), and the Potential Implications for Accelerating Spent Fuel Transfer to the ISFSI and Decreasing Spent Fuel Pool Inventory
- 6) Update on the Status of NRC Performance Indicators, Licensee Event Reports, NRC Notices of Violation, the “95001” Inspection, and Issues Raised by NRC Resident Inspectors

XXIV ADJOURN MORNING MEETING

Afternoon Session - 10/19/2017 – 1:00 P.M.

XXV RECONVENE FOR AFTERNOON MEETING

XXVI COMMITTEE MEMBER COMMENTS

XXVII PUBLIC COMMENTS AND COMMUNICATIONS

Anyone wishing to address the Committee on matters not appearing on the Agenda may do so now. The public may comment on any matter listed on the Agenda at the time the matter is being considered by the Committee. *There will be a time limit established by the Presiding Officer for each speaker. No action will be taken by the Committee on matters brought up under this item but they may be referred to staff for further study, response or action.*

XXVIII INFORMATION ITEMS BEFORE THE COMMITTEE (Cont’d.)

- C. Informational Presentations Requested by the Committee of PG&E Representatives (Cont’d.)
 - 7) Overview of Regulations and PG&E Programs for Classification of Structures, Systems and Components
 - 8) Status of Completing the Transition to NFPA-805 Fire Protection Regulations, Summary of the Advantages, Disadvantages, Lessons Learned, and Safety Insights Gained from the Transition

XXIX CONCLUDING REMARKS & DISCUSSION BY COMMITTEE MEMBERS OF FUTURE DCISC ACTIVITIES

- A. Future Actions by the Committee
- B. Further Information to Obtain/Review
- C. Scheduling of Future Site Visits, Agenda Items Study Sessions and Meetings

XXX ADJOURNMENT OF EIGHTY-EIGHTH PUBLIC MEETING

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The DCISC’s policy is to schedule its public meetings in locations that are accessible to people with disabilities. The Avila Lighthouse Suites Point San Luis Conference Facility is a wheelchair accessible facility. A person who needs a disability-related accommodation or modification in order to participate in the meeting may make a request by contacting the DCISC office at (800) 439-4688 or by sending a written request to the DCISC office at 857 Cass Street, Ste. D., Monterey, CA 93940. Providing your request at least five business days before the meeting will help ensure availability of the accommodation.

DIABLO CANYON INDEPENDENT SAFETY COMMITTEE**AGENDA TRANSMITTAL FORM**

MEETING DATE:	October 18, 2017
AGENDA ITEM:	IV-A
AGENDA TITLE:	DCISC 27th Annual Report on Safety of Diablo Canyon Operations; July 1, 2016 - June 30, 2017

CONSENT [☐] ACTION [XX] INFORMATION [☐]

The Settlement Agreement creating the DCISC provided that “The Committee shall prepare an annual report and such interim reports as it deems appropriate, which reports shall include any recommendations of the Committee.” A draft report covering Fiscal Year 2016-2017 has now been prepared by Committee Members Budnitz, Lam and Peterson, with contributions from the Technical Consultants and Legal Counsel, and is presented at this meeting for consideration and adoption. This is the Committee’s twenty-seventh annual report.

Upon adoption, the Settlement Agreement directs that the Report shall be provided first to PG&E, and that PG&E will respond in writing within 45 days. PG&E’s response shall be made a part of the Report, which will then be submitted to the California Public Utilities Commission, the Governor, the Attorney General and the California Energy Commission.

RECOMMENDED COMMITTEE ACTION: Motion to approve the DCISC 2016-2017 Twenty-Seventh Annual Report on Safety of Diablo Canyon Operations and to forward same to PG&E for its response, and upon receipt of that response, submit and file the completed report as provided by the Settlement Agreement.

Diablo Canyon Independent Safety Committee

**TWENTY-SEVENTH ANNUAL REPORT ON THE SAFETY OF
DIABLO CANYON NUCLEAR POWER PLANT OPERATIONS**

July 1, 2016 - June 30, 2017

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Exhibits

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 - B.2 Agenda for October 19-20, 2016 Public Meeting
 - B.3 Minutes of October 19-20, 2016 Public Meeting
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Ferman

- 1.0 Summary
- 2.0 Introduction
- 3.0 Discussion
 - 3.1. Meeting of DCISC Member Peterson with DCPD CNO Ed Halpin
 - 3.2. Meeting with NRC Resident Inspector
 - 3.3. Salt Deposition Rates
 - 3.4. Safety/Security Interface and Accidental Discharge of Weapons
 - 3.5. Reactor Coolant Pump Thermal Shutdown Seals
 - 3.6. Emergency Diesel Generator (EDG) Health
 - 3.7. Fire Doors
 - 3.8. Design Quality
 - 3.9. FLEX Training
 - 3.10. Independent Spent Fuel Storage Installation (ISFSI) Fuel Loading
 - 3.11. DCPD Safety and Wellness Expo and Barbeque Throwdown
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 - 3.2. Plant Protection System Upgrades
 - 3.3. Review of Operations Human Performance and Operations Excellence Plan
 - 3.4. Review of Operator Aging and Retention
 - 3.5. DCISC Member Discussion with DCPD Senior Manager
 - 3.6. Crane Program Health
 - 3.7. Containment Spray System Update
 - 3.8. Meeting with NRC Acting Senior Resident Inspector
 - 3.9. Probabilistic Risk Assessment Program
 - 3.10. Updated Seismic Probabilistic Risk Assessment
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- 6.0 References

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Ferman

- 1.0 Summary
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- 3.0 Discussion
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 - 3.2. Self-Assessment Program
 - 3.3. Annual Radiation Release and Radiation Environmental Operating Reports
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 - 3.5. Dr. Lam Meeting with DCPD Site Vice-President Jim Welsch
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Ferman

- 1.0 Summary
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- 3.0 Discussion
 - 3.1. Observe November 2, 2016 Ingestion Pathway Evaluated Emergency Exercise
 - 3.2. Meet with NRC Senior Resident Inspector
 - 3.3. National Fire Protection Association (NFPA)-805 Progress
 - 3.4. DCPD Audit Program Update and Results of 2016 Audits
 - 3.5. Reactor Coolant System Process Control System Health/Update
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- 3.0 Discussion

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- 3.2. Extent of Condition Evaluation for Emergency Diesel Generator Trip Pushbutton Covers
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- 3.5. Update on National Fire Protection Association (NFPA) 805 Program Implementation Status and Remote Hot Shutdown Panels
- 3.6. Operations Focus Daily Briefing and Accompanying Operator on Rounds
- 3.7. Probabilistic Risk Assessment (PRA) Analysis for NRC White Finding
- 3.8. Long Term Capital Project Planning Under the Joint Proposal
- 3.9. DCISC Member Discussion with DCPD Senior Manager
- 3.10. Observation of Operations Continuing Training Session
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D.6 Report on Fact Finding Meeting at DCPD on January 18-19, 2017
Ferman

- 1.0 Summary
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- 3.0 Discussion
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 - 3.2. Emergency Diesel Generator Health and Status
 - 3.3. Buried Piping and Tanks Program
 - 3.4. Large Transformer Health
 - 3.5. Meet with NRC Senior Resident Inspector
 - 3.6. Margin Management Program
 - 3.7. Meet with DCPD Vice-President, Nuclear Generation
 - 3.8. Results of November 2, 2016 Emergency Exercise
 - 3.9. Local Intense Precipitation and Tsunami Status
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D.7 Report on Fact Finding Meeting at DCPD on March 8-9, 2017

- 1.0 Summary
- 2.0 Introduction
- 3.0 Discussion
 - 3.1. Meet with NRC Senior Resident Inspector
 - 3.2. Fire Protection Program and System Health
 - 3.3. Independent Spent Fuel Storage Installation (ISFSI) Operations
 - 3.4. Auxiliary Building Ventilation System Health

- 3.5. Centrifugal Charging Pump System Health
- 3.6. DCISC Member Discussion with DCPD Senior Director of Nuclear Services
- 3.7. Reactor Vessel Material Surveillance Program
- 3.8. Operability Determination Program
- 3.9. Status of the Joint Proposal
- 3.10. Employee Concerns Program
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D.8 Report on Fact Finding Meeting at DCPD on March 22-23, 2017
Ferman

- 1.0 Summary
- 2.0 Introduction
- 3.0 Discussion
 - 3.1. Attend Plant Health Committee Meeting
 - 3.2. Refueling Equipment Readiness
 - 3.3. 1R20 Outage Safety Plan
 - 3.4. Safety System Functional Failures
 - 3.5. Status of Major Regulatory Issues
 - 3.6. Classification of Structures, Systems, and Components
 - 3.7. Compressed Air System Health
 - 3.8. Observe Operator Rounds
 - 3.9. Quality Verification Top Issues and Pre-NIEP Self-Assessment
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 - 3.11. Nuclear Safety Oversight Committee Summary Meeting
 - 3.12. Nuclear Safety Culture Health and Survey
- 4.0 Conclusions
- 5.0 Recommendations
- 6.0 References

D.9 Report on Fact Finding Meeting at DCPD on May 10-11, 2017
Ferman

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- 2.0 Introduction
- 3.0 Discussion
 - 3.1. Meet with NRC Senior Resident Inspector
 - 3.2. Seismically Induced Seismic Interactions
 - 3.3. Winter Storm Events
 - 3.4. Component Cooling Water System Health and Tour
 - 3.5. Tour Non-Containment Outage Work
 - 3.6. Tour Containment and View Containment Closure Video
 - 3.7. Outage Schedule/Status Updae
 - 3.8. Meet with DCPD Officer – Jim Welsch

- 4.0 Conclusions
- 5.0 Recommendations
- 6.0 References

- E. Record of DCISC Tours of DCP
Ferman
- F. DCISC Open Items List
Ferman
- G. DCISC Public Contacts
 - G.1 DCISC Telephone/Correspondence Log
 - G.2 DCISC Correspondence
 - G.3 Comments Received at Public Meetings
- H. Past DCISC Recommendations and PG&E Responses
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- I. DCISC Informational Brochure
- J. Glossary of Terms
Ferman

DIABLO CANYON INDEPENDENT SAFETY COMMITTEE

AGENDA TRANSMITTAL FORM

MEETING DATE:	October 18, 2017
AGENDA ITEM:	IV-B
AGENDA TITLE:	Update on Financial Matters and DCISC Activities During 2017 -2018

CONSENT [☐] ACTION [☐] INFORMATION [☒]

Staff Summary: It is expected that the Committee Members will hold a discussion regarding Committee financial matters and DCISC planned activities during 2017 and 2018.

The Actual and Proposed DCISC Fact-Finding and Public Meeting Items, with Key Dates, prepared by Committee Consultant Wardell is provided for your use in reviewing and planning Committee activities.

RECOMMENDED COMMITTEE ACTION: As appropriate

DCISC Fact-Finding and Public Meeting Agenda Items for 2017-2018

July 25-26, 2017 Fact-finding Meeting (PFP, RFW)

1. Meet with NRC Resident Inspector
2. Fire Doors
3. Annual Radiological Release Report
4. Annual Radiological Environmental Monitoring Report
5. Control Room Ventilation System
6. Direct Current (DC) Power System
7. Plant Health Committee
8. Management Observation Program
9. Nuclear Fuel Performance
10. Independent Spent Fuel Storage Installation
11. DCPD Safety Culture
12. Use of FLEX Equipment to Reduce Plant Risk
13. Cyber Security

August 9-10, 2017 Fact-finding Meeting (PL, RFW)

1. Meet with Senior NRC Resident Inspector
2. Containment In-Service Inspection
3. Radioactive Waste Processing Systems
4. DCISC Member Meet with DCPD Officer
5. Steam Generator Health
6. Equipment Qualification Process
7. Engineering Excellence Plan
8. Observe Chemistry Sampling Process
9. Operator Staffing Adequacy
10. Independent Spent Fuel Storage Installation (ISFSI) Loading Campaigns

September 6-7, 2017 Fact-finding Meeting (RJB, RDM)

1. Plant Health Committee
2. Non-seismic Probabilistic Risk Assessment Programs
3. National Fire Protection Association (NFPA) 805 Program
4. Maintenance Department Performance
5. Foreign Material Exclusion Program
6. Institute for Nuclear Power Operations Evaluation Preparations
7. Local Intense Precipitation Analysis
8. Tsunami Hazard Analysis
9. Meet with NRC Senior Resident Inspector
10. Seismic Probabilistic Risk Assessment Program
11. Auxiliary Saltwater System Health
12. DCISC Member Meet with DCPD Officer

October 18-19, 2017, Public Meeting

1. State of the Plant Update
2. Performance During the 20th Refueling Outage
3. Update on the Joint Proposal
4. Update on the Decommissioning Plan

5. Update on Spent Fuel Storage Technical Issues
6. Update on the Status of NRC Performance Indicators
7. Overview of Regulations and PG&E Programs for the Classification of Structures, Systems and Components
8. Status of Completing the Transition to NFPA-805

October 30-31, 2017 (PL, RFW) (Proposed Agenda)

1. Meeting with the Senior NRC Resident Inspector
2. Latest Status of the Joint Proposal
3. Status of Staff Retention/Recruitment Status
4. Dry Cask Storage Loading
5. Decommissioning Status and Issues
6. Meeting with DCPD Senior Management
7. Extensive Briefing on "Plant Affordability"
8. Status and Scope of Employee Communications Process
9. NRC Information Notice 2017-04 (including reference therein to a high energy arcing fault on 12kV bus on May 15, 2000)

November 14-15, 2017 Fact-finding Meeting (RJB, RFW)

December 12-13, 2017 Fact-finding Meeting (PFP, RDM)

January 17-18, 2018 Fact-finding Meeting (PL, RFW)

February 7-8, 2018 Public Meeting

March 6-7, 2018 Fact-finding Meeting (RJB, RDM)

April 18-19, 2018 Fact-finding Meeting (PL, RFW)

May 2-3, 2018 Fact-finding Meeting (PFP, RDM)

June 13-14, 2018 Public Meeting

July 10-11, 2018 Fact-finding Meeting (PFP, RFW)

August 21-22, 2018 Fact-finding Meeting (PL, RDM)

September 5-6, 2018 Fact-finding Meeting (RJB, RFW)

October 10-11, 2018 Public Meeting

DCPD 2017-2019 Key Dates

NSOC Meetings (DCISC invited only to the 2 hour exit meeting on the final day)

January 8 – 11, 2018

May 14 - 17
October 15-18

Refueling Outages

1R20 April 23 – July 6, 2017
2R20 February 11 – March 17, 2018
1R21 February 4 – March 8, 2019
2R21 September 29 – December 8, 2019

Emergency Preparedness

TBD

DIABLO CANYON INDEPENDENT SAFETY COMMITTEE	
AGENDA TRANSMITTAL FORM	
MEETING DATE:	October 18, 2017
AGENDA ITEM:	IV-C
AGENDA TITLE:	Consideration of Issues on the Open Items List
CONSENT [] ACTION [X] INFORMATION [X]	
Staff Summary: It is anticipated that the committee will hold discussion concerning the items appearing on its Open Items List prepared by Committee Consultant Wardell.	
RECOMMENDED COMMITTEE ACTION: As appropriate, provide direction.	

Diablo Canyon Independent Safety Committee Open Items List

Open Item Type:

M= Monitor

F = Follow-up

I = Issue

Items in Italics are new or revised

ITEM NO.	TYPE	OPEN ITEM CATEGORY/DESCRIPTION	Last Actions	Next Action
CO		Conduct of Operations (CO)		
CO-5	M	Clearance Process Performance & Improvements. [Reviewed Outage 1R18 results at May 2014 FF and 2R18 at 1/22/15 FF: no clearance problems.] [2R19 outage results on 6/16PM agenda.] [<i>Include in Item OM-4 & delete here.</i>]	5/14FF 1/15FF	<i>Delete</i>
CO-7	M	Review DCCP storm response experience and strategy every two years [or as necessary] during or after annual winter storm season.	4/15FF 5/17FF	Each spring
CO-8	M	Monitor all reactor trips – automatic and manual (review trip LERs at public meetings). [No trips since 2014.]	7/11FF 1/14FF 8/14FF	Post-trip FFs & PMs
CO-9	F	Reactivity Management – review every 18 months. [Reviewed Reactivity Management 5/16FF – satisfactory.]	8/14FF 5/16FF	2Q18FF
CO-10	M	Mispositioning Errors (Equipment Status) – monitor the status of mispositioning errors and actions to resolve. [Reviewed at 1/15FF – satisfactory.]	6/14FF 11/15FF	Post-2R20
CO-11	M	Operator concerns and issues – review periodically the status of operator concerns and issues. [Reviewed Ops Human Performance & Ops Excellence Plan 8/16FF – satisfactory.]	7/15FF 8/16FF	12/17FF
CO-13	M	Review any implementations of the CAISO load following policy that result in DCCP transients. Review any initiatives to operate DCCP in different modes, such as load following due to renewable energy fluctuations, during its final years of operation.	6/16PM 3/16FF	12/17FF PFP
CO-14	F	The DCISC team found the operator retention project to be effectively managed but the Committee should follow this issue closely with reference to licensed operators and well as the station in general. [<i>Reviewed operator staffing adequacy 8/17FF – satisfactory.</i>]	10/16PM 6/17PM <i>8/17FF</i>	3Q17FF 2/18PM
CM		Conduct of Maintenance (CM)		
CM-7	I	Review PG&E's progress in complying with (1) the amendment to 10CFR50.55a, which provides the requirements for <i>ISI of containment structures (degradation)</i> and (2) ASME Code requirements for steel liner weld inspections. [<i>Reviewed Unit 1 visual internal weld inspection at 8/17FF - satisfactory</i>]	7/12FF <i>8/17FF</i>	<i>2R20</i> <i>4/18FF</i>
CM-10	M	On-line Maintenance: review the implementation of on-line maintenance bi-annually, including the 12-week Rolling Maintenance Schedule about how well it is working & impacting risk. Review trend of amount of on-line maintenance. DCCP Assessment of Maintenance Risk and On-Line Maintenance Risk Procedures have been substantially upgraded with the addition of an Integrated Risk Review Team [Reviewed on-line maintenance risk 4/16FF – satisfactory.]	1/12FF 9/13FF 6/14FF 4/16FF	2Q18FF

October 18-19, 2017 Public Meeting

FF = Fact-finding Meeting

PM = Public Meeting

Q=Quarter

CM-13	M	Review Maintenance Department performance measures, staffing, etc. approximately annually. [Reviewed Trouble-shooting 3/16FF – satisfactory.]	3/16FF <i>9/17FF</i>	<i>4Q18FF</i>
CM-14	M	Portable Electronic Device Use and Plans for Use of Wireless Technology within the Power Block – DCCP Electronic Device Project is focused on increasing the use of electronic devices, including tablets, in connection with maintenance tasks and for recording data during inspection rounds. This is intended to improve efficiency and reduce paper. A few electronic work packages have been issued. A second project involves use of electronic devices and increased use of wireless information technology (IT) within the Power Block. The Power Block consists of those portions of the plant used to generate electricity including the Turbine Building, the Auxiliary Building and the Control Rooms. One of the problems with use of wireless technology is the potential for radio interference with a plant control system, which must be properly shielded and protected. The DCISC team concluded both projects appear to be beneficial and Mr. Wardell recommended the DCISC continue to follow these projects as they are being implemented. [Review electronic work packages.] [Reviewed at 9/16FF – satisfactory.] <i>PPF: how is data being managed?</i>	9/16FF	12/17FF <i>PPF</i>
EN		Engineering Program (EN)		
EN-16	F	DCPP Systems – review a system (or structure or component), system health, long-term plan, Maintenance Rule performance & walkdown with System Engineer at FFs. [Note: Systems reviewed are listed with dates at the end of the Open Items List.]	See list at end of OIL	Regularly
EN-19	F	Review every 12-18 months major Engineering Programs, including Configuration Management, Management, System Engineering (system health & long-term plans), Valve Testing, Margin Management, Staffing, etc. [Note: Programs reviewed are listed with dates at the end of the Open Items List.]	See list at end of OIL	Regularly
EN-20	F	Each Member should review or observe Plant Health Committee meetings. [Note: next action changed to “Regularly” and noted in table at the end of the OIL.] Ferman or Rick will check to see what other meetings would be of interest to the DCISC. <i>{Are there other regular meetings the DCISC should attend?}</i>	See list at end of OIL	Regularly
EN-31	F	The fact-finding team received an overview of the [Engineering Excellence] plan and should follow up in the future with a more detailed review of selected elements of the plan.	6/16PM <i>8/17FF</i>	<i>8/18FF</i>
HP		Human Performance: Human Errors and Improving Safety & Efficiency of Plant Performance		
HP-1	M	Review human performance & human behavior items (including error reduction programs, HP PIs, aberrant behavior statistics, FFD, stress reduction programs, Personnel Accountability Policy, Human Performance Steering Committee & Subcomm, Centers of Excellence, Org. Development). [Reviewed Ops Human Performance at 8/16FF – satisfactory.]	3/15FF 8/16FF	<i>Post-2R20</i> <i>4/18FF</i> RJB
HP-18	M	Review biennially operator aging, physical fitness, “no solo” issues, attention enhancement, stress management, & incentives for operator focus. [Reviewed 8/16FF – satisfactory.]	3/14FF 8/16FF	3Q18FF
HP-25	M	Further observations and improvements in the Management Observation Program should be reviewed by DCISC. <i>[Reviewed 7/17FF – satisfactory.]</i>	10/15PM <i>7/17FF</i>	<i>3Q18FF</i>
HS		Health, Nuclear Safety and Safety Conscious Work Environment		
HS-6	F	Follow DCCP progress in establishing/improving its safety culture (and its subset Safety Conscious Work Environment, including Safety Culture Monitoring Panel, and including Employee Concerns & Differing Professional Opinion Programs).	4/16FF 3/17FF <i>7/17FF</i>	<i>3Q18FFF</i>
PI		Performance Improvement Programs		

PI-1		DCPP Performance Improvement Programs: Corrective Action, Self-Assessment, Operating Experience [and line use of OE], Benchmarking, etc. Programs reviewed are listed with dates at the end of the Open Items List.]	See list at end of OIL	At least once per year
EP		Emergency Preparedness (EP)		
EP-2	M	Attend and observe DCCP emergency drills and exercises annually [including Hostile Action Based Exercises], paying special attention to JMC communications to the media and public, including radiation release communications to the public, <i>use of social media</i> , coordination of information release with SLO County, and extension of drills to better exercise FMTs & JMC. Consider public participation in drills.	9/9/15 11/16FF 1/17FF 2/17PM	Next exercise
EP-5	F	DCPP use of social media for emergency response. [Reviewed social media use with DCCP and SLO County at 1/16FF – satisfactory] [Limited use noticed at 11/2/16 exercise.] <i>[Added to item EP-2 above. Delete here.]</i>	5/14FF 1/16FF	<i>Delete</i>
RA		Risk Assessment and Management (RA)		
RA-5	M	Review overall [non-seismic] PRA program annually. Include Fire PRA Upgrade & Shutdown Analysis in next review. Much work underway (including plant specific shutdown risk analysis). Review PRA Group resources/capabilities. Turbine Bldg. (CCW & Condenser) internal flooding. Include external flooding and tsunami risk (see SC-6).	3/15FF 6/15FF 8/16FF <i>9/17FF</i>	<i>9/18FF</i> RJB
RA-6	F	Monitor Seismic Fragility Analysis progress. [Reviewed at 8/16FF – satisfactory.]	8/16FF	<i>11/17FF?</i> RJB
RA-7	F	Review Seismic PRA annually. [Reviewed Seismic PRA 8/16FF – satisfactory.]	<i>9/17FF</i>	<i>9/18FF</i>
NS		Nuclear Safety Oversight and Review (NS)		
NS-5	M	Monitor NSOC meetings periodically to observe their processes and their review of nuclear safety issues. [Reviewed at 11/15FF – satisfactory.] <i>[2018 NSOC schedule not yet available.]</i>	11/15FF 3/17FF	Next meeting
NS-9	M	Monitor DCCP's program to track INPO Areas for Improvement. Review with DCCP INPO Coordinator. Review after mid-cycle review. <i>[Biennial INPO Evaluation Sep 2017.]</i>	9/16FF 9/17FF	<i>4Q17FF</i>
RP		Radiation Protection (RP)		
RP-3	M	Regularly review outage RP performance.	11/15FF 2/16PM	1R20 <i>10/17PM</i>
RP-12	M	Review annual DCCP radiological release report each year. Review at Summer or Fall FFs. [Reviewed radiation release reports 9/16FF – satisfactory.]	9/16FF <i>7/17FF</i>	
RP-13	F	The PHC also reviewed the Radiation Monitoring System, which is white status for Unit-1 (U-1) and in yellow status for Unit-2 (U-2) because of equipment reliability problems due to aging. <i>[Review re: Joint Proposal.]</i>	11/14FF 3/16FF	4Q17FF
QP		Quality Programs (QP)		
QP-3	M	Review the activities, organization and results of QV audits as well as PG&E's outside biennial audits, including timeliness of corrective actions. Review annually – include 4 th quarter QPAR with yearly results.	11/16FF 3/17FF	1/18FF
QP-9	F	Software QA Program: SQA Program determined satisfactory in Sept. 2006 FF meeting. [Reviewed at December 2010 FF – satisfactory.] [Reviewed Cyber Security 12/15FF – satisfactory.]	12/13FF 12/15FF	4Q17FF
NF		Nuclear Fuel Performance (NF)		

NF-9	M	Nuclear Fuel Performance & Issues (review after RFOs). [Reviewed at 11/16FF – satisfactory.] [2/17PM: Dr. Peterson remarked that the Committee will want to follow up on Mr. Geesman's concerns as the question of the storage of damaged fuel was not addressed during the fact-finding he conducted with Mr. McWhorter. Mr. McWhorter stated that fundamentally damaged fuel is likely to be one pin that has a crack and has leaked fission product gases and, as that assembly would have been in the spent fuel pool long enough, it would not melt and all the gas would likely have been released and it would take a great number of such assemblies to produce a significant release but that number would be worth knowing.]	6/14FF <i>7/17FF</i>	Each RFO <i>4/18FF for 2R20</i>
ER		Equipment Reliability and Life Cycle Management (ER)		
ER-5	M	Monitor the Equipment Reliability Process approximately annually. The indicators for Deficient Critical Components Backlog and Operational Work-arounds rated as needing improvement and the DCISC should continue its review of this item in the future. [Reviewed critical equipment clock resets 4/16FF – satisfactory.]	6/15F 7/15FF 4/16FF	1Q18FF
OE		Organizational Effectiveness & Development (OE)		
OE-1	F	Review DCCP Operating Plan each January after development. [Reviewed at 1/16FF & on agenda for 2/16PM.]	1/16FF 2/17PM	2/18PM
SE		System and Equipment Performance/Problems (SE)		
SE-26	M	Review reactor pressure vessel compliance status after next set of surveillance samples is analyzed and effective vessel lifetime projections are updated. [Reviewed 3/17FF – satisfactory.]	3/16FF 3/17FF	2Q18FF 2R20
SE-39	F	Review and tour the inspections and repairs of concrete Intake Structures following selected refueling outages. [Reviewed at 7/09 FF, 6/13 FF, and 11/14FF – satisfactory.]	7/09 FF 6/13FF 11/14FF	After applicable RFOs <i>(11/17?)</i>
SE-40	F	Monitor the status of transformers & leakage, failures, corrective actions. Follow status of transformer protection barrier. [<i>Protective wall schedule delayed until R21 outages. DCISC follow-up needed.</i>] [<i>Reviewed 1/17FF – satisfactory.</i>]	4/13FF 12/14FF 2/15PM 1/17FF	1Q18FF
SE-42	F	Safety System Functional Failures – review annually. [Reviewed at 9/15FF – much improvement – continue to monitor.] [Reviewed 3/22/17FF – much improvement.]	3/16FF 3/17FF	3Q18FF
SE-45	F	Control Room Ventilation System Issues. This (Control Room Ventilation System licensing basis change) is expected to be completed by the end of 2015. Mr. Wardell suggested the DCISC review this issue when DCCP submits its license amendment (LAR) to the NRC and following NRC approval of the LAR. [Reviewed 5/16FF – satisfactory. NRC approval expected mid-2017.] [NRC gave approval of the LAR for use of Alternate Source Term 3/17. <i>DCISC should follow up in early 2018 on status of issue.</i>]	6/13PM 3/14FF 5/16FF <i>7/17FF</i>	<i>1Q18FF</i>
SE-47	F	The DCISC concluded the station continues to set high performance goals and is maintaining effective control of secondary water chemistry and is responding proactively to identify issues. Review all Chemistry in future. [Reviewed 9/15FF – excellent performance.] [Reviewed at 4/16FF – satisfactory.]	10/13P 9/15FF 4/16FF	3Q18FF all Chem.
SE-48	F	Voltage stability issues with the 230kV System should be pursued at least annually not only with the plant but also with the appropriate group in the PG&E corporate organization. [Reviewed at 9/15FF – progress made – continue to monitor until complete following 2R19.] [Reviewed at 12/16FF – satisfactory.]	9/15FF 4/16FF 12/16FF	1Q18FF

SE-49	F	Emergency Diesel Generators (EDGs) – [Reviewed EDGs at 6/15FF & 9/15FF – satisfactory. Health Yellow but to become White 4Q15, reviewed at 7/16FF – White.] [Reviewed at 1/17FF: U1 Green, U2 White.] [Review EDG Reliability Program at next EDG FF].	7/16FF 1/17FF	4Q17FF
SE-50	F	Monitor the status of DCP's decision on purchase of a new generator stator. <i>[Added to Item SE-51 below. Delete here.]</i>	6/16PM 12/16FF	<i>Delete</i>
SE-51	F	These project [Plant Protection System Upgrade <i>and new generator stator</i>] and others of this nature are subject to review, and the process for that review is now under consideration and development to review major capital projects in light of the currently proposed remaining period of operations under the Joint Proposal. The DCISC team found the project on schedule but the entire process of major capital project review is a topic the DCISC should pursue and review in the future. [Reviewed at the 12/16FF – project is under review by DCP. Continue to follow.]	10/16PM 12/16FF	4Q17FF
SE-52	F	<i>Mr. Wardell reported the fuel handling equipment is being brought to a healthy status but the DCISC should continue to monitor these efforts with reference to any issues of obsolescence or problems obtaining replacement equipment</i>	6/17PM	Post-2R20 RFO
SG		Steam Generator Performance (SG)		
SG-6	M	Review Steam Generator performance metrics & inspection results after refueling outages and the 5-year tube inspections. [Tube inspections 11/10PM, SG performance 6/11PM] [Reviewed 5/12 FF & 6/12PM – satisfactory – continue to monitor.] <i>[Reviewed at 8/17FF – SGs in good shape.]</i>	11/14FF 8/17FF	Following RFOs 4/18FF for 2R20
OM		Outage Management (OM)		
OM-3	M	During outages, monitor Outage Coordination Center, Control Room, and containment walkdown/inspection (end of outage). Review outage turbine work.	11/15FF 5/17FF	2R20 Feb/Mar 2018
OM-4	M	Review Plan, safety margin trends, outage results, <i>including clearances</i> , following each outage at FFs and PMs.	5/16FF	Each RFO 10/17PM
OM-5	F	DCPP has determined that it needs to do a better job of foreign material exclusion (FME) and this resolution appeared satisfactory to the DCISC team. <i>[Note: FME Program review dates at the end of the Open Items List.]</i>	1/12FF 12/14FF	9/17FF
SEC		Security (SEC)		
SEC-3	M	Monitor interaction of Security and Operations, Engineering, Maintenance, <i>Cyber Security</i> , and Emergency Preparedness for effects on nuclear safety. [Reviewed Cyber-Security April 2011 FF: satisfactory. Review specific mods to see how handled with new NRC regs. <i>[Reviewed Cyber Security 7/17FF – satisfactory.]</i>	8/14FF 7/16FF 7/17FF	2Q18FF
SF		Independent Spent Fuel Storage Installation – ISFSI (SF)		
SF-1		Monitor ISFSI operations, including cask transfer. [Reviewed ISFSI inspection program 12/15FF – satisfactory.] Review following next campaign.	3/17FF 7/17FF 8/17FF	1Q18FF
SF-2	M	Follow technical advances of relative risks of cask and pool storage. NRC Staff study and Commissioners' vote. Monitor needs for opening casks to inspect fuel. Monitor SONGS spent fuel transfer plans. Include corrosion of metals [reviewed 5/15FF]. [Reviewed ISFSI MPC corrosion at 7/15 – satisfactory.] [DCPP corrosion presentation at 2/16PM.] [Reviewed at 12/16FF – satisfactory.]	7/15FF 2/16PM 12/16FF	10/17PM

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SC	M	Seismic, Tsunami and Other External Events		
SC-3	M	Long-Term Seismic Program: review periodically. Review significant seismic events as they occur. Reviewed at 6/09 PM. [Reviewed 3/10 FF – progress satisfactory. Continue to monitor.] DCCP Seismic study reviewed 3/15 FF & to be presented by DCCP at 6/15PM. Shoreline Fault – follow activities and events with the Shoreline Fault. Review NRC's Review Report within several months.	6/15PM 11/15FF 8/16FF	10/17PM & 11/17FF RJB
SC-4	M	Monitor new DCCP risk-based Tsunami Hazard & Local Intense Precipitation Flooding Analyses. [Coordinate with BDB-1, Fukushima review.] Dr. Robert Sewell presented his evaluation at June 2016 Public Meeting, concluding with a recommendation that a state of the art probabilistic tsunami hazard assessment, akin to a SSHAC Level 2 review, is warranted which would involve consulting multiple disciplines and selecting experts capable of representing the informed technical community. Dr. Peterson remarked that with the Bartlett cruise data some fairly good conclusions may be possible related to the risk associated with submarine landslide as well as the magnitude and size of tsunamis produced by such events. Dr. Budnitz observed that determination of the annual probability of a 29.9-foot tsunami would be important in context of assessing any threat to the plant and until some sort of state of knowledge of the probability is established, that is a probabilistic understanding of the epistemic uncertainty. Awaiting DCCP's actions in response to the Committee's request to have further study done regarding the tsunami hazard and risk.	2/16PM 6/16PM 8/16FF <i>9/17FF</i>	10/17PM
SC-12	F	Workplace seismic safety – review annually.	2/16PM	2Q18FF PFP
FP		Fire Protection (FP)		
FP-5	M	Review [non-NFPA-805] Fire Protection Program and Systems every two-three years, including QV audits and NRC triennial inspections. Review the health and correction of degraded systems every six months. Monitor fire doors (Plant Door Life Cycle Management Plan) for correction of impairments <i>[Fire doors reviewed 7/17FF - sat.]</i> .	1/16FF 3/17FF <i>7/17FF</i>	<i>1Q19FF</i>
FP-6	M	Monitor DCCP's process of converting to the National Fire Protection Association's Regulation 805 (NFPA 805) standard. [Reviewed at 5/16FF – NRC approval issued. DCCP has a year to complete procedures, training, etc.] Modifications [for NFPA-805] to the plant were completed in November 2016 and procedures and training will need to be complete by April 2017. <i>The DCCP should next review this issue in late 2018 following implementation of the Unit 2 self-approval process, which is planned for June 2018.</i>	11/16FF 12/16FF <i>9/17FF</i>	<i>6/18FF or PM</i>
LD		Learning & Development Programs (LD)		
LD-3	M	Review non-license technical, operations & accredited training programs at least annually. [Reviewed Maintenance Training Programs 12/14FF – satisfactory.]	12/14FF 12/14FF	<i>4Q17FF</i>
LD-6	F	Observe operator license, re-qualification, classes periodically in FF meetings. Include Enhanced Simulator Training.] [Observed Ops TCOA training & Eng. DC Power System training at 6/14FF – satisfactory.] [Discussions with SRO trainees at 4/16FF.] [Reviewed at 9/16FF & 12/16FF – satisfactory.]	6/14FF 9/16FF 12/16FF	4Q17FF
NR		Nuclear Regulatory Commission Items (NR)		

NR-3	M	Monitor the Non-Cited Violation Tracking & Trending Program annually at the Jan/Feb Public Meetings.	3/year	Each PM
NR-4	F	Meet with NRC Resident Inspectors regularly. [Note: Next Action changed to "Regularly."]	Most FFs	Regularly
LR		License Renewal (LR)		
LR-1	F	CEC: The Committee should conduct an evaluation of issues and make recommendations for any mitigation plans related to reactor pressure vessel integrity . . . in connection with PG&E's application for a 20-year license renewal (LR) and should consider reactor vessel surveillance reports in context of changes predicted to the predicted seismic hazard in the vicinity of the plant site. <i>[Moot because there's no relicensing. Delete.]</i>	11/10 PM 2/11 FF 2/11 FF 8/13FF	Delete
CL		Closed Loop Cooling (CL)		
CL-1	M	Monitor DCP's responses and actions to the EPA proposed regulations on closed loop cooling (best technology available) for thermal power plants. [Reviewed at December 2010 FF – DCP's feasibility study satisfactory.] [Reviewed at 12/11 FF – satisfactory.] [Reviewed at 9/12FF – satisfactory.] Dr. Peterson commented the DCISC needs to monitor issues with respect to safety evaluation of any such possible modifications and the transition that might occur from the elimination of the once-through cooling system now used by DCP [6/12PM]. [Reviewed at 5/14FF, continue to follow.] [Reviewed 12/14FF – nothing new.] <i>[Delete re: Joint Proposal.]</i>	12/11FF 9/12FF 9/13FF 10/13PM 5/14FF 12/14FF	Delete
CL-2	F	Monitor response to DCISC input sent to SWRCB and its Nuclear Review Committee. Bechtel is performing the safety review.) [RJB attended SWRCB meeting on July 17, 2013 in Sacramento.] (DCISC 9/5/13 Bechtel evaluation report to SWRCB.) <i>[Delete re: Joint Proposal.]</i>	6/11 PM	Delete
CL-4	M	Monitor salt deposition on external equipment, systems, EDG, ventilation systems, transformers, etc. [Check with DCP on data availability beforehand.] [Determine rate of salt deposition.] [Reviewed at 7/16FF.]	4/15FF 7/16FF	Review annually 4/18FF PFP
BDB		Beyond Design Basis Events (e.g, Fukushima Event)		
BDB-6	F	DCPP FLEX Status – review status of progress on FLEX, including EASW screen plugging, SFP level instrumentation; SAMG, EDMG, EOP consolidation; portable instrumentation; operator actions; temporary connections; equipment storage. Review BDB & FLEX storage re: PPR & dosimetry. Review FLEX training. [DCISC should observe future FLEX training and FLEX overall. [Reviewed EASW pump test results at 11/16FF. Results satisfactory.]	5/16FF 11/16FF 7/17FF	2Q18FF PFP
DEC		Decommissioning		
DEC-1	F	Review DCP's decommissioning plans periodically as a result of the Joint Proposal forced plant shutdown in 2025. Review the timing of spent fuel transfer from wet to dry storage and when the spent fuel pools are decommissioned the plant will lose the capability to open multipurpose canisters for inspection. DCISC should actively review the decommissioning plans for DCP because of the potential impact on staffing and future options with respect to managing spent fuel. Dr. Peterson observed there have been multiple approaches taken to decommissioning in terms of rate and timing and the DCISC will need to review and discuss with its appointing entities whether and to what extent it will engage in a review of PG&E's decommissioning plans for DCP. [Reviewed at 1/17FF. DCP is forming decommissioning organization to look into decommissioning options.]	10/16PM 1/17FF	12/17FF RJB

DEC-2	F	In response to Mr. Geesman's observation that if the spent fuel had to be repackaged in the future a dry transfer technology would need to be used, Dr. Peterson responded that issue needs to be reviewed in context of the timing of decommissioning of the spent fuel pools because once the pools are no longer available you lose much of the ability to inspect and repack and need to be prepared to undertake much more ambitious efforts in the event the fuel must be repackaged. Dr. Budnitz observed that the chances that the fuel would need to be repackaged prior to transport offsite are, in his opinion, small but represent an issue the Committee will need to carefully review.	2/17PM	1Q18FF PFP
O		Other items (O)		
O-1	F	Perform observations of evolutions (work processes) within the plant periodically. [Performed observation of Turbine Building 11/13FF, 12/16FF and 3/17FF – satisfactory. <i>Chemistry sampling 8/17FF</i>] Continue with these about annually.]	12/16FF <i>8/17FF</i>	4Q17FF Lam
		Public Meeting Items (PM) (Reference: Public Meeting Minutes Pages)		
2/16 PM 10	F	Permanent corrective action installing [4kV] solid state relays will be completed during refueling outages 1R21 2R21. The fact-finding team concluded reasonable progress has been made but the DCISC should continue to monitor station progress with regard to the potential open phase conditions, which could affect plant safety systems. [Reviewed at 5/16FF – satisfactory. Continue to monitor.]	2/16PM 5/16FF	Post 1R21 & 2R21 RFOs
6/16 PM 3	F	The PHC also discussed funding for modifications including installation of a cover over a Unit-2 diesel generator trip button to prevent inadvertent operation and the DCISC will follow up on why that action was not taken when Unit-1 had an inadvertent actuation of the same button which was addressed by installation of a similar cover. [Reviewed why action not taken at 12/16FF; Need to confirm when modification completed on Unit 2.]	6/16PM 12/16FF	4Q17FF
4	F	The DCISC team found a significant reduction in SSFF during 2015 with one SSFF for Unit-1 and four for Unit-2 with none experienced in the fourth quarter of 2015. The DCISC team recommends the Committee continue to routinely monitor progress in mid-2017. [Reviewed 3/17FF – significant improvement.]	6/16PM 3/17FF	<i>2Q18FF</i>
10/16 PM 5	F	Dr. Peterson observed, and Drs. Budnitz and Lam agreed, that classification of systems, structures and components is a topic, which should be considered for a presentation by PG&E at the next public meeting of the DCISC. [See 2/17PM, Item 1 below.] [DCPP unable to present at 6/17PM. Move to 10.17PM]	10/16PM 3/17FF	10/17PM
17	F	Dr. Peterson remarked that, as DCPP relies on offsite power for safety of operations, it will be important to assess whether the Joint Proposal might have an impact or result in a change to reliability of electric supply. Mr. Jones responded that while he did not expect there would be any such effects he would need time to provide an answer to the Committee. <i>[Jones to present this subject at October 2107 PM.]</i>	10/16PM	Awaiting DCPP <i>10/17PM?</i>
<i>6/17 PM 1</i>	<i>F</i>	<i>Mr. Wardell reported the fuel handling equipment is being brought to a healthy status but the DCISC should continue to monitor these efforts with reference to any issues of obsolescence or problems obtaining replacement equipment. [Moved to Item SE-52. Delete here.]</i>	<i>6/17PM</i>	<i>Delete</i>
<i>2</i>	<i>F</i>	<i>Mr. Wardell recommended that the DCISC review the Westinghouse report [on GSI-191] when it is available</i>	<i>6/17PM</i>	<i>4Q17FF</i>
<i>3</i>	<i>F</i>	<i>NRC is preparing to conduct a 95001 inspection for this event which will take place later in June 2017 and Mr. Wardell confirmed the DCISC would follow up with the NRC Senior Resident Inspector on this issue. [Inspection completed. Awaiting report.]</i>	<i>6/17PM</i>	<i>Awaiting NRC Inspection Report</i>

4	F	Unit-1 has experienced a high source term due to cobalt 60 activation in the Reactor Coolant System (RCS) as a result of stellite from rubbing due to misalignment of a shaft on a reactor coolant pump having gotten into the RCS and going through the reactor core which increased the radiation levels for Unit-1. This issue will be reviewed during a future DCISC fact-finding.	6/17PM	4Q17FF
5	F	DCISC will follow up on the results of the safety culture survey during a future fact finding visit. [Reviewed at July 2017 FF – satisfactory. Close.]	6/17PM	Close
6	F	Investigation into this matter determined that an administrative evaluation before components used for scaffolding were installed was not done and while a reevaluation determined there was no adverse effect on safety-related systems the issue was entered into the Corrective Action Program and the Quality Verification (QV) organization will perform an assessment. Mr. Wardell recommended that the DCISC follow-up on the QV assessment during a future fact finding.	6/17PM	4Q17FF
7	F	Dr. Peterson observed there is potential that an increase in the risk of transmission problems or outages might affect the availability of alternate off site power sources for DCCPP due to increasing incentives to curtail power output because of production or grid-related reasons. Mr. Peck and Dr. Peterson agreed this might be a suitable topic for a future DCISC fact-finding which should include representatives from the PG&E transmission organization.	6/17PM	12/17FF PFP
8	F	NCV involved an occurrence in 2010 when a certain number of instrumentation devices used for post-accident, wide-range, performance monitoring were found to have been operating outside of the requirements of technical specification 3.3.3. These devices monitor temperature in the Reactor Coolant System's hot and cold legs and a number of devices were determined to have been operating outside their environmental temperature range due to incorrect installation of insulation which trapped heat inside the thermatic tension pipe. As a result temperatures exceeded normal allowed temperature. Mr. Wardell stated the DCISC would receive the root cause evaluation for this NCV from PG&E and likely review the NCV at a future fact finding.	6/17PM	11/17FF
9	F	In response to a question from Dr. Peterson Mr. Frauenheim stated he would provide the DCISC with information concerning how many of the 1,038 events reviewed during 2016 were found to have applicability to DCCPP.	6/17PM	12/17FF PFP
10	F	Dr. Peterson remarked and Mr. Frauenheim agreed that a review of the amount of data and information managed by DCCPP would be a worthwhile topic for a future fact-finding.	6/17PM	12/17FF PFP
11	F	Dr. Budnitz stated he would inquire of the PRA group whether the CAP trend in reducing items adverse to quality and in the reduction of human error has propagated through to the way human error is analyzed in PRAs.	6/17PM	11/17FF RJB
12	F	Dr. Peterson stated that the new electronic tools being used are now working with much greater amounts of information and it would be worthwhile for the Committee to review what is changing in terms of how information is being managed. [Included in Item CM-14. Delete here.]	6/17PM	Delete
13	F	Dr. Budnitz remarked that during his last fact-finding on human performance the errors reviewed were mostly errors of commission as opposed to errors of omission. He inquired of Mr. Frauenheim whether the plant has attempted to determine the numbers of each in the data set Mr. Frauenheim presented to the DCISC. Dr. Budnitz stated he would follow up on this issue during a future fact-finding. [How about PFP's 12/17FF with Frauenheim?]	6/17PM	12/17FF

14	F	Dr. Peterson also inquired and Mr. Rathie promised to provide information on any seasonal correlation of demand for the DCISC's plant tours in order that, if the Committee were to decide to reduce the frequency of its tours, the tour program might still be conducted in conjunction with the most opportune public meeting.	6/17PM	Complete ?
15	F	Dr. Peterson suggested that a tour not be held with the October 2017 public meeting and instead more time be set aside at that meeting to continue the discussion concerning the tours and other matters with reference to DCISC's operations.	6/17PM	Done. Close
16	F	Dr. Budnitz suggested that the Committee not conduct a public tour at its October 2017 meeting and implement the new procedures discussed above including reserving additional time for interaction by the Committee during fact-finding presentations. Drs. Peterson and Lam agreed with Dr. Budnitz' suggestion with the caveat that the revised format, without the public tour and with the increased time for fact finding reports, would only be implemented on a trial basis for the October 2017 public meeting	6/17PM	Done. Close
17	F	The Members then directed that the agenda for the October 18-19, 2017 public meeting should be developed in accordance with the direction provided and that coordination be undertaken on the production of an informational video with a target date to have the informational video ready for the February 2018 public meeting. For the October 2017 public meeting, on a trial basis, additional time will be reserved for the presentation of fact finding reports and Mr. Rathie will work with Mr. McWhorter and Mr. Wardell on arranging the agenda to accommodate this trial format. The Committee will issue invitations to the CPUC and to its appointing entities and other parties to attend a future public meeting.	6/17PM	Done. Close

October 18-19, 2017 Public Meeting

FF = Fact-finding Meeting

PM = Public Meeting

Q = Quarter

Diablo Canyon Independent Safety Committee Open Items List

DCPP Systems/Components Reviewed Periodically

4 kV – Nov 2015
 230 kV – Dec 2016
 500 kV – Dec 2014
 Aux Feedwater – Jan 2016
 Aux Saltwater – **Sep 2017**
 Aux Bldg Ventilation – Mar 2017
 Centrifugal Charging Pumps – Mar 2017
 Component Cooling Water – May 2017
 Compressed Air – 3/17FF
 Condensate – Apr 2016
 Containment Structure – Sep 2016
 Containment Spray – August 2016
 Control Room Simulator – Jun 2015
 Control Room Ventilation – May 2016
 Digital Systems – Dec 2013 & Oct 2014 PM
 DC Power – **Jul 2017**
 EDG – Jan 2017
 High Pressure Injection – April 2015
 Plant – Dec 2013
 Process Protection System Digital Upgrade – Jun 2016
 Radiation Monitoring – Nov 2014
 Radwaste Processing – **Aug 2017**
 Reactor Coolant – Sep 2014 (review again 4Q15FF)
 RCS Process Control System – Nov 2016
 Reactor Coolant Pumps – Jan 2015
 Refueling Equipment – 3/17FF
 RCS Process Control – Jun 2013
 RHR – Mar 2016
 Safety Injection Pumps Mar 2015
 Spent Fuel Pool – Mar 2015 & Apr 2015
 Steam Generators – Nov 2014

DCPP Programs Reviewed Periodically
 AOV – Jun 2015
 Benchmarking – May 2015 (review biennially)
 Boric Acid Corrosion Control – Apr 2016 (review biennially)

Buried Piping & Tanks – Jan 2017
 Chemistry – Apr 2016
 Cranes – August 2016
 Configuration Management – Jul 2015 & Sep 2015
 Corrective Action – Nov 2015
 Door Life Cycle Management Plan – Mar 2014
 Emergency Preparedness Exercises – 2/17PM
 Equipment Environmental Qualification – **Aug 2017**
 Excellence Plan – 6/17PM
 Fire Doors – July 2016
 Fire Protection (Non-NFPA-805) – Mar 2017
 Fire Protection (NFPA-805) – Dec 2016
 Flow Accelerated Corrosion – Apr 2016
 FME – **Sep 2017**
 Integrated Risk Assessment Program – Jun 2015
 Large Motors – Mar 2016
 Long-Term Capital Planning Process – Dec 2016
 Margin Management – Jan 2017 [Next review 2Q18FF]
 MIDAS – Mar 2015
 Nuclear Fuel Program – Jun 2014
 On-Line Maintenance – Apr 2016
 Operating Experience – May 2015 (review biennially)
 Operability Assessment Program – March 2017
 Operational Decision Making – Apr 2015
 PRA Programs (non-seismic) – Aug 2016
 Performance Improvement – Mar 2016
 Performance Review Quarterly Meeting – May 2015
 Plant Health Committee – **Jul 2017 & Sep 2017**
 Reactivity Management – May 2016
 Safety-Security Interface – Jul 2016
 Self-Assessment – Sep 2016
 Single Point Vulnerabilities – Jan 2015
 Seismic PRA – Aug 2016
 Seismically Induced System Interactions – 5/17FF (review biennially)
 System Engineering – Mar 2015
 Transformers, Large – Jan 2017 [2Q18FF after 2R20]
 Trending Analysis – Jan 2014

October 18-19, 2017 Public Meeting

FF = Fact-finding Meeting

PM = Public Meeting

Q=Quarter

DIABLO CANYON INDEPENDENT SAFETY COMMITTEE

AGENDA TRANSMITTAL FORM

MEETING DATE:	October 18, 2017
AGENDA ITEMS:	VI-A & B and XI-C & D
AGENDA TITLE:	Consultant & Legal Counsel Reports; Receive, Approve and Authorize Transmittal of Fact Finding Reports, and receive report by Asst. Legal Counsel.

CONSENT [☐] ACTION [☒] INFORMATION [☒]

Staff Summary: It is anticipated that oral or written reports will be presented at the meeting by Technical Consultants Mr. Wardell and Mr. McWhorter and DCISC Assistant Legal Counsel Rathie concerning items listed or on other matters.

Fact finding reports may be submitted for consideration and comment by members and consultants since the last public meeting of the DCISC in June 2017. These reports may be received by the Committee, approved as to form and content and be authorized for transmittal to PG&E for its consideration and response. Fact finding reports become a part of the next DCISC Annual Report and are available for public inspection following their approval by the Committee.

RECOMMENDED COMMITTEE ACTION: Receive reports by Consultants and Assistant Legal counsel reports and provide direction.

Motions to receive and approve transmittal of fact finding reports to PG&E concerning fact-findings conducted on July 25-26, August 9-10 and September 6-7, 2017.

DIABLO CANYON INDEPENDENT SAFETY COMMITTEE	
AGENDA TRANSMITTAL FORM	
MEETING DATE:	October 18, 2017
AGENDA ITEM:	XII
AGENDA TITLE:	
CONSENT [] ACTION [X] INFORMATION []	
Staff Summary: The Committee Members, Technical Consultants and Assistant Legal Counsel will hold a discussion of future plans and Committee effectiveness including the conducting of fact-findings visits and public meetings, the development and utility of the Committee's Annual Reports, its outreach to government officials charged with appointing its members, the engagement of consultants for specific projects, and the Committee's Interaction with PG&E	
RECOMMENDED COMMITTEE ACTION: Provide direction as appropriate.	

DIABLO CANYON INDEPENDENT SAFETY COMMITTEE

AGENDA TRANSMITTAL FORM

MEETING DATE: October 19, 2017

AGENDA ITEM: XXII-A

AGENDA TITLE: Minutes of June 7-8, 2017
Public Meeting

CONSENT [X] ACTION [] INFORMATION []

Staff Summary: Attached are the Minutes which have been prepared from the Committee's eighty-seventh public meeting held on June 7-8, 2017 in Avila Beach, CA.

(Each session of this public meeting was webcast live in real time and is available for subsequent viewing, archived to the meeting agenda, by visiting the links on the Committee's website www.dcisc.org or at www.slospan.org. Meetings are videotaped for later broadcast on Channel 21 in the San Luis Obispo, CA area, the government access television channel.)

RECOMMENDED COMMITTEE ACTION: Approve the Minutes by motion

MINUTES
of the
DIABLO CANYON INDEPENDENT SAFETY COMMITTEE'S
June 7-8, 2017, PUBLIC MEETING
[For approval at the October 18, 2017 Public Meeting]

Wednesday & Thursday
June 7-8, 2017
Avila Beach, California

Notice of Meeting

A legal notice of the plant tour and public meeting and several display advertisements were published in local newspapers and mailed to the media and those persons on the Committee's service list. Information on the public tour and a copy of the meeting agenda were also posted on the Committee's website at www.dcisc.org.

PUBLIC TOUR OF DIABLO CANYON POWER PLANT

On the morning of Thursday, June 7, 2017, DCISC Members Drs. Budnitz and Lam, together with Technical Consultants Mr. McWhorter and Mr. Wardell, accompanied by 36 members of the public, participated in a tour of Diablo Canyon Power Plant (DCPP). The members of the public responded to the advertisements concerning the public tour placed in a local area newspaper and on the DCISC's website. The group received security badges at the PG&E Energy Education Center and assembled in the auditorium for a brief introduction of the DCISC and its Members and Technical Consultants and a discussion of the role and responsibility of the Committee. Afterward DCPP Lead Manager, External Affairs & Public Policy, Ms. Suzanne Parker, gave an informational presentation about the plant and PG&E's current energy generation portfolio and plans for the future. An opportunity was provided for questions. The group then boarded a bus for the ride to the plant. During the drive information was presented on the history of the plant. The bus entered the plant site through the Avila Gate and the group received a briefing from PG&E on the various external features and buildings and was taken on a narrated drive-by of the Independent Spent Fuel Storage Installation (ISFSI), also known as the dry cask spent fuel storage facility.

The bus then arrived at the parking area. The members of the public and the DCISC Members and Technical Consultants visited in turn the Control Room Simulator Facility, a full scale mockup of the Unit-1 (U-1) control room, and a viewing area for the Intake and Outfall Facilities where the plant pulls in and discharges cooling water from and to the Pacific Ocean.

The group then departed DCPP for return to the Energy Education Center and had the opportunity to discuss the plant with individual DCISC members and consultants.

CONCLUDE PUBLIC TOUR

Agenda

I CALL TO ORDER - ROLL CALL

The June 7, 2017, public meeting of the Diablo Canyon Independent Safety Committee (DCISC), the eighty-seventh meeting of the DCISC, was called to order by Committee Chair, Dr. Peter Lam, at 1:30 P.M. at the Point San Luis Conference Room at the Avila Lighthouse Suites in Avila Beach, California.

Present: Committee Member Robert J. Budnitz
Committee Member Peter Lam
Committee Member Per F. Peterson
Absent: None

II INTRODUCTIONS

Dr. Lam welcomed those present and introduced himself and briefly reviewed the appointments to the DCISC by officials of the State of California and the professional backgrounds of each of his fellow Members, Dr. Robert J. Budnitz and Dr. Per F. Peterson. Dr. Lam then described the professional background of each of the Committee's Technical Consultants, Mr. R. Ferman Wardell, P.E., and Mr. Richard D. McWhorter Jr. and introduced Assistant Legal Counsel Robert W. Rathie. Dr. Lam then introduced and recognized Mr. Hector Garcia, Support Manager for Pacific Gas & Electric Company's (PG&E) Senior Vice President and Chief Nuclear Officer Mr. Ed Halpin, and Dr. Lam reported Mr. Garcia also serves as the principal liaison and point of contact for the Committee with Pacific Gas & Electric Company (PG&E) and Diablo Canyon Power Plant (DCPP).

Dr. Lam recognized and introduced Mr. Kevin Barker who serves as Chief of Staff to California Energy Commission (CEC) Chair Dr. Robert B. Weisenmiller. Mr. Barker addressed the Committee and he thanked the DCISC for its dedicated service and remarked that the need for the Committee's review of DCPP operations is perhaps more critical now than at any time in the past and he remarked it was a privilege for the citizens of California to have persons of the stature of the Members to review the workings of DCPP.

III PUBLIC COMMENTS AND COMMUNICATIONS

The Chair reviewed the procedures and advice from the agenda for the meeting concerning receipt of comments from members of the public wishing to address remarks to the Committee. The Chair advised time would be set aside for members of the public to comment on those matters listed on the agenda at the time the matter was considered by the Committee and inquired whether there were any members of the public present who wished to address remarks to the Committee on items not appearing on the agenda for the public meeting.

Dr. Gene Nelson, the government liaison for the group Californians for Green Nuclear Power, was recognized. Dr. Nelson expressed his appreciation for the work done by the Committee to keep DCPP running safely. He remarked that his group has recently achieved what he described as a ground-breaking achievement by becoming the first citizen group eligible

for compensation as an intervenor in proceedings before the California Public Utilities Commission (CPUC).

Ms. Sherry Lewis, a member of the group San Luis Obispo Mothers for Peace, was recognized. Ms. Lewis described the highly radioactive used fuel located at the site of DCPD as a latent emergency and remarked that the used nuclear fuel stored at the site is more dangerous now than it was when it was inside the reactors and in the future it is likely to be on the site for years, decades, or even millennia. She described this event as evidence of the folly of civilization to create such a lethal substance in return for a few years of energy production. Ms. Lewis stated her understanding that the DCISC would cease operations and its oversight functions would cease once the plant stops producing electricity and she wondered who would keep track of the deteriorating spent fuel storage casks. Ms. Lewis closed her remarks by stating nuclear power has been a colossal mistake and it is good that it has proven to be short-lived as an energy source.

Dr. Lam thanked the members of the public for their comments.

IV CONSENT AGENDA

The only item on the Consent Agenda was approval of the Minutes of the Committee's February 8-9, 2017, public meeting held in Avila Beach, California. The Members and Consultants reviewed the draft of the February 2017 Minutes provided with the agenda packet for this meeting. Items were discussed and reviewed for follow up or action and clarification was provided to the Committee's Assistant Legal Counsel concerning certain references in the draft Minutes and regarding typographic or editorial corrections, as well as concerning substantive changes to be made to the final version of the February 2017 Minutes. The Minutes as revised and corrected will be part of the final version of the Committee's 27th Annual Report on the Safety of Diablo Canyon Power Plant Operations (Annual Report) for the period July 1, 2016 to June 30, 2017.

On a motion by Dr. Budnitz, seconded by Dr. Peterson, the Minutes of the Committee's February 2017 public meeting were accepted as amended, subject to inclusion of the revisions discussed and changes provided to its Assistant Legal Counsel.

V ACTION ITEMS

A. Update on Financial Matters and Committee Activities. The Chair requested Assistant Legal Counsel Rathie to provide this report. Mr. Rathie reported that for the sixth year in succession DCISC spending in 2016 remained less than the amount provided by PG&E ratepayers under a CPUC Decision for the Committee's operation. Accordingly, a small surplus of funds in the amount of \$7,153.25 remains from 2016 and, upon a motion made by Dr. Budnitz seconded by Dr. Peterson the DCISC unanimously approved returning those funds to PG&E for credit to its ratepayers.

Mr. Rathie reported that the amount of funding provided for DCISC operations increases annually at what he described as the modest rate of 1.5%. He reported that the Committee's accountant has been directed to pay the retainers provided by the CPUC decision to those

members currently serving in appointed terms. Dr. Budnitz remarked that during his service on the Committee, the DCISC has never made a decision or curtailed an investigation based upon a lack of financial resources.

Assistant Legal Counsel Rathie directed the attention of Members and Consultants to the green sheets in the public agenda packet prepared by Consultant Wardell which describes the scheduled activities for the 2016-2018 period.

B. Discussion of Issues on Open Items List: Dr. Lam requested Consultant Wardell lead a review of items on the Open Items List, used by the Committee to establish priorities and to track and follow issues, concerns, and information identified as requested or to be provided, on a periodic basis and for subsequent action during future fact-finding or public meetings. Dr. Budnitz remarked that a significant number of the items appearing on the Open Items List were generated due to comments received from members of the public during public meetings. Items captured on the Open Items List representing changes from the prior version of the list were shown in bold red text on the version of the Open Items List provided with the agenda packet for this meeting. Items concerning which action was taken included the following¹:

<u>Item</u>	<u>Re:</u>	<u>Action Taken/Next Action</u>
CO-9	Reactivity Management	For 2Q18 FF
CO-14	Operator Retention Program	Note action @ 6/17 PM & next action 2/18 PM
CM-7	Containment Structures Inspection	Confirm 3Q17FF if any action taken
CM-13	Use of Portable/Wireless Devices	For 12/17FF w/PFP
EN-20	Plant Health Committee Meetings	Rev re other regular meetings
HP-1	Human Performance/Behavior	For 9/17FF w/RJB after outage
HP-25	Management Observation Program	For 8/17FF
RA-5	Non Seismic PRA Program	For 9/17FF w/RJB
RA-6	Seismic Fragility Analysis	Pending results of outside peer review for 9/17 FF w/RJB
NS-9	INPO AFIs	For 9/17FF w/RJB
PR-13	Radiation Monitoring System	Strike sentence re PHC review by mid 2014
QP-3	Quality Verification Audits	For 1/18FF
NF-9	Nuclear Fuel Performance/damaged fuel	For 7/17FF w/PFP
SE-39	Intake Structure Concrete Inspection	For 9/17FF if work done
SE-42	Safety System Functional Failures	For FF in mid 2018
SE-47	Secondary Water Chemistry	For FF in mid 2018
SE-50	New Generator Stator	For 4Q17FF

¹ Key to abbreviations used: Dr. Robert J. Budnitz (RJB), Dr. Peter Lam (PL), Dr. Per F. Peterson (PFP), Mr. Rick D. McWhorter (RDM), and Mr. R. Ferman Wardell (RFW), Fact-Finding Meeting (FF), Quarter (Q), Public Meeting (PM), Review (Rev).

<u>Item (Cont'd.)</u>	<u>Re:</u>	<u>Action Taken/Next Action</u>
SE-51	Plant Protection System Upgrade	For 4Q17FF
OM-4	Plan, Safety Margin Trends, Outage Results	For 10/17 PM and combine w/HP-1 for 9/17FF w/RJB
SF-2	Risks of Cask & Pool Fuel Storage	For 10/17 PM & tentatively for 11/17FF
SC-3	Long Term Seismic Program	For 10/17PM & for 11/17FF w/RJB
SC-4	Tsunami Hazard Analysis	For 9/17FF w/RJB & for 10/17PM Merge SC-3 and SC-4 and shorten text description
SC-12	Workplace Seismic Safety	For Mid 2018FF
SC-13	Tsunami PRA Recommendation	Combine w/SC-3 & SC-4 merger (above)
FP-5	Non NFPA 805 Fire Protection	For 1Q18FF
FP-7	Fire Doors	Merge w/FP-5
CL-4	Salt Deposition on External Equipment	For 4/18FF w/PFP
BDB-6	FLEX Status	For 7/17FF w/PFP or for 3Q17 FF
DEC-1	Decommissioning Plan	For 12/17FF w/RJB
DEC-2	Spent Fuel Repackaging	For 1Q18FF w/PFP
OE-3	Revised Open Items List after PMs	Delete
2/17PM-17	Assessment of Tsunami Risk	Combine w/SC-3 & SC-4 merger (above)
10/16PM-14	Submarine Landslide Induced Tsunamis	Combine w/SC-3 & SC-4 merger (above)
2/17PM-13	Scheduled Inspections	Completed/Close

During discussion on the Open Items List certain items identified by Mr. Wardell as suitable for closure and deletion from future open items lists were confirmed.

Following the discussion on the Open Items List the Chair called for public comments. There were no comments by members of the public at this time.

C. Nomination and Election of Chair and Vice Chair for the July 1, 2017 - June 30, 2018 Term. On a motion made by Dr. Budnitz, seconded by Dr. Peterson, the Committee reelected Dr. Lam to the position of DCISC Chair and on a motion by Dr. Peterson seconded by Dr. Lam, Dr. Budnitz was elected to the position of DCISC Vice-Chair for respective terms of office from July 1, 2017 through June 30, 2018.

A short break followed.

VI COMMITTEE MEMBER REPORTS AND DISCUSSION

A. Public Outreach, Site Visits and Other Committee Activities:

The Members turned to the matter of confirming and scheduling public meetings of the DCISC. Public meetings are now scheduled for October 18-19, 2017, February 7-8 and June 13-14, 2018 and the Members then scheduled a future public meeting of the Committee for October 17-18, 2018.

Fact-finding visits were confirmed and scheduled as follows²:

[2017] July 25-26 PFP/RFW (subject to confirmation by DCPD); August 9-10 PL/RFW; September 6-7 RJB/RDM; September 20-21 PL/RFW (subject to confirmation by DCPD); November 14-15 RJB/RFW; December 12-13 PFP/RDM (subject to confirmation by DCPD); and

[2018] January 17-18 PL/RDM; March 6-7 RJB/RDM (subject to confirmation by DCPD as these dates are during refueling outage 2R20); April 18-19 PL/RFW; May 2-3 PFP/RDM; July 10-11 PFP/RFW; August 21-22 PL/RDM; September 5-6 RJB/RFW.

The Members and Consultants observed that the fact-finding schedule is subject to change based on emergent activities at DCPD.

B. Documents provided to the Committee: Dr. Lam remarked that the DCISC conducts its business in a transparent manner and most documents received by the Committee are matters of public record. Mr. Rathie directed the Committee's attention to the list of documents received since its last public meeting in February 2017. A copy of the list was included with the public agenda packet for this meeting. Mr. Rathie reported that a letter from Dr. Robert T. Sewell in response to questions received from Dr. Garry Maurath, the CEC geologist representative to the CPUC Independent Peer Review Panel (IPRP), was included in the documents provided to the Committee as the response, although the statements in the letter represent Dr. Sewell's analysis, was prepared by Dr. Sewell at the request of the DCISC.

The Chair then recognized Dr. Douglas Hamilton to address remarks to the Committee.

Dr. Hamilton stated he appreciated the opportunity to present data to the DCISC with relevance to the assessment of the seismic hazard at the DCPD. He stated the material he would provide to the Committee consisted of a compendium of data on strong earthquake motion records and the computation of the earthquake generation capacity of faults in the immediate vicinity of DCPD as well as actual records from strong earthquakes which recently occurred in the Christchurch and Kaikoura regions of New Zealand. Dr. Hamilton observed the New Zealand earthquakes produced what he described as extraordinary ground motion and were very damaging. Dr. Hamilton remarked that the handouts he provided to the DCISC contain an extract from a talk he presented in 2012 to the Association of Engineering Geologists entitled "Diablo Canyon Nuclear Power Plant in South Central Coast of California Incremental Recognition of Seismic Hazard 1965-2012." He observed this information provides a historical sequence of the improvement in understanding of the tectonics and earthquake issues affecting

² Abbreviations used: Robert J. Budnitz (RJB); Peter Lam (PL); Richard D. McWhorter (RDM); Per F. Peterson (PFP); R. Ferman Wardell (RFW)

Diablo Canyon and that he prepared and would distribute an addendum to the handout he provided to the Committee with information through 2017.

Dr. Hamilton stated strong ground motion at DCPD could be generated on the three closest seismogenic faults to the site, as compared to PG&E's response spectra shown in the NRC's recently released Figure 3.5-1 plot. He observed the Christchurch and Kaikoura response spectra recorded during the 2011 Christchurch and 2016 Kaikoura earthquakes yielded maximum peak ground acceleration values of 4.2G and 3.2G respectively which he compared to the NRC Figure 3.5-1 plot. He remarked on the similarity and pattern of coseismic rupture on at least ten faults in the Kaikoura region to the late quaternary faulting in the area around the site of DCPD and he stated he calculated the response spectra from the three local faults and those from the Christchurch and Kaikoura events and superimposed the data on NRC Figure 3.5-1 and he noted that these data points significantly exceed the Figure 3.5-1 spectra in the approximate frequency range of two to eleven hertz. Dr. Hamilton closed his remarks by stating he would be interested in the Committee's assessment of the implications from the Christchurch and Kaikoura events which he believes to have occurred in settings having considerable similarity to DCPD.

Dr. Budnitz reported he attended a meeting of the USGS some time ago concerning the New Zealand earthquakes and stated it was his impression that there was an ongoing and extremely complex post-earthquake investigation to determine from whence these events were initiated, which faults caused what motions, and which faults were connected to others. Dr. Budnitz reported the entire seismic community is awaiting the release of results by the New Zealand's analog to the USGS on these events as he stated the events were revealing in how many different features may have intersected and/or interacted with each other to cause the motion. Dr. Hamilton stated he agreed with Dr. Budnitz' description and assessment and Dr. Hamilton remarked that if this event happened in one place it is impossible to say that it could not happen in another area. Dr. Hamilton, in response to Dr. Budnitz' request, stated that it was his belief a pattern of faulting exists in the Irish Hills located above and behind DCPD that is very complex, very young, and quite active and he observed there is also a scarp in the sea floor of Estero Bay that is five to ten meters high and was created in the post glacial period and Dr. Hamilton observed it would be unconservative not to consider that the features of the local area around DCPD might not be comparable to those in New Zealand. Dr. Hamilton stated what appeared to have occurred as far as linkage of features in the Kaikoura event was similar to what occurred in the Denali event. Dr. Budnitz observed that there were huge displacements and extreme motion at the site in the New Zealand, with a single house having moved seven meters in one direction and eleven meters in another. Dr. Hamilton, in response to Dr. Budnitz' observation on the motion at the site of DCPD being, for the most part, lateral, stated the uplift of the Irish Hills and of the Santa Lucia range was not caused by lateral displacement. Dr. Hamilton observed the ten meter scarp in the Estero Bay sea floor occurred around 10,000-12,000 years ago and he noted that he did not find in Dr. Sewell's analysis of landslide-generated tsunamis in the vicinity of DCPD anything about an uplift in the sea floor being a factor and yet the sea floor and the Irish Hills are clearly uplifted by a substantial amount. Dr. Hamilton stated that a proper evaluation would need to account for both excitation from a distant landslide as well as local excitation by a substantial uplift in the sea floor.

Dr. Gene Nelson was recognized. Dr. Nelson commented that the areas around DCPD are some of the most heavily studied areas in the world and records show that, unlike the events

in New Zealand described by Dr. Hamilton, the dominate motion in the area of DCP is strike-slip. He observed that Dr. Hamilton's comments appear to be trying to fit data to a hypothesis that the area around DCP is going to be subject to large ground motion and this is contrary to the studies he referred to and the consensus is that the power plant is designed to handle any predicted ground motion with the Hosgri Fault as the bounding factor for that ground motions. Dr. Nelson stated that he knows of no active volcanos in the vicinity of DCP and volcanism is definitely associated with subduction zones and very complicated geology such as exists in the area of the Denali event. He stated his opinion that the DCISC would be ill advised to try to fit data which do not correspond to the features around DCP into any analysis.

VII STAFF-CONSULTANT REPORTS & RECEIVE, APPROVE AND AUTHORIZE TRANSMITTAL OF FACT FINDING REPORTS TO PG&E

The Chair requested Consultant Wardell to report on a fact-finding visit to DCP. Mr. Wardell reported on the March 22-23, 2017, fact-finding visit to DCP with Dr. Budnitz. Mr. Wardell stated topics reviewed with PG&E during that visit included the following:

- Attend Plant Health Committee Meeting - Mr. Wardell reported the DCISC fact-finding team attended a meeting of the Plant Health Committee (PHC). The PHC continually reviews system and program health and any outstanding system issues. The PHC is made up of director level personnel. The meeting attended by Mr. Wardell and Dr. Budnitz reviewed the Fire Protection Program and the Boric Acid Control Program. The Fire Protection Program system engineer reviewed the health of that system as in White status³ due to a calculation requiring an update and a design change to support a test of another similar system. There were also issues with attention needed to the fire dampers which are in the NRC Maintenance Rule A-1 category. The Fire Protection System is expected to return to Green health by the end of June 2017 and Mr. Wardell reported the new Fire Protection Program health card now includes the fire doors. Mr. Wardell reported the Boric Acid Corrosion Control Program addresses and assesses the use of boric acid in nuclear plant cooling systems to control radioactivity. Boric acid is corrosive to carbon steel and when it leaks it can dry and crystallize or remain as a wet boric acid leak, indicating a continued leak on a valve bonnet or valve stem. In any event, Mr. Wardell stated boric acid leaks are very undesirable. Following 1R19 the DCP Boric Acid Corrosion Control Program was rated as among the worst in the industry due to too many wet leaks. An industry review team made recommendations and the plant began an aggressive program with a low tolerance for boric acid leaks. After its last outage Unit-2 was determined to be in the best quartile for the industry with respect to boric acid leakage and DCP is committed to continue this effort for Unit-1 during the 1R20 refueling outage. Mr. Wardell reported the PHC was well run and information was crisply presented with intrusive questioning of and by the participants.
- Refueling Equipment Readiness - Mr. Wardell reported refueling equipment consists of moveable bridges, cranes, and gripper components used to pick up and move fuel in and out of the core and around various locations in the spent fuel pools and Fuel Handling Building. This

³ On a scale of Green indicating a healthy system and White indicating that achievable action plans are in place to return the system to healthy status. A Yellow rating would indicate that system health is deficient and needs improvement and Red would indicate unsatisfactory system health.

equipment was installed when the plant was constructed and while most equipment remains reliable there are issues now with obsolescence and parts availability. Mr. Wardell reported DCPD was planning to upgrade or replace almost the entire inventory of fuel handling equipment but with the Joint Proposal pending, which, if approved by the CPUC would close DCPD in 2024 and 2025 (Joint Proposal) those plans have been scaled back. The fuel transfer system and manipulator crane will not be modified. The spent fuel bridge crane for Unit-1 will have its analog controls replaced with digital controls during 1R21 in the spring of 2018. This was done previously for Unit-2. **Mr. Wardell reported the fuel handling equipment is being brought to a healthy status but the DCISC should continue to monitor these efforts with reference to any issues of obsolescence or problems obtaining replacement equipment.**

➤ 1R20 Safety Plan - The DCISC team reviewed the 1R20 refueling outage Safety Plan including the safety-related equipment planned to be taken out of service during the outage for service, maintenance, or repair. A probabilistic risk assessment (PRA) program known as Safety Monitor assesses the consequences of equipment unavailability to assist in preventing or mitigating accidents and in controlling radioactive materials. DCPD employs a defense-in-depth policy which requires at least one additional piece of equipment be available in all situations to mitigate a potential accident. The DCISC team found the 1R20 refueling outage Safety Plan to be similar to those used in the past and to be adequate to keep the safety level from dropping below acceptable standards during the outage.

➤ Safety System Functional Failures - As there is to be a presentation on this topic later during this public meeting Mr. Wardell deferred discussion of this item to that time.

➤ Status of Major Regulatory Issues - Mr. Wardell reported major regulatory issues which are being addressed by the plant include NRC Generic Safety Issue 191 concerning the need to address debris in the containment sump. He reported Westinghouse is preparing a generic topical report for Westinghouse-designed nuclear power plants such as DCPD which will document final testing and that this report will be sent to the NRC and should result in the closure of this issue for DCPD. **Mr. Wardell recommended that the DCISC review the Westinghouse report when it is available.** The DCISC team reviewed emergency diesel generator (EDG) health and performance and found Unit-1 to be in Green status and Unit-2 to be in White status, tending toward Green. Mr. Wardell reported this represents good progress concerning EDG health. The EDG reliability improvement plan was reviewed and a date has been entered into the Open Items List for further review. The 230kV Emergency Power System has been modified with the replacement of some circuit switches and installation of static VAR compensators. The industry issue on open phase vulnerabilities was addressed at DCPD by installation of compensatory measures and by design modifications which are to be installed during outages 1R20 and 2R20 and the trip function enabled by those modifications is planned to become effective by the end of 2018. The Control Room habitability issue to protect operators from radiation and gas has been addressed by an application to the NRC for an alternate source term radiation analysis which has now been approved and it is now a matter of the station doing the required analysis and possibly implementing a technical specification change. Mr. Wardell stated the station received a White Finding from the NRC for the inoperability of a valve control switch in one train of the plant's Emergency Core Cooling System (ECCS) and the **NRC is preparing to conduct a 95001 inspection for this event which will take place later in June 2017 and Mr. Wardell confirmed the DCISC would follow up with the NRC Senior**

Resident Inspector on this issue. The station continues to await the NRC evaluation of the plant's analysis of locally intense precipitation events.

➤ Classification of Structures, Systems and Components (SSC) - Mr. Wardell reported this issue involves assurance that SSCs important to safety are designed, fabricated, erected and tested to quality standards commensurate with their importance to the safety function they perform. The standards are classified with higher or lower requirements and the plant has a system to rank SSCs depending on importance to safety and seismic capability. This system is described in the Final Safety Analysis Report (FSAR) and in plant procedures and includes Quality Assurance (QA) organization classifications and quality code classes for fluid systems and fluid components. Mr. Wardell described this as a comprehensive system with each SSC in the plant assigned to a particular quality standard. The DCISC team found the SSC classification system to be satisfactory.

➤ Compressed Air System Health - the compressed air system is common to both units and provides safety as well as non safety functions. The system uses five compressors which are old and which will be replaced in the next one or two years. The system health is currently Yellow due to component aging and obsolescence issues. Mr. Wardell reported that replacing the main compressor will raise the system health to White with a return to Green expected in 2018 with replacement of the five main compressors.

➤ Observe Operator Rounds - the DCISC representatives observed a morning shift turn over meeting in the Control Room and found the process went very well with no problems or issues identified. The DCISC team then accompanied one of the operators on rounds in the Turbine Building during the operator's check of instruments and inspections for leaks or vibration and to observe various components. Mr. Wardell reported the operator entered data on a portable hand held electronic device and the data was then downloaded to the plant process computer for documentation purposes.

➤ Quality Verification Top Issues and Pre-NIEP Self-Assessment - Mr. Wardell report the Quality Verification (QV) organization's top issues included activities in connection with an upcoming inspection by the Nuclear Industry Evaluation Program (NIEP) for which a self-assessment was conducted by DCPD to address findings and recommendations being corrected and addressed from the last NIEP inspection. No significant deficiencies were identified by the self-assessment and the deficiencies identified in the 2016 NIEP inspection were closed with no repeats. Mr. Wardell reported QV also considered the White Finding related to the ECCS switch to be a top issue and there was some rework required for the root cause analysis of that event.

Unit-1 has experienced a high source term due to cobalt 60 activation in the Reactor Coolant System (RCS) as a result of stellite from rubbing due to misalignment of a shaft on a reactor coolant pump having gotten into the RCS and going through the reactor core which increased the radiation levels for Unit-1. This issue will be reviewed during a future DCISC fact-finding. Security issues and issues with human performance fundamentals were also addressed by QV during its audit of human performance of the Maintenance organization. None of the issues were significant enough to require escalation. Mr. Wardell observed that the DCISC representatives concluded QV is doing its job and represents a valuable component of the DCPD organization in performing an independent verification function.

➤ Use of Lower-Bounding Cutoffs in the Analysis of Probabilistic Seismic Fragilities for Components and Structures - Dr. Budnitz reported that during the fact-finding visit the issue of the seismic PRA analysis being performed of the fragility of every structure and component in the plant was addressed relative to the level at which a structure or component would fail, that is, the structure or component would be unable to perform its safety function. Dr. Budnitz reported those data are compressed into an analytical function which describes their fragility as a function of seismic ground motion. He stated the data fit within a log-normal distribution very well but the trouble with a log-normal distribution, or even with a regular distribution, is that there is no cutoff at either the high end tail or the low end tail and the distribution never goes to zero. He stated this was contrary to common sense and engineering logic as very tiny ground motions would never be expected to cause a building to fail although a log-normal function would give some tiny probability for such an event. Dr. Budnitz reported the general practice is to cut off the distribution at about four or five standard deviations above zero. Dr. Budnitz stated the DCP staff discussed with him a paper written in 1985 for which Dr. Budnitz served as the principal author which recommended that a cut off not be used. Dr. Budnitz reported he advised the DCP staff that engineering knowledge has moved on since 1985 and that the conclusion he reached in 1985 has now been superseded. Dr. Budnitz stated he recommended that DCP follow current standard practice and not worry about something he wrote in 1985.

➤ Nuclear Safety Oversight Committee (NSOC) Summary Meeting - Mr. Wardell reported on the fact-finding team's observation of the NSOC meeting. The NSOC is made up of very high level, very experienced, industry peers outside of PG&E and most nuclear power plants have similar committees. The NSOC is on site at DCP three times every year for a four-day visit to review safety culture, quality verification, operations, chemistry, training, outages, project, security, engineering and other issues. On the third day the NSOC assembles to discuss its comments and on the fourth day the NSOC reports to DCP senior management. The DCISC representatives were invited to attend this report to senior management. Mr. Wardell reported the NSOC provided very astute observations and good comments but, in common with the information received from the Institute of Nuclear Power Operators (INPO), the DCISC is bound by an agreement with DCP not to report in public on specific NSOC findings in order to protect an open dialogue and the free exchange of ideas and opinions.

➤ Nuclear Safety Culture - Mr. Wardell reported DCP has conducted a nuclear safety culture survey but the results are not yet available. He reported safety culture performance measures shows that the overall safety culture at DCP is in Green status and the **DCISC will follow up on the results of the safety culture survey during a future fact finding visit.**

Upon a motion by Dr. Peterson, seconded by Dr. Lam, the March 22-23, 2017 Fact Finding Report was approved and its transmittal to PG&E authorized.

Once the Committee's fact finding reports are approved at a public meeting they are no longer considered to be in draft form and are made available in a binder for inspection by members of the public, together with information concerning the professional backgrounds of the Committee's technical consultants involved with preparation of its fact finding reports. Fact finding reports become part of DCISC's Annual Reports.

The Chair requested that Consultant Wardell continue his report with a briefing on the May 10-11, 2017 visit to DCP.

➤ Meet with Senior Resident Inspector - Mr. Wardell reported the DCISC fact-finding team met with Senior Resident Inspector Mr. Christopher Newport to discuss issues including workplace seismic safety, the use of FLEX⁴ equipment to reduce day-to-day and outage risk, the final NRC inspection of FLEX implementation, the schedule for the tsunami and flooding reevaluation, the use of an alternate source term for Control Room analysis, and the upcoming 95001 inspection for the White Finding related to the ECCS.

➤ Seismically-Induced System Interactions Housekeeping (SISI) Program - Mr. Wardell described the purpose of the SISI Program as to ensure that any safe shut down systems that are seismically designed are not affected by other systems that might require components or equipment to be brought into proximity with the seismically designed system and which could thereby interact with the seismically designed system and affect its functionality during a seismic event. Mr. Wardell stated DCP has detailed procedures and employs SISI safe areas to store temporary equipment. During the commencement of refueling outage 1R20 there was some degradation of SISI performance detected principally related to the installation of scaffolding. **Investigation into this matter determined that an administrative evaluation before components used for scaffolding were installed was not done and while a reevaluation determined there was no adverse effect on safety-related systems the issue was entered into the Corrective Action Program and the Quality Verification (QV) organization will perform an assessment. Mr. Wardell recommended that the DCISC follow-up on the QV assessment during a future fact finding.**

➤ Winter Storm Events - Mr. Wardell reported that winter storms in the Pacific Ocean can sometimes dislodge and bring large amounts of loose kelp from within Diablo Cove, where the plant draws in its cooling water, and the kelp can impede or block the flow of water into the Intake Structure. When this occurs power is reduced and procedures have been established. These procedures include cleaning the racks or the screens in the Intake Structure, and returning to 100% power operation. There were three such events in the recent past: one event affected Unit-2 and resulted in a 50% power reduction; a second event did not require any power reduction; and a third event did not initially result in power reduction but subsequently during this third event small pieces of kelp were discovered in the condenser and found to have blocked a sensor and accordingly power was reduced to 50% and the condenser tubes were cleaned of the kelp. The DCISC representatives found the plant was very successful and adroit in responding to winter storm events.

➤ Component Cooling Water (CCW) System - this important system attaches to the Auxiliary Saltwater (ASW) System used to cool various safety-related and non safety-related components. The CCW System uses three pumps, two heat exchangers, and a surge tank and has

⁴ “FLEX” is not an acronym but the title of a program by the nuclear power industry to develop a diverse, flexible approach to implement the lessons learned in 2011 from the accident at the Fukushima Daiichi Power Plant in Japan and to address the NRC recommendations following that accident.

two operational trains as only two pumps are needed for functionality. The CCW System is in Green health status with no leaks.

- Non-Containment Outage Work Tour - Dr. Peterson and Mr. Wardell toured the work being performed during the outage which consisted mainly of observing work in the Turbine Building on the turbines and work at the Intake Structure on the traveling screens. Mr. Wardell displayed photos taken during the DCISC's inspection tour and reviewed some of the equipment worn by personnel to detect any exposure to radiation.
- Containment Outage Work Tour - the DCISC fact-finding team toured within Unit-1 Containment with the Outage Containment Coordinator, Mr. Ron McQuade, and reviewed maintenance, inspections, and other work on replacement of components being done in Containment. Mr. Wardell reported cobalt 60 in the RCS has been a cause of Unit-1 having higher radiation levels than Unit-2. He reported during the outage protective shielding was used as well as having low dose waiting zones available for personnel. Mr. Wardell reported he and Dr. Peterson received very little dose during their tour, less than one millirem each.
- View Containment Closure Video - a video was shown at the meeting of the closure drill performed to ensure the Containment equipment hatch which is approximately 20 feet in diameter and is used for moving equipment in and out of Containment. Mr. Wardell reported the plant is required to test that the hatch can be closed within the required time. The hatch is open during refueling except when the RCS is not physically intact and fuel remains in the reactor vessel.
- Outage Schedule Update - Mr. Wardell reported this review determined the outage was proceeding well.
- Meet with DCPD Officer - Dr. Peterson met with Vice President Mr. Jim Welsch to discuss items from the fact-finding.

Upon a motion by Dr. Budnitz, seconded by Dr. Peterson, the May 10-11, 2017 Fact Finding Report was approved and its transmittal to PG&E authorized.

The Chair requested Consultant McWhorter to make a report on the next fact-finding visit to DCPD. Mr. McWhorter reported on the March 8-9, 2017, fact-finding visit to DCPD with Dr. Lam. Mr. McWhorter reviewed the topics reviewed with PG&E during that visit included the following:

- Meeting with NRC Senior Resident Inspector Christopher Newport.
(Audio and transcript did not pick up any comments here.)
- Fire Protection Program and System Health - Mr. McWhorter reported that in the past the Fire Protection Program has focused on requirements contained in 10 CFR Part 50 Appendix R but will now transition to a new format based upon the National Fire Protection Association (NFPA) 805 Program requirements. The DCISC fact-finding team reviewed the results of the triennial fire protection inspection completed in October 2016. Mr. McWhorter reported the inspection results were generally good but implementation of NFPA 805 requirements has not

been approved as quickly as the plant anticipated and another fire protection inspection will likely be performed in 2018 to capture and assess the plant's implementation of NFPA 805 requirements. The DCISC representatives met with the Fire Protection Services manager for a discussion of improvements made in the control of transient combustibles and in overall plant cleanliness. Transient material control includes the use of metal instead of wooden containers to hold parts and the use of metal instead of wooden pallets. The Fire Protection Services organization includes the DCPD Fire Department as well as other aspects of the Fire Protection Program. The DCISC team reviewed the reductions achieved in Fire Protection System impairments which have reduced those issues from 45 two years ago to 8 at the time of the fact-finding.

➤ Independent Spent Fuel Storage Installation (ISFSI) Operations - Mr. McWhorter reported the fact-finding visit included review of the ISFSI cask loading campaign conducted during 2016 when 12 casks were successfully loaded, with each cask containing 32 spent fuel assemblies. He reported the total number of casks now stored on site at the ISFSI is 49 and there are plans to load another 9 casks during 2018 and 8 casks each in years 2020 and 2022. These years were elected for loading campaigns as they are years when the plant is expected to have only a single refueling outage. DCPD's 10 CFR Part 72 license for the ISFSI is due to expire in 2024 and DCPD plans to submit an application for renewal of the site-specific Part 72 license for the ISFSI in 2022. Mr. McWhorter reported DCPD will require certain general information on the storage casks from their manufacturer, the Holtec firm, and Holtec's general cask certification from the NRC is due to renew in 2020 so that information should be available. He remarked that the issue of stress corrosion cracking may be reviewed as part of Holtec's application and that this could result in new license requirements for DCPD's ISFSI license. Mr. McWhorter stated the results of the NRC inspection of the ISFSI during 2016 were discussed with plant staff including the results of the non destruction examination of the welds for the lifting yokes for the ISFSI transporter which did not find any issues with the welds. He reported an issue was identified based on a licensing analysis during the recent loading campaign regarding insufficient thread stud engagement and procedures and, based on this analysis, the 3" thread stud engagement required by the licensing basis was not always being obtained. Upon review it was determined that only 1-1/4" was required to meet the design strength requirements and all the stud engagement links were greater than 1-1/4". PG&E has changed to longer studs and continued the loading campaign and later went back and changed all the studs on the existing casks to make sure the full 3" of thread engagement was achieved per the licensing basis. The DCISC team reviewed fuel management issues in light of the requirements of the Joint Proposal which, if approved, would require PG&E to consider accelerating the movement of spent fuel from wet to dry storage. Mr. McWhorter stated there are considerable constraints involved in this issue based on licensing, such as minimal duration for the fuel to be in the pool before moving and based upon the NRC's B.5.b. requirements (addressing station blackout and advanced accident mitigation measures) for the spacing of old and new assemblies as well requiring the mixing old and new assemblies within the casks. Mr. McWhorter reported as part of its review, PG&E will assess whether or not to support a request to change the associated license conditions but that such changes might require several years to effect.

➤ Auxiliary Building Ventilation System Health - The DCISC fact-finding team met with the system engineer for the Auxiliary Building Ventilation System that supplies air and cooling to the Auxiliary Building which contains safety-related equipment which depends upon air flow

for cooling. The system also serves a mitigation function during an accident as it assists in filtering air as it leaves the Auxiliary Building. The Auxiliary Building Ventilation System is presently in Green health status.

- Centrifugal Charging Pump System Health - The DCISC representatives met with the system engineer for the Centrifugal Charging System pumps which serve both emergency and non emergency functions. Two of these pumps are safety-related and are part of the ECCS and the third pump serves during normal operations as a non safety-related pump to supply charging to the Chemical Volume and Control System. The Centrifugal Charging Pump System for both units was in Green health status with no significant problems. Mr. McWhorter reported the Chemical Volume and Control System has experienced some trouble with getting replacement for its boric acid transfer pumps but that issue has been worked through and the boric acid transfer pumps are planned for replacement by the end of 2017.

- DCISC Member Dr. Lam's Discussion with DCPD Senior Director of Nuclear Services.

- Reactor Vessel Material Surveillance Program - The DCISC team met with the program engineer for the Reactor Vessel Material Surveillance Program which takes irradiated samples from both reactor vessels and tests the samples for strength in order to validate the pressure and temperature limits for the vessels and prevent over pressurization and brittle fracture due to thermal shock and pressure. Mr. McWhorter reported that typically four coupons are required for sampling and four such samples were removed from Unit-2 and found to be satisfactory with minimal scatter. For Unit-1 three of the four samples did not produce low enough scatter and an alternate methodology was required under NRC Technical Branch Position 5.3 to utilize other industry data and those results were satisfactory.

- Operability Determination Program - Mr. McWhorter replied a meeting with the acting Operations manager was held to discuss operability determinations which are performed whenever a degraded condition is identified. These operability determinations are an important aspect of decision making and are governed by procedure as to how degraded conditions are required to be reviewed to determine if equipment involved should be declared inoperable. Mr. McWhorter observed the Operability Determination Program is very specific in requiring the shift manager to use a conservative decision making process in making operability evaluations. Complex operability determinations require involvement of the Engineering organization and the DCISC's review of operability assessments found those assessments to have been properly performed in accordance with procedure. Mr. McWhorter reported degraded, unanalyzed and non conforming conditions are tracked by what is termed the 'DUNC List' which is made part of the monthly Plant Performance Improvement Report and that this gives those conditions visibility to managers at the station and the Plant Performance Improvement Report is regularly reviewed by the DCISC.

- Status of Joint Proposal - As there is to be a presentation on this topic at this public meeting Mr. McWhorter deferred discussion on this item.

- Employee Concerns Program - The DCISC representatives reviewed the Employee Concerns Program (ECP) with program staff. The ECP is used to allow employees to voice their concerns outside the station's line management organization and provides a non intimidating,

protected, venue for such concerns. Mr. McWhorter reported the ECP appears to be well and properly run and it provides mechanisms for employees to report concerns directly as well to do so anonymously. During 2016 the ECP investigated 42 concerns, 4 of which resulted in detailed, formal investigations. Many of those concerns involved leadership or communication issues but several were technical in nature. The ECP also conducts interviews with DCPD employees who are separating from the station if the employee has been at DCPD for more than six months. Mr. McWhorter reported the ECP also receives and conducts investigations into concerns referred to the ECP by the NRC of allegations which were raised independently and separately with the NRC by employees. During 2016 there was one such allegation referred to the ECP by the NRC. Overall, the DCISC fact-finding team found the ECP to be properly managed in an appropriate manner for the industry and the station.

Dr. Lam reported that for the March 8-9, 2016, fact-finding visit DCPD plant staff were well prepared and they provided relevant material that was responsive to the topics requested by the DCISC on the fact-finding agenda.

Ms. Sherry Lewis of Mothers for Peace was recognized. In response to Ms. Lewis inquiry Mr. McWhorter stated the terms of the Joint Proposal which require PG&E to consider acceleration of the transfer of spent fuel from wet to dry storage is subject to the NRC licensing basis for the plant and accordingly PG&E is not totally in control of the pace of transferring fuel from wet to dry storage. Any change to the present requirements would only be allowed by the NRC in accordance with revised technical specifications or to other commitments such as the B.5.b. security-related requirements. Accordingly, PG&E would be required to seek additional approvals in this matter and PG&E has not yet undertaken a review process in connection with any potential changes to spent fuel transfer. In response to Ms. Lewis questions, Mr. McWhorter reported that PG&E is required to maintain the fuel in its current configuration or to propose an alternate configuration and other plants have built alternate systems for fuel storage in order to commence the decommissioning process for permanent systems but the same requirements such as for seismic and equipment qualification continue to apply.

Upon a motion by Dr. Peterson, seconded by Dr. Budnitz, the March 8-9, 2017 Fact Finding Report was approved and its transmittal to PG&E authorized.

The Chair requested Assistant Legal Counsel Rathie to report on administrative, regulatory and legal matters.

Mr. Rathie reported that PG&E completed a required CPUC filing concerning the compensation provided to DCISC members which compares their compensation to that provided to the members of the NSOC and of the Nuclear Decommissioning Trust. In this filing PG&E recommended no change to the compensation provided to the Members of the DCISC. He reported that Dr. Peterson is one of three candidates under consideration by the Governor for reappointment to the DCISC for a term commencing on July 1 2017, and expiring on June 30, 2020. Mr. Rathie reported that the NRC has scheduled a public meeting to review DCPD performance for July 12, 2017, at the Courtyard by Marriott Hotel in San Luis Obispo. He concluded his remarks by reporting that the DCISC website (www.dcisc.org) has averaged 1,415 unique visitors every month this year with the top five countries for visitors, in order, being Poland, Russia, Canada, the U.S. and Japan.

VIII ADJOURN AFTERNOON MEETING

The Chair adjourned the morning meeting of the DCISC at 5:05 P.M.

IX RECONVENE FOR EVENING MEETING

Dr. Lam reconvened the afternoon meeting of the DCISC at 5:31 P.M. and welcomed those present.

X COMMITTEE MEMBER COMMENTS

There were no comments by Members at this time.

XI PUBLIC COMMENTS AND COMMUNICATIONS

There were no comments by members of the public at this time.

XII INFORMATION ITEMS BEFORE THE COMMITTEE

The Chair requested Mr. Cary Harbor, Director of Compliance, Risk and Business Planning for PG&E's generation line of business to introduce the first of the informational presentations requested by the Committee for this public meeting. Mr. Harbor has more than 30 years' experience in the nuclear industry and holds a Bachelor of Science Degree in Nuclear Engineering from the University of California at Santa Barbara and has completed executive level courses at Stanford University. Mr. Harbor previously held leadership positions in the Engineering, Regulatory Services, Operations and Maintenance organizations at DCP.

Mr. Harbor introduced Ms. Paul Gerfen, DCP Station Director. Mr. Harbor reported Ms. Gerfen has more than 25 years' experience in the nuclear industry, holds a Bachelor of Science degree in Computer Science and previously held leadership roles in Engineering, Maintenance and Operations organizations at DCP.

Presentation on the State of the Plant including Key Events, Highlights and Station Activities since the DCISC's February 2017 Public Meeting; Summary of Station Highlights and Performance, Including the Status of the Twentieth Refueling Outage for Unit-1 (1R20).

Ms. Gerfen began her presentation by displaying a photo taken inside Unit-1 Containment during the time when the reactor vessel's cavity seal was being replaced. Unit-1 is currently in a refueling outage which was initially scheduled for 75 days but for which the schedule has now been reduced to 60 days. Ms. Gerfen reported Unit-2 is operating in Mode 1 at 100% power with no equipment issues and all NRC performance indicators in Green status. In January 2017 ocean conditions caused curtailment of both units to 55% power to conduct "pick and dredge" condenser cleaning activities which were completed with no challenges. Unit-2 was curtailed for a cooling water tunnel cleaning in March 2017.

Ms. Gerfen displayed and briefly reviewed the power generation history for both units over the last four months and over the last twelve months including the events she described above. She reported a retired U.S. astronaut was engaged as a speaker in connection with the Unit-1 refueling outage and a principal focus of his message was the need for and benefit to safety from having every individual employee feeling encouraged to raise issues that others might not be addressing.

The baffle-former bolt replacement project conducted during 1R20 found after inspection of 832 bolts that only one baffle-former bolt displayed signs of degradation. However, based upon analysis by Westinghouse a total of 61 baffle-former bolts were replaced to ensure that Unit-1 should be able to operate to the end of its current licensed life without this issue needing to be again addressed. Outage 1R20 was originally scheduled for a 75-day duration based on a “worst case” estimate of having to replace 200 bolts. As only 61 bolts were replaced the outage schedule was reduced to 60 days. In response to Dr. Lam’s inquiry Ms. Gerfen stated the decision to replaced 61 bolts when only a single bolt was found to have symptoms of degradation was based upon the number of bolts required in a proper bolt pattern and upon the failure rate of the bolts as determined by the ultrasonic inspection conducted during 1R20. In response to Consultant McWhorter’s question Ms. Gerfen replied that the plant anticipated that only a very small amount of bolts might need to be replaced and the outage was accordingly structured with smaller maintenance outage windows to be able to be concluded earlier. In response to Dr. Budnitz request Ms. Gerfen confirmed that condition of baffle-former bolts is not an issue for Unit-2 due to differing flow patterns within the Unit-2 reactor core, with Unit-1 having a down-flow pattern while Unit-2 has been modified to have an up-flow pattern which prevents the condition.

Ms. Gerfen reported Unit-1 experienced elevated dose rates due to cobalt 60 but with changes made including raising the pH, increasing zinc injection, and increasing let down as well as through the use of smaller micron filters, the dose for Unit-1 was proactively lowered. She remarked that the station has worked diligently on As Low as Reasonably Achievable (ALARA) worker practices and expects to conclude refueling outage 1R20 with a collective dose of approximately 46 rem which is less than the 55 rem projected for 1R20 which would place the plant within the industry’s second quartile of performance for collective dose during outages. Dr. Budnitz observed that when neutrons strike iron material during operation of the reactor the iron is activated and produces cobalt 60 which Dr. Budnitz stated has a five-year half-life and a very energetic gamma ray. He remarked that while most cobalt 60 remains within the reactor vessel, on occasion it will get into the cooling water and be transported in the primary system in such a manner as to produce external dose to plant personnel. Ms. Gerfen reported that the increased dose rate for Unit-1 due to cobalt 60 was because of misalignment of a reactor coolant pump during 1R18 which released stellite from a bearing in the pump.

Ms. Gerfen concluded her presentation with a review the upcoming activities for DCPD including the evaluation by the Institute of Nuclear Power Operations (INPO) scheduled during September 2017 and preparations for the Operations crew performance evaluations with training activities scheduled to take place in the control room Simulator facility and the actual evaluations taking place in August and September 2017.

Mr. Harbor introduced Mr. Tom Baldwin, Director of Site Services at DCP, and reported that Mr. Baldwin has more than 25 years' experience in the nuclear industry and holds a Senior Reactor Operator License and a Bachelor of Science Degree in Mechanical Engineering and a Professional Engineer's License. Mr. Baldwin has held leadership roles at DCP in the Engineering, Operations and Regulatory Services organizations.

Update on Safety System Functional Failures.

Mr. Baldwin observed DCP is committed to the highest standards for its equipment design and to design and procedural redundancy and diversity. DCP employs a large, professionally trained, and routinely tested staff to operate the plant. He remarked this ensures defense-in-depth is established and maintained so that safety functions can be performed. Processes and procedures such as the Corrective Action Program and root cause evaluations facilitate a clear understanding of the causes of events to prevent recurrence. Through promotion of awareness and recognition of risk in day to day activities and the establishment of mitigation measures for those risks DCP has been able to reduce safety system functional failures to zero over a period of the last three years.

Mr. Baldwin stated a safety system function failure (SSFF) is any event or condition that at the time of discovery could have prevented the fulfillment of the safety function of a structure or a system that is needed to shut down the reactor and maintain it in safe shut down; to remove residual heat; to control the release of radioactive material; or to mitigate the consequences of an accident. He reported that there is no credit, allowance or leeway given the licensee in SSFF analysis for manual action or other means of performing the function. SSFF only applies to those safety-related systems, structures or components that are within the plant's technical specifications and are required to be operable. In response to Dr. Peterson's observation Mr. Baldwin confirmed that SSFF analysis does not employ a risk-informed definition and accordingly may not provide an accurate depiction of total plant safety or risk. However, Mr. Baldwin observed DCP expects to maintain its safety function capability through defense-in-depth and redundancy and he stated that SSFF analysis uses a rule-based prescribed methodology that does not include assessing probabilistic risk. The plant is managed and controlled in accordance with its technical specifications which require one train of a safety-related system, at a minimum, be available at all times and to be capable of performing its function without consideration of risk. In the event that the technical specifications are not met a report to the NRC is made which does include a probabilistic risk assessment of the event. Dr. Budnitz remarked that in some cases SSFF has a more important risk significance than in others and there are methods to assess that risk but the objective of the SSFF Program is to reduce the number of SSFF to zero because having a SSFF may be a sign that actions in response to a root cause evaluation may not have been as effective as necessary and therefore might not prevent recurrence. Dr. Budnitz remarked and Mr. Baldwin agreed that there may be a hierarchy of response to take into consideration with violation of a technical specification being of the highest priority.

Mr. Baldwin reported in 2012 DCP recognized that there was an improvement opportunity to reduce SSFF and a root cause evaluation was conducted which identified need for improvement in recognition of risk through the use of human performance tools and efforts were undertaken to educate and assist plant staff who are involved in daily work planning activities,

including assessment and prioritization of risk, to better identify and categorize risk in context of SSFF considerations. Systems of concern for loss of system function were identified and controls were established to mitigate the risk of an adverse event when work was performed on the system. Mr. Baldwin used the example of the redundant trains employed by the Residual Heat Removal (RHR) System and reported that when work is being performed on one of the two fully redundant trains available to the RHR System the train on which work is not being performed is protected by a barrier and access is restricted to the operational train and to its power supplies. Mr. Baldwin stated that oversight including review by senior plant leadership has been increased before high-risk work is commenced in the plant, including assessing the work involved, the prevention measures to be employed, the associated risk, and the methods to be employed to detect if something is not going as expected, as well as the corrective measures in place.

Mr. Baldwin reported there have been no SSFF events since 2014. In 2012 there were three such events, in 2013 there were five, and in 2014 there were four SSFF events. He reported the Licensing Basis Verification Project (LBVP) identified some original design vulnerabilities and accordingly some license and design changes were identified in context of the potential for loss of a safety system function. In response to Dr. Peterson's inquiry concerning a SSFF related the emergency diesel generators (EDGs) Mr. Baldwin explained that technical specifications require the EDGs to be operable and to start automatically on demand and in the course of restoring the EDGs from an automatic start due to loss of offsite power, operators placed all three EDGs for one unit in manual and then restored them to automatic. The very short period during which all three EDGs were in manual represented a SSFF as they were not capable of operating per the technical specifications which required that they be available for automatic start. In response to Consultant McWhorter's query Mr. Baldwin stated inoperability in 2016 of an RHR valve did not represent a SSFF because the second RHR train remained operable and capable of performing its function. In response to Mr. McWhorter's further inquiry, Mr. Baldwin and Mr. Harbor stated that the event involving the RHR valve does not have a clear time of inoperability and it is possible that function on RHR Train B might have been lost at some time during time that maintenance was performed on RHR Train A, but without knowledge and with an indeterminate period of time by the NRC's reporting rules for SSFF the event was not declared to be a loss of system function.

Mr. Baldwin stated that work control processes will be key in continuing to identify risk and challenges and to putting mitigation measure in place well in advance of performance of work and to thereby eliminate SSFFs. Protection of redundant trains will remain important as will the need to consider preemptively declaring a system to be unavailable and to implement technical specification requirements for diversity and for compensatory measures when performing work on systems. Additional oversight and barriers will be used to prevent actions that could lead to adverse conditions including using additional checks and stops in procedures to ensure critical steps in procedures are not missed. Mr. Baldwin concluded his presentation with the observation that DCPD has a robust process in place to prevent or reduce SSFF that has been demonstrating good results. Dr. Lam observed and Mr. Baldwin agreed that DCPD having achieved zero SSFF events for the last three years was not a random occurrence.

Dr. Lam thanked Mr. Baldwin for his informative presentation.

A short break followed.

Mr. Harbor introduced Mr. Adam Peck, Engineering Director at DCPD, to make the next informational presentation to the DCISC. Mr. Harbor reported Mr. Peck holds a Bachelor of Science Degree in Electrical Engineering and has more than 15 years' of experience in the nuclear industry and holds a Senior Reactor Operator License. Mr. Peck is a graduate of the U.S. Naval Academy and has held leadership posts in Operations and Engineering organizations at DCPD.

Update on the Joint Proposal to Retire DCPD at the Expiration of its Current Operating Licenses Joint Proposal), the DCPD Excellence Plan, and Plans for Retention of Employees After Year Four.

Mr. Peck reported that testimony in the CPUC hearings on the Joint Proposal concluded at the end of April 2017 and topics discussed in those hearings included replacing DCPD power, the employee retention program, and the recovery of the cost for DCPD license renewal activities. Mr. Peck stated legal briefs were due to the Administrative Law Judge on May 26 and rebuttal briefs are due on June 9, 2017. He stated challenges in the proceedings from intervening parties have principally focused upon the replacement power component while the employee retention and community assistance components have been largely without opposition. In response to Dr. Lam's inquiry Mr. Peck stated the hearing schedule, including hearings to be held in the San Luis Obispo area, has not yet been established.

Dr. Peterson observed **there is potential that an increase in the risk of transmission problems or outages might affect the availability of alternate off site power sources for DCPD due to increasing incentives to curtail power output because of production or grid-related reasons.** If this were to occur it could affect overall operational risk as any resulting curtailment of DCPD operations would place stress on the plant. However, improvements in grid reliability reduce the probability of having an effect on DCPD safety of operations and there is a question as to the balance of these factors. He inquired whether PG&E has assessed issues of grid reliability in going forward during the remaining period of operation under the Joint Proposal in context of the matter of obtaining replacement power. Mr. Peck replied that the replacement power issue is tied to the three tranches of energy replacement originally proposed as part of the Joint Proposal, with the first tranche being in reference to energy efficiency and the other two tranches based upon replacement of demand. Mr. Peck stated PG&E has an agreement with the California Independent System Operator (CAISO) with reference to DCPD power production and there have been no changes to that agreement as a result of the Joint Proposal. **Mr. Peck and Dr. Peterson agreed this might be a suitable topic for a future DCISC fact-finding which should include representatives from the PG&E transmission organization.**

Mr. Peck stated the DCPD Excellence Plan is developed in furtherance of PG&E's mission to safely, reliably, and affordably operate DCPD with excellence to the end of its current licensed life and to conduct an orderly transition to decommissioning. The Excellence Plan is intended to cultivate relationships with DCPD employees and with the local community and to engender confidence with regulatory authorities. Objectives include maintaining and sustaining high levels of safety and performance, engaging each employee and maintaining his or her motivation, and enabling DCPD to perform with excellence. Workforce management issues

which the Joint Proposal is intended to implement include ensuring appropriate levels of skilled and qualified personnel are available, developing retraining and redeployment programs for DCPD employees, and maintaining relationships with and oversight by the Strategic Teaming and Resource Sharing (STARS) joint utility initiative and with the INPO.

Mr. Peck reported employee focus groups are engaged in assessing the concerns of differing personnel groups within the plant and with maintaining a strong nuclear safety culture and employee morale. He stated the plant is receiving strong support from PG&E's corporate organizations in these efforts. He acknowledged that there may be strong motivation for some employees to leave DCPD upon conclusion of the Tier 1 Retention Program which ends of August 31, 2020. The Tier 1 Retention Program has achieved participation by 87% of DCPD employees and provides financial incentives for employees to stay at DCPD through the end of Tier 1 and financial penalties to depart before the end of Tier 1. Mr. Peck stated each department has different initiatives and these have been incorporated into the DCPD Five-Year Business Plan. The Tier 2 Retention Program will become available to employees by the first quarter of 2019 and this should give time to assess attrition levels. PG&E will also make available the Retraining and Redeployment Plan to provide information and opportunities within PG&E. Mr. Peck observed the goal is to maintain the appropriate level of staff to operate the plant safely and with excellence. In response to Mr. McWhorter's inquiry, Mr. Peck stated that the Retraining and Redeployment Plan's first milestone occurs at the end of 2017 and involves assessment and development of a strategy to address hiring needs but funding for the Retraining and Redeployment Plan will intentionally not be made available until 2021, so as not to provide redeployment opportunities too early. In response to Consultant Wardell's inquiry, Mr. Peck stated that there are at present no specific efforts directed at NRC-licensed as opposed to unlicensed employees and Mr. Peck reported that the plant presently has a number of licenses in reserve in different areas of the plant.

Dr. Budnitz stated that he does not in any way doubt PG&E's and Mr. Peck's commitment or good will in these efforts but Dr. Budnitz does not believe the plant will have the same quality staff and operational capability during its last three months of operation than it would otherwise have were it not closing. Dr. Budnitz stated his comment was in respect to the "best of the best" and not necessarily directed to the entire DCPD workforce. He remarked those highly qualified persons in the middle of their careers will receive and be receptive to attractive job opportunities elsewhere in the nuclear or other industries and he observed that PG&E and DCPD need to recognize and acknowledge that fact and that human nature, even with significant financial incentives, may affect their plans to retain a highly qualified workforce. Mr. Peck stated he appreciated the concern expressed by Dr. Budnitz and that those concerns are the reason for the Excellence Plan. Mr. Peck observed participants in the PG&E defined-benefit pension plan and those close to retirement as well as those who would benefit from the severance package to be offered will have a greater incentive to remain at DCPD. Mr. Peck stated he was a bit more optimistic than Dr. Budnitz but cautiously so.

Dr. Gene Nelson of Californians for Green Nuclear Power was recognized. Dr. Nelson stated his group was working very hard on an alternative to the Joint Proposal which would continue DCPD's operation beyond 2025. Dr. Nelson stated the local job market is very limited and has been so for some time. He stated he shares Dr. Budnitz' views on retention issues. Californians for Green Nuclear Power is an intervenor in the CPUC proceedings to consider the

Joint Proposal and has strongly defended the continued, safe operation of DCPD for the benefit it provides not only to the local economy but also to the state in terms of important voltage, phase, and frequency stability to the grid particularly as more and more inherently unreliable wind and solar power is added. He cautioned that sudden voltage surges or huge blackout events could result from the closure of DCPD if the Joint Proposal is approved. Dr. Nelson reported that the deadline for rebuttal testimony in the CPUC proceedings to consider the Joint Proposal has now been extended to June 16, 2017.

Ms. Sherry Lewis of Mothers for Peace was recognized. Mr. Lewis stated that while she understood the Tier 2 Retention Program would commence after 2020 she requested confirmation that commitments from DCPD employees could be made upon the Program's roll out in 2019. Mr. Harbor replied that agreements for an additional five-year commitment under the Tier 2 Retention Program would be offered to plant staff upon program roll out during the first quarter of 2019.

Dr. Nelson was again recognized. He stated he provided an email to the DCISC's Assistant Legal Counsel wherein he rebutted what he termed alarmist assertions made earlier in the meeting by Dr. Douglas Hamilton, a geologist who Dr. Nelson believed to be representing Mothers for Peace. Dr. Nelson read from his email which he stated included content to show that subsurface liquefaction and rare near-subsurface strata were responsible for the high vertical peak ground motion acceleration that occurred in 2011 in Christchurch, New Zealand. He observed the 2003 San Simeon earthquake caused the greatest damage 50 miles away from Diablo Canyon in Paso Robles, California where, similar to Christchurch, the near subsurface strata were weak. Dr. Nelson observed the subsurface strata near DCPD are well-characterized, solid, and not prone to liquefaction and there is therefore no equivalence to the peak ground motion acceleration measured at Christchurch at the DCPD site.

Ms. Rochelle Becker, Executive Director of the Alliance for Nuclear Responsibility, was recognized. Ms. Becker stated she wished to clarify the record concerning Dr. Nelson's comments and to confirm that Dr. Hamilton was an expert witness for the Alliance for Nuclear Responsibility in the CPUC proceedings to consider the Joint Proposal and Dr. Hamilton has also acted in that capacity on behalf of the Alliance for Nuclear Responsibility in proceedings before the California Energy Commission.

XIII ADJOURN EVENING MEETING

The Chair adjourned the afternoon meeting of the Committee at 7:05 P.M.

XIV RECONVENE FOR MORNING MEETING

The June 8, 2017, morning session of this public meeting of the Diablo Canyon Independent Safety Committee was called to order by its Chair, Dr. Peter Lam, at 9:00 A.M. Dr. Lam welcomed those present and attending remotely by live-streaming video to the meeting.

XV COMMITTEE MEMBER COMMENTS

There were no comments by any Member at this time.

XVI PUBLIC COMMENTS AND COMMUNICATIONS

Dr. Lam inquired whether any member of the public wished to comment or to address the Committee on matters not appearing on its agenda for this meeting.

Dr. Gene Nelson of Californians for Green Nuclear Power was recognized. Dr. Nelson reported that the Connecticut State Senate passed a bill allowing nuclear power which would be of importance to the Millstone Nuclear Plant in Waterford in that state.

XVII INFORMATION ITEMS BEFORE THE COMMITTEE (Cont'd.)

Dr. Lam requested Mr. Harbor to continue with the informational presentations requested of PG&E by the Committee for the public meeting.

Mr. Harbor introduced DCPD Manager of Regulatory Mr. Hossein Hamzehee and reported Mr. Hamzehee has more than 30 years of experience in the nuclear industry and holds Master of Science Degrees in Nuclear and Mechanical Engineering and brings extensive experience with the NRC including at the level of an NRC Branch Chief.

Update on the Status of NRC Performance Indicators, Licensee Event Reports, NRC Notices of Violation, the NRC "95001" Inspection for "White" Input into a Strategic Performance Area, and Issues Raised by NRC Resident Inspectors.

Mr. Hamzehee reported he would provide an overview of DCPD's performance based on NRC's performance indicators for a four-month period since the last DCISC public meeting. He stated the plant is rigorously inspected by the NRC and PG&E is committed to the highest safety standards and accordingly continually reevaluates its operations and emergency plans. He remarked his presentation would cover approximately five months of NRC inspections involving ~2,000 hours of inspection time.

During the period February -May 2017 DCPD met all Green performance expectations for all NRC performance indicators. One violation of very low safety significance was issued by the NRC since the last DCISC meeting in February 2017. Mr. Hamzehee reviewed and briefly discussed some of the 16 performance indicators reviewed by the NRC as currently being within Green status as follows.

- Unplanned Scrams per 7000 Critical Hrs
- Unplanned Power Changes per 7000 Critical Hrs
- Unplanned Scrams with Complications
- Safety System Functional Failures
- Mitigating Systems Performance Index, Emergency AC Power System
- Mitigating Systems Performance Index, High Pressure Injection System
- Mitigating Systems Performance Index, Heat Removal System
- Mitigating Systems Performance Index, Residual Heat Removal System
- Mitigating Systems Performance Index, Cooling Water Systems
- Reactor Coolant System Activity

- Reactor Coolant System Leakage
- Drill/Exercise Performance
- ERO Drill Participation
- Alert & Notification System
- Occupational Exposure Control Effectiveness
- Radiological Effluent Occurrence

Mr. Hamzehee described the safety significance characterizations used for the performance indicators as either Green (very low), White (low to moderate) Yellow (substantial) or Red (high). Green non cited violations indicate very low safety significance, with no impact to public health and safety. In response to Consultant Wardell's inquiry, Mr. Hamzehee reported none of the performance indicators were closed to White based on NRC criteria but DCPD monitors these indicators internally at a lower threshold and on that basis a few indicators are approaching White status.

Dr. Peterson stated that there are challenges involved with detecting incipient conditions through observation and measurement as sometimes the aspects being measured are only indirectly related to degradation or failure and accordingly one is always seeking after better metrics. He observed that monitoring something which is unrelated to a potential failure mechanism also represents a missed opportunity to better employ resources. Dr. Peterson inquired concerning how often the NRC updates or changes the performance indicators it uses. Mr. Hamzehee replied that the performance indicators are infrequently changed in order to provide licensees with stability and he observed that the NRC oversight examination process was significantly revised and changed in the late 1990's to be more risk-informed and this represented a major overhaul of the NRC's monitoring program. Mr. Hamzehee also remarked that licensees rely on other programmatic processes in addition to the NRC performance indicators to assess performance including the Corrective Action Program. He observed PG&E in its assessment of performance of DCPD uses many additional performance indicators to those monitored by the NRC.

Dr. Budnitz observed any suggestion to the NRC that it change its performance indicators needs to be counter balanced with the value in having a long longitudinal record of measuring the same thing. Mr. Hamzehee agreed and stated the indicators may change but not significantly because the NRC and its licensees want them to be stable and mature but also the manner in which data is collected has improved and while the NRC refrains from advising how to collect data it does inspect to ensure the totality and accuracy of the data collected by its licensees. Dr. Peterson agreed and remarked that random methods would produce differing results but he also observed that an unwillingness to drop certain indicators when new indicators are added comes with the risk of the indicators becoming overwhelming for decision making purposes and it is likely that indicators monitored for very long periods of time are not telling the organization very much. Dr. Budnitz gave as an example of the numbers of fuel failures which are monitored by a performance indicator but because of the advances in nuclear fuel technology there are far fewer fuel failures today than compared to what previously was the industry norm. Mr. Hamzehee agreed and provided another example, that of the number of reactor trips which in the 1980's averaged 10-11 trips per year for the average plant and has now been reduced to about 24 trips per year for the entire U.S. fleet of nuclear power plants. Dr. Peterson stated this was a result of the stability achieved in working with a mature technology where most of the flaws in the system

that can exist have been discovered but he observed that one reason for continuing to gather data is that even with mature technology surprises will happen.

Dr. Peterson observed that Space X, while employing a technology much less mature than nuclear power, has developed a high level of skill in its corrective action and root cause processes so as to enable it to follow significant failure with success. He remarked that in the root cause analysis process it is most important to have information as to the as-built condition which is achieved through good, detailed records and this is a reason Dr. Peterson remains very interested in modern electronic log-keeping information gathering techniques with their ability to collect and manage large data sets in order to achieve high levels of reliability in very complex, technical, systems. Dr. Lam observed that the low level of plant trips has had an unintended consequence of not allowing operators much opportunity to experience the system's response to a real emergency situation and consequently a greater emphasis and burden is placed upon operator training. Dr. Lam stated he agreed with Dr. Peterson that a broader scope to collect and analyze data collectively is most valuable.

Mr. Hamzehee reported there were no Licensee Event Reports (LER) issued during February through May 2017.

Mr. Hamzehee reported on NRC Violations January 2017– June 2017 and stated one non cited violation (NCV) was received since last DCISC public meeting. This NCV was Green indicating very low safety significance with no impact to public health & safety. He stated this NCV involved an occurrence in 2010 when a certain number of instrumentation devices used for post-accident, wide-range, performance monitoring were found to have been operating outside of the requirements of technical specification 3.3.3. These devices monitor temperature in the Reactor Coolant System's hot and cold legs and a number of devices were determined to have been operating outside their environmental temperature range due to incorrect installation of insulation which trapped heat inside the thermatic tension pipe. As a result temperatures exceeded normal allowed temperature. This issue was self-identified by DCP, placed in the plant's Corrective Action Program, and reported to the NRC which, after review in the last NRC's Integrated Inspection Report, issued an NCV for violation of technical specifications. In response to Mr. Wardell's question, Mr. Hamzehee stated that DCP could not tell whether the instrumentation would have worked correctly if called upon but the root cause evaluation established the maintenance package had insufficient guidance and in the future when the instrumentation is maintained procedures will be improved to ensure the insulation is installed properly. **Mr. Wardell stated the DCISC would receive the root cause evaluation for this NCV from PG&E and likely review the NCV at a future fact finding.**

Dr. Lam observed and Mr. Hamzehee agreed the characterization that the NCV had no impact on public safety was somewhat inaccurate and what was meant was that while it did not have any impact on public health or safety there was a potential for such an impact.

Mr. Hamzehee stated DCP's overall performance is Green with respect to NRC Performance Indicators and the NCV he discussed is documented in the 1st Quarter 2017 NRC Integrated Inspection Report which will be provided to the DCISC.

Mr. Hamzehee concluded his presentation by responding to Mr. Wardell's inquiry on the 95001 Inspection which is a follow-up inspection to the White Finding received related to the ECCS. Mr. Hamzehee reported all root cause evaluations have been completed, the situation has been corrected and the NRC is due to visit the plant during the week of June 12, 2017, to conduct an entrance meeting, review documentation, and perform an exit inspection. If the NRC agrees that the situation and the inspection finding have been adequately addressed and all the root causes and extent of condition have been identified the NRC will change DCP Unit-2 from Column 2 to Column 1 on the NRC's Reactor Oversight Process Action Matrix which change would represent better performance with respect to risk. **Mr. Wardell confirmed that the Committee will follow up on the 95001 inspection during a future fact finding visit.**

Dr. Gene Nelson of Californians for Green Nuclear Power was recognized. Dr. Nelson stated he found in PG&E's materials for this public meeting some excellent illustrations of the application of discipline such as was discussed by Mr. Hamzehee during his presentation and Dr. Nelson stated he appreciated the discussion on why it is important to look at the whole picture.

Mr. Harbor introduced DCP Manager of Performance Improvement Mr. Mark Frauenheim and reported Mr. Frauenheim holds a Bachelor of Science Degree in Electrical Engineering and has more than 25 years' experience in the nuclear industry including leadership roles at DCP in the Engineering, Maintenance and Performance Improvement organizations.

Description and Status of the Performance Improvement Program.

Mr. Frauenheim began his presentation with an overview of the performance improvement process which he described as a method to find, analyze and fix issues that surface within the station and he stated this model was typical in the nuclear industry. Information is gathered from all sources and used in a monitoring model and analyzed for risk and significance and then a solution to the issue is determined and implemented in a timely manner. Follow-up mechanisms are in place to ensure that the solution successfully addresses the problem. He described and briefly reviewed each of the elements of the DCP Performance Improvement Program:

- Corrective Action Program - available to all station personnel to raise issues.
- Self-Assessment - objective method available to individual departments.
- Benchmarking - assessing performance against other entities.
- Use of Operating Experience - incoming & outgoing, unique to the nuclear industry.
- Performance Monitoring & Trending - to review the data that flows through the station.
- Use of Human Performance Tools - to reinforce training.
- Field Engagement and Coaching (Observations) - by leadership and peers.

The Corrective Action Program (CAP) provides the opportunity for any employee to raise a concern or an issue without regard to its severity. Mr. Frauenheim stated once entered into the CAP system the employee who raised the concern or any employee can track progress and see the propagation of the concern within the station. The CAP analyzes each concern for risk significance and this review is initially performed by the Operations Department as to any potential for an effect on the plant. The concern once entered into the CAP creates a Notification document and when the Notification is closed an email is sent to the person who initially raised

the concern and feedback is sought as to whether the concern and the issue were addressed to that person's satisfaction. Mr. Frauenheim stated there is a broad effort underway in the nuclear industry to simplify and make the CAP process more effective by focusing less on the administrative aspects and more on transparency. In response *[to an unidentified comment]* Mr. Frauenheim stated DCPD has in the manner in which it classifies CAP concerns adopted a revised definition of 'issues adverse to nuclear quality' from the definition proposed by the Nuclear Energy Institute (NEI). He remarked DCPD is confident in its CAP based upon the results of self-assessment. He reviewed the CAP process as including:

- Issue screened by expert panel made up of all major departments.
- Significance, level, and analysis type is assigned.
- Issue owner is assigned and determination made as to level of analysis needed.
- Senior Leadership Board reviews issues independently twice each week.
- Owner investigates and corrects.

Mr. Frauenheim reported issues of high significance, such as those involving the failure of safety-related equipment, result in a root cause evaluation which he described as the highest level of analysis to understand what occurred, why it occurred, and what actions are necessary to prevent recurrence. A second category for less significant events involves a cause evaluation which is conducted by a team of seven or eight individuals engaged full time in performing an in-depth, detailed, analysis which takes on average approximately 30 days to conclude. Mr. Frauenheim described cause evaluation as very rigorous and very invasive. He reported that DCPD does not necessarily wait for the evaluation process to conclude before taking corrective action and the initial step in any analysis process is to determine what immediate action needs to be taken to arrest an issue adverse to quality. In response to Dr. Lam's inquiry Mr. Frauenheim reported that evaluation team members are usually made up of senior plant personnel. A sponsor is assigned for a root cause analysis at the director level or higher and the team manager is typically manager level or higher with considerable experience in the subject matter area. He reported it is not unusual for DCPD to bring in personnel from other stations or consultants to assist in its evaluations.

Mr. Frauenheim reported that cause evaluation and work group evaluation represent lower levels of evaluation and cause evaluation is a new process which DCPD, in common with the nuclear industry, has adopted. He described the cause evaluation process as a menu-based approach which offers significant flexibility. The work group evaluation is performed with supervisor oversight and includes involvement of the person who initially raised the issue. Mr. Frauenheim reported that the PG&E Corporation has adopted the CAP structure used at DCPD for implementation corporate-wide throughout the entire PG&E organization in all its lines of business and DCPD has been assisting in these efforts.

Mr. Frauenheim reviewed the self-assessment process which he described as a structured method for reviewing performance within a group. He reported that self-assessment is never based upon subjective standards but relies on DCPD or external procedures and industry documents provided, for example, by the INPO, the NEI, the American Society of Mechanical Engineers (ASME) or the Institute of Electric and Electronic Engineers (IEEE). Self-assessment is generally performed by the department that owns the program and 47 self-assessments, both formal and informal, were performed during 2016.

Mr. Frauenheim stated that benchmarking is another performance improvement tool used in the nuclear industry which he described as, unlike many industries, a very sharing environment. All departments are encouraged to benchmark with other power plants performing the same functions by visiting those stations and perhaps by visiting other facilities outside the nuclear industry. He reported DCPD has recently benchmarked with the Phillips 66 Company's oil refinery organization on the issue of confined space entry. He reported that 66 benchmarking activities were performed during 2016.

DCPD's use of operating experience was discussed by Mr. Frauenheim and he reported the INPO provides a very robust process and software application that allows every nuclear station in the U.S. to provide information concerning events into INPO's system and every day those events are screened by INPO and information is sent out to the industry. During 2016 there were 1,038 external operating events reviewed by DCPD. Each is reviewed for its applicability to DCPD by the appropriate expert at the station. **In response to a question from Dr. Peterson Mr. Frauenheim stated he would provide the DCISC with information concerning how many of the 1,038 events reviewed during 2016 were found to have applicability to DCPD.**

Dr. Peterson inquired as to how information on operating experience was obtained from other industries for use by DCPD and Mr. Frauenheim replied the staff of the Performance Improvement Program reviews industrial news websites each day for events which have occurred in other industries which might have application or utility for DCPD. In response to Dr. Peterson's inquiry concerning how many of the 1,038 events might have been generated by events outside the nuclear industry, Mr. Frauenheim replied that the INPO process does not encourage reporting of events outside the nuclear industry. Dr. Peterson remarked and Mr. Frauenheim agreed that it is admirable that the nuclear industry is looking outside the nuclear field for operating experience and this should be encouraged to discover areas where perhaps there might be opportunities for improvement and innovation. Dr. Peterson observed the use of hand-held devices and wireless technology in obtaining and recording information in the petroleum and petrochemical industry is very advanced and has contributed to increased reliability in those industries and the search for best practices need not and likely should not be restricted to within the nuclear industry. In response to Dr. Peterson's inquiry about experience and attitude from other industries to the nuclear industry's benchmarking efforts Mr. Frauenheim and Mr. Harbor replied that not all industries are open to such efforts. Generally when there is no issue of competition, such as with benchmarking efforts in the aviation and space industries, greater opportunities for sharing information are available.

Mr. Frauenheim stated that benchmarking outside the nuclear industry is not unique to DCPD but the nuclear industry is more receptive in general than other industries to seeking information from varied sources in order to achieve improved performance. In response to Dr. Peterson's observations he stated he would take a recommendation to the INPO concerning the possible establishment of a process to share information generated from outside the nuclear industry. Dr. Peterson remarked that it might be useful for the nuclear industry to review the phased approach used by the biotech industry in terms of licensing issues. Dr. Budnitz observed that the NRC also analyzes operational data and this effort commenced following the accident at the Three Mile Island Nuclear Generating Station in Pennsylvania through the NRC's Office for

Analysis and Evaluation of Operational Data which has now been merged into the NRC main office. Mr. Frauenheim stated he was aware of the NRC's efforts which are now largely redundant to those of the INPO as to operational events but the NRC does perform independent analysis on initial events that is typically not done by the INPO. Dr. Lam stated that earlier in his career he managed a group of experts on behalf of the NRC involved with the review of a large volume of LERs.

Mr. Frauenheim reviewed with the Committee issues of performance monitoring and trending which provide a procedure to process data monitored by various plant programs including the CAP, field observations, safety events, human performance events, self-assessments, benchmarking, and internal and outside organizations such as DCPD Quality Verification, the INPO, and the DCISC and the Performance Improvement Program provides that input on a daily basis to teams of analysts in the effort to detect early trends in equipment deficiencies and human performance issues and to prepare to take corrective action if necessary.

Mr. Frauenheim discussed the plant's use of human performance tools to reinforce training and to reduce error. These tools are intended to manage situations based on risk and significance and to reinforce the use of procedures and tools to enable every employee to perform at her or his best and to avoid events. Human performance tools include pre job briefings which are now focused on risk to the station and the role of probabilistic risk assessment in this analysis and use of procedural checklists and the Site Standards Handbook provided to every DCPD employee. Mr. Frauenheim provided and briefly discussed the activities by an employee shown in a photograph working in the plant and employing various human performance tools in context of the job.

Mr. Frauenheim reported that field engagement and coaching are also important attributes to the Performance Improvement Program and efforts in field engagement and coaching involve observations by leadership and peers of workers in the plant using work processes to allow leadership to see first-hand the conditions and challenges faced by those doing work in the plant. These observations are sometimes targeted observations for specific activities or specific times and feedback is provided by the observers either in written form, possibly with photographs, or through the use of software either in the field in real time or after the observation. This feedback is then used to develop an analysis and a set of actions, if required, to address a problem.

In response to Consultant McWhorter's observation on the use of electronic procedural documents Mr. Frauenheim stated DCPD is now looking into that application and is assessing the ways electronic procedures would and should be used in the plant including the worker's preference to see the entire procedure rather than just proceeding from one step to the next. He noted that one benefit of using electronic procedures would be that only the most current version of the relevant documents would be made available. Dr. Peterson stated he encouraged the plant to continue to explore the potential provided by expanding the use of electronic media as the amount of information that one can obtain is thereby greatly increased. **Dr. Peterson remarked and Mr. Frauenheim agreed that a review of the amount of data and information managed by DCPD would be a worthwhile topic for a future fact-finding.** Mr. Frauenheim stated that the Performance Improvement Program is reviewing how data volumes at the plant are managed and how it can be leveraged into creating better learning opportunities and in furtherance of more effective corrective actions.

Mr. Frauenheim summarized the results of the Performance Improvement Program during 2016 as including 47 self-assessments, 66 benchmarking activities, 5,874 documented field engagements, 1,038 reviews of operating experience, and 85 issues identified at DCPD which were shared with the industry. He reviewed with the DCISC a graph of the managed inventory of CAP issues which showed a steady decrease in the amount of open, unresolved, issues adverse to quality from approximately 1,100 in 2016 to what he described as a new, normal level of 325 to 350 issues at the present time. He remarked that there is typically an increase in CAP items during a planned refueling outage.

In response to Mr. McWhorter's question, he estimated 100 Notification documents were generated each day at DCPD during normal operation but this increases to approximately 150-200 Notifications per day during a refueling outage. He stated that the majority of Notifications are closed within 30 days and the inventory of 325-350 Notifications represents the balance between inflow and the closure rate for Notifications. In response to Dr. Peterson's inquiry as to whether there were standardized, automated procedures used for reporting of minor issues Mr. Frauenheim responded that although each Notification is unique they do not all require the same amount of effort to close. Issues defined as adverse to quality require a review by an analyst to ensure appropriate action will be taken and depending on the level of the issue, may require review by two or three oversight bodies before they can be considered for closure. For issues not identified as adverse to quality there are procedures used by the initial screening team, including what he termed closing the issue to trend or taking no action at all.

Mr. Frauenheim displayed a graph showing the total numbers of human performance events, both station level and department level, since 2012 which showed continued improvement and he stated the record for the station is 1,026 days without a station level event. However, Mr. Frauenheim remarked there was an event some weeks ago which is under review to see if it fits the criteria for a station level event. This event involved the Maintenance organization during switchgear maintenance performing a resistance check on one of the 12kV volt start up buses. During reconfiguration of the bus for normal operation a ground buggy was placed into the wrong cubicle. This event was detected by a Maintenance manager and the work was thereupon stopped and the ground buggy removed. Although this event resulted in no consequences Mr. Frauenheim described it as a close call and the plant is performing a thorough investigation of the sequence which led up to the incorrect placement of the ground buggy.

In concluding his presentation Mr. Frauenheim stated the Performance Improvement Program at DCPD is effective and is continuing to identify issues while providing greater independent opportunities for personnel to identify issues. The backlog of inventory of open issues is decreasing which allows focus to remain on the most important issues. Process simplification is aligned with the industry and the self-assessment and benchmarking processes are enabling the plant to continue to learn and make improvement based upon internal events and from those within the industry. Human performance is improving and resulting in fewer errors and the operating experience review continues to provide benefit to the station. Field engagement by the leadership provides a valuable tie-in to the Process Improvement Program.

Dr. Budnitz inquired and Mr. Frauenheim confirmed that the CAP results achieved by DCPD in reducing the numbers of items adverse to quality was typical of other stations and he

attributed this to decreasing trends in human performance error rates and he commented the interaction between stations has played a role in the reduction. Dr. Budnitz observed that a reasonable fraction of all important accidents that emerge in probabilistic risk assessment (PRA) have human error associated with them and the nuclear industry benefits from an industry-wide database on different human errors in differing situations. **Dr. Budnitz stated he would inquire of the PRA group whether the CAP trend in reducing items adverse to quality and in the reduction of human error has propagated through to the way human error is analyzed in PRAs.** Dr. Budnitz observed that many human errors are very minor and these may not have decreased in numbers but he stated he would be surprised if these minor errors propagated through to the PRAs and he remarked that a significant number of human reliability analysis events that appear in PRAs are of a lesser significance than would be shown on Mr. Frauenheim's graph of station level events.

Dr. Peterson stated that the new electronic tools being used are now working with much greater amounts of information and it would be worthwhile for the Committee to review what is changing in terms of how information is being managed. He observed there can be problems with acquiring large amounts of information in that it is difficult to sift out the most important information so that it can be prioritized by management. He remarked the use of new electronic tools has the potential to substantively improve safety and reliability of power plants but this comes with its own set of challenges.

Dr. Budnitz remarked that during his last fact-finding on human performance the errors reviewed were mostly errors of commission as opposed to errors of omission. He inquired of Mr. Frauenheim whether the plant has attempted to determine the numbers of each in the data set Mr. Frauenheim presented to the DCISC. Dr. Budnitz stated he would follow up on this issue during a future fact-finding. Dr. Budnitz observed that having more than one person involved in performing a job, such as is done in an airliner cockpit, or using techniques such as independent verification and three-way communication used in the plant can significantly decrease the number and frequency of errors of omission. Mr. Harbor stated that the types of programs that address the techniques described by Dr. Budnitz were among the most important programs for DCP. The CAP has also led to the identification of single point vulnerabilities which in turn assisted with increasing equipment reliability and, in the past, trips caused by inadvertent actuation by an operator have led to improved human performance tools and all the efforts to address these issues have greatly assisted in increasing overall plant performance, safety, and in achieving continuous improvements and with a CAP modeled on that employed at DCP being implemented corporate-wide PG&E as an organization should benefit.

In response to Consultant Wardell's question on the effectiveness review of corrective actions taken, Mr. Frauenheim stated the effectiveness evaluations performed in connection with each root cause evaluation have found the corrective actions to be effective although there were some which found additional improvements necessary to drive better behavior or equipment performance. Mr. Frauenheim stated that when additional corrective actions are identified as a result of an effectiveness review those additional actions are entered into the CAP.

Dr. Gene Nelson of the group Californians for Green Nuclear Power was recognized. Dr. Nelson inquired concerning the meaning of the abbreviation “DA” used on Mr. Frauenheim’s graph for the reduction in CAP inventory. Mr. Frauenheim replied that “DA” was an abbreviation for “Diablo Action” which is a type of software code which applies to corrective action Notifications specific to actions adverse to quality. Dr. Nelson observed that one of the issues he most values related to technology involves data typing, that is ensuring the correct data is gathered, which enables those analyzing the data to identify issues. Dr. Nelson stated there is an organization in San Luis Obispo named Focused Learning which conducts training for high consequence industries including aviation and nuclear power and he encouraged PG&E to look to Focused Learning as another source for operating experience. Dr. Lam thanked Dr. Nelson for his comments.

A short break followed.

Following the break Mr. Harbor reported he recently received good news from the INPO that DCPD Unit-1 has set the record for U.S. nuclear power plants for continuous operation without an automatic reactor trip, Unit-1 having operated without experiencing such an event since June 3, 2002, which he described as a very significant accomplishment for the DCPD entire team.

Mr. Harbor introduced Mr. Eric Nelson, the Director of Projects in the Nuclear Technical Services organization and Mr. Harbor reported Mr. Nelson has more 25 years’ experience in the nuclear industry and has held leadership roles in the Engineering, Maintenance and Projects organizations at DCPD.

Overview and Update on the Licensing Basis Verification Project.

Mr. Nelson stated this would likely be the final update on the Licensing Basis Verification Project (LBVP) he would present to the DCISC as the project is now in its concluding phase. Mr. Nelson described the purpose of the LBVP as a voluntary effort by PG&E in furtherance of reliable and continued operations by providing an objective evaluation to ensure the DCPD licensing basis has been maintained and to resolve any discrepancies and to assist in the production of an enhanced and updated Final Safety Analysis Report (FSAR). The LBVP has as another goal clearly defining and enhancing knowledge transfer among plant personnel regarding the plant’s current licensing basis. DCPD partnered with the Chicago Bridge and Iron and Westinghouse firms in these efforts and during the project more than 30 engineers, many of whom were early in their careers at DCPD, were rotated through assignments to the LBVP along with three senior reactor operators in the effort to aid knowledge transfer and retention and to send information from the project back into the organization.

Mr. Nelson reported an Independent Review Board was formed along with an Executive Oversight Board to evaluate facility and analysis changes made since completion of the original FSAR in 1980 through the current Updated Final Safety Analysis Report (UFSAR) and to resolve any discovered deficiencies and perform corrective actions for identified issues. The

UFSAR was enhanced over the FSAR by the inclusion of hyperlinks to source documents to improve detail and clarity and to provide full-text search capabilities of current licensing basis (CLB) documents. In response to Dr. Peterson's inquiry Mr. Nelson stated he estimated there were more than 600 documents which are now accessible by hyperlink and these included documents referenced in the original FSAR as well as those referenced in 33 Supplemental Safety Evaluations Reports (SSERs). Hyperlinks were also included to implementing documents and to Westinghouse technical reports.

Mr. Nelson reported LBVP included review of the component design bases of five risk-significant systems for the following plant systems:

- Component Cooling Water
- 230 kV
- 500 kV
- Emergency Diesel Generator
- Auxiliary Feedwater

Dr. Budnitz speculated and Mr. Nelson concurred that certain systems were not selected for component design basis review due to the fact those systems have likely not experienced much change in technology or in licensing basis or regulatory guidance. Mr. Nelson stated that personnel assigned to the LBVP were able to take the lessons learned from the Component Cooling Water component design basis review, the first conducted, and apply them to subsequent evaluations and as the process continued fewer items were identified as they had already been discovered in other contexts. He reported knowledge transfer was generally enhanced by plant system or topical areas (e.g., station blackout). Licensing Basis Review (LBR) included establishing the licensing basis requirements along with the source documents. Licensing basis requirements were drafted and formatted for clarity and LBR reports were reviewed internally and by the Independent Review Board. Mr. Nelson stated DCP's licensing basis is complicated and extends over a number of years. Subsequent to DCP design basis having been established, the NRC put together more and detailed specificity on how FSARs should be compiled to assist the NRC in its review and also to ensure clarity. As DCP was licensed under an older version some of the NRC's subsequent revisions were not part of its licensing basis and this has made it more challenging for DCP to communicate with the NRC and in the LBVP the opportunity was taken to use the best possible format.

System reviews to verify licensing basis requirements and FSAR implementation into plant documents were conducted. Every line of the FSAR was examined and UFSAR and Design Criteria Memorandum (DCM) revisions were finalized and UFSAR revisions were made including identification of the source documents and of some implementing documents. Mr. Nelson described this as a massive effort. System Review Reports were reviewed internally and by the Independent Review Board. The engineering staff, which Mr. Nelson previously described as having been rotated into LBVP assignment, were brought into the project at this point to facilitate knowledge transfer and training opportunities and to take advantage of the engineer's expertise on the various systems.

Mr. Nelson reported that a licensing basis search tool has been created. Prompt Operability Assessments (POAs) were also developed for technical issues and preparation of UFSAR and DCM revisions and enhancements was conducted including identification of source and implementing documents. Screening and evaluation of 10 CFR 50.59 issues was accomplished as were revisions to DCP Operations and Surveillance Test Procedures. Mr. Nelson reported there were some “Document Change Only” design change packages issued along with design calculations. Mr. Nelson reported there were five License Amendment Requests (LAR) initiated and submitted to the NRC as a result of the LBVP and he briefly reviewed these for the Committee, including the LARs for:

- Main Feedline Break Analysis - due to an incorrect assumption regarding pressurizer overfilling.
- Hosgri + LOCA Seismic Loading Combination - due to an error in a modification to the FSAR an operability evaluation was performed including redoing the seismic analysis for the entire Nuclear Safety Steam Supply System.
- Non-Class 1E Inputs into Reactor Trip System - due to the inputs associated with a 12kV under voltage, under frequency, input into the reactor trip system not being Class 1E safety-related.
- Emergency Diesel Generator (EDG) Regulatory Guide (RG) Compliance - due to testing issues which required reanalysis of EDG loading and changing the set-points on some of the limit switches on the day tanks in the system.
- Unapproved methodology change for X/Q Dispersion Factors - due to factors related to atmospheric dispersion calculations done in the 1980s having been done under a different methodology which was subsequently not allowed for use at other nuclear power plants.

Mr. Nelson, in concluding his presentation, stated the enhanced UFSAR was completed in December 2015. The LBVP thoroughly reviewed and updated every chapter in the UFSAR. The UFSAR now contains much clearer CLB with hyperlinks and references to the source documents. Engineers, operators, and other plant staff now have a much greater understanding of the CLB and this promotes knowledge transfer. The LBVP submitted five LARs to the NRC and 97% of the corrective actions taken to address LBVP-identified issues were completed by December 2016 and the remaining items will be closed this year.

In response to Dr. Lam’s question Mr. Nelson stated the cost for the LBVP was approximately \$148 million including \$35 million in project analysis costs. The LBVP saw more than 30 engineers rotated into the project and the project required a staff of between 12 and 60 persons at various periods and took six years to complete. In response to Dr. Budnitz’ inquiries Mr. Nelson stated that, although benchmarking was part of the LBVP effort, in most cases the LBVP effort was not prompted by experiences at other plants. Mr. Nelson confirmed

that much of the work accomplished by the LBVP would be of value to other nuclear power plants and DCPD has received a number of inquiries in this regard although, Mr. Nelson observed, many of these other plants went through their licensing proceedings during the period when there was much more standardization by the NRC on matters concerning the licensing basis and general design criteria. In response to Dr. Budnitz' question Mr. Nelson replied the LBVP did not result in DCPD having to immediately comply with a large volume of revised general design criteria put into place for other plants licensed after DCPD.

XVIII ADJOURN MORNING MEETING

The Chair adjourned the afternoon meeting of the Committee at 11:23 A.M.

XIX RECONVENE FOR AFTERNOON MEETING

Dr. Lam convened the afternoon meeting of the DCISC at 1:00 P.M. He introduced the other Members and welcomed members of the public present in the audience and those following the meeting by the streaming video available through a link on the Committee's website at www.dcisc.org or at www.slospan.org.

XXI COMMITTEE MEMBER COMMENTS

There were no comments by Members at this time.

XXII PUBLIC COMMENTS AND COMMUNICATION

The Chair invited any comments from members of the public. There was no response to his invitation.

XVIII INFORMATIONAL DISCUSSION BY COMMITTEE MEMBERS AND CONSULTANTS

Committee Discussion of Future Plans and Committee Effectiveness: Including Conduct of Fact Findings and Public Meetings and Public Tours; Development and Utility of the Annual Report; Outreach to Government Officials Appointing Members; Engagement of Consultants for Specific Projects; and the Committee's Interaction with PG&E.

Dr. Budnitz stated he requested that these topics be placed on the Committee's agenda for this public meeting and he briefly reviewed his concerns and questions concerning each topic. He remarked that due to California's open meeting laws it is impossible for him to discuss matters within the Committee's subject matter jurisdiction with one of the other members except during a public meeting of the Committee as such a discussion by two members of a three-member committee constitutes a quorum of the body and can only take place at a properly noticed public meeting. Dr. Budnitz stated he is often frustrated by this restriction which, in his opinion, impedes the workings of the Committee.

➤ Conduct of Fact Finding, Public Meetings & Public Tours - Dr. Budnitz observed the Committee's public meetings now consist principally of receiving reports on recent Committee fact-finding, when generally one member of the Committee together with one technical consultant meets informally with DCPD staff, and of informational presentations made by PG&E on subjects requested by the Committee. He stated the public meetings provide important opportunities for the public to learn about the activities of the Committee. Dr. Budnitz suggested that the time allocated for the reports by Committee technical consultants on their fact-finding visits be increased from the present 20 minutes to approximately one hour for each report. Dr. Peterson observed the reason the Committee was able to set aside time during this public meeting for a discussion of these topics was because this public meeting had fewer informational presentations by PG&E scheduled than most other DCISC public meetings due to the plant currently being in a refueling outage with the associated greater demands on DCPD personnel. Dr. Peterson stated he finds that the normal schedule for the DCISC's public meetings generally provides an adequate balance of time devoted to informational presentations and fact-finding. Dr. Peterson observed that each fact finding is documented by a detailed written report that is provided for public review once approved at a public meeting and the most important function of the reports during the public meetings by the technical consultants on fact-finding is to provide a summary to the public. In response to Dr. Lam's observation that one member is always present during the fact finding Dr. Budnitz stated that allocating more time during the public meetings would allow the other members to interact with one another concerning the fact finding topics. Dr. Peterson mentioned that in his observation of past discussions of fact-finding reports the discussion has never been constrained due to the estimated time allocated on an agenda and the Committee has always taken the time it needed to adequately cover the material presented on the fact-finding visits. Dr. Lam stated his preference was to reserve time for the informational presentations.

Dr. Budnitz stated that PG&E now conducts tours of DCPD and accordingly the tours conducted by the DCISC with members of the public are no longer unique and the Committee tours have in the past inspired varied levels of interest from members of the public. Dr. Budnitz stated he could support eliminating the DCISC's tours of DCPD with members of the public. He observed that approximately one-quarter of the time the Committee Members spend together is devoted to accompanying varying numbers of the public on a tour of the power plant. In response to Dr. Lam's request, Mr. Rathie reported that the DCISC, by the terms of its Restated Charter from the CPUC, has an obligation to conduct public outreach in the local area and the Committee has always viewed its public tours as an important aspect of fulfilling that mandate. Mr. Rathie confirmed, however, that there is no requirement in the Restated Charter that the Committee conduct a public tour, only that the Committee will have the opportunity and ability to inspect DCPD. Mr. Rathie reported that prior to the attacks on September 11, 2001, the Committee conducted one plant tour with members of the public each year usually in conjunction with its February public meeting. He reported that requests for tour reservations have varied and that sometimes the tour fills immediately while at other times demand is less intense. Mr. Rathie confirmed, in response to Dr. Lam's request, that in his opinion the public tours are consistent with the letter and the spirit of the Restated Charter. **Dr. Peterson also**

inquired and Mr. Rathie promised to provide information on any seasonal correlation of demand for the DCISC's plant tours in order that, if the Committee were to decide to reduce the frequency of its tours, the tour program might still be conducted in conjunction with the most opportune public meeting. Dr. Peterson suggested that, with the concurrence of the membership, no tour be scheduled for the October 18-19, 2017 public meeting to permit more discussion of this issue.

The Members discussed the practice of holding three public meetings each year in the San Luis Obispo area and a suggestion by DCPD staff, conveyed to Dr. Lam, that perhaps the number of public meetings might be reduced from three to two each year. Dr. Lam observed the NRC conducts one public meeting on DCPD's performance every year. He also observed that during the months when a public meeting is not conducted by the DCISC a fact-finding visit is generally conducted which results in a Committee presence at DCPD or in the local area every month and he questioned whether this may impose an unnecessary burden on PG&E. Dr. Lam also remarked that as nuclear power technology is complex this frequency may be justified but he observed that some issues reviewed by the DCISC may not be ripe for consideration for some considerable period of time and this may not always coincide with the DCISC's fact-finding and public meeting schedules. Dr. Lam reported the NSOC, PG&E's internal safety committee for DCPD, meets at the plant three times each year. Dr. Budnitz stated that he would not be supportive of a proposal to reduce the frequency of the DCISC's public meetings from three to two each year and he reminded the other members that the public meetings provide the only opportunity for them to interact as a body and receive information and to interact on a different level with PG&E and DCPD staff. Dr. Budnitz stated he would support a proposal to use the entirety of the two days of the Committee's public meetings to receive more information by eliminating the public tours. Consultant Wardell expressed his support for having three public meetings, with a public tour in conjunction with each, every year as he stated it was his opinion that this schedule provides a valuable opportunity for engaging in a two-way dialogue between the Committee Members and Committee staff; between the Committee and DCPD, between the Committee and the public, and between the Committee, the public and PG&E. Mr. Wardell observed that several years ago the DCISC conducted a number of open house events in the San Luis Obispo area but even though these were well advertised the open houses were not well attended and he observed the tours with members of the public provide an opportunity for the Committee to connect with persons who may not attend its public meetings. Mr. Wardell remarked PG&E has kept its presentations in conjunction with the tours both current and informative. Mr. Garcia stated PG&E's proposal that the public meetings might be reduced from three to two each year was based upon DCPD's current reliability and the time required to resolve certain technical matters and to provide more meaningful updates to the Committee on those matters.

Dr. Peterson inquired whether there was any intention or plan by PG&E to discontinue providing the public with an opportunity to tour DCPD on PG&E-sponsored tours. Mr. Garcia and Mr. Harbor replied that at this time PG&E is not considering making any changes to its tour program. Mr. Harbor expressed his personal opinion that the public receives benefit from both the tours conducted by PG&E and from those conducted by the DCISC. Dr. Budnitz remarked

that the Committee may want to consider making a change to the manner in which the DCISC participates in the opening presentation given at the PG&E Energy Education Center where the public assembles and receives information before each tour. Dr. Budnitz stated that while PG&E's representatives do an excellent job there is a difference between PG&E and the DCISC presenting information to the public. Dr. Lam stated he would not be comfortable with a presentation wherein a DCISC representative described how PG&E operates DCP. Dr. Budnitz replied that his proposal was simply that a DCISC representative might provide a description of what the members of the public will see and what it would not be possible for them to see once the tour reaches the plant site. Dr. Peterson stated he agreed with Dr. Lam but he suggested that the Committee might consider reformatting or changing the amount of time devoted to the presentations made by both PG&E and the DCISC at the Energy Center before the tours. Dr. Peterson remarked he sees value in the DCISC's public tours but it might not be necessary to continue holding a tour with each public meeting. **Dr. Peterson suggested that a tour not be held with the October 2017 public meeting and instead more time be set aside at that meeting to continue the discussion concerning the tours and other matters with reference to DCISC's operations.**

Mr. Rathie suggested that the Committee might consider the use of an informational video presentation during its public tours to present information regarding the formation, role, operations and activities of the Committee which could be used not only in conjunction with its tour program but might also be made available on the Committee's website and to any interested persons. Mr. Bob Lloyd of AGP Video Services, the company which provides the video and audio recording of the DCISC public meetings, was recognized. Mr. Lloyd stated AGP has produced video presentations similar to that suggested by Mr. Rathie, including videotaping of field trips conducted by the California Coastal Commission, and would be willing to work with the DCISC on producing a video of the DCISC activities. Dr. Peterson remarked that by working with PG&E and other parties the Committee should be able to assemble sufficient footage which would include its public meetings and fact-finding activities. Mr. Lloyd commented that while a few persons watch the Committee's public meetings on live-streaming video at the time they are taking place most people access the DCISC meetings on the internet using the archive function which allows them to go to specific presentations on a Committee agenda.

Dr. Budnitz suggested that the Committee not conduct a public tour at its October 2017 meeting and implement the new procedures discussed above including reserving additional time for interaction by the Committee during fact-finding presentations. Drs. Peterson and Lam agreed with Dr. Budnitz' suggestion with the caveat that the revised format, without the public tour and with the increased time for fact finding reports, would only be implemented on a trial basis for the October 2017 public meeting. Dr. Lam stated he would likely in the future not support devoting more time to the fact-finding reports and less time to PG&E informational presentations and Dr. Peterson remarked that he did not believe the Committee should seek a significant increase in the number of informational presentations the Committee requests for PG&E for its public meetings. Mr. Rathie suggested that perhaps the Committee might also consider moving some of the more mundane items on the agenda, such as

approval of the minutes or the scheduling of public meetings, to a later point in the meeting so as to begin each session with a substantive discussion which is most likely to be of interest to the public.

Dr. Gene Nelson of Californians for Green Nuclear Power was recognized. Dr. Nelson stated his group recently conducted a public outreach effort that resulted in a number of persons signing up for the DCISC public tour held in conjunction with this public meeting of the DCISC. Dr. Nelson stated he has in the past encouraged PG&E to increase the amount of community education and outreach it provides concerning DCPD to assist in dealing with a sense of fear of the unknown concerning DCPD among some members of the public. Dr. Nelson suggested that an invitation might be extended by the Committee to the San Luis Obispo Board of Supervisors to attend one of the Committee public meetings. Dr. Nelson stated that in his attendance at the DCISC's public meetings he has formed a number of positive relationships and he has been impressed by the high quality of the informational presentations made by PG&E. Dr. Nelson stated a video on the activities of the DCISC might prove to be useful but he encouraged the Members to make sure that the opportunity remains for one on one interaction with the public.

Ms. Rochelle Becker of the Alliance for Nuclear Responsibility was recognized. Ms. Becker inquired concerning the frequency and level of interaction between the Committee and the CPUC. The Members responded and reported that aside from the activities in connection with appointments of members to the Committee, for which the candidates are vetted by the CPUC, the Committee in recent years has had very little substantive interaction with the CPUC concerning issues related to DCPD operations. Ms. Becker observed that the Committee was originally created by the CPUC to ensure there would be no competition between profit and safety. She remarked that given the matters under consideration in context of the Joint Proposal those issues will again arise in context of winding down operations at DCPD, in context of retaining employees who are necessary to its continued safe operation, in the competition within PG&E on whether and how much to invest in large capital projects, and in maintaining an adequate safety margin. She further observed that the CPUC is now engaged in the process of making decisions concerning all these matters, including how much financial support the PG&E ratepayers will be required to provide. She encouraged the DCISC to reach out to the CPUC concerning all these matters and with regard to questions the DCISC may have for the CPUC.

Dr. Budnitz remarked that he has reviewed the filings made in the CPUC's consideration of the Joint Proposal but his review was done in his individual capacity and not as a representative of the Committee. Ms. Becker encouraged the Committee to engage and interact with other state bodies including not only the CPUC but also with the California State Lands Commission and the California Coastal Commission as well with local legislative representatives. Ms. Becker commented that the Alliance for Nuclear Responsibility attends the meetings of these various organizations and often finds itself in the position of carrying the message of what one particular body is doing to another body. She remarked the informational video proposal might prove useful but that persons taking the Committee's public tours may be uninformed about certain issues and challenges to DCPD's operations. Dr. Budnitz responded that his observation from his participation on a number of tours was that many of the persons he

has interacted with on the Committee's tours have been knowledgeable and have asked him and the other members and technical consultants some very well informed questions.

Ms. Becker closed her comments with the statement that it is her belief that transparency is very important and as the NRC is in the process of conducting personnel layoffs the DCISC's safety oversight role is more important now than at almost any time in the past. Consultant Wardell stated that he supported issuing an invitation to the CPUC to attend a future public meeting and for CPUC representatives to participate with the DCISC on a plant tour. Dr. Lam stated that the California Energy Commission (CEC) has been an active and interested participant in the DCISC's activities including its Chair, Dr. Robert B. Weisenmiller, having attended a public meeting and plant tour and Dr. Weisenmiller's Chief of Staff, Mr. Barker, and CEC Senior Nuclear Policy Advisor, Dr. Justin Cochran, having attended several Committee meetings. Dr. Lam further observed that, together with Mr. Rathie, he has met on a regular basis with the CEC Chair and senior staff in Sacramento, California.

The Members then directed that the agenda for the October 18-19, 2017 public meeting should be developed in accordance with the direction provided and that coordination be undertaken on the production of an informational video with a target date to have the informational video ready for the February 2018 public meeting. For the October 2017 public meeting, on a trial basis, additional time will be reserved for the presentation of fact finding reports and Mr. Rathie will work with Mr. McWhorter and Mr. Wardell on arranging the agenda to accommodate this trial format. The Committee will issue invitations to the CPUC and to its appointing entities and other parties to attend a future public meeting.

The Members turned to Dr. Budnitz' issue of having two members observing an event during a fact-finding and the restrictions of having a quorum of the Committee together, outside a noticed public meeting when a matter within the Committee's jurisdiction was under consideration. The Members discussed the probability of success in seeking an exemption from the state legislature from the constraints of the Bagley-Keene Open Meeting Act. Dr. Budnitz remarked that the Bagley-Keene Act does allow more than one member to attend a noticed public meeting of another body provided the members do not discuss matters within the DCISC's jurisdiction during that meeting. The consensus of the Committee was that obtaining such an exemption to address Dr. Budnitz' concern was unlikely to occur. Dr. Peterson observed that he was more frustrated by state permitting regulations which for some period of time prevented the testing of FLEX equipment and he remarked that the ability to observe certain activities taking place at DCPD is afforded by videotape technology such as was used during this public meeting for the video of the Containment hatch closure drill. Mr. Rathie observed that at the present time the membership of the DCISC consists of three Members who are very collegial and whose views are very often in alignment but that might not always be the case in the future and, as two members constitute not merely a quorum but also a majority of the Committee, it is therefore most important that the Committee Members' discussions and decisions only take place and be made in a transparent and public forum to thereby safeguard against any perception amongst members of the public that Committee decisions are made in any other forum other than a noticed public meeting.

➤ Development & Utility of DCISC Annual Report - Dr. Budnitz inquired whether any of the Members or the Technical Consultant had any suggestions to improve the efficiency of the process used to compile the Committee's Annual Report or concerning the effectiveness of those reports. Dr. Budnitz described the process of compiling the Annual Report together with the Executive Summary by Consultant Wardell and that the report is then provided individually to the Members, Technical Consultants and Legal Counsel whose comments are provided directly to Mr. Wardell for inclusion in the final version which is then approved by the membership at a noticed public meeting. There were no suggestions to improve this process made at this time. In response to Mr. Rathie's inquiry as to how many Annual Reports should be retained on the Committee's website, the Members directed that, provided there was no impairment of the functionality of the website, those reports appearing on the website now with the addition of those to be approved in the future will be maintained and remain available on the Committee's website at www.dcisc.org.

- Outreach to Appointing Officials - the discussion of this matter is included in the foregoing.
- Engagement of Consultants for Specific Projects - there was no discussion on this issue.
- DCISC Interaction with PG&E - the discussion of this matter is included in the foregoing.

XXIV CONCLUDING REMARKS & DISCUSSION BY COMMITTEE MEMBERS OF FUTURE DCISC ACTIVITIES

Dr. Lam expressed the thanks of the Committee to the DCPD senior managers who made presentations to the DCISC during this public meeting and also to the technicians of AGP Video who are responsible for audio and visual recording of the DCISC's meetings. The Chair expressed appreciation in particular to Mr. Harbor and Mr. Garcia for their able assistance with the informational presentations and the tour for this public meeting. The Chair also expressed the thanks and appreciation of the DCISC to the members of the public who attended and participated in this public meeting.

XXV ADJOURNMENT OF EIGHTY-SEVENTH PUBLIC MEETING

There being no further business, the eighty-seventh public meeting of the Diablo Canyon Independent Safety Committee was adjourned by its Chair, Dr. Peter Lam, at 2:25 P.M.

DIABLO CANYON INDEPENDENT SAFETY COMMITTEE	
AGENDA TRANSMITTAL FORM	
MEETING DATE:	October 19, 2017
AGENDA ITEM:	XXII-B
AGENDA TITLE:	Documents Provided to the Committee
CONSENT [] ACTION [] INFORMATION [X]	
Staff Summary: Attached for your information are copies of the transmittal memoranda which list the various documents provided to the Committee by PG&E since your last public meeting in June 2017.	
RECOMMENDED COMMITTEE ACTION: None, information item only.	

DCISC
List of Documents Transmitted Electronically

A. Licensing Basis Impact Evaluations

Date	LBIE No.	Title
8/8/17	2017-011	E-Plan Section 2, Scope and Applicability
8/8/17	2017-012	E-Plan Section 4, Emergency Conditions
8/8/17	2017-013	E-Plan Section 8, Maintaining Emergency Prep
8/8/17	2017-014	E-Plan Section 10, Reference
8/8/17	2017-015	E-Plan App D Intro, Introduction
8/8/17	2017-016	E-Plan App D FPB Bases, Fission Product Barrier
8/8/17	2017-017	E-Plan App D Cat S, System Malfunction
8/8/17	2017-018	E-Plan App D Cat C, Cold Shutdown/Refueling
8/18/17	2017-020	FPEE 170, NFPA 805 Internal Conduit Seal Design Criteria Equivalency

B. NRC Outgoing Correspondence (incl. LERs, LARs, etc.)

Date	Letter No.	Title
8/15/17	DCL-17-072	Core Operating Limits Report for Unit 1 Cycle 21
8/17/17	DCL-17-070	Flaw Evaluation of Unit 1 Residual Heat Removal Suction Weld Joint
8/17/17	DCL-17-073	Supplement to License Amendment Request 16-04, Request to Adopt Emergency Action Level Schemes Pursuant to NEI 99-01, Revision 6, "Development of Emergency Action Levels for Non-Passive Reactors"

C. NRC Incoming Correspondence (including Inspection Reports)

Date	Title
8/10/17	Diablo Canyon Power Plant – NRC Integrated Inspection Report 05000275/2017002 and 05000323/2017002
8/15/17	Diablo Canyon Power Plant, Units 1 and 2 – Notification of NRC Inspection of the Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communication/Staffing/Multi-Unit Dose Assessment Plans (05000275/2017007 and 05000323/2017007) and Request for Information

D. PSRC Documents (PSRC Minutes)

Date	Doc. No.	Title
PSRC Minutes		There are no PSRC minutes for this month.

E. CAP Documents (RCAs, ACEs, CAP Effectiveness Evaluations)

Type	Doc. No.	Title
RCAs		There are no RCAs for this month.
ACE		

DCISC
List of Documents Transmitted Electronically

7/13/17	SAPN 50912407	DA-2017 BRI: Green SL-IV NCV-Lic Operat
8/9/17	SAPN 50923422	DA-Near Hit: Grnd Buggy in 52VU11 Cubicl
8/10/17	SAPN 50920539	DA-EI – SPDS Calculation Error
9/6/17	SAPN 50825789	DA-Adverse Trend in RMS Submittals
Eff. Eval		
9/6/17	SAPN 50680750	LTCA-DA-RV-8708 inlet pipe socket (RCA)
8/4/17		Condition Report Backlog Curve
8/11/17		Condition Report Backlog Curve
8/18/17		Condition Report Backlog Curve
8/25/17		Condition Report Backlog Curve

F. QV Documents (QPAR, Audit Reports, Audit Schedule, Assessments)

Date	Doc. No.	Title
		There is no QPAR for this month.
8/8/17	FileNet #171280032	2017 Security Audit
8/21/17	FileNet #171240002	2017 Special Processes, Inservice Inspection, and Inservice Testing Audit
		There is no new Schedule for this month.
8/21/17	Assessment #172260093	1R20 Readiness for Restart Assessment

G. Nuclear Safety Culture Monitoring Panel Reports

Date	Doc. No.	Title
9/11/17		There is Nuclear Safety Culture Monitoring Panel Report, and available for viewing in person at next finding.

H. Self Assessment/Benchmarking (SA/BM Reports/Schedules)

Date	Doc. No.	Title
		There is no updated Quick Hit Self-Assessment (QHSA) Schedule for this month.

DCISC
List of Documents Transmitted Electronically

		There is no Formal Benchmarking and Self-Assessments Schedule for this month.
8/2/17	SAQH 50603110	Quick Hit SA – Reportability (WCNOC)
8/2/17	SAQH 50831941	2016 NEI EP Working Group Info / Actions
8/8/17	SAQH 50924777	Pre-Inspection 2017 Access Control QHSA
8/8/17	SAQH 50934047	SAQH Pre Inspection SGI
8/8/17	SAQH 50934500	QHSA Confined Space
8/15/17	SAQH 50876746	Pre Inspection QHSA – PI Verification
8/28/17	SAQH 50927226	QHSA for NRC RP Inspection 71124.02
8/2/17	SAF 50688241	Document ISI Program Self Assessment
8/2/17	SAF 50890708	50.59 Program Self-Assessment for 2017
8/2/17	BNHI 50863070	National Nuc Security Conference
8/2/17	BNHI 50872980	MOV Program Benchmark for RCE
8/2/17	BNHI 50880282	Perry benchmark 50.54(p)
8/2/17	BNHI 50930203	2017 NNSC Issues Evaluation
8/15/17	BNHI 50834217	Informal Benchmark – Outage Management
8/16/17	BNHI 50703545	PPC: Informal Benchmarking
8/16/17	BNHI 50914080	3-14 EP Wolf Creek Informal Benchmark
8/17/17	BNHI 50932500	Vermont Yankee Decom Bnchmrk July 2017

I. Performance Information (PPIR, Operating Plan, Station Initiatives, IPMs)

Date	Doc. No.	Title
3/6/17		Operating Plan 2017 – 2021, No new updates this month.

DCISC
List of Documents Transmitted Electronically

PPIR		
8/16/17		Diablo Canyon Power Plant; Plant Performance Improvement Report Achieving Results; Data: July 2017
Station Initiative		
8/31/17		Maintenance Excellence Plan 2017
8/31/17		Radiation Protection Excellence Plan 2017
8/31/17		Performance Improvement Excellence Plan 2017
8/31/17		Operations Excellence Plan 2017
8/31/17		Nuclear Work Management Excellence Plan 2017
8/31/17		Engineering Excellence Plan 2017
8/31/17		Chemistry Excellence Plan 2017
8/31/17		Strategic Projects Excellence Plan 2017
8/31/17		Organizational Effectiveness Excellence Plan 2017
8/31/17		Learning Services Excellence Plan 2017
9/10/17		Access Authorization and Fitness for Duty Excellence Plan 2017
9/10/17		Emergency Preparedness Excellence Plan 2017
9/10/17		Fire Protection Excellence Plan 2017
9/10/17		Security Services Department Excellence Plan 2017
9/10/17		Emergency Services Performance and Support Excellence Plan 2017
IPM		There are no IPMs for this month.

J. INPO

Date	Doc. No.	Title
		There are no INPO documents for this month.

K. Operational Documents (ODM Minutes, POAs)

Date	Doc. No.	Title
ODMs		There are no ODMs for this month.
POA		There are no new POAs for this month.

L. Safety Limit Violation Report

Date	Doc. No.	Title
		There are no Safety Limit Violation Reports for this month.

DCISC
List of Documents Transmitted Electronically

M. Significance Determination Process Calculations

Date	Doc. No.	Title
		There are no Significance Determination Process Calculations for this month.

N. Miscellaneous

Date	Title
	There are no miscellaneous documents for this month.

O. Functional Area Documents

Subcommittee	Date/Doc	Title
Maintenance	Week 201730	T+1 Critique
	Week 201731	T+1 Critique
	Week 201732	T+1 Critique
	Week 201733	T+1 Critique

P. Documents Previously Transmitted during the Month

Date	Doc. No.	Title
		There are no documents previously transmitted during the month.

NSOC & DCISC
List of Documents Transmitted Electronically

A. Licensing Basis Impact Evaluations

Date	LBIE No.	Title
		There are no LBIEs this month.

B. NRC Outgoing Correspondence (incl. LERs, LARs, etc.)

Date	Letter No.	Title
7/19/17	DCL-17-066	Diablo Canyon Power Plant (DCPP) 2017 10 CFR 50.54(t) Assessment (County)
7/19/17	DCL-17-067	Diablo Canyon Power Plant (DCPP) 2017 10 CFR 50.54(t) Assessment (State)
7/19/17	DCL-17-064	Diablo Canyon Power Plant Focused Evaluation Report for External Flooding

C. NRC Incoming Correspondence (including Inspection Reports)

Date	Title
7/6/17	Nuclear Regulatory Commission Plan for the Audit of Licensees' Responses Concerning Seismic Hazard Reevaluations Related to Request for Information Pursuant to Title 10 of the Code of Federal Regulations Section 50.54(f) Regarding Recommendation 2.1 of the Near-Term Task Force Review of Insights From the Fukushima Dai-Ichi Accident
7/17/17	Summary of Annual Assessment Meeting Regarding Diablo Canyon Power Plant 2016 Performance
7/18/17	Nuclear Regulatory Commission Plan for the Audit of Licensees' Responses Concerning Flooding Hazard Reevaluations Related to Request for Information Pursuant to Title 10 of the Code of Federal Regulations Section 50.54(f) Regarding Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident

D. PSRC Documents (PSRC Minutes)

Date	Doc. No.	Title
PSRC Minutes		
4/5/17	2017-007	- E-Plan Appendix D, Category H, Rev. 4.03. "Hazards" - E-Plan, Appendix F, Rev. 4.05, "ERO On-Shift Staffing" - NRC Submittal DCL-17-024, "Submittal of the Diablo Canyon Power Plant Mitigating Strategies Assessment for Flooding Report"
6/12/17	2017-012	M-1177, Nuclear Safety Capability Assessment Various Topics Selected by the Station Director
6/14/17	2017-013	OP L-0, Attachment 9, Mode Change Authorization Form with Active Technical Specification
7/18/17	2017-015	DCL-17-064, Diablo Canyon Power Plant Focused Evaluation Report for External Flooding

NSOC & DCISC
List of Documents Transmitted Electronically

E. CAP Documents (RCAs, ACEs, CAP Effectiveness Evaluations)

Type	Doc. No.	Title
RCAs		There are no RCAs for this month.
ACE	SAPN 50923422	DCPP 12kV Ground Buggy Near Hit Potential SIF
Eff. Eval		There are no Effectiveness Evaluations for this month.
7/7/17		Condition Report Backlog Curve
7/14/17		Condition Report Backlog Curve
7/21/17		Condition Report Backlog Curve
7/28/17		Condition Report Backlog Curve

F. QV Documents (QPAR, Audit Reports, Audit Schedule, Assessments)

Date	Doc. No.	Title
		There is no QPAR for this month.
		There are no Audit Reports for this month.
		There is no new Schedule for this month.
5/7/17	Assessment #171290094	Breaker 52-1F-41 Replacement
6/17/17	Assessment #171510050	Proficiency or Qualification Induced Events in Maintenance at Diablo Canyon
7/10/17	Assessment #171920023	Turbine Team Work Package Review
7/11/17	Assessment #171780030	1R20 Core Reload
7/11/17	Assessment #171780031	1R20 New Fuel Receipt Inspection
7/11/17	Assessment #171780029	Outage Safety Scheduling
7/17/17	Assessment #171780021	1R20 Transient Combustible Permits
7/18/17	Assessment #171780027	1R20 ALARA Assessment
7/19/17	Assessment #171780026	1R20 Integrated Outage Assessment
7/19/17	Assessment #171780032	1R20 Reactor Startup Assessment
8/1/17	Assessment 171920025	STP R-1A Assessment

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List of Documents Transmitted Electronically

8/2/17	Assessment #171920026	TCARB Effectiveness Assessment
8/3/17	Assessment #172150069	SISIP Walkdown
8/7/17	Assessment #171920024	1R20 Radiological Shielding
8/8/17	Assessment #172200029	Maintenance Fundamentals
8/21/17	Assessment #172260092	7/28/17 Alert Classification

G. Nuclear Safety Culture Monitoring Panel Reports

Date	Doc. No.	Title
		There is no Nuclear Safety Culture Monitoring Panel Report for this month.

H. Self Assessment/Benchmarking (SA/BM Reports/Schedules)

Date	Doc. No.	Title
		There is no updated Quick Hit Self-Assessment (QHSA) Schedule for this month.
		There is no Formal Benchmarking and Self-Assessments Schedule for this month.
7/3/17	SAQH 50829869	QHSA: NRC Force on Force Exercise
7/5/17	SAQH 50924172	Perform QHSA – completed by MOV orders
7/11/17	SAQH 50576400	APV Program Quick Hit Self-Assessment
7/12/17	SAQH 50637594	SNM 71130.11 QHSA for RPI 2014
7/24/17	SAQH 50542171	FAC Program QH Self Assessment
6/28/17	SAF 50808104	2016 Ops Comp SA Effectiveness Review
7/5/17	BNHI 50861864	NT RW Benchmarking ASME/EPRI
7/6/17	BNHI 50809794	Work Control Benchmarking
7/10/17	BNHI 50838987	Benchmark for Maint AFI leads

NSOC & DCISC
List of Documents Transmitted Electronically

7/10/17	BNHI 50930081	Sec – Trip Report NEI Trng Task Force
7/27/17	BNHI 50822486	Document Trip Report: PV PI&R SA Support
7/27/17	BNHF 50826018	Benchmark of Station Rework
7/28/17	BNHI 50929930	Informal Benchmarking Palo Verde

I. Performance Information (PPIR, Operating Plan, Station Initiatives, IPMs)

Date	Doc. No.	Title
3/6/17		Operating Plan 2017 – 2021, No new updates this month.
PPIR		If none, state none
7/19/17		Diablo Canyon Power Plant; Plant Performance Improvement Report Achieving Results; Data: June 2017
Station Initiative		
7/24/17		Performance Improvement and Regulatory Projects Excellence Plan 2017
7/31/17		Operations Excellence Plan
IPM		There are no IPMs for this month.

J. INPO

Date	Doc. No.	Title
		There are no INPO documents for this month.

K. Operational Documents (ODM Minutes, POAs)

Date	Doc. No.	Title
ODMs		There are no ODMs for this month.
POA		There are no new POAs for this month.

L. Safety Limit Violation Report

Date	Doc. No.	Title
		There are no Safety Limit Violation Reports for this month.

M. Significance Determination Process Calculations

Date	Doc. No.	Title
		There are no Significance Determination Process Calculations for this month.

**NSOC & DCISC
List of Documents Transmitted Electronically**

N. Miscellaneous

Date	Title
	There are no miscellaneous documents for this month.

O. Functional Area Documents

Subcommittee	Date/Doc	Title
Maintenance	Week 201726	T+1 Critique
	Week 201727	T+1 Critique
	Week 201728	T+1 Critique
	Week 201729	T+1 Critique

P. Documents Previously Transmitted during the Month

Date	Doc. No.	Title
		There are no documents that were previously transmitted during the month.

DCISC
List of Documents Transmitted Electronically

A. Licensing Basis Impact Evaluations

Date	LBIE No.	Title
6/13/17	2017-009	M-1177, Nuclear Safety Capability Assessment

B. NRC Outgoing Correspondence (incl. LERs, LARs, etc.)

Date	Letter No.	Title
6/7/17	DCL-17-058	10 CFR 26.719(c) Notification
6/15/17	DCL-17-059	10 CFR 26.719(c) Notification – Testing Error for Two Specimens
6/21/17	DCL-17-055	Response to NRC Request for Additional Information Regarding License Amendment Request 16-04, "Request to Adopt Emergency Action Level Schemes Pursuant to NEI 99-01, Revision 6, 'Development of Emergency Action Levels for Non-Passive Reactors'"
6/21/17	DCL-17-060	Response to NRC Request for Additional Information Regarding "Relief Requests NDE-SLH U2, NDE-LSL U2, NDE-LHC U2, NDE-LHM U2, and NDE-ONV U2"

C. NRC Incoming Correspondence (including Inspection Reports)

Date	Title
6/1/17	Request for Additional Information (RAI) – Relief Requests NDE-SLH U2, NDE-LSL U2, NDE-LHC U2, NDE-LHM U2, and NDE-ONV U2 (CAC Nos. MF9386 through MF9390)
6/13/17	Acceptance Review – Request for Approval of an Alternative to the ASME Boiler and Pressure Vessel Code Section XI Examination Requirements Class 1 and 2 Piping Welds for Diablo Canyon Power Plant, Units 1 and 2 (CAC Nos. MF9706 and MF9707)

D. PSRC Documents (PSRC Minutes)

Date	Doc. No.	Title
PSRC Minutes		
5/30/17	2017-011	OP1.ID1, Report out on regulatory commitments associated with Readiness for Restart Program Humboldt Bay Independent Spent Fuel Installation License Renewal Application Charter
6/20/17	2017-014	DCL-17-055, Response to NRC Request for Additional Information Regarding License Amendment Request 16-04, "Request to Adopt Emergency Action Level Schemes Pursuant to NEI 99-01, Revision 6, 'Development of Emergency Action Levels for Non-Passive Reactors'"

E. CAP Documents (RCEs, ACEs, CAP Effectiveness Evaluations)

Type	Doc. No.	Title
RCEs	SAPN 50886801	DCPP Inadequate NAMCO Procedure

DCISC
List of Documents Transmitted Electronically

	SAPN 50476376	LTCA Reactor Shutdown - SALP
	SAPN 50669932	DA-Loss of Startup Power to Both Units
ACE	SAPN 50907301	DA-Main Bank C fuse blown during TMOD
	SAPN 50912407	DA-2017 BRI: Green SL-IV NCV-Lic Operat
Eff. Eval	SAPN 50893254	Effectiveness Eval – Ops Comp SA Finding
6/2/17		Condition Report Backlog Curve
6/9/17		Condition Report Backlog Curve
6/16/17		Condition Report Backlog Curve
6/23/17		Condition Report Backlog Curve
6/30/17		Condition Report Backlog Curve

F. QV Documents (QPAR, Audit Reports, Audit Schedule, Assessments)

Date	Doc. No.	Title
6/12/17	#170960009	Quality Performance Assessment Report (QPAR) First Period 2017; January 1, 2017 through April 30, 2017
6/15/17		Audit MAP: Emergency Preparedness
		There are no Audit Reports for this month.
		There is no new Schedule for this month.
6/27/17	Assessment # 171780028	1R20 Assessment: Mid-Loop Operations

G. Nuclear Safety Culture Monitoring Panel Reports

Date	Doc. No.	Title
		There is no Nuclear Safety Culture Monitoring Panel Report for this month.

H. Self Assessment/Benchmarking (SA/BM Reports/Schedules)

Date	Doc. No.	Title
		There is no updated Quick Hit Self-Assessment (QHSA) Schedule for this month.
		There is no Formal Benchmarking and Self-Assessments Schedule for this month.

DCISC
List of Documents Transmitted Electronically

1/24/17	SAPN # 50888286	Quick Hit Self-Assessment – Fitness for Duty (FFD) Pre-Inspection Activities
4/5/17	SAPN # 50889546	NFPA 805 QHSA#2 Readiness Review GO-LIVE
6/7/17	SAPN # 50925209	Quick Hit Self-Assessment Report; Priority-1 Procedure Distribution and Filing
6/14/17	SAPN # 50926858	Risk review for deferring c
4/18/17	SAPN # 50914080	ERO Turnover Drill Wolf Creek Informal Benchmark
5/10/17	SAPN # 50878410	Benchmark Chubu Visit Oct 2016 – OPS
6/2/17	SAPN # 50920890	San Onofre Nuclear Generating Station Decommissioning Benchmark
6/21/17	SAPN # 50928282	INPO Instructional Technologist (IT) Workshop Informal Benchmark / Trip Report

I. Performance Information (PPIR, Operating Plan, Station Initiatives, IPMs)

Date	Doc. No.	Title
3/6/17		Operating Plan 2017 – 2021, No new updates this month.
PPIR		
6/19/17		Diablo Canyon Power Plant; Plant Performance Improvement Report Achieving Results; Data: May 2017
Station Initiative		
6/13/17		Performance Improvement Excellence Plan 2017
6/19/17		Emergency Preparedness 2017 Excellence Plan
6/19/17		Emergency Services Performance & Support 2017 Excellence Plan, "Excellence through Employee Growth & Engagement"
6/21/17	SAPN # 50887058	Fire Protection Excellence Plan
IPM		There are no IPMs for this month.

J. INPO

Date	Doc. No.	Title
		There are no INPO documents for this month.

K. Operational Documents (ODM Minutes, POAs)

Date	Doc. No.	Title
ODMs		There are no ODMs for this month.

DCISC
List of Documents Transmitted Electronically

POA		There are no new POAs for this month.
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L. Safety Limit Violation Report

Date	Doc. No.	Title
		There are no Safety Limit Violation Reports for this month.

M. Significance Determination Process Calculations

Date	Doc. No.	Title
		There are no Significance Determination Process Calculations for this month.

N. Miscellaneous

Date	Title
	There are no miscellaneous documents this month.

O. Functional Area Documents

Subcommittee	Date/Doc	Title
Maintenance	Week 201722	T+1 Critique
	Week 201723	T+1 Critique
	Week 201724	T+1 Critique
	Week 201725	T+1 Critique

P. Documents Previously Transmitted during the Month

Date	Doc. No.	Title
		There are no documents previously transmitted during the month.

DCISC
List of Documents Transmitted Electronically

A. Licensing Basis Impact Evaluations

Date	LBIE No.	Title
5/11/17	2017-004	H2 Recombiner Elec. Pen...
5/11/17	2017-005	H2 Recombiner Elec. Pen...

B. NRC Outgoing Correspondence (incl. LERs, LARs, etc.)

Date	Letter No.	Title
5/3/17	DCL-17-040	Nuclear Material Transaction Report for New Fuel
5/4/17	DCL-17-041	Readiness for Supplemental Inspection
5/5/17	DCL-17-042	Response to NRC Regulatory Issue Summary 2017-03, Preparation and Scheduling of Operator Licensing Examinations
5/12/17	DCL-17-044/ DIL-17-006	Emergency Plan Update for Appendix D Category H, Appendix F, Section 5, and Coversheet
5/18/17	DCL-17-048	Request for Approval of an Alternative to the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code Section XI Examination Requirements for Class 1 and 2 Piping Welds
5/18/17	DCL-17-049	Flaw Evaluation of Unit 2 Residual Heat Removal Suction Weld Joint
5/25/17	DCL-17-051	Nuclear Material Transaction Report for New Fuel
5/26/17	DCL-17-054	Nuclear Material Transaction Report for New Fuel
5/31/17	DCL-17-052, DIL-17-007	Emergency Plan Implementing Procedure Update

C. NRC Incoming Correspondence (including Inspection Reports)

Date	Title
5/10/17	Diablo Canyon Power Plant – NRC Integrated Inspection Report 05000275/2017001 and 05000323/2017001
5/16/17	Diablo Canyon Power Plant, Units 1 and 2 – Correction Letter Regarding Amendment Nos. 230 and 232 to Adopt Alternative Source Term (CAC Nos. MF6399 and MF6400)
5/17/17	Commission Declined to Review Director's Decision (DD-17-02)
5/22/17	Public Outreach and Meeting with Pacific Gas and Electric (PG&E)

D. PSRC Documents (PSRC Minutes)

Date	Doc. No.	Title
PSRC Minutes		
4/11/17	2017-008	DCP 2*25299 (U2) - H2 Recombiner Elec. Penetration DCN 2*01689 - DCP 1*25298 (U1) - H2 Recombiner Elec. Penetration DCN 2*01690
4/25/17	2017-009	Emergency Plan, Section 5, Revision 4.18 Organizational Control of Emergencies

DCISC
List of Documents Transmitted Electronically

5/9/17	2017-010	OP1.ID1 Readiness for Restart Program
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E. CAP Documents (RCAs, ACEs, CAP Effectiveness Evaluations)

Type	Doc. No.	Title
RCAs		There are no RCAs for this month.
ACE		There are no ACEs for this month.
Eff. Eval		There no Effectiveness Evals for this month.
5/5/17		Condition Report Backlog Curve
5/12/17		Condition Report Backlog Curve
5/19/17		Condition Report Backlog Curve
5/26/17		Condition Report Backlog Curve

F. QV Documents (QPAR, Audit Reports, Audit Schedule, Assessments)

Date	Doc. No.	Title
		There is no QPAR for this month.
5/18/17	FileNet # 162860009	2017 Emergency Preparedness and FLEX Programs Audit
		There is no new Schedule for this month.
5/3/17	SAPN 50888616-55	Security Protective Strategy Assessment 2-3; Quality Verification Level 1 Assessment Report
5/3/17	SAPN 50888616-53	Security Protective Strategy Assessment 2-1: Quality Verification Level 1 Assessment Report
5/3/17	SAPN 50888616-54	Security Protective Strategy Assessment 2-2; Quality Verification Level 1 Assessment Report
5/3/17	SAPN 50916056	Operations Trend Assessment; Quality Verification Level 1 Assessment Report
5/6/17	SAPN 50911527-62	Quality Verification Assessment Report – FWH 1-4A Confined Space
5/7/17	Report # 171290094	Quality Verification Assessment Breaker 52-1F-41 Replacement
5/11/17	SAPN 50911527-39	1R20 Snubber Inspections Assessment; Quality Verification (QV) Level 1 Assessment Report
5/11/17	SAPN 50911527-13	Quality Verification (QV) Level 1 Assessment Report – 1R20 ASW Buried Piping Excavation
5/21/17	SAPN 50911527-65	Operator Verification Practices; Quality Verification Level 1 Assessment Report
5/23/17	SAPN 50911527-47	Operator Verification Practices; Quality Verification Level 1 Assessment Report

DCISC
List of Documents Transmitted Electronically

G. Nuclear Safety Culture Monitoring Panel Reports

Date	Doc. No.	Title
		There is no report for this month.

H. Self Assessment/Benchmarking (SA/BM Reports/Schedules)

Date	Doc. No.	Title
		There is no updated Quick Hit Self-Assessment (QHSA) Schedule for this month.
4/12/17	SAPN 50896032	Sec – Informal Trip Report (Cooper)
5/16/17	SAPN 50803846	VDM Release 9.0- Change Management
4/7/17	SAPN 50910632	RP QHSA against RAD Hazard IP 71124.01
4/24/17	SAPN 50914927	QH Security First Aids and Injuries
4/27/17	SAPN 50911933	RP QHSA NRC Inspection 71124.03
5/5/17	SAPN 50907925	QHSA: Engr Rigor and Tech Conscience
5/24/17	SAPN 50913375	QHSA 95-001 Inspection Readiness

I. Performance Information (PPIR, Operating Plan, Station Initiatives, IPMs)

Date	Doc. No.	Title
3/6/17		Operating Plan 2017 – 2021, No new updates this month.
PPIR		
5/16/17		Diablo Canyon Power Plant; Plant Performance Improvement Report; Achieving Results; Data: April 2017
Station Initiative		There are no new Station Initiatives this month.
IPM		There are no IPMs for this month.

J. INPO

Date	Doc. No.	Title
		There are no INPO documents for this month.

DCISC
List of Documents Transmitted Electronically

K. Operational Documents (ODM Minutes, POAs)

Date	Doc. No.	Title
ODMs		If none, state, No ODMs for this month
POA		There are no POAs for this month.

L. Safety Limit Violation Report

Date	Doc. No.	Title
		There are no Safety Limit Violation Reports for this month.

M. Significance Determination Process Calculations

Date	Doc. No.	Title
		There are no Significance Determination Process Calculations for this month.

N. Miscellaneous

Date	Title
	There are no miscellaneous documents this month.

O. Functional Area Documents

Subcommittee	Date/Doc	Title
Maintenance	Week 201717	T+1 Critique
	Week 201718	T+1 Critique
	Week 201719	T+1 Critique
	Week 201720	T+1 Critique
	Week 201721	T+1 Critique

P. Documents Previously Transmitted during the Month

Date	Doc. No.	Title
		There were no documents previously transmitted this month.