

DIABLO CANYON
INDEPENDENT SAFETY COMMITTEE
(www.dcisc.org)

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

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Wednesday & Thursday
September 28-29, 2022
Avila Lighthouse Suites

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

PUBLIC MEETING AGENDA

This public 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>.

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PARTICIPATION

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Morning Session - 9/28/2022 – 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. The meeting will be webcast in real time.

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 for each speaker as designated by the presiding officer. 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. | Consider Engaging Dr. Andrew C. Kadak as a Technical Consultant to on an <i>ad hoc</i> basis to assist in the Review of Spent fuel, Decommissioning and Regulatory Issues. | Discussion/Action |
| B. | DCISC 32nd Annual Report on Safety of Diablo Canyon Operations; July 1, 2021 – June 30, 2022. | Discussion/Approval |
| C. | Updates on Financial Matters and Committee Activities during 2022 & 2023. | Discussion/Action |
| D. | Discussion of Open Items List. | Discussion/Action |

V ACCEPTANCE OF MINUTES

- | | | |
|----|--|--------|
| A. | Minutes of June 22-23, 2022, Public Meeting. | Accept |
|----|--|--------|

VI COMMITTEE MEMBER REPORTS AND DISCUSSION

- | | |
|----|---|
| A. | Public Outreach, Site Visits and Other Committee Activities; Scheduling and Confirmation of Future Fact-Finding Visits and Public Meetings. |
| B. | Documents Provided to the Committee. |

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

- | | |
|----|---|
| A. | Consultant Richard D. McWhorter Jr.: Fact-finding Topics; Report on and Acceptance of July 20-21, 2022 Fact Finding Report. |
| B. | Assistant Legal Counsel Robert W. Rathie: Administrative, Regulatory and Legal Matters. |

VIII ADJOURN MORNING MEETING

Afternoon Session – 9/28/2022 – 1:30 P.M.

IX RECONVENE FOR AFTERNOON MEETING

X COMMITTEE MEMBER COMMENTS

XI PUBLIC COMMENTS AND COMMUNICATIONS

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XII INFORMATION ITEMS BEFORE THE COMMITTEE

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

- 1) Presentations on the State of the Plant: including Key Events, Outages, Highlights, Organizational Changes, Preparations for Refueling Outage 2R23 and other Station Activities since the DCISC June 2022 Public Meeting.
- 2) Updates on the Status of NRC Performance Indicators, Licensee Event Reports, NRC Inspections Reports and Notices of Violation, Issues Raised by NRC Resident Inspectors, Open Compliance Issues, Current and Future License Amendment Requests, and other Significant Regulatory Issues/Requests.

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

- C. Consultant R. Ferman Wardell:
Fact-finding Topics; Report on and Acceptance of the August 16-17, 2022 Fact Finding Report.
- D. Fact-finding Topics; Report on and Acceptance of the September 13-14, 2022 Fact Finding Report.

XIV ADJOURN AFTERNOON MEETING

Evening Session – 9/28/2022 – 5:30 P.M.

XV RECONVENE FOR EVENING MEETING

XVI COMMITTEE MEMBER COMMENTS

XVII 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 for each speaker as designated by the presiding officer. 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.*

XVIII DISCUSSION BY THE COMMITTEE

- A. Committee Activities Related to Potential Extended DCPD Operation
Discussion/Action

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

- B. Informational Presentations Requested by the
Committee of PG&E:
- 3) Update on Potential Continued Operations of Diablo Canyon.

XX ADJOURN EVENING MEETING

Morning Session – 9/29/2022 – 9:00 A.M.

XXI RECONVENE FOR MORNING MEETING

XXII COMMITTEE MEMBER COMMENTS

XXIII 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 for each speaker as designated by the presiding officer. 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.*

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

- C. Informational Presentations Requested by the
Committee:
- 4) NRC Senior Resident Inspector Remarks.
- 5) Updates on Decommissioning Planning, License Amendment
Activities Related to Decommissioning, and the 2021 Nuclear
Decommissioning Cost Triennial Proceedings.
- 6) Updates on Procurement of a New Spent Fuel Storage System
and the Proposed Schedule for Spent Fuel Transfers.
- 7) Emergency Planning Update and Results of the September 2022
Emergency Planning Exercise.

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

- A. Future Actions by the Committee.
- B. Further Information to Obtain/Review.
- C. Confirmation of Future Site Visits, and Public Meetings.

XXV ADJOURNMENT OF ONE-HUNDRED AND THIRD PUBLIC MEETING

The Committee's policy is to schedule its public meetings in locations that are accessible to people with disabilities and to remain in compliance with state guidelines on COVID-19 prevention. The Avila Lighthouse Suites Point San Luis Conference Room 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 P.O. Box 4523, Carmel-by-the-Sea, CA 93921-4523 or by email to dcisafety@dcisc.org. Providing your request at least five business days before the meeting will help ensure availability of the requested accommodation.

DIABLO CANYON INDEPENDENT SAFETY COMMITTEE

AGENDA TRANSMITTAL FORM

MEETING DATE:	September 28, 2022
AGENDA ITEM:	IV-A
AGENDA TITLE:	Consider the Engagement of Dr. Andrew C. Kadak as a Technical Consultant on an <i>ad hoc</i> Basis to Assist in the Review of Spent Fuel, Decommissioning and Regulatory Issues.

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

Staff Summary: The Second Restatement of the Charter for the Committee, Section II.D.(2), provides the Committee may contract for services, including the services of consultants and experts, to assist the Committee in its safety review.

The Second Restatement and recent legislation provide for that safety review to continue prior to and following the cessation of electric generation operations. At the June 2022 public meeting the Committee Members reviewed and approved a scope of services to govern the engagement of a consultant, on an *ad hoc* basis, to assist them in the review of spent fuel, decommissioning, and regulatory issues and discussed the engagement of a technical consultant.

A resume and for Dr. Andrew C. Kadak and an Agreement for his services as a consultant are provided.

RECOMMENDED COMMITTEE ACTION: Motion to approve the Agreement with Dr. Andrew C. Kadak.

Andrew C. Kadak, Ph.D.

President, Kadak Associates, In.



Education:

Massachusetts Institute of Technology

- Ph.D., Nuclear Engineering - Reactor Physics (1972)

- M.S., Nuclear Engineering (1970)

Northeastern University - M.B.A. (1983)

Union College - B.S., Mechanical Engineering (1967)

Employment:

Nuclear Economics Consulting Group – Affiliate

2015 to Present

Kadak Associates, Inc. President

1997 to Present

Exponent, Failure Analysis Corporation - Director Nuclear Services

2010 to 2013

Massachusetts Institute of Technology – Professor of the Practice

1997 to 2010

Yankee Atomic Electric Company-numerous positions – last CEO

1979 to 1997

New England Power Company – Director of Nuclear Information

1975 to 1979

Combustion Engineering Company – Principal Physicist

1972 to 1975

Career Highlights:

Dr. Kadak's has a diverse background ranging from day-to-day operations of nuclear plants to senior executive utility management to teaching in the Nuclear Science and Engineering Department at the Massachusetts Institute of Technology. Dr. Kadak has led license renewal of operating reactors, systematic evaluation of older plants to allow them to demonstrate compliance to new regulations, financial rate proceedings to assure adequate capital for safe operation, innovative fuel purchase agreements, high level nuclear waste disposal, and storage solutions.

His technical background has allowed him to actively direct regulatory strategy dealing with reactor vessel embrittlement, safety analyses, boiling water reactor pipe replacements and how to manage aging of nuclear plants. He presently consults on decommissioning of nuclear plants based on his decommissioning experience at the Yankee Atomic Nuclear Power station. In this consultancy, he also worked with Southern California Edison's decommissioning of Unit 1 and the Big Rock Point Plant. He currently lectures on decommissioning at the MIT/INPO Executive Course for utility executives. He has served on safety review boards of nuclear utilities. He has also conducted several audits of nuclear companies to assess management and served as chairman of a panel providing suggestions to the DOE's Nevada Test Site as to how to make their operations more like commercial industries. Presently, he is consulting with two companies in reviewing the design and licensing standards for small modular reactors.

Dr. Kadak also served on the Senior Nuclear Safety Oversight Board of the Daya Bay Nuclear Power Stations in Guangdong Province, China. He currently serves on the Senior Nuclear Safety Review Board

of the Ningde Nuclear Power Station in Fuding, China. Internationally, he participated in an IAEA inspection of the Onagawa Nuclear Power Station post the Fukushima nuclear accident. He performed an independent assessment of the Fukushima accident immediately after the accident. He has also participated in evaluations of the San Onofre steam generator tube rupture event and economic evaluations of the Savannah River Site MOX plant construction among other technical assessments.

Dr. Kadak was formerly President and CEO of the Yankee Atomic Electric Company (YAEC) that operated the Yankee Atomic Nuclear Power station. Yankee also provided engineering, safety and environmental support services to Vermont Yankee, Maine Yankee, and Seabrook station through its Nuclear Services Division. Yankee also provided engineering consulting services to other nuclear plants in New England and the US. During his tenure at Yankee, Dr. Kadak held project management positions supporting several of these reactors and was Vice President of the Nuclear Engineering Services before becoming President and CEO.

From 1998 to 2010, Dr. Kadak was a Professor of the Practice in the Nuclear Engineering Department of the Massachusetts Institute of Technology. His research interests include the development of advanced reactors, in particular the high temperature pebble bed gas reactor, space nuclear power systems, improved technology neutral licensing standards for advanced reactors and operations and management issues of existing nuclear power plants. Dr. Kadak is presently consulting under Kadak Associates, Inc.

Dr. Kadak was President of the American Nuclear Society in 1999/2000. He has served as a board and executive committee member of the Nuclear Energy Institute and the industry's Advisory Committee on High Level Waste. He has served as a member of the National Association of Regulatory Utility Commissioners special panel on high level nuclear waste and the Aspen Institute's "Dialogue on Nuclear Waste Disposal". In 1995, he was a member of the Advisory Committee on External Regulation of Department of Energy Nuclear Safety. He has also conducted several audits of nuclear companies to assess management and served as chairman of a panel providing suggestions to the DOE's Nevada Test Site as to how to make their operations more like commercial industries.

In 2005, Dr. Kadak was named by President Bush to serve on the US Nuclear Waste Technical Review Board for two four year terms. He has served as a member of the Rhode Island Atomic Energy Commission. Dr. Kadak has made more than 70 lectures and speeches on topics related to the technical and business aspects of nuclear power.

Recently, he was an editor of Elsevier's Encyclopedia of Nuclear Energy's section on the Social Issues of Nuclear Energy.

PROFESSIONAL AFFILIATIONS AND HONORS:

- US Nuclear Waste Technology Review Board, Member (past)
- Commissioner, Rhode Island Atomic Energy Commission (past)
- President, American Nuclear Society, 1999-2000
- Elected as Fellow of the American Nuclear Society
- Nuclear Energy Institute - Board of Directors (past)
- Nuclear Energy Institute - Nuclear Waste Advisory Committee (past) Advisory Committee on External Regulation of DOE Nuclear Safety (member)
- Electric Power Research Institute Research Advisory Committee (past member)

The University of Massachusetts Engineering Task Force (past member)
Edison Electric Institute - past member of the Policy Committee on Energy Resources,
Member of the Nuclear Power Executive Advisory Committee (past)
Electric Council of New England - Board of Directors (past)
New England Council - Board of Directors (past)
Nuclear Utility Management and Resources Committee (NUMARC) - past member of the
Issues Management Committee Board of Directors, and Executive Committee
Northeast Section of the American Nuclear Society,
Tau Beta Phi, Sigma Xi (Honorary engineering and science societies)
Member of the Industry Review Group on the Chernobyl Accident

PROFESSIONAL EXPERIENCE:

Kadak Associates, Inc. (1997 to Present)

President – Kadak Associates is a firm that specializes in decommissioning, licensing strategies, management reviews intending to improve competitiveness and effectiveness, organizational strategies for deregulation of the utility industry, safety assessments, license renewal, legal and political strategies, innovative solutions to tough problems, spent fuel management, public relations and communication, and adapting to changing regulatory environments.

Exponent (2010 to 2013)

Principal and Director of Nuclear Services – At Exponent, Dr. Kadak applies his extensive experience in the nuclear industry to current problems facing operating nuclear plants and those proposed for construction. He leads the Nuclear Services practice to apply Exponent's skills to address problems of national and international significance. These areas include engineering fundamentals in mechanical, structural, metallurgical, chemical, electrical engineering. Additional areas include executive management consulting, construction, and operations covering such areas as risk, reliability, vulnerability and root cause analyses, and corrective action program development and assessment. Of significance to the nuclear industry, Dr. Kadak's responsibilities include regulatory strategy development and compliance assessment..

Massachusetts Institute of Technology (1997 –2010)

Professor of the Practice – Dr. Kadak supervised the modular high temperature gas reactor project and many graduate and undergraduate theses on many diverse topics from space nuclear power to nuclear powered container ships. He taught classes in design, engineering systems, operational reactor safety, nuclear waste and engineering leadership. He also gave invited lectures on topics relevant to commercial nuclear power.

Kadak Associates, Inc. (1997 - 2010)

President - Kadak Associates is a firm that specializes in decommissioning, licensing strategies, management reviews intending to improve competitiveness and effectiveness, organizational strategies for deregulation of the utility industry, safety assessments, license renewal, legal and

political strategies, innovative solutions to tough problems, spent fuel management, public relations and communication, and adapting to changing regulatory environments.

Yankee Atomic Electric Company (1979 - 1997)

President and Chief Executive Officer (1989 - 1997) - Oversaw the Yankee Nuclear Power Station operation and then decommissioning when the plant was permanently shutdown in 1992. Yankee also provides engineering and operations support for the Vermont Yankee, Maine Yankee, and Seabrook Nuclear Power Stations and other clients worldwide. Yankee was a \$ 100 million revenue company with over 500 professional staff with expertise ranging from engineering, environmental sciences, nuclear safety analysis, quality assurance, fuel procurement, in-service inspection and plant support.

Vice President (1986-88) - Responsible for Nuclear Engineering, Environmental Engineering, Environmental Laboratory, Computer Services, Generic Licensing, and Commercial Sales.

Project Manager, Vermont Yankee (1983-85) - Managed engineering and licensing support for operation of the Vermont Yankee NPS (BWR).

Project Manager, Yankee NPS (Rowe) (1980-83) - Directed engineering, capital projects, and licensing for the Yankee NPS. Managed Yankee's response to the NRC's Systematic Evaluation Program, for the oldest operating plant in the country.

Assistant to the Vice President (1979-80) - Coordinated emergency planning for the Yankee, Vermont Yankee, and Seabrook Nuclear Power Stations, performed post-TMI assessments of operating reactors, and represented Yankee on the Utility Waste Management Group.

New England Power Company (1975-79)

Manager, Nuclear Information - Directed efforts to educate the public on nuclear power. He managed the informational, advertising, citizen coalition and political support for a new power plant project proposed for Rhode Island.

Combustion Engineering Corporation (1972-75)

Principal Physicist, PWR Physics (1973-75) - Concentrated on the operational control aspects of pressurized water reactors; formulated improved methods of reactor control and analysis; developed improved monitoring and safety protection systems; investigated reactor maneuvering capabilities and the application of space-time kinetics to safety analysis.

Selected Papers and Lecture Topics:

1. Papers in Refereed Journals List:

1. Kadak, A.C., Freidberg, J.P. " Fusion-fission hybrids revisited", *Nature Physics*, June 2009, Vol. 5
2. Kadak, A. " MIT Pebble Bed Reactor Project", *Nuclear Engineering and Technology*, 39 (2), 2007, pp. 95-102.
3. Kadak, A.C., "A Future for Nuclear Energy: Pebble Bed Reactors", *International Journal of Critical Infrastructures*, Vol. 1 No. 4, 2005, pp. 330-345.
4. Kadak, A.C., "Intergenerational Risk Decision Making: A Practical Example", *Risk*, Vol. 20, No. 6, 2000, pp. 883-894.
5. Kadak, A.C., Matsuo, T., "The Nuclear Industry's Transition To Risk Informed Regulation and Operation in the United States", *Reliability Engineering and System Safety*, Vol. 92, Issue 5, May 2007, pp. 609-618.
6. Kadak, A.C., Zhai, T., "Air Ingress Benchmarking with Computational Fluid Dynamics Analysis", *Nuclear Engineering and Design*, Vol. 236, Issue 5-6, March 2006, pp. 587-602.
7. Kadak, A.C., Berte M.V., "Advanced Modularity Design for the MIT Pebble Bed Reactor", *Nuclear Engineering and Design*, Vol. 236, Issue 5-6, March 2006, pp. 587-602.

2. Other Major Publications:

1. Kadak, A.C, Berte, M.V. "Modularity Design of the MIT Pebble Bed Reactor", American Nuclear Society Meeting, Reno, Nevada. November 2001.
2. Kadak, A.C., "An Advanced Nuclear Power Plant That Can Compete With Natural Gas", *Electric Power 2001 Conference Proceedings*, March 21, 2001.
3. Kadak, A.C., "The MIT Modular Pebble Bed Reactor Project", Seminar on HTGR Application and Development conference proceedings, Beijing, China, March 19, 2001.
4. Zhai, No, Kadak, "LOCA Analysis in a Pebble Bed Reactor", American Nuclear Society paper submitted for June 2001 meeting in Milwaukee, Wi.
5. Kadak, A.C, Berte, M.V., "Advanced Modularity Design for the MIT Pebble Bed Reactor", 2nd International Topical Meeting on High Temperature Reactor Technology, September 22-24, 2004, Beijing, China.
6. Kadak, A.C., Zhai, T., "Air Ingress Benchmarking with Computational Fluid Dynamics Analysis", 2nd International Topical Meeting on High Temperature Reactor Technology, September 22-24, 2004, Beijing, China.
7. Kadak, A.C., Feng, B., "Conceptual Design of an Advanced Breeder Burner Reactor", American Nuclear Society, June 2007.
8. Kadak, A.C., "Nuclear Power: Made in China", *The Brown Journal of World Affairs*, Vol. XIII, Issue I, Fall/Winter, 2006.
9. Kadak, A.C., "Reconsidering Nuclear Power", *Science Year Book 2003*, pp. 68-83.
10. Kadak, A.C., Bazant, M.Z., "Pebble Flow Experiments for Pebble Bed Reactors", 2nd International Topical Meeting on High Temperature Reactor Technology, September 22-24, 2004, Beijing, China.
11. Kadak, A.C., "Establishing a Safety and Licensing Basis for Generation IV Advanced Reactors", Workshop on Advanced Reactors, Advisory Committee on Reactor Safeguards, June 4-5, 2001.

12. Kadak, A.C, Brudieu, M.A, "Blind Benchmarking Predictions of NACOK Air Ingress Tests Using Computational Fluid Dynamics, 3rd International Topical Meeting on High Temperature Reactor Technology, October 1-4, 2006, Johannesburg, South Africa.
13. Kadak, A.C., Finan, A.E, Miu, K., "Nuclear Technology & Canadian Oil Sands: Integration of Nuclear Power with In-Situ Oil Extraction", International Congress on Advances in Nuclear Power Plants, June 4-8, 2006, Reno, Nevada.
14. Kadak, A.C, Finan, A.B, "Integration of Nuclear Energy with Oil Sands Projects for Reduced Greenhouse Gas Emissions and Natural Gas Consumption", MIT CANES white paper, June 2007.
15. Kadak, A.C., "Licensing and Deployment of Advanced Reactors", American Nuclear Society Annual Meeting, June 2002.
16. Kadak, A.C., "An Advanced Nuclear Power Plant That Can Compete with Natural Gas", Electric Power 2001 Conference, March 21, 2001.
17. V. Dostal, K. Gezelius, J. Horng, J. Koser, J.P. Iv, E. Shwageraus, P. Yarsky, and A.C. Kadak, "Mission to Mars: How to Get People There and Back with Nuclear Energy" (September 2004), MIT-NSA-TR-001
18. P. Yarsky, A.C. Kadak, and M.J. Driscoll, "Design of a Sodium-cooled Epithermal Long-term Exploration Nuclear Engine" (September 2004), MIT-NSA-TR-002
19. T. Zhai, A. Kadak, and H-C. No, LOCA and Air Ingress Accident Analysis of a Pebble Bed Reactor (March 2004), MIT- ANP-TR-102.
20. T.A. Galen, D.G. Wilson, and A.C. Kadak, Comparison Between Air and Helium for Use as Working Fluids in the Energy-Conversion Cycle of the MPBR (February 2001

3. Selected Invited Lectures:

Woodrow Wilson International Center for Scholars, May 8, 2008 – Current and Future Prospects for Civilian Nuclear Power: US and Japanese Perspectives", Washington, D.C.

Manhattan Institute, New York City – Nuclear Energy Options, March 28, 2007.

American Physical Society Conference - Nuclear Renaissance, October 31, 2006

Westinghouse/BNFL, "MIT's Pebble Bed Reactor Research" May 11, 2001, Monroeville, PA.

Bettis Atomic Power Laboratory, "MIT Fuel and Safety Research", May 11, 2001

New England Council of Public Utility Commissioners, "The Inevitability of Nuclear Energy", May 21, 2001, Mystic CT.

Council of Scientific Society Presidents, "Advanced Nuclear Energy Plants – The Pebble Bed Reactor", May 6, 2001, Washington, DC

University of Rhode Island, "China's Nuclear Energy Program", December 2013

Nuclear Innovation Alliance Workshop, Washington DC, "Technology Neutral Risk Informed Licensing Approaches and a Proposal", October 2015

World Nuclear Fuel Market Conference, New York City, "Nuclear Power Construction Programs – Can We Do It Again?" June 2014

45th Annual Meeting on Nuclear Technology, Frankfurt Germany, "US Decommissioning Experience", May 2014

Japan Atomic Industrial Forum, "The Environmental Imperative of Nuclear Energy –Despite the Challenges", Tokyo, Japan, April 2014

Department of Energy, Nuclear Energy Research Advisory Committee, Washington, DC, "Views and Priorities on Advanced Reactor Research and Development" January 2015.

MIT Energy Conference, Cambridge MA, "Nuclear Power Plants – Will there be 6 or 60?", April 2008.

6th Annual Technical VHTR Review Meeting 2013, Idaho Falls, "Nuclear Innovation in High Temperature Gas Reactors" May 2013

Not all listed

4. Selected Management Presentations

"Airplanes Are Different - The Management Challenge," ANS Annual Meeting, New Orleans, Louisiana, June 1994.

"The Safety Goal as a Regulation," ANS Executive Conference, Washington, D.C., March 1994.

"Self Assessment - A Challenge to Human Nature," ANS Conference, San Diego, California, November 1993.

"Engineering Excellence," ANS Executive Conference on Engineering Excellence, Jupiter Beach, Florida, October 1993.

"The Quality of Management - The Next Self Assessment Challenge," American Nuclear Society Executive Conference, Self Assessment for Self Assurance, La Jolla, California, December 1990.

"Excellent and Economic Nuclear Plant Performance Conference," ANS/ASME Joint Conference, Newport, Rhode Island, September 1990.

"Promoting Professionalism and Credibility in the Engineering Organization," INPO Workshop, Atlanta, Georgia, May 1990.

"What's a Safety Culture? How do I Get It? How Do I Keep It?" Presented to the Nuclear Nonoperating Owner's Group, Boston, September 1989.

"Is Technology Enough? What About Management?," 16th Reactor Operations International Topical Meeting, August 1993.

5. Selected other Lectures and Presentations

"Generating Companies, An Idea Whose Time Has Come...Again," Nuclear Engineering International, September 1989.

"Utilities of the 1990's - Generators of Cash or Electricity?," American Nuclear Society Executive Conference on Utility Management Strategies of the 1990's, April 1989.

"Institutional Investors Conference on Economics of Older Nuclear Power Plants," Lehman Brothers, New York, March 1992.

"The Atom and Human Values," 60th Steinmetz Memorial Lecture, Union College, October 1992.

"How to Decide to Shut Down a Nuclear Plant Prematurely," NUMARC panel presentation, October 1992.

"How Long Will the Current Nuclear Power Reactors Operate?," MIT October 1993.

"The Safety Goal as a Regulation," ANS Executive Conference, March 1994.

"Yankee's Decommissioning Program," NRC Regulatory Information Conference, May 1994.

"High Level Waste Legislation," New England Conference of Public Utility Commissioners, March 1995

"Risk Management in Electric Utility Decommissioning," ANS Executive Conference, May 1995.

"The Science and Politics of High Level Waste," International Conference on High Level Radioactive Waste Disposal, May 1996.

"The U.S. NRC's Nuclear Regulator Research - Accomplishments and Needs," ANS/ENS International Meeting, November 1996.

"An Intergenerational Approach to High Level Waste Disposal (that Might Work)," A Symposium on Advances in Nuclear Technology, MIT April 1997.

"Developing a Practical and Cost Effective Decommissioning Plan," Energy Daily Conference, April 1997.

AGREEMENT FOR CONSULTING SERVICES

THIS AGREEMENT is made and entered into on September 28, 2022, by and between the DIABLO CANYON INDEPENDENT SAFETY COMMITTEE (hereinafter referred to as the "Committee") and ANDREW C. KADAK, Ph.D. ("Consultant"), as follows:

Recitals

1. In December 1988 the California Public Commission ("CPUC") approved and adopted a settlement agreement between Pacific Gas & Electric Company ("PG&E"), the Division of Ratepayer Advocates of the CPUC, and the Attorney General of the State of California relating to Diablo Canyon Nuclear Power Plant ("DCPP"). The settlement agreement, among other things, established the three-member Committee to review PG&E's adherence to safety standards at Diablo Canyon, conduct site visits, review DCPP operations, and prepare reports and suggest any recommendations for safe operations. In its Decisions D.88-12-083, D.97-05-088, D.04-05-055 and D.07-01-028 the CPUC provided for continuing operations by the Committee in order that it might fulfill its responsibilities. On September 9, 2021, the CPUC approved Decision 21-09-003 adopting a Settlement Agreement proposed in the 2018 Nuclear Decommissioning Cost Triennial Proceeding to provide for a role for the Committee following Diablo Canyon's cessation of electricity generating operations in accordance with the Second Restatement of the Charter for the Committee to continue in its safety oversight role until all DCPP spent nuclear fuel has been moved from wet storage in the Spent Fuel Pools to dry storage at the Independent Spent Fuel Storage Installation.

2. The Committee now requires the performance of consulting services in order to assist it in the performance of its above-referenced review and report activities, which services are described in **Exhibit "A"** (the "Scope of Services") hereto.

3. The Committee wishes to engage Consultant to perform the services described in Exhibit A.

4. Consultant is qualified to perform and wishes to provide those services requested by the Committee.

5. The Committee wishes to engage the services of Consultant and Consultant consents to provide such services, upon the terms and conditions hereinafter set forth.

Terms and Conditions

In consideration of the mutual promises contained herein, the Committee and Consultant hereby agree to the following terms and conditions:

1. Scope of Services. Consultant shall provide to the Committee those services set forth in the Scope of Services, which is attached as Exhibit "A" to this agreement. Such services may be modified, from time to time, as required, by a written amendment to **Exhibit "A"** which shall be signed by both parties to this agreement.

2. Compensation. For the services to be provided by Consultant under this agreement, Consultant shall be compensated at an hourly rate for this engagement of \$240.00. Time spent by Consultant for the services hereunder shall be recorded under generally accepted accounting practices and shall be itemized on any billings to the Committee. In addition to compensation for the Consultant's time above, the Committee shall also reimburse Consultant directly for all out-of-pocket expenses reasonably incurred by Consultant in connection with providing services to the Committee including, but not necessarily limited to, printing of any reports, photocopies, facsimile, postage, long-distance telephone and internet charges and for any travel specifically requested by the Committee and for lodging and subsistence (meals and incidental expenses) incurred during such travel. Time and expense reporting shall be in accordance with Committee Policy No. 6 "Consultant Guidelines" attached hereto as **Exhibit "B"** hereto.

3. Ownership of Work Product. Ownership of any reports, data, studies, surveys, charts, maps, figures, photographs, memoranda and any other documents which are developed, compiled or produced pursuant to this agreement, whether or not completed, shall be vested in the Committee. If the Consultant's working papers or deliverables include computer generated statistical material, the Consultant shall provide the material to the Committee in a mutually agreed upon computer-readable format and media. Any evaluation, assessment or report by Consultant shall be made in accordance with the Consultant Guidelines, **Exhibit "B"** hereto.

4. Delegation of Work. Consultant's professional qualifications and experience constitute a principal consideration for the Committee in entering into this agreement, therefore Consultant may not delegate the services to be performed by Consultant or utilize any sub-consultant, person or firm having applicable expertise to assist Consultant in performing the work authorized by this agreement without the prior written consent of the Committee which may be withheld in the Committee's sole discretion.

5. Independent Contractor. The parties agree that Consultant, any sub-consultants and agents shall be independent contractors with regard to the providing of services under this agreement, and that Consultant and its employees, sub-consultants or agents shall not be considered to be employees or agents of the Committee for any purpose. The Committee shall make no deductions for payroll taxes or Social Security from amounts due Consultant for services provided under this agreement.

6. Conflict of Interest. Consultant covenants that he does not have and shall not acquire any interest directly or indirectly which would conflict in any manner with the interests of the Committee or which would in any way hinder or affect Consultant's performance of services under this agreement. The Committee understands and acknowledges that Consultant may have in the past and is as of commencement of services under this agreement continuing to perform services unrelated to the Scope of Services herein for Exponent, an engineering and scientific consulting firm. Prior to his association with Exponent, Consultant previously performed services unrelated to the Scope of Services herein for educational and private institutions including the Massachusetts Institute of Technology, Nuclear Engineering Department, and the Yankee Atomic Electric Company.

7. Liability Insurance. Consultant shall, at its sole cost and expense, at all times during which services are performed under this agreement, maintain in force automobile liability insurance covering all vehicles used during such performance of services. Such insurance policy or policies shall be maintained on the minimum basis of \$100,000.00 for damage to property and \$500,000.00 for bodily injury or death in any one accident.

8. Indemnification. Consultant agrees to defend, indemnify and hold harmless the Committee, its officers, agents and employees from and against all claims, demands, damages or costs arising from Consultant's negligence with respect to services performed pursuant to this agreement. The Committee agrees to defend, indemnify and hold harmless Consultant and its employees and agents from and against all claims, demands, damages or costs arising from the Committee's negligence with respect to its duties pursuant to this agreement. .

9. Workers' Compensation Insurance. Consultant shall, at its sole cost and expense, at all times during the performance of services under this agreement, maintain in force and effect workers' compensation insurance on any employee of Consultant working pursuant to this agreement in an amount not less than the statutory required minimum.

10. Compliance with Laws. Consultant and any employees and agents shall comply with all applicable state, federal and local laws and safety regulations while performing services pursuant to this agreement.

11. Termination or Suspension. The Committee may terminate or suspend this agreement at any time and for any reason. Should the Committee elect to terminate or suspend this agreement, it shall be obligated to Consultant for any charges for services rendered by Consultant and properly substantiated by Consultant up to the date of termination or suspension.

Consultant may terminate this agreement upon giving Committee thirty (30) days' written notice in advance thereof. Should Consultant elect to terminate this agreement, Consultant shall give Committee all data, memoranda, reports, and other documents prepared in performance of this agreement.

12. Assignment. This agreement may not be assigned or otherwise transferred by Consultant without the prior written consent of the Committee.

13. Draft Documents Confidential. Consultant agrees that until final approval by the Committee all data, memoranda, reports and other documents are confidential drafts and will not be released to third parties without the prior written consent of the Committee.

14. Notice. Unless otherwise mutually agreed upon in writing by the parties, all notifications, notices, demands, requests and other communications herein provided for or made pursuant hereto shall be in writing and shall be sent by (i) registered or certified mail, return receipt requested, and the giving of such communication shall be deemed complete on the third (3rd) Business Day after the same is deposited in a United States Post Office with postage charges prepaid, or (ii) reputable overnight delivery service, and the giving of such communication shall be deemed complete on the immediately succeeding Business Day after the

same is deposited with such delivery service.

If to Consultant, addressed to the address set forth below, or at such other address in the continental United States as Consultant may furnish to the Committee in writing:

Dr. Andrew C. Kadak. _____

Telephone: (_____) _____

If to the Committee, addressed to the Committee, at the address set forth below, or at such other address in the continental United States as the Committee may furnish to Consultant in writing:

Diablo Canyon Independent Safety Committee, c/o Legal Counsel, SW 4th & Mission, Suite 2,
P.O. Box 4523, Carmel-by-the-Sea, CA 93921-4523

Telephone: (831) 647-1044; (800) 439-4688 (In CA only).

15. Attorney's Fees. In the event of any controversy, claim or dispute relating to this agreement, or the breach thereof, the prevailing party shall be entitled to recover from the losing party reasonable expenses, attorney's fees and costs.

16. Amendment or Modification. This agreement is not subject to amendment, change or modification except by a writing signed by Consultant and the authorized representative of the Committee.

17. Counterparts. This agreement may be executed in two counterparts, each of which shall be deemed an original but both of which shall constitute one and the same instrument.

18. Effective Date. This agreement is effective on the date first shown above and shall continue until the scope of services provided for herein are completed unless terminated earlier as provided herein.

DIABLO CANYON INDEPENDENT
SAFETY COMMITTEE

ANDREW C. KADAK.

By _____
Peter Lam, Chair

Andrew C. Kadak.

Date: September 28, 2022

Date: September 28, 2022

EXHIBIT "A"

SCOPE OF SERVICES

Work to be performed for the Diablo Canyon Independent Safety Committee ("DCISC") in accordance with the Second Restatement of the Charter for the DCISC approved by the California Public Utilities Commission.

1. Provide support to the Committee from time to time as requested by a Committee Member. This includes, but is not necessarily limited to, participating either remotely or in person in Committee public meetings and fact-finding visits to Diablo Canyon Power Plant or other Pacific Gas & Electric Company facilities; reviewing DCISC, Nuclear Regulatory Commission, Institute of Nuclear Power Operations, and PG&E's documents as a basis for recommending potential issues or concerns that the Committee may wish to pursue; identifying additional supporting specialists; developing background material on specific issues; and providing written material in support of Committee reports.
2. Assist the DCISC in evaluating pre and post-shutdown decommissioning activities, with a special emphasis on high-risk operations, for the potential for any impact on safety or the schedule for wet and dry storage of spent fuel. Both public health and safety and worker safety are encompassed by this scope.
3. Assist the DCISC in reviewing and opining on the schedule for spent fuel cask procurement and moving spent fuel in context of pre and post-shutdown decommissioning activities.
4. Assist the DCISC in assessing any impact of the plans and schedule to construct a new facility for storage of greater than Class C waste on the plans for movement of spent fuel and on other decommissioning activities that could impact upon spent fuel-related matters.
5. Assist the DCISC in reviewing and assessing regulatory changes required, including but not necessarily limited to, in connection with the Part 50 and Part 72 Licenses, Technical Specifications, the Emergency Plan and emergency planning, and California state regulatory issues.
6. Assist the DCISC in evaluating the adequacy of Spent Fuel Pool, Independent Spent Fuel Storage Installation, fuel transfer systems, and storage/handling systems for other (non-nuclear fuel) radioactive waste, including instrumentation, programs, and FLEX strategies retained, adopted, or modified during decommissioning.
7. Assist the DCISC in its decommissioning-related public outreach activities, including with respect to DCISC's interactions with PG&E's Diablo Canyon Decommissioning Engagement Panel and the California Public Utilities Commission's Independent Peer Review Panel (for seismic studies of Diablo Canyon Power Plant).

8. Serve as a resource for addressing discrete questions from the Committee concerning the interface between decommissioning activities and the safety of storage and management of spent fuel.

9. Assist the DCISC in reviewing and assessing PG&E's selected decommissioning management scheme (e.g., self-perform the work, contract with a decommissioning contractor, or a temporary or permanent license transfer) in terms of all aspects of spent fuel safety.

DIABLO CANYON INDEPENDENT
SAFETY COMMITTEE

CONSULTANT

By _____
Committee Chair

Andrew C. Kadak

EXHIBIT B

Diablo Canyon ISC Committee Policy No. 6

CONSULTANT GUIDELINES

The Diablo Canyon Independent Safety Committee (DCISC) may contract with consultants to perform various tasks in its review of the safety of operations of the Diablo Canyon Power Plant. The following are guidelines for consultant agreements and activities:

1) Prior to charges being made for services rendered, a consultant shall sign a written agreement that has been signed by the Chair or a designated DCISC member and approved by the affirmative vote of at least two-thirds of the members of the DCISC. A proposed standard form of Agreement is attached hereto.

2) Consultant work shall not commence without a specific scope of services description which shall be signed by the Chair or a designated DCISC member and approved by the affirmative vote of at least two-thirds of the members of the DCISC or attached as part of the signed agreement referred to in paragraph 1. A sample specific scope of services is attached.

3) The signed original of the Agreement and Specific Scope of Services shall be sent by the Chair or designated DCISC Member to the DCISC Legal Counsel for retention, with copies to the other DCISC members and the contracting consultant.

4) Any consultant recommendations in reports shall be made as recommendations to the DCISC which will review and decide on disposition. Consultant reports shall be marked and considered as drafts until approved by the affirmative vote of at least two-thirds of the members of the DCISC. The Chair or designated DCISC member shall review and approve for presentation draft reports prior to the Consultant's presentation at a DCISC public meeting.

Copies of draft reports shall be distributed to all DCISC members and the DCISC Legal Counsel prior to the Consultant's report at a public meeting and subsequent final approval by the affirmative vote of at least two-thirds of the members of the DCISC.

5) Consultant charges for travel expenses shall be for actual expenditures with receipts for charges of \$25.00 or more and for all lodging. The attached form is to be used for submittal for reimbursements.

6) Time reporting shall be as follows:

- a) Report time to nearest 0.25 hours.
- b) A "standard day" is defined as the normal eight-hour working day.
- c) All DCISC actual work-time and travel-time during the "standard day" is charged.
- d) All time on-assignment or on-location during the "standard day" is charged.
- e) DCISC actual work-time outside the "standard day" is charged at standard rates.
- f) DCISC travel-time outside the "standard day" is not charged unless it includes DCISC work.

7) Contracts entered into with consultants or experts for a particular project shall include an estimated total cost for such work, which amount shall not be exceeded without prior authorization by the Committee Chair and ratification by the affirmative vote of at least two-thirds of the members at a regular Committee meeting.

[Adopted June 1994; Revised October 2003]

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

MEETING DATE:	September 28, 2022
AGENDA ITEM:	IV-B
AGENDA TITLE:	DCISC 32nd Annual Report on Safety of Diablo Canyon Operations; July 1, 2021 - June 30, 2022

CONSENT [] ACTION [XX] INFORMATION []

Staff Summary: The Settlement Agreement creating the DCISC provided “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 2021-2022 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 thirty-second annual report.

Upon adoption, Public Utilities Code §712.1(e)(2) directs the Committee to annually transmit its findings and recommendations for improved safety to the Legislature (in accordance with California Government Code §9795), the Governor, the California Public Utilities Commission, the California Energy Commission, the United States Nuclear Regulatory Commission and Pacific Gas & Electric Company. Public Utilities Code §712.1(f) directs Pacific Gas & Electric Company to annually respond to the annual report and distribute its response to the governmental entities identified above. The Committee’s annual reports are available to members of the public on the Committee’s website (www.dcisc.org) and through the California Polytechnic University Library, Government Documents Department, and local public libraries.

RECOMMENDED COMMITTEE ACTION: Motion to approve the DCISC 2021-2022 Thirty-Second Annual Report on Safety of Diablo Canyon Operations and to transmit same in accordance with Public Utilities Code §712.1(e)(2).

Diablo Canyon Independent Safety Committee

**THIRTY-SECOND ANNUAL REPORT ON THE SAFETY OF
DIABLO CANYON NUCLEAR POWER PLANT OPERATIONS**

July 1, 2021 - June 30, 2022

Report Outline

Section

Preface

Executive Summary and Conclusions and Recommendations

Table of Contents

1.0 Introduction

1.1 Formation of the Independent Safety Committee

1.2 Appointment of Committee Members

1.3 DCISC Public Meetings and Plant Tours

1.4 Committee Member Site Inspection Tours and
Fact-finding Meetings

1.4.1 Inspections and Visits by Robert J. Budnitz

1.4.2 Inspections and Visits by Peter Lam

1.4.3 Inspections and Visits by Per F. Peterson

1.4.4 Tours of DCPD by DCISC Members and
Members of the Public during the Period July 1,
2021 – June 30, 2022

1.5 Visits by DCISC Members to California State Agencies,
Outreach Activities to the Diablo Canyon Decommissioning
Engagement Panel, and Outreach Activities to the Diablo
Canyon Independent Peer Review Panel.

1.5.1 Visits by DCISC Members to California State Agencies.

1.5.2 Outreach Activities to the Diablo Canyon
Decommissioning Engagement Panel.

1.5.3 Outreach Activities to the Diablo Canyon Independent
Peer Review Panel (IPRP).

Visits by DCISC Members to California
State Agencies

1.6 Documents Provided to the DCISC

1.7 Documentation of DCISC Activities

2.0 Public Meetings

2.1 Public Meetings

3.0 NRC Assessments and Issues

3.1 Summary of Licensee Event Reports

3.1.1 Discussion and Required LERs

3.1.2 Special Report LERs

3.1.3 Voluntary LERs

3.1.4 Reactor Trips Reported in LERs

3.1.5 Other Reports to NRC

3.1.6 LER Trends

3.1.7 DCISC Evaluation and Conclusions

3.2 NRC Inspection Reports and Enforcement Actions

3.2.1 Discussion

3.2.2 DCISC Review of Trends of Violations
And NRC-Identified Issues

3.2.3 DCISC Evaluation and Conclusions

- 3.3 NRC Performance Evaluations
- 3.4 DCISC Meetings with NRC Resident Inspector
- 3.5 DCISC Conclusions and Recommendations
- 4.0 Summary of Major DCISC Review Topics
 - 4.1 Conduct of Operations
 - 4.1.1 Overview and Previous Activities
 - 4.1.2 Current Period Activities
 - 4.1.3 Conclusions and Recommendations
 - 4.2 Conduct of Maintenance
 - 4.2.1 Overview and Previous Activities
 - 4.2.2 Current Period Activities
 - 4.2.3 Conclusions and Recommendations
 - 4.3 Engineering Program
 - 4.3.1 Overview and Previous Activities
 - 4.3.2 Current Period Activities
 - 4.3.3 Conclusions and Recommendations
 - 4.4 Human Performance
 - 4.4.1 Overview and Previous Activities
 - 4.4.2 Current Period Activities
 - 4.4.3 Conclusions and Recommendations
 - 4.5 Nuclear Safety Culture and Safety Conscious Work Environment
 - 4.5.1 Overview and Previous Activities
 - 4.5.2 Current Period Activities

- 4.5.3 Conclusions and Recommendations
- 4.6 Performance Improvement Processes
 - 4.6.1 Overview and Previous Activities
 - 4.6.2 Current Period Activities
 - 4.6.3 Conclusions and Recommendations
- 4.7 Emergency Preparedness
 - 4.7.1 Overview and Previous Activities
 - 4.7.2 Current Period Activities
 - 4.7.3 Conclusions and Recommendations
- 4.8 Risk Assessment and Management
 - 4.8.1 Overview and Previous Activities
 - 4.8.2 Current Period Activities
 - 4.8.3 Conclusions and Recommendations
- 4.9 Nuclear Safety Oversight and Review
 - 4.9.1 Overview and Previous Activities
 - 4.9.2 Current Period Activities
 - 4.9.3 Conclusions and Recommendations
- 4.10 Radiation Protection
 - 4.10.1 Overview and Previous Activities
 - 4.10.2 Current Period Activities
 - 4.10.3 Conclusions and Recommendations
- 4.11 Quality Programs
 - 4.11.1 Overview and Previous Activities
 - 4.11.2 Current Period Activities

- 4.11.3 Conclusions and Recommendations
- 4.12 Nuclear Fuel Performance/Fuel Cycles/Storage
 - 4.12.1 Overview and Previous Activities
 - 4.12.2 Current Period Activities
 - 4.12.3 Conclusions and Recommendations
- 4.13 Equipment Reliability
 - 4.13.1 Overview and Previous Activities
 - 4.13.2 Current Period Activities
 - 4.13.3 Conclusions and Recommendations
- 4.14 Organizational Effectiveness & Organizational Development
 - 4.14.1 Overview and Previous Activities
 - 4.14.2 Current Period Activities
 - 4.14.3 Conclusions and Recommendations
- 4.15 System and Equipment Performance/Problems
 - 4.15.1 Overview and Previous Activities
 - 4.15.2 Current Period Activities
 - 4.15.3 Conclusions and Recommendations
- 4.16 Steam Generator Performance
 - 4.16.1 Overview and Previous Activities
 - 4.16.2 Current Period Activities
 - 4.16.3 Conclusions and Recommendations
- 4.17 Outage Management
 - 4.17.1 Overview and Previous Activities

- 4.17.2 Current Period Activities
 - 4.17.3 Conclusions and Recommendations
- 4.18 Safety/Security Interface
 - 4.18.1 Overview and Previous Activities
 - 4.18.2 Current Period Activities
 - 4.18.3 Conclusions and Recommendations
- 4.19 Independent Spent Fuel Storage Installation
 - 4.19.1 Overview and Previous Activities
 - 4.19.2 Current Period Activities
 - 4.19.3 Conclusions and Recommendations
- 4.20 Seismic, Tsunami and Other External Events
 - 4.20.1 Overview and Previous Activities
 - 4.20.2 Current Period Activities
 - 4.20.3 Conclusions and Recommendations
- 4.21 Fire Protection
 - 4.21.1 Overview and Previous Activities
 - 4.21.2 Current Period Activities
 - 4.21.3 Conclusions and Recommendations
- 4.22 Learning and Development Programs
 - 4.22.1 Overview and Previous Activities
 - 4.22.2 Current Period Activities
 - 4.22.3 Conclusions and Recommendations
- 4.23 Nuclear Regulatory Commission Items
 - 4.23.1 Overview and Previous Activities

- 4.23.2 Current Period Activities
 - 4.23.3 Conclusions and Recommendations
 - 4.24 Beyond Design Basis Accidents/Fukushima Lessons
 - 4.24.1 Overview and Previous Activities
 - 4.24.2 Current Period Activities
 - 4.24.3 Conclusions and Recommendations
 - 4.25 Other DCISC Reviews
 - 4.26.1 Overview and Previous Activities
 - 4.26.2 Current Period Activities
 - 4.26.3 Conclusions and Recommendations
- 5.0 DCISC Performance Indicators
- 6.0 DCISC Open Items List
- 7.0 PG&E Actions on Previous DCISC Report Recommendations
- 8.0 Public Outreach
 - 8.1 Telephone Calls and E-mails Received by the DCISC
 - 8.2 DCISC Internet – Worldwide Web Activity
 - 8.3 Comments Received at DCISC Public Meetings
 - 8.4 DCISC Public Tours of DCPD
 - 8.5 DCISC Evaluation
- 9.0 PG&E Response to DCISC Recommendations

Volume II - EXHIBITS

Exhibits

- A. Documents Received By the DCISC
- B. DCISC Public Meeting Notices, Agendas and Reports
 - B.1 Notice of October 19-20, 2021 Public Meeting
 - B.2 Agenda for October 19-20, 2021 Public Meeting
 - B.3 Minutes of October 19-20, 2021 Public Meeting
 - B.4 Notice of February 15-16, 2022 Public Meetings
 - B.5 Agenda for February 15-16, 2022 Public Meetings
 - B.6 Minutes of February 15-16, 2022 Public Meetings
 - B.7 Notice of June 22-23, 2022 Public Meetings
 - B.8 Agenda for June 22-23, 2022 Public Meetings
 - B.9 Minutes of June 22-23, 2022 Public Meetings
 - B.10 DCISC Service Mailing List
- C. Diablo Canyon Operations
 - 1.0 PG&E/DCPP Organization
 - 2.0 Summary of Diablo Canyon Operations
 - 2.0.1 Capacity Factor
 - 2.0.2 Refueling Outages
 - 2.0.3 Collective Radiation Dose Equivalent Exposure
 - 2.0.4 Unplanned Reactor Trips
 - 2.0.5 Unplanned Safety System Actuations
 - 2.0.6 Chemistry Effectiveness Indicator (CEI)

2.0.7 Fuel Reliability

D. DCISC Reports on Fact-finding Meetings

D.1 Report on Fact Finding Meeting at DCPD on July 14-15, 2021

- 1.0 Summary
- 2.0 Introduction
- 3.0 Discussion
 - 3.1. Observation of Operations Turnover and Focus Meeting
 - 3.2. Emergency Preparedness Update
 - 3.3. Meet with NRC Resident Inspector
 - 3.4. Annual Radioactive Effluent Release Report & Annual Radioactive Environmental Operating Report
 - 3.5. Lessons Learned from Texas Extreme Weather Event
 - 3.6. Meet with DCPD Officer
 - 3.7. Program for Managing Changes Under 10CFR50.59
 - 3.8. Management Observation Program
 - 3.9. Health of Emergency Diesel Generators
 - 3.10. Plant Tour
 - 3.11. Refueling Outage 2R22 Safety Plan
 - 3.12. Observe NSOC Exit Meeting
 - 3.13. Radiation Protection Department Update
- 4.0 Conclusions
- 5.0 Recommendations
- 6.0 References

D.2 Report on Fact Finding Meeting at DCPD on August 18-19, 2021

- 1.0 Summary
- 2.0 Introduction
- 3.0 Discussion
 - 3.1. Observe Plant Health Committee (remote)
 - 3.2. DCISC Member Meet with Jim Welsch, Chief Nuclear Officer (remote)
 - 3.3. DCPD Safety Culture and DCPD Safety Conscious Work Environment (remote)
 - 3.4. Meet with Two NRC Resident Inspectors
 - 3.5. Institute of Nuclear Power Operations (INPO) Update and INPO Mid-Cycle Evaluation
 - 3.6. Intake Structure Concrete Inspection Update and Tour
 - 3.7. Software Quality Assurance
 - 3.8. Chemistry Update
 - 3.9. Reactor Coolant System Health
- 4.0 Conclusions
- 5.0 Recommendations
- 6.0 References

- D.3 Report on Fact Finding Meeting at DCPD on September 13-15, 2021
- 1.0 Summary
 - 2.0 Introduction
 - 3.0 Discussion
 - 3.1. Probabilistic Risk Assessment Program
 - 3.2. Staffing, Retention and Attrition Update
 - 3.3. Meet with DCPD Officer
 - 3.4. COVID-19 Pandemic Response Update
 - 3.5. Cause Evaluation for Failed Auxiliary Saltwater Pump
 - 3.6. Equipment Reliability Process
 - 3.7. Meet with NRC Resident Inspector
 - 3.8. Root Cause Evaluation for Unit 2 Main Generator Failures
 - 3.9. Cybersecurity Program
 - 3.10. Auxiliary Feedwater System
 - 3.11. Plant Tour
 - 3.12. Emergency Preparedness Exercise Observation
 - 4.0 Conclusions
 - 5.0 Recommendations
 - 6.0 References
- D.4 Report on Fact-finding Meeting at DCPD November 16-17, 2021
- 1.0 Summary
 - 2.0 Introduction
 - 3.0 Discussion
 - 3.1. Observe Licensed Operator Training – Loss of Heat Sink
 - 3.2. Independent Spent Fuel Storage Installation Cask Inspection Results
 - 3.3. Digital Systems Update
 - 3.4. Meeting with NRC Resident Inspectors
 - 3.5. Feedwater Heater Tube Failure and Forced Reactor Shutdowns
 - 3.6. Operating Experience Program Update
 - 3.7. Observe Plant Health Committee (remote)
 - 3.8. Observe Simulator Training on Anticipated Transient without Scram
 - 3.9. NRC Ultimate Heat Sink Inspection Results
 - 3.10. Meeting with DCPD Officer
 - 4.0 Conclusions
 - 5.0 Recommendations
 - 6.0 References
- D.5 Report on Fact-Finding Meeting at DCPD on December 7-8, 2021
- 1.0 Summary
 - 2.0 Introduction
 - 3.0 Discussion
 - 3.1. Root Cause Evaluation for Failed Auxiliary Saltwater Pump Motor

- 3.2. Transmission System
 - 3.3. Meet with Nuclear Regulatory Commission (NRC)
Acting Senior Resident Inspector
 - 3.4. Trends in Plant Status Control Events
 - 3.5. Crane Program
 - 3.6. Plant Tour
 - 3.7. Observe Simulator Training Class
 - 3.8. Emergency Diesel Generator System Follow-up Items
 - 3.9. Plant Health Committee Meeting
 - 3.10. Staffing, Retention and Attrition Update
 - 3.11. Meteorological Information and Dose Assessment System
 - 3.12. Meet with DCPD Officer
 - 4.0 Conclusions
 - 5.0 Recommendations
 - 6.0 References
- D.6 Report on Fact Finding Meeting at DCPD on January 11-12, 2022
- 1.0 Summary
 - 2.0 Introduction
 - 3.0 Discussion
 - 3.1. Meet with DCPD Officer Maureen Zawalik
 - 3.2. Review Operator Rounds Procedures and Experience
 - 3.3. Independent Spent Fuel Storage Installation Cask
Inspections
 - 3.4. Meet with Acting NRC Senior Resident Inspector
 - 3.5. COVID-19 Update
 - 3.6. Refueling Equipment Health
 - 3.7. Fire Doors and Door Life Management
 - 3.8. Observe Plant Health Committee Meeting
 - 3.9. Meet with DCPD Officer Adam Peck
 - 3.10. Single Point Vulnerabilities
 - 3.11. Operability Determination Program
 - 3.12. Feedwater Heater Tube Failure Root Cause Evaluation
 - 4.0 Conclusions
 - 5.0 Recommendations
 - 6.0 References
- D.7 Report on Fact Finding Meeting at DCPD on March 23-24, 2022
- 1.0 Summary
 - 2.0 Introduction
 - 3.0 Discussion
 - 3.1. Refueling Outage 1R23 Safety Plan
 - 3.2. Post-Shutdown License Amendment Requests
 - 3.3. Independent Spent Fuel Storage Installation License
Renewal Application
 - 3.4. Attend Notification Review Team Meeting
 - 3.5. Emergency Preparedness Program

- 3.6. Strategic Engineering Department Update
 - 3.7. Inadvertent Boric Acid Addition Event
 - 3.8. Integrated Risk Management
 - 3.9. Benchmarking Program
 - 3.10. Meet with DCPD Officer
 - 3.11. Plant Tour
 - 3.12. Meet with Nuclear Regulatory Commission (NRC)
Acting Senior Resident Inspector
 - 3.13. Quality Verification
 - 3.14. Direct Current Power Systems
 - 4.0 Conclusions
 - 5.0 Recommendations
 - 6.0 References
- D.8 Report on Fact Finding Meeting at DCPD on April 12-13, 2022
- 1.0 Summary
 - 2.0 Introduction
 - 3.0 Discussion
 - 3.1. Meet with Acting NRC Senior Resident Inspector
 - 3.2. FLEX Program Update
 - 3.3. Maintenance Rule Program Status
 - 3.4. NRC Office of Inspector General Report on Counterfeit,
Fraudulent and Suspect Parts
 - 3.5. Quality Verification Elevated Audit Findings
 - 3.6. Radiation Protection During Refueling Outage 1R23
and Tour of Containment
 - 3.7. Observe Outage 1R23 Outage Control Center
 - 3.8. Workplace Seismic Safety
 - 3.9. Configuration Management Program
 - 3.10. New Independent Spent Fuel Storage Installation Cask System
 - 3.11. Human Performance Update
 - 3.12. Meet with DCPD Officer Adam Peck, Site Vice President
 - 3.13. Observe Corrective Action Review Board Meeting
 - 4.0 Conclusions
 - 5.0 Recommendations
 - 6.0 References
- D.9 Report on Fact Finding Meeting at DCPD on May 18-19, 2022
- 1.0 Summary
 - 2.0 Introduction
 - 3.0 Discussion
 - 3.1. Learning Services Department
 - 3.2. New Spent Fuel Storage System
 - 3.3. Containment Structure Inspections
 - 3.4. Nuclear Fuel Performance
 - 3.5. Flow Accelerated Corrosion Program
 - 3.6. Containment Spray System

- 3.7. Radiation Protection Department Performance During Refueling Outage 1R23
 - 3.8. Meet with Nuclear Regulatory Commission (NRC) Acting Senior Resident Inspector
 - 3.9. Meet with DCPD Director
 - 3.10. Capital Project Planning
 - 3.11. Refueling Outage 1R23 Results
 - 3.12. Online Maintenance Scheduling
 - 3.13. Maintenance Department
 - 3.14. Foreign Material Exclusion Program
 - 4.0 Conclusions
 - 5.0 Recommendations
 - 6.0 References
- E. Record of DCISC Tours of DCPD
- F. DCISC Open Items List
- G. DCISC Public Contacts
 - G.1 DCISC Telephone/Correspondence Log
 - G.2 DCISC Correspondence
 - G.3 Comments Received at Public Meetings
- H. Second Restatement Of The Charter To The Diablo Canyon Independent Safety Committee And Development of a Post-Shutdown Role
 - H.1 Second Restated Charter, Effective as of November 10, 2021
 - H.2 Post-Shutdown Phases and Timeline, DCISC Post-Shutdown Matrix, Sample Post-Shutdown Future Open Items List Following Cessation of Electrical Generation Activities..
- I. Past DCISC Recommendations and PG&E Responses
- J. DCISC Informational Brochure
- K. Glossary of Terms

DIABLO CANYON INDEPENDENT SAFETY COMMITTEE

AGENDA TRANSMITTAL FORM

MEETING DATE:	September 28, 2022
AGENDA ITEM:	IV-C
AGENDA TITLE:	Update on Financial Matters and DCISC Activities

CONSENT [] ACTION [] INFORMATION [X]

Staff Summary: It is expected that the Committee Members will hold a discussion regarding Committee financial matters and DCISC planned activities during 2022 and 2023.

The Actual and Proposed DCISC Fact-Finding and Public Meeting Items, with Key Dates, prepared by Committee Consultant Ferman 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 2022-2023

July 20-21, 2022 Fact-finding Meeting (PL, RDM) (AR Exhibit D.1)

1. Nuclear Safety Oversight Committee Exit Meeting (Remote)
2. Observe Plant Health Committee Meeting (Remote)
3. Annual Radioactive Effluent Release and Radiological Environmental Operating Reports
4. Health of 4kV Electrical Systems and Tour
5. Containment Ventilation and Hydrogen Mitigation Systems
6. Meet with Nuclear Regulatory Commission (NRC) Senior Resident Inspector
7. Performance Improvement Program
8. Containment Liner Inspections
9. Radiation Monitoring Systems
10. Meet with DCPD Officer
11. Access to Technical Information for the New Spent Fuel Storage System
12. Industry Efforts to Evaluate the Radiological Consequences of a Release of Radionuclides from a Spent Fuel Storage Cask
13. Response to State Government Interest in Extending Power Operations Beyond 2025

August 16-17, 2022 Fact-finding Meeting (PFP, RFW) (AR Exhibit D.2)

1. Greater Than Class C Waste Storage Plans
2. License Renewal Status
3. Emergency Preparedness During Decommissioning
4. Feedwater Heater Tube Failure Follow-up
5. Tsunami Warning Response
6. Meet with NRC Senior Resident Inspector
7. NRC Resident Inspectors Access to PG&E Computer System
8. Observe Plant Health Committee Meeting
9. Equipment Reliability Update
10. Condensate Polisher Resin Issue
11. Meet with DCPD Officer
12. Large Motors Program
13. Radiation Surveys of Independent Spent Fuel Storage Installation
14. Observe Receipt and Inspection of New Fuel

September 13-14, 2022 Fact-finding Meeting (RJB, RFW) [EP Exercise] (AR Exhibit D.3)

1. Probabilistic Risk Assessment (PRA) Program Review
2. Safety Culture Update
3. Observe All Hands Meeting with PG&E Chief Executive Officer and Board of Directors
4. 2R23 Outage Safety Plan
5. Long-Term Seismic Program Update
6. Core Exit Thermocouple System Update
7. Cyber Security Update
8. Meet with Adam Peck, Site Vice-President
9. DCPD License Extension Update
10. Observe Evaluated Emergency Preparedness Exercise

September 28-29, 2022 Public Meeting (AR Exhibit B.3)

1. Consider Dr. Andrew Kadak as a Technical Consultant
2. Consider Approval of the DCISC 32nd Annual Report
3. Review Open Items List
4. Acceptance of Minutes of June 22-23, 2022 Public Meeting
5. Future Fact-finding and Public Meetings
6. Reports by Technical Consultants on Three Fact-finding Meeting Reports
7. State of the Plant
8. Preparations for Refueling Outage 2R23
9. Potential Extended DCPD Operation
10. Remarks by the NRC Senior Resident Inspector
11. Update on DCPD Decommissioning Plans
12. Procurement of a New DCPD Spent Fuel Storage System
13. Emergency Preparedness September 14, 2022 Evaluated Exercise

September 29, 2022 Fact-finding Meeting (RJB, RDM, RFW, ACK) (AR Exhibit D.4)

November 9-10, 2022 Fact-finding Meeting (RJB, RDM) (AR Exhibit D.5)

December 6-7, 2022 Fact-finding Meeting (PFP, RFW) (AR Exhibit D.6)

January 30-31, 2023 Fact-finding Meeting (PL, RDM) (AR Exhibit D.7)

February 15-16, 2023 Public Meeting (AR Exhibit B.6)

March 14-15, 2023 (RJB, RFW) (AR Exhibit D.8)

April 19-20, 2023 (PL, RDM) (AR Exhibit D.9)

May 2-3, 2023 (PFP, RFW) (AR Exhibit D.10)

June 21-22, 2023 PM (AR Exhibit B.9)

July 12-13, 2023 Fact-finding Meeting (PFP, RDM) (AR Exhibit D.1)

August 9-10, 2023 Fact-finding Meeting (PL, RFW) (AR Exhibit D.2)

August 30-31, 2023 Fact-finding Meeting (RJB, RDM) (AR Exhibit D.3)

September 20-21, 2023 Public Meeting (AR Exhibit B.3)

DCPD 2022 Key Dates

NSOC Meetings (DCISC invited only to the 2-hour exit meeting on the final days, which are shown below)

- December 8, 2022
- February 23, 2023
- July 13, 2023
- November 30, 2023

Refueling Outages

2R23 10/16/22 – 11/15/22

DIABLO CANYON INDEPENDENT SAFETY COMMITTEE

AGENDA TRANSMITTAL FORM

MEETING DATE:

September 28, 2022

AGENDA ITEM:

IV-D

AGENDA TITLE:

Review and Discussion of 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 Technical Consultant Ferman Wardell.

RECOMMENDED COMMITTEE ACTION: As appropriate, review and provide direction.

Diablo Canyon Independent Safety Committee Open Items List – 2022-2023

Open Item Type:

M= Monitor

F = Follow-up

I = Issue

Items in *Red Italics* are new or revised
Items in *Blue* are for the next 3 FF Meetings

ITEM NO.	TYPE	OPEN ITEM CATEGORY/DESCRIPTION	Last Actions	Next Action
CO		Conduct of Operations (CO)		
CO-7	M	Review DCCP storm response experience and strategy every two years [or as necessary] during or after annual winter storm season.	5/17FF 3/21FF	As necessary
CO-8	M	Monitor all reactor trips – automatic and manual – and forced outages. (review trip LERs at public meetings). [Reviewed Unit 2 forced outage 11/21 FF – satisfactory.]	11/21FF 2/22PM	Post-trip FFs & PMs
CO-9	F	Reactivity Management – review every 18-24 months. [Reviewed Reactivity Management 5/16FF, 4/18FF, and 11/19FF – satisfactory.]	List at end of OIL	Regularly <i>2Q23FF</i>
CO-10	M	Mispositioning Errors (Equipment Status) – monitor the status of mispositioning errors and actions to resolve. [<i>Reviewed QV assessment of 2R20 outage. Some mispositioning issues. Follow up on resolution.</i>] [<i>Reviewed 4/20FF – needs follow-up at FFs</i>] [<i>Followed up 12/21FF.</i>]	12/20FF 12/21FF	<i>11/22FF</i>
CO-11	M	Operator concerns and issues – review periodically the status of operator concerns and issues. [<i>Reviewed Operations performance 5/21FF – satisfactory.</i>] [<i>Follow up on operator staffing for continued operation.</i>]	4/20FF 5/21FF	<i>11/22FF</i>
CO-13	M	<i>Review any implementations of the CAISO load following policy that result in DCCP transients.</i> Review any initiatives to operate DCCP in different modes, such as load following due to renewable energy fluctuations, during its final years of operation. Include 230kV voltage stability issues. 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 DCCP 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. [<i>Reviewed 12/21FF, including Public Safety Power Shutoff Program.</i>]	12/19FF 12/21FF	<i>11/22FF</i> As necessary
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>Review operator staffing.</i>]	9/21FF 12/21FF 2/22PM	<i>11/22FF</i>
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 ISI of containment structures (degradation) and (2) ASME Code requirements for steel liner weld inspections.	5/22FF <i>7/22FF</i>	Each Pair of RFOs
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.	See list at end of OIL	Regularly
CM-13	M	Review Maintenance Department performance measures, staffing, etc. approximately annually.	3/21FF 5/22FF	2Q23FF
EN		Engineering Programs (EN)		
EN-16	F	DCCP 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 this 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 this Open Items List.] <i>Review Engineering reorganization 1Q23FF.</i>	See list at end of OIL	Regularly <i>1Q23FF</i>
EN-20	F	Each Member should review or observe Plant Health Committee, Notification Review Team, Corrective Action Review Board, Performance Review Quarterly Meeting, and other regular meetings.	See list at end of OIL	Regularly
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). [Review biennially operator aging, physical fitness, "no solo" issues, attention enhancement, stress management, & incentives for operator focus.	3/20FF 12/20FF 4/21FF 4/22FF	4/23FF
HP-25	M	Further observations and improvements in the Management Observation Program should be reviewed by DCISC. [Reviewed 4/19FF – satisfactory.]	4/19FF 7/21FF	1 or 2Q23FF
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).	8/21FF 10/21PM <i>9/22FF</i>	<i>3Q23FF</i>
PI		Performance Improvement Programs		
PI-1		DCCP Performance Improvement Programs: Corrective Action, Self-Assessment, Operating Experience, 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 <i>3Q23FF</i>
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 JIC communications to the media and public, including radiation release communications to the public, use of social media, coordination of information release with SLO County, and extension of drills to better exercise FMTs & JMC. [Next evaluated exercise 9/14/22.] Talk with new SLO County OES Director 9/22FF.	11/18FF 9/21FF 10/21PM 3/22FF 9/22FF	Next evaluated exercise (9/23 full scope)
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).	9/20FF 9/21FF 9/22FF	3or4Q23 FF RJB
RA-6	F	Review DCCP response to NRC re: 10CFR50.59 risk-informed rule changes. Review in FF.	2/22PM	2Q23FF
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.	7/21FF 7/22FF	Next meeting [see FFPM]
NS-9	M	Monitor DCCP's program to track INPO Areas for Improvement. Review with DCCP Coordinator. [Reviewed 8/24FF -- satisfactory.] Review DCCP August 2022 INPO evaluation.	1/21FF 8/21FF	1/22FF
RP		Radiation Protection (RP)		
RP-3	M	Regularly review outage RP performance.	4/22FF 5/22FF	Each RFO 1/22FF
RP-12	M	Review annual DCCP radioactivity release report each year. Review at Summer or Fall FFs.	7/21FF 7/22FF	3Q23FF
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 4th quarter QPAR with yearly results.	3/21FF 5/21FF 3/22FF	2Q23FF
QP-9	F	Software QA Program	See list at end of OIL	Regularly
NF		Nuclear Fuel Performance (NF)		
NF-9	M	Nuclear Fuel Performance & Issues (review after RFOs). Observed new fuel receipt and inspection 8/22FF.	3/21FF 5/22FF 8/22FF	Each RFO 1/22FF
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.	See list at end of OIL	Annually 3Q23FF
OE		Organizational Effectiveness & Development (OE)		

OE-1	F	Review DCPD Operating Plan each January after development.	3/21FF 2/22PM	2/23PM
OE-2	F	Station Excellence Plan & Station Oversight Committee (4 th Thursday of every month at 9:00am. Try to attend a meeting remotely following, but as part of, a future fact-finding meeting.)	10/21PM 7/22FF	3Q23FF
SE		System and Equipment Performance/Problems (SE)		
SE-39	F	Review and tour the inspections and repairs of concrete Intake Structures following selected refueling outages.	12/19FF 8/21FF	12/22FF
SE-40	F	Monitor the status of transformers & leakage, failures, corrective actions. Follow status of transformer protection barrier. [Barrier project placed on hold.]	See list at end of OIL	Regularly
SE-49	F	Emergency Diesel Generators (EDGs)	See list at end of OIL 7/21FF	Regularly 12/23FF
SE-50	F	Maintenance Rule Functional Failures [Change from SSFFs to MRFFs beginning 3/21FF.]	See list at end of OIL 4/22FF	Regularly
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. Review Steam Generator performance metrics and inspection results.	11/20FF 4/22FF 5/22FF	Each RFO 12/23FF
OM-4	M	Review Outage Safety Plan, safety margin trends, outage results, including clearances, following each outage at FFs and PMs.	7/21FF 3/22FF 5/22FF 9/22FF	Each RFO
OM-5	F	DCPD has determined that it needs to do a better job of foreign material exclusion (FME) and this resolution appeared satisfactory to the DCISC team. [Note: FME Program review dates at the end of the Open Items List.] [Reviewed 4/19FF – need to follow up on supplemental outage worked training]	See list at end of OIL	Each RFO 12/23FF
SEC		Security (SEC)		
SEC-3	M	Monitor interaction of Security and Operations, Engineering, Maintenance, and Emergency Preparedness for effects on nuclear safety. Plant security per se not reviewed but reviewed only in the context of impact on plant operation.	12/19FF 12/20FF	12/23FF
SEC-4	M	Review status of DCPD cyber security (but not physical security) program in compliance with NRC requirements.	9/21FF 10/21PM 9/22FF	3Q23FF
SF		Independent Spent Fuel Storage Installation – ISFSI (SF)		

SF-1	F	Monitor ISFSI operations, including the development of new procedures by Orano for the loading of new Dry Storage Canisters (DSCs), movement of DSCs from SFP to ISFSI, and loading of DSCs into new Horizontal Storage Module (HSM).	10/20PM 5/21FF	2Q23FF
SF-2	M	Follow technical advances of relative risks of existing (Holtec) casks and pool storage. Follow relicensing of ISFSI including seismic adequacy reviews and the implementation of aging management plans.	3/22FF 5/22FF 6/22PM	2Q23FF
SF-4	F	Review the adequacy of the design for new (Orano) spent fuel storage system focusing on items of safety significance including seismic adequacy, criticality control, storage of damaged fuel, thermal analyses, effects of extreme environmental conditions, long-term (>100 years) integrity assurance, radiation/neutron shielding, and accident analyses.	6/22PM	1Q23FF
SF-5	F	Monitor the submittal and approval of license amendment(s) for the Orano spent fuel storage system.	6/22PM	2Q23FF
SF-6	M	Dr. Budnitz remarked the DCISC should include an item on the Open Items List to review the inspection of the ISFSI systems, structures and components following a seismic event which should be a part of the aging management plan or the FSAR.	6/22PM	After seismic event
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 (9/21 – nothing new to review; defer to 3Q22FF.)	8/16FF 3/19FF 9/22FF	9/24FF? RJB
SC-12	F	Workplace seismic safety – review annually. [Reviewed at 5/18FF – some problems – follow up on resolution and Control Room procedures “crash cart” stability. Discrepancies in workplace seismic standards (e.g., unbraced furniture) were caused by inadequate knowledge transfer during Building Services personnel turnovers, although the plant had a written standard. Control Room procedure card reviewed 12/20FF – satisfactory.]	5/19FF 12/19FF 12/20FF 4/22FF	4/23FF PFP
SC-13	F	Review DCCP actions re January 15, 2022, tsunami warning re Procedure CPM5 under Category SC and schedule for April 2022 FF	2/22PM 8/22FF	Close
FP		Fire Protection (FP)		
FP-5	M	Review NFPA-805-based 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 [Fire doors Reviewed 1/22FF – satisfactory.]	5/21FF 1/22FF See list at end of OIL	Regularly 2Q23FF
LD		Learning & Development Programs (LD)		
LD-3	M	Review non-license technical, operations & accredited training programs at least annually.	1/21FF 5/22FF	3Q23FF
LD-6	F	Observe operator license, re-qualification, classes periodically in FF meetings. [Reviewed licensed operator simulator training 11/21FF & 12/21FF – satisfactory.]	11/21FF 12/21FF	1Q23FF
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.	Most FFs	Regularly
DEC	F	Decommissioning		
DEC-1	F	Review DCCP decommissioning plans periodically as a result of the Joint Proposal 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 DCCP because of the potential impact on staffing and future options with respect to managing spent fuel.	10/20PM 10/21PM 3/22FF	10/22PM
DEC-4	F	Emergency preparedness during decommissioning. [Met with SLO OES 9/18FF – satisfactory there was concern by SLO County that their monies from PG&E would be reduced after operation ceases.	10/21PM 8/22FF	10/22PM
DEC-5	F	DCCP's approach to submitting LAR requests for decommissioning appears appropriate and the DCISC should continue to follow from a safety perspective all the regulatory activities which will define the reduction in requirements which will occur at shutdown.	6/21PM 3/22FF	8/22FF 9/22PM
O		Other Items (O)		
O-1	F	Perform observations of evolutions (work processes) within the plant periodically. Continue with these about annually. Work process observations: Observe in the plant work processes important to nuclear safety, such as operator rounds, Control Room shift turnover, surveillance tests, preventive and corrective maintenance, system modifications, system walk downs with system engineers; outage activities, etc.	12/21FF 1/22FF 3/22FF	Regularly 11/22FF
O-2	F	COVID-19 response/initiatives/practices.	9/21FF 1/22FF	2Q23FF
		Public Meeting Items (PM) (Reference: Public Meeting Minutes Pages)		
6/21 PM 8	F	Dr. Peterson state his belief in the value of the NRC resident inspectors continuing to have access to PG&E computers and he stated the Committee should consider endorsing this to PG&E and follow up to confirm including, if necessary, adopting a formal recommendation to that effect. Review after permanent Senior Resident Inspector is in place.	6/21PM 8/22FF	Close
9	F	Dr. Peterson stated the Committee should follow up in future discussion with the NRC resident inspectors and continue the discussion about plans the NRC may have to leverage electronic communication capabilities with respect to such things as emergency response. Review after permanent Senior Resident Inspector is in place.	6/21PM 8/22FF	Close
10/21 PM 3	F	Mr. McWhorter stated that for the February 2023 public meeting, with the assistance of Consultant Wardell and Mr. Rathie, the Draft Post-Shutdown Matrix prepared previously and now available to the public on the Committee's website will be revised and the Open Items List reviewed in order to inform a discussion at the DCISC's next public meeting on February 15-16, 2023, which may include the periodicity of public meetings and fact-findings.	10/21PM 2/22PM	2/23PM
4	F	Mr. Harbor reported seven tubes have been identified as having failed and are being analyzed and other feedwater heaters are being inspected to determine extent of condition and to insure no other failures are imminent. Mr. Harbor stated he expects to review this issue with the DCISC at a future fact-finding.	1/22FF 2/22PM 8/22FF	Close
2/22 PM 4	F	He (Mr. McWhorter) reported the FFT concluded the Transmission System was in good health with minor problems being tracked for resolution and he recommended the DCISC next monitor the Transmission System one year from the December 2021 fact-finding.	2/22PM	11/22FF

September 28-30, 2022 Public Meeting

FF = Fact-finding Meeting

PM = Public Meeting

Q = Quarter

First Draft 9/22/22

5	F	Consultant Wardell responded that all the high voltage breakers in the 500kV and 230kV switchyards will have their own DC control power systems and he concurred with Dr. Budnitz' observation that these will not be part of the plant's DC system and Mr. Wardell suggested those DC control power systems should be included in the list of topics for the March 2022 fact finding. (March 2022 FF reviewed other Transmission issues.)	2/22PM 3/22FFF	
8	F	Dr. Budnitz remarked the DCISC will review the extent of condition FWH determinations during future fact finding.	2/22PM 1/22FF 8/22FF	Close
9	F	He (Tom Jones) stated PG&E requests for those matters (Relicensing of the ISFSI, Cask Inspection Activities and Results, and Aging Management Plan Development and new cask vendor) to be included on the next agenda for a DCISC public meeting in June 2022.	2/22PM 6/22PM	Close to SF-1
10	F	Mr. Jones stated completion and review by the NRC of the of the Post-shutdown Decommissioning Activities Report is pending the scheduling of a public meeting in the local community which was delayed due to the COVID-19 pandemic. Dr. Budnitz remarked the DCISC will want to keep informed as to the safety aspects within the scope of that meeting.	2/22PM	Close to DEC-5
11	F	Dr. Peterson stated the DCISC should take an action to review the plans for storage of greater than Class C waste during a future fact-finding, possibly at the April 2022 fact-finding. Dr. Peterson stated the DCISC should review during future fact-finding PG&E's plans for managing greater than Class C waste including any relationship between those plans and the movement of the spent fuel. Dr. Peterson observed an item should be added to the Open Items List and scheduled for a future fact-finding to get clarity on the timeframe for the removal of greater than Class C waste.	2/22PM 8/22FF	Close
12	F	In response to Dr. Lam's question Mr. Jones stated he could not recall if the Coastal Act was part of the initial licensing review for the ISFSI but he promised to take an action to check and report to the Committee.	2/22PM	Close
13	F	Dr. Peterson stated the Committee should include an item on the Open Items List to review radiation surveys done at the ISFSI and to schedule a visit with DCCP radiation protection personnel to observed measurements of specific areas.	2/22PM 8/22FF	Close
14	F	She (Linda Seely) mentioned during an inspection of the outside of a cask presently on-site at the ISFSI another DCDEP member informed her that some rust was found on the exterior. Dr. Peterson remarked the DCISC would make inquiries and review the issue of rust on a cask located at the ISFSI during a future fact-finding. (On agenda for 6/22PM. Close.)	2/22PM 3/22FF 6/22PM	Close
17	F	Mr. McWhorter reported his recommendation, joined in by Consultant Wardell and Mr. Rathie, is to proceed to create later this year or during the first part of next year a separate Open Items List for post-shutdown activities ("Post-Shutdown Open Items List") and commence the review of that list, in conjunction with regular Open Items List during each public meeting commencing at the February 2023 public meeting.	2/22PM	Close to 10/21 PM #3
19	F	Mr. Rathie requested the Committee's direction concerning the engagement of a consultant and he observed that in that effort the first step should be development of a comprehensive scope of services in connection with consideration of potential candidates. The Committee then directed that a scope of services for consultant services be developed in accordance with the Committee's Charter and be brought to the Committee for consideration at its June 2022 public meeting.	2/22PM 6/22PM	Close

20	F	The PHC also reviewed an issue with the condensate polisher resin and Mr. Wardell reported samples have been sent to the supplier and the issue remains unresolved and he recommended the DCISC should follow-up on this issue.	2/22PM 8/22FF	Close
21	F	Dr. Budnitz stated use of the NEI guidance [on Operability Determinations] is voluntary but DCCP together with many other stations has adopted the NEI's guidance as a framework for completing operability determinations and Dr. Budnitz reported that probabilistic risk assessment results and insights are used to guide the importance and priority of different components which represents a new development in the industry. Dr. Budnitz recommended the DCISC conduct a future fact-finding to assess the efficacy of the use of the NEI guidance by DCCP.	2/22PM	3/23FF RJB?
22	F	At the time of the January 2022 fact-finding meeting the cause evaluation results were available which determined the probable cause to be fatigue fracture of the feedwater heater tubes and other feedwater heaters will be reviewed to determine the extent of condition and Mr. Wardell recommended the DCISC follow up on the results of that review.	2/22PM 8/22FF	Close
6/22 PM 1	F	Dr. Budnitz remarked the DCISC should include an item on the Open Items List to review the inspection of the ISFSI systems, structures and components following a seismic event which should be a part of the aging management plan or the FSAR.	6/22PM	Close to SF-
2	F	The FFT recommended that a meeting be scheduled during future fact-finding with the new San Luis Obispo County Emergency Services Manager prior to the September 2022 evaluated emergency exercise.	6/22PM	1-2-23
3	F	Mr. McWhorter recommended the Committee should schedule another review of the Containment Ventilation and the Radiation Monitoring Systems.	6/22PM 7/22FF	Close
4	F	In response to Dr. Lam's request Mr. McWhorter stated he would provide a copy of the new DCCP organization to Dr. Lam.	6/22PM	Complete Close
5	F	Dr. Budnitz reported when the ISFSI was constructed a seismic evaluation was done of the ground motion and he reported the Committee would review that evaluation in context of the relicensing of the ISFSI and the acquisition of a new dry cask spent fuel storage system.	6/22PM	Close to SF-4
6	F	If it should become necessary to address severe corrosion a cask might be inspected more frequently, repaired, or replaced or a multipurpose canister could be placed in a transportation cask which does not reply on the integrity of the multipurpose canisters. Dr. Peterson recommended the DCISC take an action to review this specific question in more depth	6/22PM	Close to SF-4
7	F	Dr. Lam remarked the independent role of the DCISC makes it neither a proponent nor an opponent of license renewal. Dr. Peterson agreed with Dr. Lam that it would not be appropriate for the Committee to be proactive in this matter. Dr. Peterson suggested the DCISC Legal Counsel's office should investigate the circumstances and advise.	6/22PM	Awaiting Legal
8	F	Mr. Rathie reported that Consultants Mr. Wardell and Mr. McWhorter proposed and the Committee approved the development of a Post-Shutdown Open Items List that beginning in February 2023 will be reviewed in concert with the Open Items List.	6/22PM	Close to 10/21 PM #3
9	F	Dr. Budnitz commented the DCISC's remit is to evaluate, examine, and ask questions about the safety and efficacy of PG&E's plans and he remarked the Orano system proposed for DCCP will be evaluated in detail by the DCISC and the Committee will opine independently on its assessment.	6/22PM	Close to SF-4

10	F	Dr. Budnitz replied the DCISC will perform an independent seismic evaluation to understand the seismic adequacy of the Orano design for use at DCCP akin to the evaluation performed by the Committee of the Holtec system.	6/22PM	Close to SF-4
11	F	Mr. McWhorter recommended the DCISC follow up this afternoon concerning the secondary system problem occurring during the restart following 1R23.	6/22PM	Complete Close
12	F	Mr. McWhorter suggested the Committee should review the Engineering organization and the changes described by Mr. Wallos during the first quarter of 2023.	6/22PM	12/2FF
13	F	Mr. Jones stated he would need to check and get back to the Committee on how the Orano licensing approach may effect DCCP's 10 CFR Part 50 license.	6/22PM	Awaiting DCCP
14	F	Mr. Jones committed to provide the difference in time between 23 months and the time which would be required under an unmodified general license and commented that the number would be somewhere between 23 and 48 months.	6/22PM	Awaiting DCCP
15	F	Consultant McWhorter remarked the Committee may want to review and reopen an effort by the Electric Power Research Institute (EPRI) in 2017 to quantify the potential radiological impacts if a cask were to leak with reference to the need for a secondary layer of protection. Mr. Jones committed to take an independent look-up to review the EPRI's work.	6/22PM	Close to 7/22FF
16	F	Mr. McWhorter observed the Diablo Canyon Decommissioning Engagement Panel Strategic Vision document includes discussion of whether there would be a need for a secondary containment and the DCISC may want to consider reviewing that issue in support of the Panel, in which case it would be necessary to understand the implications and impacts of a leaking cask. Mr. Wardell advised commencing such an inquiry by reviewing the Orano application to the NRC for its general license. Mr. McWhorter recommended that during fact-finding in July, August or September 2022 a request be made for a briefing on what technical information is available from Orano as part of the general licensing documentation and how that information is organized Mr. McWhorter remarked the DCISC may also want to consider reviewing any update on the industry effort led by EPRI to evaluate the radiological consequences of a leaking cask.	6/22PM	Close to SF-4

DCPP Systems/Components Reviewed Periodically / Blue = Completed / FF = Fact-finding / PM = Public Meeting / Q = Quarter

4 kV – July 2022

230 kV & 500 kV – Dec 2021

Aux Feedwater – Sep 2021

Aux Sallwater – Mar 2020

Aux Bldg Ventilation – Apr 2021

Chemical & Volume Control System and High Pressure Injection – Jan 2021

Component Cooling Water – Apr 2020

Compressed Air – Jul 2020

Condensate & Feedwater – Nov 2021

Containment Structure – July 2022

Containment Spray – May 2022

September 28-30, 2022 Public Meeting

First Draft 9/22/22

FF = Fact-finding Meeting

PM = Public Meeting

Q = Quarter

Containment Ventilation and H2 Purge – July 2022
 Control Room Simulator – Nov 2020
 Control Room Ventilation – Jan 2021
 Digital Systems – Nov 2021
 DC Power – Mar 2022
 EDG – Jul 2021
 Fire Protection & Detection Systems – Aug 2020
 Nuclear Instrumentation & In-core Instrumentation – Sep 2022
 Plant Protection System – Mar 2021
 Radiation Monitoring – July 2022
 Radwaste Processing – Nov 2020
 Reactor Coolant System & Pumps – Aug 2021
 RCS Process Control System – May 2020
 Refueling Equipment – Jan 2022
 RHR – Jan 2021
 Rod Control & Indication – Sep 2020
 Safety Injection Pumps – Jan 2021
 Spent Fuel Pool Cooling & HVAC – July 2021
 Steam Generators – Aug 2020
 Special Protection System – Mar 2020
 Turbine-Generator – Dec 2020

DCPP Programs Reviewed Periodically [Yellow = Upcoming FF]

10CFR50.59 Program – July 2021
 ALARA – May 2022
 Air Operated Valves – Dec 2020
 Benchmarking – Mar 2022
 Boric Acid Corrosion Control – Apr 2021 (review biennially)
 Buried Piping & Tanks – Jul 2020
 Chemistry – Aug 2021
 Cranes – Dec 2021
 Configuration Management – Apr 2022
 Corrective Action – CARB – Apr 2022
 Emergency Preparedness– Mar 2022
 Employee Concerns Program – Aug 2020
 Equipment Environmental Qualification – Mar 2020
 Equipment Reliability – Aug 2022
 Fire Doors & Door Life Cycle Mgm't. Plan – Jan 2022
 September 28-30, 2022 Public Meeting
 First Draft 9/22/22

Fire Protection Program (NFPA-805) – May 2021
 FLEX Program – Apr 2022
 Flow Accelerated Corrosion – May 2022
 Foreign Material Exclusion – May 2022
 Greater Than Class C Waste – Aug 2022 PFP
 In-service Inspection Program – Apr 2019
 Integrated Risk Assessment Program – Mar 2022
 Large Motors – Aug 2022
 Long-Term Capital Planning Process – May 2022
 MIDAS – Dec 2021
 Maintenance Rule – Apr 2021
 Margin Management Program – May 2020
 Motor Operated Valves – Dec 2020
 Notification Review Team – Mar 2022
 Nuclear Fuel Program – May 2022
 On-Line Maintenance – May 2022
 Operating Experience – Nov 2021 (review biennially)
 Operability Assessment Program – Jan 2022
 Operational Decision Making – Sep 2020
 PRA Programs (non-seismic) – Sep 2022
 Performance Improvement – July 2022
 Performance Review Quarterly Meeting – Apr 2021
 Plant Health Committee – August 2022
 Reactivity Management – May 2021
 Safety-Security Interface – Dec 2020
 Self-Assessment – Aug 2020
 Single Point Vulnerabilities – Jan 2022
 Seismic PRA – Sep 2022
 Seismically Induced System Interactions – Nov 2020
 Software QA - Aug 2021
 Spent Fuel Management – May 2022
 System Engineering – Mar 2022
 Transformers, Large – Jan 2021
 Troubleshooting – Jan 2020
 Tsunami Hazard Analysis – August 2022
 Vibration Monitoring – Mar 2021

FF = Fact-finding Meeting PM = Public Meeting Q = Quarter

DIABLO CANYON INDEPENDENT SAFETY COMMITTEE

AGENDA TRANSMITTAL FORM

MEETING DATE:	September 28, 2022
AGENDA ITEM:	V-A
AGENDA TITLE:	Minutes of June 22-23, 2022 Public Meeting
CONSENT [X] ACTION [] INFORMATION []	

Staff Summary: Attached are the Minutes which have been prepared from the Committee's one hundred and second public meeting held on June 22-23, 2022, held in Avila Beach, CA and as a Zoom webinar.

(Each session was also 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 at www.disc.org or at www.slospan.org. Meetings are videotaped for later broadcast on Channel 21 in the San Luis Obispo, CA area, the governmental access television channel.)

RECOMMENDED COMMITTEE ACTION: Accept the Minutes by motion

MINUTES
of the
DIABLO CANYON INDEPENDENT SAFETY COMMITTEE'S
JUNE 22-23, 2022, PUBLIC MEETING
[For approval at the September 28, 2022, Public Meeting.]

Wednesday & Thursday
June 22-23, 2022
Avila Beach, California
Also conducted as a Zoom Webinar

Notice of Meeting.

A legal notice of the public meeting and several display advertisements were published in local newspapers and mailed to the media and those persons on the Committee's mailing list. The meeting agenda and the entire agenda packet for the meeting together with the informational presentations made during the meeting were posted on the Committee's website at www.dcisc.org prior to the meeting and the meeting agenda contained information on how to access the webinar using a computer or a telephone. This meeting was also produced in hybrid format as a webinar by AGP Video, Inc. and was webcast live on SLO-SPAN at <http://www.slo-span.org> and through <http://www.dcisc.org> and was subsequently broadcast on San Luis Obispo, California local government access television Channel 21.

I CALL TO ORDER - ROLL CALL

The June 22, 2022, public meeting of the Diablo Canyon Independent Safety Committee (DCISC), the one hundred and second public meeting of the Committee, was called to order by Committee Chair Dr. Robert J. Budnitz at 9:00 A.M. Dr. Budnitz stated the members of the public could review the Agenda for this meeting by visiting the Committee's website at www.dcisc.org. He then introduced himself as a nuclear engineer, retired from the University of California's Lawrence Berkeley National Laboratory, and the appointee of the California Attorney General to the Diablo Canyon Independent Safety Committee (DCISC). Dr. Budnitz then reviewed the professional backgrounds and appointment to the DCISC for each of his fellow Members: Dr. Peter Lam, a nuclear engineer and former judge on the Nuclear Regulatory Commission (NRC) Atomic Safety and Licensing Board who serves as the appointee of the Chair of the California Energy Commission to the DCISC; and Dr. Per F. Peterson, a nuclear engineer and professor in the Department of Nuclear Engineering at the University of California at Berkeley who also serves as the Chief Nuclear Officer for Kairos Power, a company developing a new advanced nuclear reactor for future deployment, and who serves as the appointee of the Governor of California to the DCISC. Dr. Budnitz reported that Dr. Peterson, having recently tested positive for COVID-19 would be attending and fully participating in this public meeting via the Zoom webinar. Dr. Lam remarked that Dr. Budnitz is an internationally recognized expert on reactor seismic safety and remarked this an important issue for the Diablo Canyon Power Plant (DCPP) which sits on an active seismic fault.

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

II INTRODUCTIONS

Dr. Budnitz introduced and briefly reviewed the professional backgrounds of the Committee's Technical Consultants and Assistant Legal Counsel including Technical Consultants Mr. Richard D. McWhorter Jr. and Mr. R. Ferman Wardell, P.E. and Assistant Legal Counsel Robert W. Rathie. Dr. Budnitz then introduced Mr. Hector Garcia, DCPD Chief Nuclear Officer Support Manager. Dr. Budnitz remarked Mr. Garcia plays a key role on behalf of PG&E and DCPD in working with the DCISC in efficiently coordinating activities, providing information and facilitating the Committee's public meetings and the frequent fact-finding visits conducted by a single member and one of the technical consultants. Dr. Budnitz remarked the technicians of AGP Video were present to provide the technical expertise to ensure the meetings reach their intended audiences.

III PUBLIC COMMENTS AND COMMUNICATIONS

The Chair reviewed the procedure and the timing for members of the public to address remarks to the Committee. Assistant Legal Counsel Robert Rathie announced that the AGP Video technicians requested there be no cellphone use in proximity to the microphones as doing so could interfere with the recording of the meeting. He also announced that all persons in the meeting room who were not vaccinated against COVID-19 were requested to wear face coverings and face coverings and hand sanitizers were available in the meeting room. He stated that as this meeting was also being conducted as a Zoom webinar the members of the public attending via Zoom could make comments and interact with the Committee by referencing the information given on the agenda and online at the Committee's website. Dr. Budnitz then invited any members of the public present or attending remotely who wished to address remarks to the Committee on items not appearing on the agenda for the public meeting to do so at this time.

Dr. Gene Nelson, the legal assistant for the independent, non-profit group Californians for Green Nuclear Power (CGNP) was recognized. Dr. Nelson reported he recently received a citation from the President of the American Nuclear Society for his advocacy for the continued safe operation of DCPD beyond 2025 and he read the text of the citation. Dr. Nelson stated the award was significant as California Governor Gavin Newsom recently took a series of actions supportive of keeping approximately 10% of California's dispatchable generation available to Californians beyond 2025. Dr. Nelson cited DCPD's reliability, the consequences of the state's previous attempt to deregulate the state's electric market, the need to maintain a sufficient and reliable supply of electricity, the need to avoid the plan to replace DCPD generation with coal-fired generation from outside the state, and the cost and associated delay in creating a transmission pathway for that generation. Dr. Nelson remarked California experienced rolling blackouts in 2020 which underscore the fragility of the power grid and he cited the state's investment in unreliable power generation technologies since 2010 which has yielded a lack of environmental benefits in contrast to the power generated by DCPD which does not produce air

pollution. Dr. Nelson stated a coalition of groups including CGNP and the yak tityu yak tilhini Northern Chumash Cultural Preservation Kinship have announced their support for DCP's continued safe operation. In response to Consultant McWhorter's inquiry Dr. Nelson commented concerning a possible license extension for DCP that he believes this will be an interesting process that will eventually result in an incremental expansion to eventually encompass the entire relicensing interval.

IV ACCEPTANCE OF MINUTES

This item concerned review and acceptance of the Minutes of the Committee's February 15-16, 2022 public meeting, conducted in person at Avila Beach, CA and as a Zoom webinar. A draft of the February 2022 Minutes was included in the public agenda packet for this meeting. The Members and Consultants reviewed and discussed the Minutes and provided corrections and substantive changes to certain pages which will be included in the final version of the February 2022 Minutes. The Members and Technical Consultants discussed some of the follow-up actions to be taken, provided clarification concerning typographical errors and the accuracy of certain discussion in the Minutes and made editorial comments and changes concerning the draft of the February 2022 Minutes.

The Minutes of the Committee's public meetings in their final accepted form become part of its Annual Reports on Safety of Diablo Canyon Nuclear Power Plant Operations (Annual Report). Mr. Wardell complimented Mr. Rathie for an excellent set of Minutes. Dr. Budnitz asked for any public comments and hearing none, upon a motion made by Dr. Lam, seconded by Dr. Peterson, the Minutes of the Committee's February 2022 public meeting were accepted subject to inclusion of the changes provided to the Committee's Assistant Legal Counsel. The February 2022 Minutes will become a part of the Committee's 32nd Annual Report.

V ACTION ITEMS

A. Update on Financial Matters and Committee Activities During 2022.

The Chair requested Assistant Legal Counsel Rathie to report on this topic. Mr. Rathie reported the Committee's finances appear to be in a reasonably good status for calendar year 2022. He commented the Committee spends funds at differing rates during the year and will soon enter the period of preparation of its 32nd Annual Report. There have been two quarterly payments made on the grant funds provided by PG&E's ratepayers for the Committee's operation and Mr. Rathie stated he expects the Committee will end 2022 with a surplus of unspent funds which in accordance with the Second Restated Charter will be remitted for credit to the ratepayers. He remarked 2020 and 2021 were anomalous years in that due to the COVID-19 pandemic the Committee conducted its public meetings and fact-finding entirely remotely. He remarked that as the Committee has returned to in person activities and costs continue to increase it is expected the Committee will draw upon its financial resources to a greater extent than during the previous two years. He reported that in accordance with a California Public Utilities Commission (CPUC) Decision the Committee receives an annual increase in funding of 1/5%. In response to Consultant McWhorter's inquiry Mr. Rathie stated that while it is difficult to predict,

it appears the Committee's financial condition is adequate at the present time to cope with the present increases in travel expenses.

Concerning Committee activities during 2022 Mr. Rathie referred the Members and Consultants to the list prepared by Consultant Wardell of public meetings, fact-findings and key dates in the agenda packet.

B. Discussion of Issues on Open Items List.

Dr. Budnitz requested Consultant Wardell lead a review of items on the Open Items List, which he described as a very important tool used by the Committee to track and also to follow issues, concerns and information requests identified for subsequent action or receipt during fact-finding and public meetings. Mr. Wardell stated newly added or changed items were shown in *red italics* and items for which action is identified within the next three fact findings until the next public meeting are shown in text the version of the Open Items List included with the agenda packet and certain items are being identified for closure. Mr. Wardell thanked Consultant McWhorter for his assistance in reviewing and providing comment on the Open Items List.

Items discussed or concerning which action was taken included the following¹:

<u>Item</u>	<u>Re:</u>	<u>Action Taken/Next Action</u>
NS-5	Monitor NSOC meeting	Virtually on 7/14/22 PL/RDM
OE-2	Monitor Station Oversight Meeting	Virtually re 8/22FF PFP/RFW
OM-5	FME Program	Correct typo re "worker" training
DEC-4	Decom. Emerg. Preparedness	9/22FF RJB/RFW
O-2	COVID-19 Response	Keep Open (Delete "then close")
2/22PM-6	EDG Fuel Oil Leak Cause Eval.	Keep Open (Delete "then close")
2/22PM-9	ISFSI Relicense, Cask Inspection, Aging Management, New Cask Vendor	Keep Open (Delete "then close")
2/22PM-14	Rust On Cask Exterior	Correct typo re "Seeley"
2/22PM-18	Issues Raised in CEQA Review	Keep Open
2/22PM-21	Use of NEI Guidance	9/22FF RJB/RFW

The Committee reviewed Pages 10 and 11 of the Open Items List which track the dates on which system, component and program reviews were completed or are scheduled. Items identified for review were adjusted as follows:

¹ Key to abbreviations used: California Environmental Quality Act (CEQA), Emergency Diesel Generator (EDG), Fact-finding (FF), Foreign Material Exclusion (FME), Independent Spent Fuel Storage Installation (ISFSI), Peter Lam (PM), Richard D. McWhorter Jr (RDM), Nuclear Energy Institute (NEI), PG&E Nuclear Safety Oversight Committee (NSOC), Per Peterson (PFP), Robert J. Budnitz (RJB), R. Ferman Wardell (RFW).

DCISC Systems/Component/Program Periodic Review

Program Reviewed

Action Taken

Greater Than Class C Waste

Added to List

Consultant McWhorter observed that as the plant moves toward closure there will come a point for certain items for which no further review should be necessary.

Dr. Lam remarked the Committee's Open Items List provides members of the public with a document which discloses in a transparent fashion the Committees' focus, emphasis, priorities and schedule and he stated he appreciated the contributions of both Technical Consultants and Legal Counsel to that document.

Consultant Wardell closed his comments by remarking he is in the process of developing the schedule and outline for preparation of the Committee's 32nd Annual Report.

C. Nomination and Election of DCISC Chair and Vice-Chair
for the July 1, 2022 - June 30, 2023 Term.

On a motion made by Dr. Budnitz, seconded by Dr. Peterson the Committee elected Dr. Lam to the position of DCISC Chair and on a motion made by Dr. Budnitz seconded by Dr. Lam, Dr. Peterson was elected to the position of DCISC Vice-Chair both for terms of office from July 1, 2022 through June 30, 2023.

A short break followed.

VI COMMITTEE MEMBER REPORTS AND DISCUSSION

A. Public Outreach, Site Visits and Other Committee Activities: Assistant Legal Counsel Rathie reviewed the dates selected for future public meetings and the dates and the Committee representatives selected for future fact-finding. The Members then confirmed previously scheduled public meetings of the DCISC for September 28-29, 2022, February 15-16, 2023 and June 21-22, 2023, and the Members and Consultants then scheduled a public meeting for September 20-21, 2023. Mr. Garcia stated he would check and subsequently confirmed that DCPD could support a public meeting of the DCISC on September 20-21, 2023.

Fact-finding visits were confirmed and scheduled as follows:²

[2022] July 20-21 PL/RDM; August 16-17 PFP/RFW; September 13-14 RJB/RFW [including observation of an Evaluated Emergency Exercise]; November 8-9 RJB/RDM; December 6-7, PFP/RFW; and

² Robert J. Budnitz (RJB), Peter Lam (PL), Richard D. McWhorter Jr. (RDM), Per F. Peterson (PFP), R. Ferman Wardell (RFW).

[2023] January 30-31 PL/RDM; March 14-15 RJB/RFW; April 19-20 PL/RDM; May 2-3 PFP/RFW; July 12-13 PFP/RDM; August 9-10 PL/RFW; August 30-31 RJB/RDM.

Mr. Garcia stated he would review the dates set and revised at this public meeting for fact finding and confirm that DCPD can support fact-finding by the DCISC on those dates. [The above dates include the changes to schedules made at the commencement of the morning session, Item XXII.]

B. Documents Provided to the Committee:

The Chair observed that a list of documents received by the DCISC since its last public meeting in February 2022 was included in the public agenda packet for this meeting. Mr. Tom Marre was recognized and in response to Mr. Marre's request Mr. Rathie provided the link to the Committee's website where the list of documents received since the last public meeting may be reviewed as part of the agenda packet for this public meeting.

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

A. The Chair requested Consultant McWhorter to provide a report on the March 23-24, 2022, fact-finding visit to DCPD with Dr. Budnitz. Mr. McWhorter then reviewed the topics discussed with PG&E during the March 2022, meeting as follows:

➤ Refueling Outage 1R23 Safety Plan – Consultant McWhorter reported refueling outage 1R23 was conducted during March - April 2022 and the Fact-Finding Team (FFT) visited DCPD just prior to the outage to review the Safety Plan. He described the Safety Plan as an important element of outage planning including maintenance activities and plant conditions during the outage to assure nuclear safety is maintained in all conditions. Mr. McWhorter stated the outage activities are separated into windows which are classified as Green, Yellow, Orange, or Red. Green represents a condition with the minimum number of pieces of equipment to maintain function plus more than one. Yellow is an availability condition with the minimum number of pieces of equipment plus one. Orange represents the availability of the minimum number of pieces of equipment. Red means minimum conditions are not met. Typically Red and Orange conditions are not permitted. Mr. McWhorter stated most of an outage is conducted in Green condition and Yellow windows are given enhanced attention. For 1R23 there were six Yellow windows and no Orange or Red windows in the Safety Plan. Yellow windows included the availability of a single train³ of auxiliary saltwater while the Reactor Coolant System (RCS) is at a reduced inventory. Two Yellows windows were caused by the availability of a single offsite power source during periods when certain transformers were out of service and two additional Yellow Windows were related to the configuration of electrical supplies and the ability to inject water in the core during periods when certain trains and equipment were not available. Mr. McWhorter reported there were no mid-loop activities planned during 1R23.

³ Train in this context means a series of parts or elements that together constitute a system or produce a result.

Mr. McWhorter reported since the Intake Structure was devitalized it is no longer necessary to station an operator at the Intake Structure to monitor the Auxiliary Saltwater System (ASW System) crosstie valve which he stated is a critical valve to the defense-in-depth concept and a roving operator is now employed to check that access remains available to the ASW System crosstie valve and Mr. McWhorter stated the FFT found this change acceptable. He reported the FFT followed up on a question from the February 2022 public meeting concerning the testing of reactor vessel coupons. No coupons were planned for removal during 1R23 and no coupons were removed during 1R22 and all removals and testing have been completed necessary to support operation through cessation of power operations in 2024, as documented previously by the DCISC in its May 2021 Fact Finding Report. Mr. McWhorter reported the FFT found the safety plan and safety schedule for 1R23 to be comprehensive and effective.

➤ Post-Shutdown License Amendment Requests – Mr. McWhorter reported four license amendment requests (LARs) are currently active and pending NRC approval involving:

- Permanent changes to the defueled Technical Specification which would remove approximately 90% of the requirements for operating equipment, leaving only equipment necessary for operation of the spent fuel pools. Approval is expected in June 2022.
- Post-Shutdown Emergency Planning covering the period after shutdown while fuel remains in the spent fuel pools with the potential for a zirconium fire after which the emergency plan will be reduced in scope.
- Certified Fuel Handler Training.
- Post-Shutdown Decommissioning Activities Report (PSDAR) which will update the Final Safety Analysis Report (FSAR) for decommissioning activities.

Mr. McWhorter reported future LAR activities will include revision of the Fire Protection Program, the Security and the Cyber Security Plans as well as a possible redefining of the owner-controlled area and changes to the offsite dose calculation manuals. Dr. Budnitz remarked there are three different evolutions of emergency planning involved including a plan for when fuel is in the spent fuel pools, the permanently defueled emergency plan, and finally the ISFSI only emergency plan and he observed the offsite agencies involved in DCPD emergency planning need to be trained concerning each of those emergency planning evolutions. Dr. Budnitz observed assuring safety is also an area of interest for PG&E's Diablo Canyon Decommissioning Engagement Panel (DCDEP) and he remarked the DCISC is available to act as a technical resource and support the DCDEP in this effort. Mr. McWhorter remarked DCPD has been very clear that there will be no changes and all current emergency planning requirements will stay in place until all fuel is removed from the second reactor after shutdown. The FFT concluded the station continues to approve LARs for decommissioning in an appropriate manner.

➤ ISFSI License Renewal Application – Mr. McWhorter observed there is a presentation scheduled on this topic later in this public meeting, followed by presentations on the planning for and the licensing and acquisition of a new dry cask storage system. He remarked the ISFSI

license renewal submission is a completely different effort from those involving the new cask system as it concerns the application for a 40-year license extension for the casks which contain the Holtec multipurpose canisters. He reported a key element of this effort is the development of an aging management program which will be the first such program developed for the ISFSI. The approach for aging management will be monitoring the casks and to identify systems, structures and components of the ISFSI that are important to safety and then to determine and combine into a single aging management plan how aging may be expected to affect them and what actions are available to be taken to ensure aging does not cause a loss of function. He provided the example of the bottom of the stainless steel canisters which will be reviewed for the presence of stress corrosion cracking, pitting and crevice corrosion as primary aging mechanisms which are expected to be addressed by routine inspection on a recurring interval of five years in accordance with a formal aging management plan to ensure the codes developed by the American Society of Mechanical Engineers (ASME) are met. Any identified deficiencies will be entered into the Corrective Action Program. **Dr. Budnitz remarked the DCISC should include an item on the Open Items List to review the inspection of the ISFSI systems, structures and components following a seismic event which should be a part of the aging management plan or the FSAR.** Consultant Wardell remarked that prior to the construction of the ISFSI the DCISC reviewed post seismic event evaluation of systems, structures and components following the San Simeon earthquake. Mr. McWhorter reported the license renewal application for the ISFSI includes the detailed inspection reports for inspections conducted of the casks during 2021 and all findings from those inspections have been entered into the Corrective Action Program. The FFT concluded DCP is appropriately managing the license renewal for the ISFSI.

➤ Attend Notification Review Team Meeting - Mr. McWhorter reported notifications are electronic documents entered into the Corrective Action Program and during daily operation there are generally 50-100 such notifications submitted each day with more notifications submitted during outage periods. Operations staff review notifications immediately to ensure operability is not affected and the Notification Review Team, a multi-disciplinary team of manager, reviews each notification the following day for resolution and if necessary to provide for correction. The FFT concluded the Notification Review Team meetings continue to be effectively and efficiently conducted.

➤ Emergency Preparedness Program – Consultant McWhorter reported certain shortcomings in the Emergency Preparedness Program were identified during the September 2021 evaluated exercise and corrective actions were put into place. An evaluated exercise is now planned for September 2022. The Emergency Preparedness Excellence Plan has several initiatives in progress, most focused upon personnel development and training. He reported the Emergency Preparedness Program is considering implementation of the Federal Emergency Management Agency's (FEMA) Integrated Public Alert and Warning System (IPAWS) which employs cellphone and text messaging and he reported that other plants have replaced their siren systems with IPAWS although there can be coverage issues. Mr. McWhorter reported that IPAWS is not being considered for implementation at DCP prior to the cessations of power operations. **The FFT recommended that a meeting be scheduled during future fact-finding with the new San Luis Obispo County Emergency Services Manager prior to the September 2022 evaluated emergency exercise.**

- Strategic Engineer Department Update – Mr. McWhorter reported staffing has generally been stable but there have been changes in management with Mr. Ryan West assuming the position of Engineering Director. He reported the Engineering Excellence Plan includes initiatives focused upon improving human performance, equipment reliability and managing resources. The FFT received an update on system health and found three Tier 1 systems in Red⁴ status, those being Unit 1 and Unit 2 Emergency Diesel Generator Systems and the Unit 2 stator closed cooling water system, all of which involved issues the Committee has reviewed in the past. Five Tier 2 systems currently have action plans in place which the Committee has reviewed in the past. **Mr. McWhorter recommended the Committee should schedule another review of the Containment Ventilation and the Radiation Monitoring Systems.** The FFT concluded the Strategic Engineering Department continues to effectively oversee the health of systems important to safety.
- Inadvertent Boric Acid Addition Event – Consultant McWhorter reported this event occurred on December 21, 2021, when a small amount of boric acid was inadvertently added to the Reactor Coolant System (RCS) on Unit 2 which addition resulted in an unintentional 0.12 percent decrease in reactor power. He reported this event was a Reactivity Management Level 4 event in a scale of Levels 1-6 with 6 being the most severe. Mr. McWhorter reported the avoidance of inadvertent changes in reactor power is a fundamental tenet of operations. The cause was operators failing to recognize that a surveillance test on a valve in the boric acid addition system had failed to close a valve before they commenced a second test, such that when the second test began boric acid entered the RCS. Mr. McWhorter reported this was atypical of control room operations and corrective actions were put in place and deficiencies identified. Shift personnel were taken off their shifts and required to requalify and retrain. The event was classified as a department level event for Operations. The FFT concluded the actions taken appeared to be appropriate for this event.
- Integrated Risk Management – the FFT met with the Probabilistic Risk Assessment (PRA) group to review the results of the quick-hit assessment performed of integrated risk management. Mr. McWhorter stated the DCISC had reviewed the recommendations before and there was little new information received. He reported the detail from the assessment improved management of risk at DCP.
- Benchmarking Program⁵ - Mr. McWhorter reported the results of benchmarking efforts are entered into the SAP system and tracked. During 2021 there were 21 benchmarking events which was less than previous due to the COVID-19 pandemic. As of the March 2022 fact-finding DCP had completed 16 benchmarking events during 2022. The DCISC reviews the reports of benchmarking which are included in the documents provided to Committee Members and Technical Consultants on a monthly basis through the Certrec System.

⁴ On a scale of Green indicating a healthy performance and White indicating that achievable action plans are in place to return performance to healthy status. A Yellow rating would indicate the indicator shows deficient performance and needs improvement and Red would indicate unsatisfactory performance.

⁵ Benchmarking is the practice of comparing business processes and performance metrics to industry bests and best practices from other companies.

In response to Dr. Lam's request Mr. McWhorter stated he would provide a copy of the new DCPD organization to Dr. Lam.

- Plant Tour – the Consultant toured the plant, including the Unit 1 electrical equipment rooms, accompanied by the Electrical Maintenance Manager to focus upon electrical equipment outside the radiological controlled areas and to observe preparations for the 1R23 refueling outage. The Consultant found all areas to be in good condition, well-lighted and orderly.
- Meet with NRC Acting Senior Resident Inspector - Mr. McWhorter reported items discussed included inspection results and NRC staffing issues. In response to Consultant Wardell's inquiry Mr. McWhorter reported the permanent Senior Resident Inspector has reported to the station. In response to Dr. Lam's inquiry Mr. McWhorter stated that all the Senior Resident Inspectors who were serving in an interim capacity were very competent and he observed the same Resident Inspector has been on site for some time so there has been some continuity in the NRC onsite inspection team. Mr. McWhorter remarked that at times there have been visits from project engineers and a Branch Chief from NRC Region IV at the site and the NRC resident inspectors are not alone in their function as there is backup for the inspectors available from Region IV and from NRC Headquarters if necessary.
- Quality Verification (QV) - Mr. McWhorter reported this was a routine review of the QV Department and focused on the results of the audit program and actions taken as a result of audits completed in 2021. He reported all audits appeared to have been appropriately conducted and were being closed out in an appropriate time period. Mr. McWhorter reported an independent review by the Nuclear Industry Evaluation Program (NIEP) completed in February 2022 concluded quality verification and quality assurance at DCPD were being effectively implemented and four deficiencies and four recommendations resulted from the NIEP's review which Mr. McWhorter stated did not represent significant program deficiencies as they were mostly related to areas of quality control inspection documentation. The FFT concluded the audit program was being effectively implemented and the NIEP provided valuable input to plant performance evaluation.
- Direct Current (DC) Power Systems – Mr. McWhorter reported these systems are safety and non-safety battery systems that provide uninterruptible power to DC and alternating current (AC) systems, typically instrument and control systems. There were no major issues on either unit and the program health status for both units overall was rated as Green. Mr. McWhorter reported there are no plans to replace DC batteries prior to cessation of power operations in 2025. Dr. Budnitz observed when a review of the seismic adequacy of nuclear power plants was undertaken some years ago the Institute for Electrical Electronics Engineers (IEEE) design codes for seismic adequacy were reviewed for DC systems as part of NRC regulatory review and while the review found the systems adequate there was not very much margin identified and at that time codes were updated for battery systems and DC chargers and as the DCPD design basis earthquake is higher than any other plant in the world, DCPD's battery rooms and battery racks are far more robust than for any other plant and tests were performed on shake tables to beyond their design basis and accordingly, he remarked that seismic adequacy is not an issue at DCPD with any of the DC systems

AGENDA PACKET DRAFT – SEPTEMBER 15, 2022

Dr. Gene Nelson was recognized. Dr. Nelson reported the San Simeon earthquake referred to by Consultant Wardell occurred on December 22, 2003, and was a magnitude 6.6 earthquake that caused two fatalities in Paso Robles, California and before, during and after that earthquake DCPD operated at 100% power.

Ms. Sherry Lewis of San Luis Obispo Mothers for Peace was recognized. Ms. Lewis had the following inquiries after Mr. McWhorter's report. First, what is the meaning of defense-in-depth plus one; second, was an additional reactor vessel surveillance coupon required to be removed during 1R23; third how are problems entered into the Corrective Action Program regarding the systems, structures and components of the ISFSI resolved, fourth, for how long will the canisters be inspected when their high heat loads will persist for hundreds of thousands of years; fifth, what are the implications of the Notification Review Team reviewing 50-100 separate notifications on a daily basis; sixth, is the implementation of IPAWS a sufficient reason to replace the siren system as not everyone has a cellphone; and seventh, she observed Dr. Budnitz' comments on the seismic design basis assume that the design basis earthquake is correct and there will never be an earthquake greater than a 7.2 magnitude event but the seismic design basis was established prior to all the seismic faults in the area having been categorized.

In response to Ms. Lewis queries, Dr. Budnitz stated the design basis earthquake was established in 1970 and it was comprehensively reevaluated following the accident in 2011 to the Fukushima Dai-ichi Nuclear Power Plant in Japan, which reevaluation included all the various faults identified to date in proximity to DCPD and used the process developed by the Senior Seismic Hazard Analysis Committee (SSHAC Process) endorsed by the NRC which concluded the DCPD design basis earthquake which had been in use since 1970 was adequate and did not require an upgrade. The NRC produced a lengthy safety report that established the basis for the NRC's acceptance of the design basis earthquake for DCPD which included and considered the possibility faults are connected. **Dr. Budnitz reported when the ISFSI was constructed a seismic evaluation was done of the ground motion and he reported the Committee would review that evaluation in context of the relicensing of the ISFSI and the acquisition of a new dry cask spent fuel storage system.**

Consultant McWhorter stated a Yellow condition during a refueling outage indicates the minimum number of systems or equipment are available and in addition one additional system or piece of equipment remains available and he provided an example of maintaining RCS inventory by maintaining the ability to inject water to address heat when the reactor vessel head is removed from the vessel. If two systems were required, in order to achieve Yellow status in that example one additional system would be required. Concerning reactor coupons and assessment of the embrittlement of the reactor vessel Mr. McWhorter reported that in October 2020 DCPD attempted to remove a surveillance coupon from the reactor vessel but was unable to do so, but the applicable code requirements allow an alternate method to make the calculations as to embrittlement which calculations supported the conclusion that the reactor vessel's condition regarding embrittlement is sufficient to operate through the end of its planned operation. He reported when he stated surveillance coupon removal and testing was complete this meant the number of coupons removed and tested were sufficient to complete the required calculations regarding the adequacy of margin against embrittlement and to successfully demonstrate the adequacy of that margin. Dr. Peterson observed the surveillance coupons are located within

reactor vessels in areas where their rate of neutron and radiation exposure exceeds the total amount the vessel will receive during its licensed operation and therefore the coupons examined have accumulated radiation doses that far exceed the total amount of radiation the vessel will receive during its licensed operation.

Concerning ISFSI license renewal and the Corrective Action Program Mr. McWhorter stated the cask inspection report appendix identified the presence of rust and the level of the corrosion due to rust can be measured and when entered into the Corrective Action Program a calculation is made on its rate of development and an inspection frequency can then be developed and monitored in context of the Corrective Action Program in accordance with the data obtained. He remarked at the present time all indications of corrosion found on casks have been superficial. If it should become necessary to address severe corrosion a cask might be inspected more frequently, repaired, or replaced or a multipurpose canister could be placed in a transportation cask which does not rely on the integrity of the multipurpose canisters. **Dr. Peterson recommended the DCISC take an action to review this specific question in more depth.** Consultant McWhorter stated the Corrective Action Program provides the vehicle for identifying and initiating the appropriate action and what options may be available.

Concerning notifications Mr. McWhorter stated a notification may include any off-normal occurrence including the repairs made in response and the Notification Review Team's function is to ensure actions taken are appropriate to prevent recurrence.

Mr. McWhorter reported the proposal to implement IPAWS while less than perfect has been shown to be an effective method for notification.

Dr. Gene Nelson was recognized. Dr. Nelson stated certain statements by Ms. Lewis concerning high heat from radioactivity persisting for hundreds of thousands of years demonstrate a lack of understanding as not all radioactivity is equal with transuranics having a high specific activity but a short half-life and a combination of a high specific activity and a long half-life is contrary to physics and simply does not occur. Dr. Nelson reported a group has formed a website called Carbon Free California and a group of eminent seismologists has issued a letter clarifying that the seismic capabilities of DCCP exceed the effects of any plausible earthquake and while it is possible to imagine various scenarios, society needs to be informed by science and it is the height of hubris and a poor way to establish public policy to self-appoint one's self as someone who knows more than the scientists who have drawn their conclusions from careful calculation and observation.

Upon a motion made by Dr. Peterson, seconded by Dr. Lam, the March 2022 Fact Finding Report was accepted by the DCISC and its transmittal to PG&E was authorized. The report will become a part of the Committee's 32nd Annual Report.

VIII ADJOURN MORNING MEETING

The Chair adjourned the morning meeting of the DCISC at 12:15 P.M.

IX RECONVENE FOR AFTERNOON MEETING

The afternoon meeting of the DCISC was convened by the Chair at 1:30 P.M.

X COMMITTEE MEMBERS COMMENTS

There were no comments from Members at this time.

XI PUBLIC COMMENTS AND COMMUNICATIONS

Mr. David Weisman of the Alliance for Nuclear Responsibility was recognized. Mr. Weisman remarked during the San Simeon earthquake in 2003, 56 sirens in the DCPD emergency warning system failed due to lack of power or because they were cut-off from the siren system. Since that time backup battery power has been installed for the sirens. Mr. Weisman also reported during that earthquake cellphone service also failed and in any emergency situation cellphone service can quickly become overwhelmed. He observed having both IPAWS and the siren system would appear to be consistent with the redundancy and defense-in-depth concepts espoused by the nuclear industry. Mr. Weisman reported PG&E has pledged to keep the Emergency Alert System operable, pending approval of funding by the CPUC, through the termination of the 10 Code of Federal Regulations (CFR) Part 50 license. Consultant McWhorter commented that the FFT reviewed the possible initiation of IPAWS was an item which was under consideration and there would be a significant public process prior to any implementation.

Mr. Weisman commented on information from an NRC Inspection Report which referred to installation of a sixth emergency diesel generator having taken place on February 17, 2022, and stated he found no reference to such installation in CPUC proceedings. Mr. McWhorter stated the fifth and sixth emergency diesel generators were installed many years ago as part of a redundancy upgrade program so the citation in the NRC report could be a reference, for which he agreed the wording was very unclear, to an issue that dated from February 2022. Mr. Weisman commented first, to a reference earlier in this meeting to reactor vessel surveillance coupon removal which stated all removals and testing was complete and a finding made of adequate margin against embrittlement through 2024-2025; second, to a reference to the Learning Services Department's focus on assuring adequate staffing through end of operations; third, to core design having been optimized for cessation of power operation; and fourth, to inspection activity slowing down, and he observed there is speculation now that the plant may run beyond 2025 and he questioned the adequacy of all these observations based upon continued operation. He remarked that as appointees of officials of the State of California the members of the DCISC have an obligation to report to their appointing agencies and to the ratepayers on the prospects and possibilities for continued operation before a decision is made. Dr. Budnitz replied that were the decision taken today to continue operations there would be significant work to be done and to be evaluated in many different areas and the Committee has not assessed the extent of that work in detail as it would need to do were the decision taken to extend operations, but at this time the Committee is without information and therefore must remain intrinsically reactive to future developments. Dr. Budnitz stated his opinion that at this time continued operation of DCPD is feasible but the more time that passes, as many different programs and projects have been put in place predicated on closure in 2024-2025 and would need to be reevaluated and assessed,

continued operation becomes less feasible with the passage of more time.. He remarked the technical evaluation of continued operation would be very complex.

Dr. Lam stated he agreed with Mr. Weisman that if the Committee finds that safety concerns are raised, the members have a duty to report to their appointing entities but at this time Dr. Lam remarked it is unknown when or if license renewal might take place or in what format. Therefore, Dr. Lam stated his opinion it would be premature for the Committee members to open a dialogue with the appointing entities concerning potential safety concerns as there would be numerous issues to be considered including the loss of technical personnel. Consultant Wardell remarked PG&E previously filed an Application with the NRC for a 20-year license extension which included a program of aging management including reactor vessel embrittlement issues, and work was progressing on processing that Application and that work was under review by the DCISC until the Application was withdrawn by PG&E. Mr. Wardell observed the prior Application could serve as a starting point for commencing a review of the issues involved in extending operations. Dr. Peterson commented there would be a large amount of additional work required by a decision to extend operation and a major focus for the DCISC would be DCP's ability to augment staff, possibly with additional contract personnel, for work related to relicensing. The Committee would need to review the items removed from the Open Item List in context of continued operation and this would represent a relatively intensive effort for the Committee and could require the Committee to augment its resources. Dr. Budnitz remarked the DCISC's independent function tends to make the DCISC reactive in most instances, needing to await events and PG&E's reaction to them. Consultant McWhorter suggested notifying the Committee's appointing entities to the effect that a decision concerning continued operation of DCP is time sensitive and the more time that passes the more difficulties arise in assuring it can be done safely. Dr. Lam remarked the independent role of the DCISC makes it neither a proponent nor an opponent of license renewal. Dr. Peterson agreed with Dr. Lam that it would not be appropriate for the Committee to be proactive in this matter. **Dr. Peterson suggested the DCISC Legal Counsel's office should investigate the circumstances and advise.** Dr. Budnitz gave the example of the proposed schedule for the movement of spent fuel from the spent fuel pools to dry storage at the ISFSI and the composition and configuration of the fuel in the spent fuel pools as examples of issues with safety significance that would need to be reviewed in context of DCP's continued operation.

Dr. Gene Nelson representing Californians for Green Nuclear Power was recognized. Dr. Nelson stated he was impressed with the DCISC discussion and that he understood the license extension process was completely driven by the State of California and represents a policy change. He remarked the International Brotherhood of Electrical Workers, Local 1245, has endorsed continued safe operation of DCP. Dr. Nelson urged the Committee Members to consider making a statement of fact to state regulators. Dr. Peterson reported the Committee has not had discussions concerning continued operation in any other venue than at its public meetings which have necessarily been at a relatively high level and he commented there would be considerable work involved, including a substantive amount of work required of the Committee, should a decision be made to seriously investigate license extension or renewal of the licenses for DCP.

Ms. Sherry Lewis of Mothers for Peace was recognized. Ms. Lewis stated her belief that the effort made concerning a license extension for DCPD was primarily politically driven and the public would welcome information from the DCISC on the difficulties involved in such a decision. Ms. Lewis commented in her view it was too close to the planned closure date to consider extending operation. Dr. Budnitz responded the complex and difficult issues involved can be addressed provided there is sufficient time to do so. He remarked that the complexity is in the detail and the interactions that must take place and whether to cease or continue operation is not a simple matter.

Ms. Linda Seeley of Mothers for Peace was recognized. Ms. Seeley stated she has not heard anything regarding a fixed date being under consideration for ending an extension of the operating licenses for DCPD and the public deserves to have this information. She inquired whether exemptions could be granted for otherwise required safety upgrades and as to the involvement of the NRC in that process and she described the information on the plans to date as completely obscure and obfuscated. Consultant McWhorter responded the NRC would need to approve any license extension.

Mr. Rathie reported two emails were received from Mr. Tom Marré during the Committee's discussion concerning the Committee's financial matters recommending consideration of conducting public meetings and fact-finding entirely by Zoom and as to the concrete to be used in the new dry storage casks and the fact that concrete is porous, has different compositions and ages differently and Mr. Marré had questioned the ability of local concrete suppliers to supply material to correct specifications.

XII DISCUSSION BY THE COMMITTEE

Dr. Budnitz presented this discussion and stated the principal item concerned the Committee's engagement of an additional technical consultant on an *ad hoc* basis to assist the Committee in reviewing technical issues related to spent fuel, decommissioning, and the regulatory issues related to those topics. Dr. Budnitz suggested a motion to accept the Scope of Services [included with the public agenda packet for this meeting] prepared for the engagement would be in order but first he suggested removal from the draft Scope of Services of Section 8 which concerned assisting the DCISC with matters involving public outreach in connection with San Luis Obispo County's California Environmental Quality Act review. The Chair stated upon adoption of the Scope of Services the next task would be to identify a consultant and to execute a contract with that individual. Committee Members also discussed and made revisions to Section 1 concerning the direction to be given on behalf of the Committee for the consultant's participation in public meetings and fact-finding. Upon motion made by Dr. Budnitz, seconded by Dr. Peterson, the Committee unanimously approved the Scope of Services as amended by their discussion.

Ms. Linda Seeley, who serves as unofficial liaison for the Diablo Canyon Decommissioning Engagement Panel (DCDEP) with the DCISC, was recognized. Ms. Seeley stated the DCDEP endorses the engagement by the DCISC of a technical consultant to review spent fuel storage issues.

Assistant Legal Counsel Rathie reported on the Committee's direction at its February 2022 public meeting concerning the transition of the DCISC's review of activities in the post-shutdown period. He remarked the Second Restatement of the Committee's Charter, which became effective on November 10, 2021, maintains the Committee's safety review role during the time when the plant continues to generate electricity and once generation operations cease the Committee is charged to continue its role of reviewing the safety of the spent fuel pools and related support systems. At its February 2021 public meeting the Committee briefly discussed the need to further define and identify the related support systems for which the Committee would continue its review. He observed the Committee is also charged by its Second Restated Charter to review the transport of spent fuel from the spent fuel pools to the ISFSI and elsewhere on the plant site. Mr. Rathie reported Consultant McWhorter has prepared a timeline for activities during the 2025-2029 period and Mr. Rathie stated, based on DCP's decision to purchase a new spent fuel storage system from the Orano firm, the timeline will need to be adjusted accordingly. He reported there was also discussion of plans to manage greater than Class C waste which has now been added to the Open Items List. The evolution of emergency planning during the post-shutdown period will also be included in the Committee's review. **Mr. Rathie reported that Consultants Mr. Wardell and Mr. McWhorter proposed and the Committee approved the development of a Post-Shutdown Open Items List that beginning in February 2023 will be reviewed in concert with the Open Items List.** He also briefly commented on the Committee's discussion concerning the scheduling and frequency of its public meetings and fact-finding visits during the post-shutdown period which recognized the public meetings provide an important venue for members of the public to receive information from and ask questions of the Committee as well as an opportunity for coordination of DCISC activities with those of the DCDEP.

Dr. Budnitz remarked the Open Items List of the Post-Shutdown Open Items List provide a venue for the Committee to specify and capture the scope and the frequency of the work it will engage in concerning the spent fuel pools and their related systems.

XIII LEGAL COUNSEL'S REPORT

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

Assistant Legal Counsel Rathie reported that on April 28, 2022, with Dr. Lam they met remotely via a Zoom teleconference with California Energy Commission (CEC) Chair Mr. David Hochschild, CEC Senior Nuclear Policy Advisor and Emergency Coordinator Dr. Justin Cochran and CEC Chief Policy Advisor Kenneth Rider to review and discuss the recent activities of the DCISC and items of interest to the CEC. On May 10, 2022, with DCISC Chair Dr. Budnitz they met remotely via BlueJeans video conferencing with members of the California Attorney General's staff including Chief Assistant Attorney General for Public Rights Mr. Matt Rodriguez, Senior Assistant Attorney General Mr. Ed Ochoa, Special Assistant Attorney General-Environmental Ms. Yana Garcia, Supervising Attorney General Ms. Laura Zuckerman, and Deputy Attorney General Ms. Megan Hey to review and discuss the recent activities of the DCISC and items of interest to the Attorney General and his staff. Mr. Rathie reported on April 20 and May 25, 2022, Dr. Budnitz attended and participated in the public meetings of the

DCDEP in furtherance of the Committee's commitment to serve as a technical resource to the DCDEP.

Mr. Rathie reported concerning the activity on the Committee's website during 2022 the site is averaging 118 visitors each month, with the United States, Korea, the United Kingdom and India be the top four destinations from whence its visitors come.

Mr. Rathie reported the next appointment to the Committee is scheduled to be made the California Attorney General Rob Bonta and Dr. Budnitz is one of three candidates under consideration. He reported PG&E has now filed its Application in the 2021 Nuclear Decommissioning Cost Triennial Proceeding and the Legal Counsel's Office will be following that matter.

XIV INFORMATION ITEMS BEFORE THE COMMITTEE

The Chair requested Mr. Garcia to introduce the first of the informational presentations for this public meeting. Mr. Garcia recognized the presence at the meeting of PG&E Vice President of Nuclear Decommissioning and Technical Services Ms. Maureen Zawalick and he then introduced Director of Risk and Compliance Mr. Russell Prentice to make that first presentation concerning the NRC's assessment of plant performance. Mr. Garcia reported Mr. Prentice was licensed as a Senior Reactor Operator and has been employed at DCPD for more than ten years including as Maintenance and Instrumentation & Controls Manager. In his present assignment Mr. Prentice oversees the Generation organization's regulatory relations and risk programs including those for DCPD. Mr. Prentice is also the site emergency coordinator for Team C of the Emergency Response Organization. Mr. Prentice holds a Master's Degree in Mechanical Engineering from California Polytechnic State University at San Luis Obispo (Cal Poly).

Update on the Status of NRC Performance Indicators, Licensee Event Reports, NRC Inspection Reports and Notices of Violation, Issues Raised by NRC Resident Inspectors, Open Compliance Issues and License Amendment Requests, Recent NRC Inspector General Report on Oversight t DCPD, and Other Significant Regulatory Issues/Requests.

Mr. Prentice stated during his presentation he would provide an overview of DCPD's performance from a regulatory perspective and stated regulatory performance of a station is also a reflection of its operational performance. Mr. Prentice stated his report covers a period of approximately four months from February to June 2022, which includes approximately 2,000 hours of NRC inspection time. During this period DCPD met and remained in the highest performance category for the performance expectations for all NRC Performance Indicators and the plant continues to monitor and maintain a level of margin with respect to each performance category. Three non-cited violations (NCVs), rated Green⁶ and of very low safety significance

⁶ The safety significance characterizations used for the performance indicators as either Green (very low), White (low to moderate) Yellow (substantial) or Red (high). A Green non-cited violation indicates very low safety significance, with no impact to public health and safety.

were issued since the last public meeting of the DCISC. He discussed each as follows.

- Non-Cited Violation (Green) – issued for moisture and buildup on Auxiliary Saltwater (ASW) System pump 1-1 motor internal windings not being corrected promptly. Non-safety related thermal heaters imbedded in the motor degraded over time and triggered a Control Room alarm and the replacement of the pump motor which Mr. Prentice stated remained capable of performing its function. Cross-cutting aspect⁷ assigned by the NRC of H.6 “Design Margins” and corrective actions completed.
- Non-Cited Violation (Green) – for inadequate scope maintenance verification testing for governor tuning of Emergency Diesel Generator 2-3 fuel system which resulted in low steady-state frequency and slightly slower speed during a subsequent diesel start. Cross-cutting aspect assigned of H.5 “Work Management” and corrective actions completed.
- Non-Cited Violation (Green) – procedural guidance for responding to high water level in a feedwater heater containing direction presenting a vulnerability in that it that could have led to delays in actions taken by control room personnel in response to an identified feedwater tube leak. No cross-cutting aspect assigned, no adverse impact on performance and corrective actions competed.

Mr. Prentice displayed the NRC Cross-Cutting Aspects summary of performance over a rolling four-month period which he reported utilizes a proactive approach to identifying trends in functional areas assigned by the NRC and he stated DCPD remains in Green status for all categories with no cross-cutting aspects identified as being at their threshold levels at this time.

Mr. Prentice reported no licensee event reports (LERs) were issued by PG&E since the last DCISC public meeting in February 2022. Dr. Budnitz stated he recalled that there was only one LER submitted in 2021 which he characterized as excellent performance and he remarked LERs are distributed and reviewed worldwide. Mr. Prentice reported DCPD remains in the highest performance category, that is, in Green status for all 16 performance indicators with adequate margin existing for in each:

- 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.

⁷ Cross-Cutting Aspect is the performance characteristic of a violation that is either the primary cause of the performance deficiency or the most significant contributing cause.

AGENDA PACKET DRAFT – SEPTEMBER 15, 2022

- 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.
- Emergency Response Organization Drill Participation.
- Alert & Notification System.
- Occupational Exposure Control Effectiveness.
- Radiological Effluent Occurrence.

Mr. Prentice stated two inspection reports have been issued since the last public meeting of the DCISC as follows:

- 4th Quarter 2021 Integrated Inspection Report (2021-002, 02/03/2022).
- 1st Quarter 2022 Integrated Inspection Report (2022-002, 05/05/2022).

In response to Mr. Weisman's inquiry earlier during this meeting about a reference in the NRC's 1st Quarter 2022 Inspection Report to installation of the sixth emergency diesel generator (EDG) and the date given in that report of February 17, 2022, Mr. Prentice replied that was the date DCPD provided certain information concerning the sixth EDG to an NRC resident inspector, and he reported the sixth EDG was installed at the plant in May 1993. Vice President Zawalick remarked at the time of the NRC's review DCPD's Senior Resident Inspector was serving in an interim capacity and the inquiry may have been in connection with an effort to better understand the plant's licensing basis. She stated prior to installation of the sixth EDG, EDG 1-3 functioned as a "swing" diesel, capable of providing power, with manual operator action to either unit. Dr. Budnitz observed installation of the sixth EDG was not required by NRC regulations. Mr. Wardell observed installation of the sixth EDG reduced the probabilistic risk numbers for an accident.

Mr. Prentice reported one License Amendment Request (LAR) was granted by NRC since the DCISC's meeting in February. That LAR concerned two amendments to the plant's Technical Specifications related to Unit 1 and Unit 2 sources of alternating current (AC) to allow, on a one-time basis, an additional four days to perform planned maintenance on a diesel generator's fuel oil transfer pumps.

Mr. Prentice closed his presentation with the statement that DCPD's regulatory performance is strong as is its operating performance. In response to Mr. McWhorter's inquiry Mr. Prentice confirmed that the NRC permanent Senior Resident Inspector, Mr. Mahdi Hayes, has now reported to the site. In response to Consultant Wardell's query as to the difference between "more than minor" and "very low" safety significance Mr. Prentice replied the NRC significance determination process reviews potential probabilistic risk assessment significance and differences in the safety significance referred to by Mr. Wardell turn on what the potential

consequences might have been had a violation been left uncorrected.

Ms. Sherry Lewis of Mothers for Peace was recognized. Ms. Lewis stated it was her understanding that a very low safety significance determination was made based not only on the potential consequence but also on the fact that nothing bad occurred and that this represented the difference between very low safety significance and minor safety significance. Mr. Prentice responded for very low safety significance the determining factor is not only what occurred but also the safety significance of what potentially could have occurred and the NRC has a very detailed guidance in place to make such determinations. Mr. Prentice reported for all the Green NCVs he discussed the equipment remained capable of performing its design function if called upon to do so. The Chair thanked Ms. Lewis for her comment.

The Members and Consultants thanked Mr. Prentice for his presentation.

Mr. Garcia requested Mr. Prentice to continue to make the next presentation to the Committee concerning the Emergency Diesel Generator 2-3 fuel leak and the resulting cause evaluation.

Event Significance, Causes, and Corrective Actions for Emergency Diesel Generator 2-3 Failure During Test Run on June 28, 2021.

Mr. Prentice reported the process he would describe is an example of how DCPD looks to improve its performance and procedures. He stated during maintenance outage windows DCPD periodically removes certain emergency diesel generators (EDGs) from service for testing and maintenance to verify and ensure their performance. During one such activity when EDG 2-3 was warming up in preparation for governor testing, some fuel oil leakage was identified on one of the 18 fuel injector pumps on EDG 2-3. EDG 2-3 is one of the six EDGs at DCPD. This leakage posed no immediate safety risk and was fixed prior to placing the EDG 2-3 back in service. Mr. Prentice reported the cause evaluation process was leveraged to improve EDG maintenance strategies and mitigate the risk of future fuel oil leaks.

Mr. Prentice reviewed the timeline for this event. On June 28, 2021, during planned maintenance EDG 2-3 was operating during a test run to warm up the engine in preparation for governor tuning. During the warm-up, a fuel oil leak was observed by plant personnel near the first cylinder located on the right side (1R) and EDG 2-3 was immediately shut down. The system was depressurized, the fuel injection pump cover was removed, inspections were performed and the banjo bolt that ports the fuel into the fuel injector pump was found loose and to be leaking oil. Maintenance personnel utilized established procedures to restore the loose banjo bolt connection to its required torque value and performed required testing. EDG 2-3 was declared operable on June 30, 2021. Subsequent third party analysis concluded that EDG 2-3 could have fulfilled its safety function even with the leakage which occurred at a rate of slightly more than one gallon per minute. In response to Consultant McWhorter's inquiry Mr. Prentice stated the third party analysis did not assume reliance on the other five EDGs and confirmed the leak was not large enough to prevent EDG 2-3 from running under load as long as necessary in all configurations.

The six EDGs provide emergency alternating current power in the event of a loss of offsite power. The fuel injection system for each EDG includes a positive displacement injection pump for each of the diesel engine's 18 cylinders taking suction from the common fuel header. Mr. Prentice described and displayed photos of the fuel injection system pump inlet assembly, the inlet pipe, the banjo fitting and the banjo bolt. He stated each fuel injection pump assembly is supplied from the fuel header through a fuel injection pump inlet pipe (i.e., banjo fitting) and an inlet to pump retaining screw (i.e., banjo bolt). The banjo bolt connects the banjo fitting to the injection pump suction providing a right-angle, hard pipe connection. Mr. Prentice described the banjo bolt as having a hollow shank with a radial through-hole in the narrow unthreaded portion of the shank below the bolt head which allows fuel to pass through the bolt shank while the bolt head, the O-rings, and threads provide part of the system pressure boundary to prevent fuel from escaping. On EDG 2-3 the banjo bolt had loosened resulting in the leak.

Mr. Prentice described the cause evaluation process as the process by which DCPD ensures it understands an issue and takes appropriate action to prevent recurrence. The direct cause of the EDG 2-3 diesel fuel oil leak was found to be a loose banjo bolt at cylinder 1R. The banjo bolt was found loose with no residual torque to compress the banjo bolt O-rings to prevent the leak. The first probable cause identified was due to the sequence of steps in the applicable procedure having possibly resulted in misalignment of the banjo fitting to the fuel injection pump, allowing the banjo bolt to loosen during normal engine operation and causing a leak at the joint. A second probable cause identified was due to a dual-action step in the applicable maintenance procedure possibly having resulted in inadequate torquing, allowing the banjo bolt to loosen during normal engine operation, causing a leak at the joint.

Mr. Prentice stated through the plant's cause evaluation process a thorough extent of condition was performed on all six diesel generators. He reported there are 18 banjo bolts on each diesel, for a total of 108 and no leaks were found on any of the other 107 banjo bolts. Some banjo bolts were found below the desired torque and were re-torqued to the torque specification. Mr. Prentice reported in all cases the EDGs would have performed their design function. A preventive maintenance plan was put in place to periodically perform torque verifications on these joints and the plant is still performing verifications to ensure there are no more loose joints.

Immediate actions described by Mr. Prentice included, once the leak rate subsided following shutdown of EDG 2-3, removal of the fuel injection pump cover for cylinder 1R and the banjo bolt identified as leaking. The joint was reassembled per procedure, the banjo bolt torqued appropriately and EDG 2-3 passed all its verification tests and was declared operable.

Mr. Prentice described the three corrective actions taken including:

- Revision of the applicable maintenance procedure to provide steps to ensure proper alignment between the banjo fitting and fuel injection pump and prevent movement of the fuel injection pump after initial fit-up/alignment.
- Development and implementation of a preventive maintenance strategy for phased periodic torque verification and performance of quarterly banjo bolt torque verification. If as-

found torque is 95 ft.lbs. or greater, on all cylinders for at least three consecutive quarters then extend periodicity to once per cycle.

- Revision of applicable maintenance procedures to include performer and verifier signoffs for banjo bolt and fuel injection pump hold down bolt torquing steps for each cylinder worked.

In response to Consultant McWhorter's inquiry Mr. Prentice stated there was no causal link found for leakage due to compatibility issues between the O-ring material and the low sulfur diesel fuel and the NRC found the O-ring material to be appropriate. Mr. Prentice stated the plant is engaged in a dialogue with the NRC as to future enforcement action and as there were several different Senior Resident Inspectors involved information was provided to all inspectors concerning this event. Mr. Prentice stated there may be something more to report when the NRC issues its next inspection report but he opined any violation issued would be of very low safety significance. In response to Dr. Lam's inquiry regarding fire safety Mr. Prentice stated the fuel leak did not represent a significant or immediate fire hazard due to the quantity of the fuel which escaped, the lack of an ignition source and the capabilities of the EDG room drain and fire suppression Cardox system. In response to Dr. Lam's question Mr. Prentice stated there were eight banjo bolts for which their torque level was below the desired value but all eight were above the minimum allowable torque value and he agreed with Dr. Lam's observation that this is potentially a common failure mechanism. In response to Consultant Wardell's query concerning procedure, Mr. Prentice stated the prior procedure for a single step to torque the banjo bolt was not complex but the configuration of the hard connections that comprise the fuel injection system is complex as the components all need to move in a very specific manner and need to be fitted-up and gap checked for tolerance and it is the overall assembly that adds a degree of complexity for which the procedure was modified and improved. In response to Dr. Budnitz' question concerning operating experience for the leaking banjo bolt issue Mr. Prentice stated operating experience was reviewed but no other instances of significant leakage with the specific connection with the O-rings was identified. Mr. Prentice reported the joint and connection configuration was changed by the manufacturer due to some operating experience with leakage by the issuance of a new gasket and new assembly with O-rings to prevent leakage and since that change there has been only this one instance of leakage.

Dr. Gene Nelson of Californians for Green Nuclear Power was recognized. Dr. Nelson remarked that the EDGs at DCPD are manufactured by the American Locomotive Company (ALCO) and are similar to locomotive diesels and are huge pieces of equipment. Dr. Nelson stated he was familiar with banjo bolts in an automotive context and that it is important that they not be torqued in a misaligned manner when assembling a system and incorrect set up of the cap screws can result in misalignment.

Ms. Linda Seeley of Mothers for Peace was recognized. Ms. Seeley inquired why there was the turnover in NRC Resident Inspectors mentioned by Mr. Prentice. Mr. Prentice replied that when the NRC selects a resident inspector the inspector is allowed a certain amount of time to relocate to his or her new station. Mr. McWhorter mentioned that the departure of the previous permanent Senior Resident Inspector was unanticipated. Mr. Prentice confirmed the new permanent Senior Resident and the continuing Resident Inspector are now assigned full-time to DCPD.

Mr. David Weisman of the Alliance for Nuclear Responsibility was recognized. Mr. Weisman observed the Committee's agenda for this public meeting included a review this afternoon of the recent NRC Office of the Inspector General's (OIG) Report on Oversight at DCPD [Event Inquiry into the Nuclear Regulatory Commission's Oversight of the Auxiliary Feedwater System at Diablo Canyon Nuclear Power Plant] and he stated he did not hear this item reviewed by Mr. Prentice and he inquired whether the recent turnover in NRC inspectors is in any way reflective of issues addressed by the OIG's Report. PG&E Vice President Zawalick stated the two items were not related, the OIG Report was unrelated to the unexpected retirement of the previous Senior Resident Inspector, and the remainder of any discussion concerning the OIG's Report should be addressed to the NRC. Dr. Budnitz agreed the OIG Report does not represent a PG&E issue and it was not appropriate for the DCISC to have asked PG&E for a report. Mr. Weisman inquired whether the DCISC had reviewed the OIG Report to which Dr. Budnitz replied in the affirmative and commented there were three reports, the OIG Report, a report in response by NRC staff, and the OIG's response to the staff's response. Dr. Lam commented that with Consultant McWhorter he met during fact-finding with the then interim NRC Senior Resident Inspector and asked for the inspector's opinion on the process and merits of the OIG Report and Dr. Lam reported the inspector's response was consistent with the official NRC staff response. Dr. Lam stated the OIG is an entirely separate and independent office within the NRC and he did not believe the DCISC should or would formulate an official opinion as to the OIG's Report. Mr. Weisman observed the NRC staff response contains the statement that the ROP [Reactor Oversight Process] and its associated inspection programs continue to provide reasonable assurance of adequate protection of public health and Mr. Weisman observed, counter to Dr. Budnitz observation, that the concept of reasonable assurance was not part of the Atomic Energy Act which refers to adequate protection of the health and safety of the public. Mr. Weisman stated the public who wish to be assured of adequate protection want to know when that standard was weakened to refer to reasonable assurance and he remarked the NRC should be embarrassed by use of a weakened formulation in its pronouncement.

Mr. Weisman observed the DCISC is meant to be independent from both PG&E and the NRC and it is concerning to him that the DCISC's independence from the NRC is not visible to the public and he quoted from a statement made in 2020 by Dr. Budnitz to the effect it was not fair to request the plant to comment concerning questions about the NRC inspectors and confirming and reporting to the public that during fact-finding the DCISC representatives meet with the NRC resident inspectors, and that it takes time for new inspectors to assimilate DCPD's operational history and institutional knowledge, and a prior statement by Dr. Budnitz that based on his long experience with the NRC, Dr. Budnitz was not concerned about a compromise to the NRC's ability to regulate the plant and that a part of the rationale for rotating NRC inspection staff is so they do not get too comfortable with the licensee. Mr. Weisman stated the Alliance for Nuclear Responsibility recently proposed term limits be placed on a member's service on the DCISC for which the rationale was based upon the DCISC becoming too comfortable with the NRC resident inspectors. Mr. Weisman questioned that since a broader discussion of the OIG Report will not take place, who was watching the regulators?. He inquired if there is an assumption that the NRC "must be getting it right" and he stated in his view that the OIG response to the NRC staff response found the NRC staff had not fundamentally countered the substantive issue identified by the OIG Report. Mr. Weisman remarked there may be many more examples where someone has looked the other way and it may be appropriate for the CPUC and

the DCISC, as the liaison between the state and the federal government, and the licensee to respond. He remarked that with the closure of Indian Point Nuclear Power Plant, the State of New York, realizing the NRC resident inspection program will cease once the spent fuel has been transferred, decided to hire a state Resident Inspector to continue the program previously assigned to the NRC resident inspectors and there is a clear interest by the public in having such programs and he stated the Alliance for Nuclear Responsibility would welcome a more substantive review of the OIG Report.

Dr. Lam stated Mr. Weisman's comments would have merit if the Committee's resources were infinite and if the Committee's Charter was revised accordingly. He stated in his opinion the NRC Resident Inspector's Office is a reliable and independent resource which provides a venue for the DCISC to fulfill its obligation and for the Committee members to learn about the activities and conclusions of the NRC resident inspection staff, who have a separate agenda from the DCISC and a very large staff and different processes to follow and he stated the merit of Mr. Weisman's proposal is questionable. Dr. Lam observed the Auxiliary Saltwater System inspection cited in the OIG Report is not a top priority in context of a precursor to a major reactor accident and Dr. Lam stated he was fully satisfied the analysis done and the corrective actions taken by the plant have been more than adequate and he was surprised by the issuance of the OIG Report and would not recommend the DCISC formulate an official opinion on the Report. Dr. Budnitz observed the DCISC's Second Restated Charter requires the Committee to review and report on the operational safety of the plant and in that context the DCISC Members and Technical Consultants read and review the NRC's reports, reviews, and conclusions which are the result of a large staff and having a permanent resident inspection team on the site and the DCISC representatives discuss these topics with the NRC representatives, but the DCISC's role is not to critique the NRC's actions. Dr. Budnitz stated the DCISC did review the technical issues underlying the AFW System piping corrosion matter and concluded the issue and the safety significance were appropriately addressed, but the Committee did not look at or address whether the NRC had done its job.

Dr. Budnitz stated the proposal previously made by the Alliance for Nuclear Responsibility for term limits on membership on the DCISC would, if it were approved, have resulted in the immediate removal of all three current members of the Committee at the end of their respective current terms. Dr. Budnitz stated this was not an illegitimate position to take, but he observed the Alliance for Nuclear Responsibility's proposal was not adopted although it could be revived for further consideration in the future. Dr. Budnitz observed the rationale for rotating NRC resident inspection teams is related to the fact that they and their families are embedded in the community due to their residing in the local area and while this is good for the community it is a negative for the NRC's mission. In contrast, he pointed out none of the current Members of the DCISC reside in the local area and generally they only visit for fact-finding and public meetings and he stated the Alliance for Nuclear Responsibility's proposal requires the assessment of whether that limited familiarity outweighs the experience and knowledge concerning the operation of the power plant the DCISC members gain over time. Mr. Weisman replied and observed that Dr. Lam, as the appointee of the Chair of the California Energy Commission who also serves as the state's official liaison to the NRC, has the ability to provide a beneficial and objective evaluation of the NRC in context of safety and the reliability of the delivery of electricity to the state's designated liaison. Dr. Lam stated his duty to brief the Chair of the CEC is informed by his personal opinion and not by the Committee's official positions and

this represents a significant distinction from Mr. Weisman's observation. Mr. Weisman stated the OIG Report, the NRC staff response and the OIG response to the staff response will all be posted and available to members of the public by visiting the Alliance for Nuclear Responsibility's website at www.A4NR.org so the public can understand what he termed the Alliance for Nuclear Responsibility's concern about the NRC's rather lackadaisical inspection process and how that might contribute to future issues. Dr. Budnitz replied the Committee issued a fact-finding report on the underlying technical issues and that report is also in the public domain. Assistant Legal Counsel Rathie stated as the author of the agenda for this meeting he regretted any false impression conveyed.

The Chair thanked Mr. Weisman for his comments and stated he believed them to be deeply felt.

Dr. Gene Nelson of Californians for Green Nuclear Power was recognized. Dr. Nelson stated as DCPD comprises an extremely complicated set of systems and the involvement of many persons including its regulator and owner, he sees value in the continuity of membership on the DCISC as it provides a real benefit in understanding and evaluating the safety of a complex system.

Ms. Lee Perkins was recognized. Ms. Perkins inquired whether there were to be more meetings of the DCISC and she remarked she received notice of the public meeting through the advertisement in the San Luis Obispo Tribune newspaper. Dr. Budnitz replied this was the 102nd meeting of the Committee and each of its public meetings have been advertised in the local print media and by mail and also on the internet. Mr. Rathie suggested Ms. Perkins contact the Committee at its website at www.dcisc.org and arrange to receive notice of the Committee's public meetings mailed or emailed to her in advance of each meeting. He reported the next public meeting is scheduled to be held here in Avila Beach on September 28-29, 2022.

Prior to adjournment, Mr. Garcia provided a response to an earlier inquiry and confirmed that a Coastal Development Permit was part of the initial licensing application for the ISFSI.

XV ADJOURN AFTERNOON MEETING

Dr. Budnitz observed the evening meeting of the Committee would be convened at 5:30 P.M. and he adjourned the afternoon meeting of the Committee at 4:20 P.M.

XVI RECONVENE FOR EVENING MEETING

Dr. Budnitz reconvened the evening meeting of the DCISC at 5:30 P.M.

XVII COMMITTEE MEMBER COMMENTS

There were no comments by Committee Members at this time.

XVIII PUBLIC COMMENTS AND COMMUNICATIONS

Dr. Budnitz invited members of the public to address the Committee on matters not on the agenda for this meeting. No one availed themselves of this opportunity.

The Chair requested Mr. Garcia continue with the informational presentations requested by the DCISC of PG&E for this public meeting.

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

Mr. Garcia introduced PG&E Vice President of Nuclear Decommissioning and Technical Services Ms. Maureen Zawalick and stated Ms. Zawalick has held various positions of increasing responsibility in the DCPD Compliance, Regulatory, Risk Management and Emergency Preparedness organizations and has been employed by PG&E for 25 years and in the nuclear industry for 33 years. Ms. Zawalick previously held positions as Senior Director of Regulatory, Risk and Decommissioning and as Chief of Staff in the Generation organization. Mr. Garcia then introduced DCPD Decommissioning Environmental and Licensing Manager Mr. Philippe Soenen to make the next informational presentation and stated Mr. Soenen holds a Bachelor's Degree in Mechanical Engineering from the University of California San Diego and has more than 20 years' experience in the nuclear industry having worked in a variety of licensing positions at PG&E in the areas of licensing, project management and licensing renewal including Independent Spent Fuel Storage Installation (ISFSI) applications for both the Humboldt Bay Power Nuclear Plant (HBPP) and DCPD.

Overview of License Renewal Application and Aging Management Plan Recently Submitted for the Independent Spent Fuel Storage Installation.

Mr. Soenen reported DCPD has since 2004 held a site-specific license for its ISFSI which has an initial term of 20 years. The ISFSI is licensed for the storage of high burnup fuel and was sized and licensed to accommodate all fuel for 40 years of operation. He reported the spent fuel storage system presently in use at the ISFSI is the Holtec HI-STORM 100 System with a site-specific seismic anchorage feature. The DCPD Cask Transfer facility is also within the scope of the license renewal for the ISFSI as are the Transporter and some ancillary items related to transportation of the spent fuel storage casks. Mr. Soenen reported to date DCPD has completed seven spent fuel loading campaigns with 58 casks loaded with 32 fuel assemblies within each cask.

Mr. Soenen reported DCPD submitted its License Renewal Application (LRA) for the ISFSI to the NRC in March 2022 in accordance with the requirements of 10 CFR Part 72. He reported the NRC will review the LRA using NUREG⁸-1927, which he stated is the standard review plan to ensure adequacy of the application in accordance with NUREG-2214 which addresses the requirements for Managing the Aging Process in Storage (MAPS). Mr. Soenen reported there is also industry guidance from the Nuclear Energy Institute (NEI) through NEI 14-03 Guidance for Aging Management of Dry Cask Storage and Mr. Soenen reported concerning precedent that PG&E has received ISFSI license renewal approval for HBPP and in these efforts has followed the precedents set by ISFSI license renewals for the Rancho Seco Nuclear Generating Station near Sacramento in California and the Trojan Nuclear Power Plant in Oregon and he remarked the requests for additional information and the responses submitted in the development of the initial license application were taken into consideration concerning the LRA.

Mr. Soenen reviewed the contents of the LRA which follow the requirements of the guidance documents. In preparing for ISFSI license renewal for DCPD Mr. Soenen reported the first task was to determine what parts of the system are within the scope and require review

⁸ NUREG is the acronym for Nuclear Regulatory Commission Regulation.

regarding aging management which is determined by two criteria. Criterion I is based upon a system or component that is important to maintaining a safety function during normal and abnormal conditions. Criterion II is based upon a system or component if it were to fail could prevent the safety function of a Criterion I system or component. He gave the examples of items that are not within the scope as including helium gas as it is considered to be an environmental material and therefore is treated as part of the environment for aging management purposes. The rockfall fence at the ISFSI is likewise not within the scope of aging management as its failure would not prevent safety equipment or components from performing their function. In response to Consultant Wardell's inquiry Mr. Soenen confirmed the rockfall fence is a defense-in-depth feature and analysis has determined the geologic composition of the hillside would not threaten the ISFSI even if the rockfall fence had not been installed. When a component or system is identified to be within the scope, its subcomponents are also reviewed, for example the multipurpose canister includes the shell, the lid, and the fuel basket material all of which are required to be assessed for aging management and are reviewed for their material properties, the environmental combinations, and MAPS principles to determine the applicable aging effects or mechanisms and the aging management program necessary to address these. He reviewed and described the components of the analyses as they apply to the multipurpose canister, its lid and the reinforced concrete storage pads on which the casks sit. Mr. Soenen reported for the LRA PG&E has proposed six different Aging Management Programs (AMP) each of which contains ten elements including:

- Scope of the Program.
- Preventive Actions.
- Parameters Monitored or Inspected.
- Detection of Aging Effects.
- Monitoring and Trending.
- Acceptance Criteria.
- Corrective Actions.
- Confirmation Process.
- Administrative Controls.
- Operating Experience.

Mr. Soenen reported through the use of this process the NRC is able to use its standard review plan to confirm the different elements of the AMP have been addressed and the intended function of all systems and components in the AMP will be maintained based on the periodicity of the inspections that will be performed for each of the six AMPs.

Mr. Soenen then reviewed the six AMPs as follows:

- High Burnup Fuel AMP – relies on the joint Electric Power Research Institute (EPRI) and U.S. Department of Energy High Burnup Dry Cask Storage Research and Development Project. He reported there is a demonstration cask available for the storage of high burnup fuel and that information is being developed to be used to determine the needs to be considered for high burnup fuel storage over a longer period. In response to Dr. Budnitz' inquiry Mr. Soenen stated the aging phenomena concern for high burnup fuel is principally related to its

transportation and he reported that temperature data from the demonstration cask has indicated the analyses are conservative and temperatures seen are lower than anticipated. Mr. Soenen reported three formal evaluations of the High Burnup Fuel AMP will occur: prior to March 2024 (end of the initial license); March 2034 (ten years after first assessment); and March 2044 (ten years after second assessment). In response to Dr. Budnitz' observation Mr. Soenen stated the ten-year review time intervals were selected based on a sufficient time for new information to be developed and they will focus on whether data from the instrumentation within the demonstration cask has identified unexpected results and also on industry operating experience. Mr. Soenen confirmed in response to Mr. Wardell's query that the demonstration cask has instrumentation within the interior and that data will be assessed in context of the system and the fuel stored at the DCPD ISFSI. Mr. Soenen confirmed there will be guidance documents which will provide the criterion and scope of the evaluation of the assemblies consisting of the highest burnup fuel. In response to Consultant Wardell's inquiry Mr. Soenen stated the validation provided by the demonstration cask data is important in context of the federal government eventually taking possession of and transporting the spent fuel.

➤ Multipurpose Canister – consistent with American Society of Mechanical Engineers (ASME) Code Case N-860 which provides the scope and selection criterion based on susceptibility of the site and the canister material which Mr. Soenen stated will provide a ranking and determination of how many canisters will be inspected. He reported the initial frequency of inspections will be five years which, together with the scope, is subject to adjustment. Dr. Budnitz reported the ASME Code Committee revisits the codes every five years and Mr. Soenen confirmed the review is not code revision-specific and if revisions take place DCPD would comply with new guidance. He stated the inspection program for the multipurpose canisters will be performed robotically. In response to Dr. Peterson's inquiry regarding inspection of the welds Mr. Soenen replied the AMP does not define a different inspection specific for the welds which are inspected as part of the inspection of the accessible surfaces and as the welds are in locations susceptible to stress corrosion cracking and as such any indications would result in enhanced analysis.

In response to Consultant McWhorter's request, Mr. Soenen reported a qualified inspector is stationed next to the operator of the robot which is used to take video and photos and enhanced inspection and depth measurement is undertaken and, in response to Dr. Peterson's inquiry, if an indication is found and reviewed in context of the ASME Code requirements it would be entered into and reviewed under the Corrective Action Program. He confirmed Mr. McWhorter's observation the ASME Code is very definitive as to the disposition of the findings of the inspection. In response to Dr. Lam's question Mr. Soenen reported the inspection procedures are awaiting development based upon the NRC approval of the LRA and when developed will meet the same quality requirements for other DCPD procedures. In response to Consultant Wardell's inquiry Mr. Soenen stated that in the event repair of a cask was necessary, a cold-spray overlay could be applied, as was done by the San Onofre Nuclear Generating Station (SONGS) in Southern California, however, he stated this is not yet a code approved process. With reference to removal of fuel from a multipurpose canister Mr. Soenen stated the first option would be the installation of a new confinement boundary, such as provided by a sleeve configuration or placing the canister in a transportation cask. DCPD has demonstrated the ability to reopen a cask

as part of the loading process and that ability remains as long as a spent fuel pool remains available but he remarked additional risk is created in opening a cask.

- Transfer Cask AMP - Mr. Soenen stated 100% visual testing of the accessible surfaces and for leaks in the water jacket would be performed prior to each use and will remain valid for five years.
- Overpack AMP- Mr. Soenen reported the Overpack inspection of all exterior accessible surfaces, the seismic anchorages and the concrete for any indication of potential signs of degradation on the cask bottom would occur with a frequency of every five years. At the time of a robotic inspection of the multipurpose canister, the inside of the overpack would also be visually inspected consistent with MAPS. In response to Dr. Budnitz' query Mr. Soenen reported 10% of the overpack, the bottom of the overpack, is inaccessible.
- Reinforced Concrete Structures AMP – Mr. Soenen reported 100% of the above-ground accessible areas will be inspected in accordance with the American Concrete Institute guidance document including the concrete on which the overpacks sit if it becomes accessible. The bottom of the Cask Transfer Facility will also be inspected periodically as will the soil in the vicinity. The concrete shielding on the overpacks will also be measured to confirm its shielding capacity. In response to Dr. Peterson's query Mr. Soenen confirmed the bottom of the casks are substantially thicker than the shell and therefore degradation is less likely to impact the bottom of a cask. Mr. Soenen stated this year DCPD inspected the bottom two overpacks, which was not required for ISFSI license renewal and it is not planned to inspect the bottom of the overpacks as part of the AMP.
- Cask Transportation AMP- Mr. Soenen stated this component is shared with HBPP and the AMP was reviewed and approved by the NRC as part of the HBPP license renewal for its ISFSI and the same system is in use at DCPD. Mr. Soenen remarked in response to Consultant McWhorter and Dr. Budnitz' comments the site-specific licensing basis for LRA requires maintenance of cask retrievability, that is the ability to move the multipurpose canister for future transportation by the Department of Energy and as part of the requirements for aging management, and both HBPP and DCPD have site specific requirements which seismically qualify the transporter and the transportation routes.

Mr. Soenen briefly reviewed the various appendices to the LRA as follows:

- Granted Exemptions - two, regarding duplicate records which have no aging impact.
- License Changes – specifically for conditions for implementation of the LRA.
- Licensing Updates – through the Final Safety Analysis Report.
- Decommissioning Funding Report.
- Pre-application Inspection – performed but not required to obtain additional opportunities for trending information, which was witnessed by the CEC, the DCDEP representatives and DCPD's industry peers. Mr. Soenen stated the main conclusion reached is the ISFSI is in overall good condition. No impacts to safety or to its intended functions and any degraded items seen are minor and on a superficial level with the degradation rate versus

the margin validate that the recommendations from the guidance documents are adequate and adjustment can be made as needed based upon new operating experience.

- Environmental Report – an update of the original environmental report which was part of the initial application addressed the generic findings described in NUREG-2157 for Continued Storage of Spent Fuel.

In concluding his presentation Mr. Soenen reported the LRA submitted in March 2022 is expected to have a determination for sufficiency or acceptance review by July 2022, and the NRC's goal, subject to staffing and resource levels, is to have the review completed within three years and he confirmed Dr. Lam's observation with reference to the LAR that the NRC will issue a letter documenting its acceptance or denial or request for additional information. In response to Consultant McWhorter's query Mr. Soenen reported provided the LRA for an extended license remains under review by the NRC the ISFSI can continue to operate.

The Chair requested Mr. Garcia to introduce the next presentation. Mr. Garcia introduced Mr. Raheel Haroon to make that presentation on behalf of the Orano USA firm (Orano). Vice President Zawalick stated Mr. Haroon would provide technical details concerning the new horizontal spent fuel storage system manufactured by Orano for which on April 6, 2022, PG&E announced it had selected for use at DCPD.

Presentation by Orano USA on Technical Details for New Spent Fuel Storage System Including Current Cask and Horizontal Storage Module Design Used Elsewhere, Changes Proposed for DCPD to Accommodate Heat Loads and Seismic Loads, Transfer Methodology, Aging Management Methodology, and Approval to Obtaining Nuclear Regulatory Commission Approvals.

Mr. Haroon stated he would be joined in this presentation by the Manager of the Mechanical Group at Orano, Mr. Venkata Venigalla, and Mr. Ahmed Saleh who serves as part-time manager for the Horizontal Storage Modules (HSMs). He reported Orano's global portfolio deals with all uranium products including the transport of freshly mined uranium, fresh fuel, spent fuel, waste, and spent fuel pool hardware. Mr. Haroon described the components of the NUHOMS EOS spent fuel storage system which is planned for installation at DCPD including the HSMs and the Dry Storage Canisters (DSCs), which are transported within a transfer cask loaded from within the spent fuel pool, to be stored horizontally within the HSMs. Mr. Haroon observed horizontal storage lowers the center of gravity of the DSC which provides for more seismic stability. Having the multiple HSMS in proximity to each other aids in self-shielding and lowering dose rate to the public.

Mr. Haroon reported on a previous cask loading campaign for full fuel offload conducted by Orano at the Duane Arnold Energy Center, a nuclear power plant located in Iowa. He reported 30 DSCs were involved in the loading process which he described as a very routine, four-day process per DSC with the first day involving loading the fuel assemblies into the DSC in the spent fuel storage pool, with the heat load for each assembly having been analyzed to determine its placement to ensure the maximum allowed heat load for the DSC is not exceeded. The DSC is then removed from the spent fuel pool and the outside of the cask is decontaminated and two

separate lids are welded, without the DSC being pressurized, with the inner lid forming the primary confinement boundary and the outer lid providing a redundant boundary. Mr. Haroon stated when the DSC lids are welded this represents the last time the DSC will be vertical. The DSC is then transferred to the transfer cask, laid down on to the trailer, taken to the storage location, pushed in to the HSM, and the HSM door is bolted in place. Mr. Haroon reported the process is paced to provide a timely respite for the personnel involved. Mr. Haroon stated he intended to provide a video of the offload at the Duane Arnold plant but unfortunately the video would not play during the DCISC meeting.

Mr. Haroon displayed a photo of a DSC and reported the DSCs to be used at DCPD will have 37 compartments. He commented on the function of the inner and outer cover plates and stated the grapple device to allow for pushing and pulling a DSC is located on the bottom.

Mr. Haroon reported that the design features which enable the proposed increase in the heat load capacity provided by the DSC include the treatments of materials used in the basket and coatings on the stainless steel to allow for optimum heat transfer through conduction from the fuel out to the DSC surface. He reported that once the DSC is placed within the HSM cooling is provided by outside air that is directed to cool the center of the DSC. He reported the highest temperature within the DSC is in the center area. Mr. Haroon reported there has never been a failure of a DSC and the DSCs are designed to be unloaded and the contents transferred and this capability was required to be demonstrated to the NRC. In response to Consultant Wardell's inquiry Mr. Haroon replied that unloading a DSC would need to take place either within a spent fuel pool or within a hot cell.⁹ Mr. Haroon stated at this time a hot cell is not planned for inclusion with the NUHOMS EOS system planned for DCPD and Orano does not at present have a hot cell in its inventory. Dr. Peterson remarked that the nuclear fuel reprocessing plant at LaHague in France has a hot cell, as does the VTT Center for Nuclear Safety in Finland and Dr. Peterson commented adding a hot cell would be a major construction project but it is technologically feasible to do so. Dr. Peterson remarked if a problem occurred with a DSC or a Holtec multipurpose canister, the DSC or multipurpose canister could be packaged within a transportation cask which is not reliant on the integrity of the DSC or the multipurpose canister.

Mr. Haroon reviewed the margins available for temperature versus heat load including the high burnup fuel. He reported that in the initial Safety Analysis Report, Orano was requested to provide for a design heat load of almost 37 kilowatts. For the Safety Analysis Report, Orano predicted a maximum Peak Clad Temperature (PCT) of 348 degrees Celsius. He stated that after the passage to time this was found to be conservative and the design heat load was reduced to almost 33 kilowatts in a License Amendment Request. Dr. Budnitz explained that the PCT observed the peak clad temperature referred to in the PowerPoint slide used by Mr. Haroon represents the hottest clad point of any of the fuel rods. Mr. Haroon stated the evaluation for the License Amendment Request set a maximum peak clad temperature of 318 degrees Celsius. He stated that when the DSC were actually loaded and temperatures measured the maximum

⁹ A hot cell is a shielded nuclear radiation containment chamber. The word "hot" refers to radioactivity. Hot cells are used in both the nuclear-energy and the nuclear-medicines industries. They are required to protect individuals from radioactive isotopes by providing a safe containment box in which individuals can control and manipulate the equipment required.

temperature inside the DSC was found to be 229 degrees Celsius, almost 100 degrees Celsius lower than the methodologies Orano typically uses to predict maximum heat clad temperature. He stated the Electric Power Research Institute has conducted numerous studies to try to understand the reason for the difference and Mr. Haroon stated the assumptions typically used in a licensing analysis are all skewed toward coming out with a higher temperature (conservative). An example is the use of 100 degrees Fahrenheit as the assumed ambient air temperature in the licensing analysis but that the ambient air temperature was 75 degrees when the actual temperature measurements were conducted. Additionally, he stated that a number of components inside the fuel basket are actually in contact with each other but as part of its methodology for licensing Orano assumes there is a gap which he described as a very conservative estimate. Mr. Haroon stated the current thinking is that when it starts to heat up, the gap decreases and goes away and this causes a large drop in temperature. In response to Consultant Wardell's inquiry, Mr. Haroon confirmed Orano does not know exactly by how much the expansion of the aluminum basket closes the gap. The difference from the licensing basis versus what was really measured is about 90 degrees Celsius in the conservative direction and Orano believes the gap could be one of the major drivers of this conservatism. Mr. Haroon stated the purpose of the data he presented to the DCISC was to show that the methodologies that are utilized in predicting PCT inherently have a large conservatism built in because of assumptions need for licensing evaluations. He remarked Orano will never know by how much the gap closes and he stated what matters is that the actual temperatures are much lower than the numbers used to develop the design and license basis. In response to Consultant Wardell's comment Mr. Haroon stated Orano does not take credit for the actual lower temperature in the design and license basis of any of its systems. Dr. Budnitz stated he was surprised by the differences between the measurements and the best estimates described by Mr. Haroon. Dr. Budnitz stated he understood why the conservatisms and the license calculations are what they are but with the same ambient temperature and same heat load it is difficult to understand why the best estimate cannot get closer to the actual measurement. Dr. Budnitz stated the most likely explanation is that the analysis uses a different configuration than the measurements. Mr. Haroon stated the issue described by Dr. Budnitz remains under ongoing review. Dr. Budnitz remarked he would await the results because if you don't know what's going on, then there is a lack of understanding to which Mr. Haroon agreed and commented that the analysis and assumptions always tend to the conservative side. In response to Consultant McWhorter's observation regarding gaps versus no gaps Dr. Budnitz remarked that this is the configuration issue he mentioned but it may not be the only configuration issue and other configuration issues might be related to modeling the convection, conduction or radiation properties.

Mr. Haroon agreed with the Consultant Wardell's observation that it was good the measurements are lower than the best estimates and Mr. Haroon noted they are significantly lower than the best estimates used by the Electric Power Research Institute (EPRI) and independent engineers throughout the world for licensing analysis purposes. In summarizing his overview of heat versus heat load in context of significant margins Mr. Haroon presented the following information as a PowerPoint:

- The licensing basis evaluation initially considered 36.96 kW heat loads resulting in a PCT of 348°C.

- As the project progressed, the same fuel assemblies were re-evaluated using improved methods that resulted in the heat load being reduced to 32.934 kW and the resulting PCT from analysis was 318°C.
- In contrast the measured temperature was 229°C which is significantly lower than the PCT calculated from analysis and is also significantly lower than the limit of 400°C established by the NRC.
- This demonstrates the conservatism inherent in the methodologies that go into designing and licensing the used fuel storage/transportation systems.

Mr. Haroon reported on the seismic design of the HSMs. He pointed out that the HSMs can be configured back-to-back in tied-together, top and bottom, arrays of three by two HSMs so that in the event of a seismic event the HSMs arrays move jointly as one array and due to their center of gravity they do not tip-over. He reported the HSMs were evaluated as to their ability to minimally shift on a concrete pad, and this was the same configuration used at the San Onofre Nuclear Generating Station (SONGS) in Southern California. In response to Dr. Peterson's inquiry Mr. Haroon replied the minimum number of HSMs required for the configuration he described is six HSMs and for licensing analysis a minimum of three HSMs was used. The HSMs can be configured in two different configurations, a single array (three HSMs) and back-to-back (six HSMs). For the installation at DCPD it is proposed that both configurations be used with at least one single array. He reported both of these configurations have been in use for 20 years and have undergone NRC review and validation for their stability and robust configuration including extensive analysis by Sandia National Laboratory and the conclusion is that tip-over will not occur at seismic levels that are higher than the seismic site load at DCPD.

Mr. Haroon reviewed the status of Orano's current licensing Amendment No. 3 with the NRC which involves review of fuel assemblies from boiling water reactors, which he stated are different from the fuel assemblies for pressurized water reactors such as DCPD due to their smaller cross sections and greater length. As a result Orano was able to fit more boiling water reactor fuel assemblies into a DSC and to increase the total heat load from 43.6 kilowatts to 48.2 kilowatts and the heat load for a single assembly 0.6 to 1.7 kilowatts which he described as very aggressive as far as cooling time, representing close to twelve or fifteen months. Mr. Haroon reported Orano also added a concept called Maximum Heat Load Zoning Configuration (MHLC) to its license to provide a variety of fuel loading options due to the wide variety heat loads and decay heat within fuel assemblies. He reported the Orano's license Amendment No. 3 is not finalized but is close to approval. He stated the MHLC concept is a good precursor for the 37-compartment pressurized water reactor canisters as there are unknowns that could take place between now and shutdown and therefore there is a need to build-in flexibility. He displayed a graph showing the heat load configuration for a boiling water reactor fuel with 89 compartments and different zoning which he described as a configuration with colder assemblies in the center where most of the conduction takes place and the hotter fuel assemblies on the outside, so the heat will come up to the center. In response to Dr. Peterson's inquiry Mr. Haroon replied the peak temperatures reached by the fuel assemblies in the center of the array are in the range of 710 degrees Fahrenheit limit through experience but all are subject to a 750 degrees Fahrenheit limit.

Dr. Peterson observed for heat transfer coefficients with natural circulation a horizontal configuration works better than a vertical configuration.

Mr. Haroon reviewed the proposed Amendment No. 4 which concerns Orano's plan to offload fuel at DCPD and proposes a change from the maximum decay heat in the license from 3.5 kilowatts to 4.5 kilowatts. He stated this goes to designing in margins and when the actual loading plan for the fuel was provided, a maximum heat load of 4.2 kilowatts was projected. He reported the design option proposed is to improve the heat transfer conducted by aluminum plates through anodizing. Additionally, Orano will employ one or two MHLCs to provide the flexibility of different loading plans. The proposed Amendment No. 4 was similar to one used at the Duane Arnold facility for which he reported the licensing went smoothly with the NRC. He reported Orano desires to use the same technique for this amendment, to keep the maximum temperature at the same level as in the current license to keep the risk low for the licensing path. Mr. Haroon stated Orano plans to do one of two DSCs at the high heat load of 46 kilowatt but the average of the DSC's at loading will be less, predicted to be less than 43 kilowatt and he stated some margin will be available for the majority of the DSCs. In response to Consultant McWhorter's inquiry about the impact on scheduling of new information or other issues preventing obtaining this license amendment and as a result of Orano having to proceed with a lower heat load, Mr. Haroon stated it would be difficult to assess the impact but he estimated, based on preliminary numbers, instead of the final offload being in July it could be delayed to September or October.

Mr. Haroon displayed a graph showing what he described as the rapid reduction in the heat load for a fuel assembly from 4.2 to 3.5 kilowatts over a six-month period, and he remarked that the decay will continue but get progressively slower after six months.

Mr. Haroon stated the convection properties from the horizontal configuration are optimized by bringing in outside air to the DSC from the bottom of the HSM, which cools the entire surface of the DSC and he stated this is the advantage of the Orano system in removing the high heat load and is based on the degree of margin built into the system. He observed with climate change and resulting extreme heat, the design remains valid. In response to Dr. Peterson's inquiry Mr. Haroon stated the outside of the basket is aluminum fortified in the interior with steel to transfer structural loads and holes are provided to access the bolts holding the basket together. Dr. Peterson remarked aluminum materials have a very high thermal conductivity which helps to pull heat out. Mr. Haroon reported three plates are utilized, one of steel, another of aluminum, and a third of an aluminum metal matrix composite and all create conductive pathways to remove heat.

Mr. Haroon reported concerning landslides at the ISFSI located at DCPD, the proposed configuration of the HSMs has the single array oriented so that the rear of the single array faces the direction of the hillside, the source of a possible landslide and there are no HSM vents in that direction. Therefore a landslide should have no impact on the thermal effectiveness of the HSM. He reported the connected HSMs share access to the air inlet vents, such that if one inlet vent is blocked the HSM is able to receive air from the other modules. He reported that landslides are not included in the design considerations for the Orano system and the orientation he described addresses a beyond design basis event.

In response to Dr. Peterson's question Mr. Haroon reported that 69 HSMs will be required to complete the offload at DCP. In response to Consultant McWhorter's query Mr. Haroon stated the Orano system proposed for DCP, as it is a newer license, does not include an aging management plan but he stated it is not very different from other NUHOMS systems for which Orano has received licensing renewal and for which four or five aging management inspections have taken place. Mr. Haroon stated Orano has timely completed four full core offloads with zero safety or regulatory issues and all were accomplished under the dose goal set for those campaigns.

A video was played of the NUHOMS aging management inspection at SONGS.

Dr. Budnitz called for questions from the public on Mr. Soenen and Mr. Haroon's presentations.

Ms. Linda Seeley, a Member of the Diablo Canyon Decommissioning Panel (DCDEP) who also serves as the DCDEP's unofficial liaison to the DCISC was recognized. Ms. Seeley posed several questions including first, how degradation on high burnup fuel cladding was identified as the fuel is sealed inside a multipurpose canister [MPC-Holtec] or within a DSC [Orano]; second, what is the status of the 19 MPCs which were previously loaded improperly and how would problems be addressed; third, what are the risks associated with returning a degraded MPC or DSC to a spent fuel pool for transfer; and fourth, could this be done and could a damaged fuel canister subsequently be transported? Ms. Seeley also observed in Mr. Haroon's presentation the heat cladding temperatures were given in Celsius while the ambient temperature was given in Fahrenheit. Dr. Budnitz and Mr. Haroon agreed Ms. Seeley's observation regarding the different temperature scales was valid and Mr. Haroon stated he would give both temperatures to Fahrenheit for future presentations. In response to Ms. Seeley's remark that a hot cell could be built at DCP but it would be very expensive, Mr. Haroon commented the approach under consideration would be to use a transport cask or employ an oversleeve configuration neither of which would require a hot cell.

Mr. Soenen responded to Ms. Seeley's inquiry and stated the reference to no degradation being observed on the cladding on high burnup fuel was in reference to the data from the demonstration DSC which did have instrumentation in place which indicated there were no signs of degradation. With regard to the 19 MPCs which were not loaded consistent with the Technical Specifications, Mr. Soenen stated an evaluation was conducted and reviewed by the NRC which determined all continue to be in a safe, analyzed, condition with all heat requirements maintained and their locations are known. He stated damaged fuel is allowed to be transported if it is placed in damaged fuel canisters and maintained sub-critical in accordance with 10 CFR Part 71 transportation requirements and by inserting the canister into a transportation cask the transportation cask provides the new confinement boundary. Establishing a new confinement boundary is the preferred option, however, there are procedures for spent fuel pool transfer which includes additional activities but with those activities comes an increase in the risk potential.

Ms. Carrie Sisto was recognized. Ms. Sisto stated she was employed by the County of San Luis Obispo and she inquired if the overpack inspections for the Holtec and the Orano systems would be coordinated and, concerning the Orano system how many trucks would be required to travel from the Orano facilities located in Kernsville, North Carolina, to DCP. Mr. Soenen stated the aging management inspection of the Holtec overpacks were for license renewal and took place after the casks had been on the ISFSI site for 20 years and it is PG&E's responsibility to conduct, or to contract with a third party not necessarily the manufacturer to conduct, the aging management inspection. Mr. Haroon replied that there will be 69 DSCs and 5 Greater than Class C Waste Casks each of which would be transported separately to the DCP site, likely requiring a total of 74 truck trips. Mr. Haroon stated Orano was investigating the best approach to getting the HSMs on site, that is, whether to construct the HSMs on or off the plant site.

Dr. Gene Nelson was recognized, and he inquired concerning nature of the material which supports and provides the rails on which a DSC is pushed or pulled. Mr. Haroon replied the rails are made from Nitronic which is a very hard metallic material with a lower coefficient factor.

Ms. Sherry Lewis of Mothers for Peace was recognized and she inquired about the inspection frequency and the use of the demonstration canister. She commented the spent fuel canisters will have a service life of more than 20 years, but the spent fuel will remain radioactive for much longer and she remarked she doubts there is much planning being done for when the canisters do deteriorate in the future. She inquired as to the risk associated with lifting a cask to inspect the bottom, and finally what the letter "N" stood for on a can which was shown in the video. Mr. Soenen responded and stated the enclosure and encapsulation of the fuel in welded, sealed canisters provides the primary confinement boundary and if there is a breach in that boundary another confinement boundary would be provided and a transportation cask is capable of providing that boundary. For both the Holtec and Orano systems Mr. Soenen reported the transportation cask would then remain in a vertical position. Mr. Soenen reported all the degradation mechanisms discussed were slow acting and the frequency of the inspections during the 40-year license renewal period are calculated to provide sufficient time to evaluate an indication if one is found to ensure code compliance. He remarked there is considerable information known about the concrete and steel materials involved with reference to maintenance, inspection, and repair. Dr. Budnitz observed the plan by the federal government to dispose of spent fuel and other nuclear materials underground never came to fruition and until such a plan is developed, a site selected for the repository and its technical efficacy accepted, all such materials will remain on the earth's surface for an indeterminate and unknown time and so they will need to be watched carefully to assure they remain safe which is possible, albeit difficult and expensive. Ms. Lewis remarked that for some problems there is simply no solution and therefore we should stop creating the problem now. Dr. Lam reported the NRC has issued its Waste Confidence Rule which confirms there will be a national solution for nuclear waste. **Dr. Budnitz commented the DCISC's remit is to evaluate, examine, and ask questions about the safety and efficacy of PG&E's plans and he remarked the Orano system proposed for DCP will be evaluated in detail by the DCISC and the Committee will opine independently on its assessment.**

AGENDA PACKET DRAFT – SEPTEMBER 15, 2022

Mr. Scott Lathrop, a Member of the DCDEP was recognized. Mr. Lathrop stated he was not representing the DCDEP tonight and he inquired about the difference in the heat loads between the Orano system in use at SONGS and that proposed for DCPD; as to the ability of the Orano system to survive the sheer forces of a seismic event; and as to the area between the DSC and the overpack. **Dr. Budnitz replied the DCISC will perform an independent seismic evaluation to understand the seismic adequacy of the Orano design for use at DCPD akin to the evaluation performed by the Committee of the Holtec system.** Dr. Lam remarked Mr. Haroon's presentation this evening was qualitative and pictorial in nature and much more data on the heat and seismic characteristics must be provided. Mr. Haroon stated for SONGS, Orano implemented a 24 kilowatt system which only had 24 fuel assemblies. For DCPD a 37 fuel assembly system is proposed and over time the capacity has increased and the heat flow has decreased. He reported the gap between the canister and the module is significant and sufficient to have a heat shield in between.

Mr. Bruce Severance was recognized. Mr. Severance stated he is a Member of the DCDEP but is not representing the Panel this evening. He commented on the difficulties and the deadlock encountered by the federal government in developing a federal spent fuel repository and he stated the DCDEP received information that the half-life of uranium 235 and other elements is between 1,000 and 10,000 years. Dr. Budnitz stated the period involved is longer as there are numerous isotopes involved with differing half-lives. Mr. Severance questioned how durable a canister constructed of one-inch stainless steel might be and he commented there would seem to be a way to project the lifetime of such a canister and to assess the degradation level of the material contained within such a canister. He commented there is foresight and consideration given to the near-term durability and transferability but his concern is for long-term durability and transferability. He inquired, since PG&E plans to lease the DSC transfer vehicle from Orano, whether there would be immediate access to that vehicle should it be needed. Mr. Haroon reported he did not have information on the transport time from the source facility for the transport vehicle, which is located in South Carolina, but he stated it was his understanding that if an emergency situation occurred, provided the vehicle was not in use at another facility, the vehicle would be made available.

Dr. Budnitz responded and remarked PG&E would be able to provide the various rate of decay for nuclides in the spent fuel and their half-lives. He reported the bulk of spent fuel is composed of U-238 which is radioactive, has a half-life of four and one-half billion years, but very benign in that it is not considered toxic in the same way as more dangerous fission products and other actinides. The second most important component of spent fuel is U-235 which has a much shorter half-life of seven hundred million years and is also not of concern as to its toxicity. Dr. Budnitz reported it is the shorter-lived fission products, some with half-lives of thirty years, and a few of the actinides that are of real concern. Dr. Lam remarked there also needs to be a means of spreading these extremely toxic radioactive materials.

Ms. Sheila Baker was recognized and she inquired whether there was a concern regarding the 74 trips by truck required to deliver the DSCs to DCPD to which Dr. Budnitz responded that the issue is beyond the Committee's remit but it is within the purview of the DCDEP.

XX ADJOURN EVENING MEETING

The Chair thanked Mr. Soenen and the other PG&E representatives and Mr. Haroon and stated the meeting would resume at 9:00 A.M. the following day and he then adjourned the evening meeting of the Committee at 8:05 P.M.

XXI RECONVENE FOR MORNING MEETING

The June 23, 2022, public meeting of the Diablo Canyon Independent Safety Committee was called to order by its Chair, Dr. Robert J. Budnitz at 9:00 A.M. Dr. Budnitz welcomed those persons attending in person and by Zoom Webinar and watching the proceedings on live streaming video. He introduced the Committee members and staff present for this meeting.

XXII COMMITTEE MEMBER COMMENTS

Dr. Budnitz stated that due to the scheduled for refueling outage 2R23 there exists a conflict with the dates chosen previously during this public meeting for the DCISC's October 2023 public meeting. The Committee proceeded to reschedule its final meeting in 2023 from October 11-12, 2023 to Wednesday and Thursday, September 20-21, 2023. The date for the previously scheduled September 2023 fact-finding by Dr. Budnitz and Mr. McWhorter was also changed to August 30-31, 2023, and the fact-finding previously scheduled by Dr. Lam and Mr. Wardell was rescheduled to August 9-10, 2023. Mr. Garcia promised to review the new dates chosen and provide confirmation that the plant can support the DCISC on those dates. [These dates are included in Section VI. A above.]

XXIII PUBLIC COMMENTS AND COMMUNICATION

The Chair reviewed the invitation to address remarks to the Committee on matters not on the agenda for this public meeting and invited any comments from members of the public who wished to address the Committee to do so now. There was no response to his invitation.

XXIV TECHNICAL CONSULTANT REPORTS & RECEIVE, APPROVE, AND AUTHORIZE TRANSMITTAL OF FACT FINDING REPORTS TO PG&E (CONT'D.)

The Chair requested Consultant Wardell to report on the April 12-13, 2022, fact-finding visit with Dr. Peterson. He reviewed the topics discussed with PG&E during the April 12-13, 2022, visit as follows:

➤ Meet with Acting NRC Senior Resident Inspector – Mr. Wardell reported the Fact-Finding Team (FFT) met with the Acting NRC Senior Resident Inspector to review and receive information on topics to be discussed with DCPD during the fact-finding, to discuss refueling outage 1R23 and associated infrequently performed evolutions and operations, and personnel training matters including Simulator Facility training and procedure reviews. The FFT also discussed with the NRC Resident some previous problems during outages with fuel handling equipment, with no problems having been encountered during 1R23 and the problems

experienced with replacement of a Residual Heat Removal System relief valve.

- FLEX¹⁰ Program Update – Consultant Wardell reported this was a periodic review with no problems previously identified. He reported the FLEX portable equipment is positioned to prepare the station for beyond design basis events and some equipment is stored in a special storage building shared with the plant's Fire Department while other equipment such as trailers, trucks, piping, and various machinery is stored in various locations outside. Mr. Wardell reported all equipment is maintained, tested, and replaced as necessary by the DCPM Maintenance Department and was found to be operational and in proper position and the FFT concluded the FLEX Program is healthy.
- Maintenance Rule Program Status – Mr. Wardell reported this was a periodic review of the NRC Maintenance Rule, 10 CFR 50.65, which measures the effectiveness of preventive maintenance of systems, structures and components at the station. Equipment for which preventive maintenance corrective action is needed is classified (a)(1) and once new goals are established it is monitored for six months to one year to assess effectiveness, upon which it is placed in category (a)(2) indicating an effective preventive maintenance strategy. Mr. Wardell reported 12 of 13 systems have completed (a)(1) status and were in the (a)(2) monitoring phase and one system was soon to be placed in (a)(2) status. All systems are expected to be in the (a)(2) category during 2022.
- NRC Office of Inspector General (OIG) Report on Counterfeit, Fraudulent and Suspect Parts – Consultant Wardell reported this report focused on the NRC's practices for identifying and handling counterfeit, fraudulent, or suspect parts in nuclear power plants. The FFT reviewed this report not in context of any identified weakness in the NRC's performance but regarding DCPM's multi-phased supplier evaluation process for identifying and resolving issues with suspect parts. He reported this includes looking for instances of suspected vendor misrepresentation and a receipt inspection program to identify any misrepresented vendor parts. Mr. Wardell reported the plant's Procurement Program includes steps to prevent the purchase of suspect parts and the FFT found the process to be effective and the OIG Report included examples where DCPM had previously identified suspect valves.
- Quality Verification (QV) Audit Findings - Mr. Wardell stated the FFT reviewed the status of two QV finding and determined these two findings were not escalated, that is, they were not elevated to the level of the Chief Nuclear Officer due to unsatisfactory corrective actions, but rather were elevated findings which were satisfactorily resolved in a timely way at the Operations and Chemistry organizational levels.
- Radiation Protection During Outage 1R23 & Tour Containment – Mr. Wardell reported the DCISC representatives reviewed the goals set for 1R23 for collective radiation exposure and

¹⁰ FLEX is not an acronym but describes a strategy developed by the nuclear industry to provide diverse and flexible coping strategies to address the loss of safety-related systems due to beyond design basis events.

reported the initial goal was established at 18.35 person-rem but due to excellent performance in shielding and avoiding high radiation areas, the goal was lowered to 13+ person-rem. He reported at the time of the fact-finding the actual exposure was 11.7 person-rem and at the conclusion of 1R23 the collective radiation exposure measured 18.2 person-rem which met the initial goal. The DCISC team toured containment with the Radiation Protection supervisor. Mr. Wardell reported after their tour all three individuals received a collective total of less than 1.0 millirem of exposure which he commented was virtually nothing. The FFT found the outage work was being performed effectively and safely. Dr. Peterson commented it was helpful to get inside Containment and to observe the ongoing work and photos of the DCISC team touring Containment were displayed and described by Mr. Wardell. Mr. Wardell reported the protective clothing required to be worn in Containment is now made from a paper-based material which allows the used clothing to be dissolved in hot water, with any radioactivity packaged and disposed of appropriately.

- Observe Outage 1R23 Outage Control Center – Mr. Wardell reported the Outage Control Center is located in the Administration Building where representatives of various organizations including Operations, Engineering, Maintenance, Radiation Protection and others serve as the nerve center for a refueling outage. He reported the Outage Control Center operates 24-hours per day, 7-days each week during a refueling outage, with personnel working 12-hour shifts, to review schedule and safety and to address any problems that occur. He reported the FFT found the Outage Control Center to be effective. In response to Dr. Budnitz' inquiry Mr. Wardell stated that the FFT was alert for any signs of issues with schedule adherence, emergent problems or radiation protection. Mr. McWhorter reported in previous DCISC reviews of outage planning meetings there were indications of issues with interpersonal relationships arising under stress. Mr. Wardell reported nothing similar was observed during the FFT's visit to the Outage Control Center and in response to Dr. Budnitz' observation concerning ineffective shift turnover Mr. Wardell reported the FFT observed a shift turnover during the visit.
- Workplace Seismic Safety – Consultant Wardell reported the plant has taken action in response to the DCISC's recommendation to improve workplace seismic safety to prevent items from injuring personnel or blocking their access during seismic events and he reported good processes and procedures are now in place. The FFT toured the instrumentation and electrical facilities and found everything to be in good order and concluded the Workplace Seismic Safety Program performance appears to be satisfactory in adhering to its standards.
- Configuration Management Program – Mr. Wardell reported this was a periodic review of this program which is intended to ensure plant documents reflect the correct as built configuration, including any modifications, and he reported the program presently has no backlog which he described as good performance.
- New Independent Spent Fuel Storage Installation Cask System – the FFT met with Director Tom Jones and Manager Phillippe Soenen to receive information concerning the Orano dry cask storage system and this topic was presented during this public meeting. Mr. Wardell stated the information received by the FFT was similar to that presented to the DCISC.
- Human Performance Update – Consultant Wardell reported this was a periodic review to

AGENDA PACKET DRAFT – SEPTEMBER 15, 2022

review station human performance events which he characterized, in order of severity from highest to lowest, as station level events, department, level events, and organizational learning opportunities. All but one event during 2022 were low-level organizational learning opportunities with one station level event.

➤ Meet with DCPD Officer, Site Vice President Mr. Adam Peck – Mr. Wardell reported he and Dr. Peterson discussed the topics reviewed during the fact-finding with the Site Vice President Peck.

➤ Observe Corrective Action Review Board Meeting – the FFT observed this meeting remotely and Mr. Wardell reported the Corrective Action Review Board is a management group which reviews higher level notifications submitted to the Corrective Action Program to ensure they are properly dispositioned to prevent recurrence. The FFT found the Corrective Action Review Board to be effective with clear communication and well defined responsibilities and its actions were accepted by the personnel involved.

Following a motion by Dr. Lam seconded by Dr. Budnitz the April 12-13, 2022 Fact Finding Report was accepted by the Committee.

Dr. Budnitz requested Consultant McWhorter to report on the May 18-19, 2022, fact-finding with Dr. Lam. Mr. McWhorter reviewed the topics discussed with PG&E during the May 18-19, 2022, as follows:

➤ Learning Services Department – Mr. McWhorter reported DCPD completed its last class of licensed operators in early 2021 with a 100% pass rate. At the time of the fact-finding a non-licensed operator class of 11 candidates was scheduled to conclude in May 2022. He reported at this point the Training Department will be transitioning with Operations training to become a departmental managed training requalification effort for both licensed and unlicensed operators. Technical training for Maintenance personnel will continue under the Training Department to maintain qualifications and for new engineers, but Mr. McWhorter reported as the numbers of maintenance activities decreases as plant closure approaches, Maintenance organization staffing is being slowly reduced. He reported Training organization's Excellence Plan and Performance Improvement Dashboard found some gaps regarding exam security which are being addressed. Mr. McWhorter reported there will be a new program established to train certified fuel handlers for post-shutdown operations when the plant will no longer have a commitment for licensed operators. He reported the certified fuel handler training program will be run by the Decommissioning organization which is in the process of beginning to coordinate that effort. In response to Consultant Wardell's inquiry Mr. McWhorter replied that at present there is a mix of contractor personnel from Westinghouse and DCPD personnel involved in the movement of fuel at DCPD. PG&E Director Mr. Tom Jones reported certified fuel handler positions will become minimum staff positions during decommissioning and the certified fuel handlers will be PG&E employees. In response to Consultant Wardell's inquiry Mr. McWhorter reported there is one more accreditation activity to be provided by the Institute of Nuclear Power Operations (INPO).

➤ New Spent Fuel Storage System – Consultant McWhorter observed the FFT briefing

contained much of the same information presented last evening to the Committee by the Orano representatives and Mr. Jones is scheduled to report on this topic later during this public meeting. Dr. Lam commented the presentation received during the fact-finding contained greater technical detail than was presented last evening and he stated PG&E went through a very deliberate process of screening and selecting the design and the vendor for the new DCPD spent fuel storage system. He observed the use of this new technology allows an accelerated timeframe for moving spent fuel from the spent fuel pools to the ISFSI and this will require significant changes to decommissioning scheduling and management as well as to the Committee's timeline for its post-shutdown activities. Dr. Budnitz observed the number and types of activities during the transfer are simplified by the new system as the canister is not required to be transferred from a transport cask to a storage cask. Mr. McWhorter stated it will be important to understand with reference to the ISFSI licensing process that there are two completely different and separate licenses, one for the current casks licensed under the site-specific 10 CFR Part 72 license and the new casks being licensed under a general 10 CFR Part 72 license incorporated into DCPD's 10 CFR Part 50 license, and this will lead eventually to different aging management plans. Dr. Budnitz observed the NRC safety objective for both licenses is the same and therefore if implemented correctly they offer comparable levels of safety and there are other nuclear power plants which utilize two or even three different spent fuel storage systems. Dr. Lam stated his prior concerns about an aggressive licensing schedule have been somewhat lessened. Mr. McWhorter stated the certified fuel handler training program is not required to be INPO accredited program but DCPD will employ INPO's systematic approach to training in designing and implementing the training program which is to be approved by the NRC.

➤ **Containment Structure Inspections** – Consultant McWhorter stated Containment inspections are performed for the concrete structure, the steel liner, and through an integrated leak test. The FFT reviewed the inspection of the Containment concrete for both units in 2021. He reported these are visual inspections are now conducted using a drone which contains a camera which meets the applicable code standards for resolution. The indications are categorized as first tier defects, which can be dispositioned for acceptability by visual examination of the photos; second tier defects, which are reviewed by a professional engineer; and greater than second tier defects, which are entered into the Corrective Action Program. Previous indications are tracked and during the 2021 inspection two new indications greater than second tier were identified, both on Unit 1. Overall, Unit 1 has 28 identified greater than class two defects while Unit 2 has 20 such identified defects. In all cases an engineering evaluation found the defects to be acceptable with no repair or additional inspection frequency required. The FFT concluded the Containment structures continue to be in acceptable condition.

➤ **Nuclear Fuel Performance** – Mr. McWhorter reported the FFT reviewed the core design for future onloads and he stated that DCPD is working to optimize upcoming refueling outages based upon one-third of the nuclear fuel being replaced during each refueling outage and hence it is unavoidable that new fuel will be loaded during the last outage prior to shutdown which when it is removed will have been in the core for only one cycle prior to shut down. The FFT concluded fuel performance at DCPD continues to be excellent.

➤ **Flow Accelerated Corrosion Program** – Mr. McWhorter stated this program monitors the effects on piping of an accelerated corrosion phenomenon which occurs when carbon steel

piping is subject to erosion and the buildup of a corrosion layer due the passage of hot liquid or a mix of liquid and steam that can result in rapid wall-thinning and sudden rupture. Under the Flow Accelerated Corrosion Program proactive inspection of susceptible sections of piping is conducted. Mr. McWhorter reported many sections have been replaced over time with other than carbon steel pipe which is not as susceptible to the phenomenon. With the approach of cessation of generation operations, inspections are being reduced as there is assurance for the remaining life of the plant of the integrity of the piping. For the latest inspection of Unit 1, no repairs were identified and Mr. McWhorter stated the program continues to be effectively managed but this represents a program that in the event DCPD were to continue power generation operation after 2025 would require significant work to return the inspections to the required frequencies necessary for continued operation.

- Containment Spray System – Mr. McWhorter reported the Containment Spray System sprays water into Containment in a post-accident scenario for cooling, depressurization and chemical control. Systems for both units are in rated in Green status with no issues.
- Radiation Protection Department Performance During Refueling Outage 1R23 – Consultant McWhorter reported the FFT reviewed performance by the Radiation Protection Department during 1R23. With reference to collective radiation exposure outage performance the planned goal was 21.25 person-rem, later revised to 18.35 person-rem and the 1R23 outage achieved 18.332 person-rem exposure which Mr. McWhorter stated was best ever performance for Unit 1. He reported Unit 2 set a world record for collective radiation exposure but he reported Unit 2 has a lower source term and its dose performance was assisted by the earlier shutdowns for work on the Unit 2 Main Generator. He reported the FFT found no performance issues or concerns with Radiation Department's performance but the Department is experiencing a slow decline in staffing as the Department's function will be reduced post-shutdown. The As Low As Reasonably Achievable (ALARA) Program distribution saw 39 persons who received more than 100 millirem exposure, 7 with more than 200 millirem with highest single exposure being 379 millirem, all of which Mr. McWhorter reported were within limits and planned dosage and are consistent with industry best practices. The FFT concluded performance for the Radiation Protection Department during 1R23 and overall was very good.
- Meet with NRC Acting Senior Resident Inspector- the FFT met with the Acting Senior Resident and the Resident Inspector, and two representatives of NRC Region IV on a video conference, to discuss the NRC's response Office of Inspector General's Report on the oversight of the Auxiliary Feedwater System. Mr. McWhorter stated the information received was consistent with the written response by the NRC. He reported the new permanent Senior Resident Inspector has now reported to DCPD and is on site.
- Meet with DCPD Director – Dr. Lam stated he met with Director of Strategy, Policy and Engagement Mr. Blair Jones to discuss the priorities and obligations of his current position. Dr. Lam reported the discussion was informative.
- Capital Project Planning – Mr. McWhorter reported this is an item of significant concern to the DCISC in view of the decision to cease power generation operation by 2025. He stated the

process used for the first few years following the Joint Proposal¹¹ having been entered into involved a project review working group reviewing all open capital projects and making a decision concerning each. Mr. McWhorter reported this information was germane to cost recovery in the 2020 General Rate Case then pending before the CPUC, and with the closure of the 2020 General Rate Case the process was concluded. The plant has returned to consideration of approval of capital project being reviewed by the Plant Health Prioritization Committee under a multi-step flow chart process which includes the assessment of whether a detailed scope of work should be prepared in conjunction with a detailed design cost estimate in determining whether a project should be undertaken. The FFT reviewed the process and found it robust for assessing ongoing capital project authorization. A list of projects approved and those not approved were provided and reviewed. Mr. McWhorter gave the example of the main annunciator system in the Control Room as a system now experiencing aging and spare parts issues but which a decision was made not to replace as the issues can be addressed through implementation of a spare parts bridging strategy. Unit 2 reactor coolant pump vibration monitoring will also not be implemented due to issues inside Containment on a similar Unit 1 project. Mr. McWhorter and Dr. Budnitz observed that if a decision is taken to continue power generation operation beyond 2025 there will be a large number of systems and components for which decisions made after 2016 will require further review. Consultant McWhorter reported 18 projects have been approved for implementation since 2020, of which 7 were security related and from the remaining 11, examples include the polar crane modifications, water treatment facility upgrades, condensate polisher and computer upgrades. The FFT concluded the Capital Planning Process was working well.

➤ Refueling Outage 1R23 Results – Mr. McWhorter stated a presentation on this topic is scheduled for later in this public meeting. He reported all goals were met with the exception of power ascension and reliability after the outage due to Unit 1 having to be shut down after restart for repair on the secondary side.¹² Other than for those two metrics He stated all goals were met and the performance during the refueling outage was good. **Mr. McWhorter recommended the DCISC follow up this afternoon concerning the secondary system problem occurring during the restart following 1R23.** Dr. Budnitz observed there were no serious injuries to personnel during 1R23.

➤ Online Maintenance Scheduling – Consultant McWhorter reported this was a routine review to review the 12-week rolling maintenance scheduling cycle and process which is

¹¹ The Joint Proposal was entered into by PG&E, together with Friends of the Earth, the Natural Resources Defense Council, Environment California, the International Brotherhood of Electrical Workers Local 1245, Coalition of California Utility Employees and the Alliance for Nuclear Responsibility in June 2016 to retire DCPD at the expiration of the current operating licenses for each unit, November 2024 for Unit-1 and August 2025 for Unit-2 and was subsequently approved by the CPUC in its Decision (D) 18-01-022.

¹² Primary and secondary side refer, respectively, to the Reactor Coolant System which is used to remove heat from the nuclear reactor and to the Main Steam and Feedwater Systems which provide cooling to the steam generators and generate and provide steam to the turbines.

planned around routine preventive maintenance activities. He reported online maintenance is integrated with corrective and preventive maintenance to minimize the time equipment is out of service and at three, six and nine week intervals before the work commences risk reviews are performed by an integrated risk review team in consideration of the scope and the number of personnel involved. The Phoenix Risk Model is also used to assess the risk of taking equipment out of service and to provide a quantitative analysis of the risk based on the probabilistic risk assessment (PRA) model. The FFT concluded the procedures and programs for managing online maintenance risk at DCPD are satisfactory.

➤ Maintenance Department – Mr. McWhorter reported Mr. Mike Bass was assigned as the new Maintenance Director in January 2022 and continues to pursue previous initiatives. Mr. McWhorter reported Maintenance Department performance has generally been good recently and there have been some reductions in staff as the number of maintenance activities continues to decline. The Maintenance Department has been restructured with general foremen moving up in three major disciplines including mechanical maintenance, electrical maintenance and instrument and control maintenance. There have been no human performance events recently. The FFT also received information on the PG&E Voluntary Separation Program. Dr. Budnitz observed that longstanding procedures required that when doing maintenance on multi train systems¹³ it was well known in the industry not to undertake activities that could affect more than one train but with the PRA models it is possible to identify other component and systems that might, in combination, create problems. He remarked that Maintenance Department staff members have now become trained to understand PRA analysis model and this has enhanced their understanding of off-normal conditions and overall plant safety. Dr. Budnitz characterized this as a very positive advance. Mr. McWhorter agreed and commented when the NRC Maintenance Rule became effective in the mid-1990's it required plants to perform an analysis of online maintenance risk and to change procedures to minimize that risk and the industry struggled at that time as to how to implement that requirement and that struggle has lessened significantly with the use of PRA methods that are now integrated into maintenance processes, which Mr. McWhorter stated has made plants safer and allowed personnel to better understand their roles.

➤ Foreign Material Exclusion (FME) Program – Consultant McWhorter reported the FME Program tracks issues where foreign material is introduced unintentionally or found in a system. Such events are categorized as events, threats, or conditions with events being the most severe. During 1R23 he reported there were no events, one threat, and six conditions. The threat concerned a tool coming apart in an Eagle 21 System cabinet and one small part was lost which was assessed and the Eagle 21 System was found to be in acceptable condition for continued operation. Mr. McWhorter stated the FME Program performed well during 1R23 and the FME Program overall continues to perform well.

Dr. Gene Nelson of Californians for Green Nuclear Power was recognized. Dr. Nelson stated he was impressed by reports that Maintenance Department personnel are now trained on PRA methods and modeling and he remarked the long-term benefit of that should result in

¹³ Train in this context means a series of parts or elements that together constitute a system or produce a result.

enhancement of defense-in-depth and a better understanding of the plant.

Mr. Eric Greening was recognized. Mr. Greening stated that much of the information reported by Mr. McWhorter is premised on PG&E's assurances on the plant will cease generating electricity by 2025. He inquired that if a decision to continue operation beyond 2025 were taken whether there are items which would have been addressed differently during the most recent maintenance periods and how would the Committee evaluate these differences. Mr. McWhorter stated that while he could not speak for PG&E, if the plant were not going to shut down in 2025 there would have been a larger maintenance scope during outage 1R23 and he stated if the decision to close DCP is changed there would need to be a review and a plan developed on moving forward safely and the amount of work involved in that undertaking should not be underestimated. Dr. Budnitz confirmed in the event the plant were to continue operations the scope of work would change dramatically over the next two years in many areas for DCP and the work of the DCISC and the NRC would correspondingly increase dramatically. Dr. Budnitz observed at the present time the Committee must continue to be reactive, in the sense that these decisions are outside the control of the DCISC.

Following a motion by Dr. Budnitz, seconded by Dr. Peterson, the May 18-19, 2022 Fact Finding Report was accepted by the Committee.

A short break followed.

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

Mr. Jones introduced DCP Station Director Mr. Dennis Petersen. Mr. Jones reported Mr. Petersen holds a Bachelor of Science Degree in aeronautical engineering from California Polytechnic University at San Luis Obispo and has been employed at DCP for more than 34 years. Mr. Petersen has previously held leadership positions as Director of Operations Services, Director of Nuclear Work Management, Director of Learning Services, Director of Quality Verification and as outage manager. Mr. Petersen spent the earlier part of his career in Operations and held a Senior Reactor Operator License and led an operating crew on shift prior to assuming senior leadership roles.

Presentation on the State of the Plant including Key Events, Outages Including Forced Outage 1X24, Highlights, Organizational Changes, Status of Retention Programs, Recent Attrition and PG&E's Voluntary Separation Program Initiative, COVID-19 Pandemic Response, December 2021 Inadvertent Boron Event, and Other Station Activities since the DCISC's February 2022 Public Meeting.

Mr. Petersen stated in his presentation he would cover an update on station performance and provide information on key upcoming activities. He reported both units are presently operating at 100% power with a probabilistic risk assessment of Green. All the NRC Performance Indicators for both units are also in Green status.

Mr. Petersen reported refueling outage 1R23, the twenty-third refueling outage for Unit 1, was conducted from March 26 to April 26, 2022, and reactor refueling and key maintenance

activities were accomplished. Subsequent to the completion of the outage, after the plant had paralleled to the grid, a problem was experienced with a steam relief valve on the secondary [non- nuclear] side which caused air to be drawn into the condenser and created efficiency problems. Unit 1 separated from the grid and power was held at a low level to identify the root cause and determine the scope of repairs necessary. Upon completion of the repair Unit 1 reconnected to the grid, completed power ascension and has been at full power since with no significant issues. This event was of five days duration.

Mr. Petersen reviewed the status of the Tier II of the Employee Retention Program and reported attrition rates continue to align with the station's estimates. He reported the station is focusing on retraining and redeployment and all employees have been contacted to ascertain their intentions following the retirement of the operating licenses for both units. In response to Dr. Lam, Mr. Petersen stated the attrition rate varied over time for individual departments and is dependent upon age and experience with each department being unique. Mr. Petersen remarked since attrition rates were first determined the plant has been able to revise its estimates to preclude any significant shortfall in staffing and at this time the plant is not experiencing staffing problems.

Mr. Petersen reported PG&E has implemented a company-wide Voluntary Severance Program and DCPD senior management opted to have DCPD employees participate. He reported the Voluntary Severance Program is targeted to individuals with a certain number of years' experience and at DCPD the program has been offered to specific groups. Approximately 22 individuals have opted for voluntary severance and will separate from PG&E at the end of June 2022. In response to Consultant Wardell's inquiry Mr. Petersen reported any of the 22 individual who also signed up for Tier II of the Employee Retention Program will be allowed to retain the payments made to date but no further payments under that program will be made to them. In response to Consultant McWhorter's observation that the Voluntary Severance Program could be viewed by some as counter- productive to the methodical plans DCPD has had in place since the inception of the Joint Proposal to manage attrition and retain necessary staffing Mr. Petersen replied the process to estimate attrition is imprecise and DCPD was able to align and target the areas where staffing was available and could be reduced through the Voluntary Separation Program. He gave the examples of the project manager and design engineer and associated support staff positions as positions which were targeted due to the plant not undertaking large projects in the future because of the cessation of power operation. He reported the Operations Department operating crews and the craft ranks are not affected by the Voluntary Severance Program.

Mr. Petersen reported Unit 1 recently surpassed 20 years of operation without an automatic or a manual trip¹⁴ and with that achievement Unit 1 is now the top performing nuclear power plant in the United States with reference to automatic or manual trips. He stated achieving this performance level is a significant accomplishment for DCPD and is reflective of performing

¹⁴ The automatic shutdown of a nuclear reactor is called a reactor trip or scram.

the correct maintenance and doing it well, having appropriate timing for preventive maintenance, and effectively managing risk. Dr. Budnitz observed that in 1978, the year before the accident at the Three Mile Island Nuclear Generating Station in Pennsylvania, nuclear power plants experienced approximately one automatic or manual trip each month and since that time programs to improve reliability of equipment and to widely share details of operating experience have been undertaken in the industry and within the following ten-year period the number of trips was reduced throughout the industry by a factor of three. He stated the performance of Unit 1 as reported by Mr. Petersen was remarkable.

Mr. Petersen displayed the power history from June 2021 through May 2022 for both units showing their current and past performance. He reported that with reference to COVID-19 the plant has seen some fluctuation in the number of COVID-19 cases amongst plant personnel which correlates with and is approximate to the experience in the local community. He reported COVID-19 has had no impact of DCP's safe operation and the plant maintains its on-site testing capabilities and if necessary can implement the controls previously in place at the outset of the pandemic. He reported the Security organization has experienced a recent uptick in COVID-19 cases which is being monitored and appears to be subsiding.

Concerning upcoming station activities Mr. Petersen reported as follows:

- NRC Design Basis Assurance Inspection – June 2022.
- NRC Security Access Control Inspection – July 2022.
- Nuclear Safety Oversight Committee (NSOC) site visit – July 2022.
- NRC Radiation Protection Inspection – July 2022
- NRC Emergency Preparedness and Performance Improvement Inspection – September 10, 2022.
- Unit 2 Refueling Outage – October 2022.

In concluding his presentation Mr. Petersen addressed a question from Consultant McWhorter concerning leadership's perspective on continuing DCP's operation beyond 2024-2025. Mr. Petersen stated leadership has communicated the company's commitment to support and coordinate with the state and to abide by the Joint Proposal concerning retirement of the licenses for DCP. He reported that in response to a request from the state and the company to commence preparations to renew the licenses for DCP the plant would be prepared to act on that request but he commented the issue is a distraction for the plant workforce and leadership's message to the workforce is stay focused, do not be distracted, and to follow established processes as the best way to stay safe and productive. In response to Dr. Lam's query Mr. Petersen stated there has been no plan developed to reverse plans for license termination and any response by the plant will of necessity be reactive. Mr. Jones commented there isn't an active engineering team assigned to this matter as was the case during the license renewal process and were the policy to change a resource realignment would be required.

AGENDA PACKET DRAFT – SEPTEMBER 15, 2022

Dr. Gene Nelson of Californians for Green Nuclear Power was recognized. He stated he was impressed with the performance of Unit 1 for achieving twenty years of operation without a manual or automatic trip. He observed the full load trip of Unit 2 on December 1, 2018, was reported to be a rather spectacular event. Mr. Petersen commented the diversion of steam to the outside environment from a turbine and the generator trip was necessary and was part of the plant's design, as those systems are required to be designed to manage temperature and pressure. He reported there were no significant impacts from that event other than the repairs made to the generator and the stator cooling system.

Mr. Jones introduced DCPD Refueling Outage Manager Mr. Mike Quitter and reported Mr. Quitter previously served six years in the U.S. Navy and this year is his 36th year with PG&E. He reported Mr. Quitter has spent almost all of his time with PG&E in the Operations organization and Mr. Quitter holds a Senior Reactor Operator License and has experience as a foreman, a shift manager and Operations Planning Manager.

Results of the 23rd Refueling Outage for Unit 1 (1R23) and Plans for the 23rd Refueling Outage for Unit 2 (2R23).

Mr. Quitter stated the twenty third refueling outage (1R23) for Unit 1 began on March 26, 2022 at 9:00 p.m. and ended on April 22, 2022 at 10:14 a.m. with the closure of the Unit 1 output breaker. He reviewed and described the goals and performance during 1R23 as follows:

Performance Measure	Goal	Actual
Significant Injuries or Fatalities	0	0
Nuclear Safety Events	0	0
Site Clock Resets	0	0
Outage Duration	≤35 days	26 days 6 hours 47 minutes (Best ever for DCPD)
ALARA (person rem)	≤21.250 revised to 18.350	18.332 person rem
Significant FME Events	0	0
Power Ascension	≤5 days	Maintenance outage
Reliability	≥90 days	Maintenance outage

Mr. Quitter reported a refueling outage involves approximately 500-600 persons being brought on to the site as temporary workers. He stated the five day maintenance outage during power ascension occurred on the secondary side and was due to steam leakage in the main condenser.

Mr. Quitter described and discussed successes during 1R23 as including:

- No nuclear safety challenges (defense in depth).
- No industrial safety significant injury or fatality.
- No foreign material challenges.
- No clearance tagging challenges.
- No station level events.

AGENDA PACKET DRAFT – SEPTEMBER 15, 2022

- Lowest dose ever achieved.

He reported during 1R23 several efficiencies were achieved through working with Operations and Maintenance schedules that allowed for the lowest duration ever for a DCPD refueling outage.

Mr. Quitter reported and described the major scope activities for 1R23 on the primary and secondary sides of the plant and for electrical work.

Primary Side:

- Primary Drain-down primary for work on 30-40 valves.
- Reactor Coolant System spray isolation valve, used to control Reactor Coolant System pressure, enhanced and repacked to address a leak.
- Refueling cavity up-ender kick-off spring replaced. Work was done preemptively on Unit 2 and the broken spring on Unit 1 was replaced during 1R23. In response to Consultant Wardell's inquiry Mr. Quitter stated the repair did not require use of a diver and was done by using a man-basket which was attached to the polar crane.
- Special Lifting Device 10-year in-service inspection of this device used for lifts out of the reactor vessel, inspected for any cracks or weld flaws.
- Reactor coolant pump 1-3 repair of a small oil leak which after 1R22 required Containment entry at power to add oil.
- Weld repair in Reactor Coolant System valve stem leak-off line to Pressurizer relief tank.
- Repack of a valve due to boric acid leaking.

Secondary Side:

- Auxiliary saltwater pump 1-1 pump replacement.
- Travelling screen 1-3, 1-4, and 1-5 overhauls.
- Turbine stop valve refurbishment by the Siemens firm.
- Root cause evaluation for extent of condition and feedwater heater eddy current testing and tube plugging (5 feedwater heaters).

Electrical Work:

- Main and auxiliary bank maintenance outage window.
- Startup bank maintenance outage window.
- Main Generator inspection.
- Vital bus F maintenance outage window.

Mr. Quitter described the goals and the activities established and planned for refueling outage 2R23, the twenty-third refueling outage for Unit 2, which he reported is scheduled to begin on October 16, 2022 and it is now scheduled for 35 days.

AGENDA PACKET DRAFT – SEPTEMBER 15, 2022

Performance Measure	Goal
Significant Injuries or Fatalities	0
Nuclear Safety Events	0
Site Clock Resets	0
Outage Duration	≤35 days
ALARA (person rem)	TBD
Significant FME Events	0
Power Ascension	≤5 days
Reliability	≥90 days

Mr. Quitter stated, in response to Dr. Budnitz' query, the As Low As Reasonably Achievable (ALARA) Program collective dose goal for 2R23 will be established two to three weeks before the outage commences, with prior input and adjustment of a preliminary evaluation by the ALARA Committee and then by DCPD leadership. He commented as Unit 2 is slightly cleaner than Unit 1, the goal is expected to be slightly less than that set for 1R23. He replied, in response to a question from Consultant McWhorter, the estimate for outage duration is required for long-term electrical supply planning purposes and is announced significantly ahead of the commencement of any refueling outage.

Mr. Quitter reported and described for 2R23 the major scope activities on the primary, secondary sides of the plant and electrical work.

Primary Side:

- Primary valve maintenance outage window.
- Special Lifting Device 10-Year in-service inspection, requires coatings removal, in-service inspection, and re-coating.
- Residual heat removal pump motor overhaul.
- Air test of Containment spray nozzles.
- Accumulator nozzle inspections.

Secondary Side:

- Main condenser expansion joint replacement and inspection.
- Main feedwater pump 2-1 ruptured disc replacement.
- Feedwater heater extent of condition inspection, repair and preventive tube plugging (4 main feedwater heaters).
- Turbine stop valve and turbine governor valve inspections by the Siemens firm.
- Main steam isolation valve inspection.
- Auxiliary saltwater pump 2-2 motor and pump replacement.
- Condensate polisher computer replacement project which Mr. Quitter remarked will be the last major project expected to be undertaken prior to plant closure.
- Travelling screen 2-1 and 2-6 overhaul.

AGENDA PACKET DRAFT – SEPTEMBER 15, 2022

- Main Generator inspection.
- Main feedwater pump 2-2 pump inspection.
- Circulating water pump 2-2 motor overhaul.

Electrical Work:

- Main and auxiliary bank and startup bank.
- Auxiliary transformers 2-1 and 2-2 isophase bushing inspections.
- Startup transformer 2-2 power factor testing.
- Vital bus F maintenance outage window.
- 4kV bus E auxiliary feeder breaker racking complete overhaul due to aging issues.
- 12kV and 4kV bus E preventive maintenance.
- Non-Vital bus maintenance outage windows (3).

In response to Dr. Budnitz' query Mr. Quitter confirmed no mid-loop operations, which carry more risk because of the requirement to reduce Reactor Coolant System inventory down to the hot leg area above the fuel and then draw a vacuum on the Reactor Coolant System to remove air bubbles in the system, are planned for 2R23 or for any outages to be conducted prior to plant closure. Mr. Quitter stated the lowest level for Reactor Coolant System inventory during 2R23 is planned to the level of the vessel flange and this eliminates the need for a Yellow risk window.

Mr. Quitted identified DCP's major partners in the outage and the work to be performed by each, including Westinghouse for fuel handling and low power reactor physics testing and Siemens for the Main Generator inspection, Main Turbine stop valve refurbishment, and Main Turbine governor valve refurbishment. He reported there are no issues presently anticipated with bringing in supplemental personnel to assist with refueling outages but he remarked DCP recognizes challenges still exist concerning the COVID-19 virus and remains ready to respond accordingly.

Mr. Eric Greening was recognized. In response to Mr. Greening's request Mr. Quitter and Mr. Jones confirmed that the air bubbles Mr. Quitter mentioned in connection with the need to draw a vacuum on the Reactor Coolant System during mid-loop operation are present when the alternative operation is not a mid-loop and any air bubbles in the piping are forced out by starting the reactor coolant pumps and there is no exposure to radiation produced and no pathway for any isotopes.

Dr. Budnitz thanked Mr. Quitter for his presentation.

XXVI ADJOURN MORNING MEETING

The Chair adjourned the morning meeting of the Committee at 11:35 A.M.

XXVII RECONVENE FOR AFTERNOON MEETING

AGENDA PACKET DRAFT – SEPTEMBER 15, 2022

The June 23, 2022, afternoon session of the Diablo Canyon Independent Safety Committee was called to order by its Chair, Dr. Robert J. Budnitz at 1:15 P.M.

XXVIII COMMITTEE MEMBER COMMENTS

Dr. Budnitz requested any of the Members who wished to make remarks to do so at this time. There were no comments or remarks by Committee Members at this time.

XXIX PUBLIC COMMENTS AND COMMUNICATION

The Chair reviewed the invitation to address the Committee on matters not on the agenda for this public meeting and invited any comments from members of the public who wished to address the Committee to do so now.

Ms. Sherry Danoff, a resident of the Avila Beach area and a former member of the Diablo Canyon Decommissioning Engagement Panel was recognized. Ms. Danoff inquired whether an independent study of the safety of the Orano spent fuel storage system and its capabilities concerning heat was warranted, given that use of that system may result in spent fuel remaining in the spent fuel pools for approximately two years. Dr. Budnitz responded the Second Restated Charter for the Committee requires the Committee to perform an independent safety evaluation of the Orano system to assure it not only meets applicable regulations but makes sense from a safety perspective.

Ms. Danoff observed the casks and multipurpose canisters in use with the existing Holtec spent fuel storage system have some vulnerability to the effects of sea air and she inquired as to the Committee's response concerning whether a study should be undertaken to determine whether there should be a climate controlled containment for the Holtec casks. Dr. Budnitz replied the DCISC has addressed questions about the safety of the Holtec system from the perspective of whether it not only meets NRC regulations but also as to whether it is adequately safe. He observed no one can ensure safety over thousands of years but it is possible to assess a system's present adequacy and to assess the rate of any developing degradation and to develop inspection and assessment protocols to ensure sufficient information is available to allow required intervention to take place prior to any safety compromise. Such intervention for a spent fuel storage system could include use of a container that would insulate an affected cask from outside conditions and he commented there is no question that a system to insulate a cask is feasible. Dr. Budnitz observed in his view that at the present time there are no indications that this will be necessary and degradation, if any, is projected to be slow and slight. Dr. Lam observed the Holtec casks were licenses in 2004 for twenty years and a License Renewal Application has been submitted by DCPP and in that context there may be a hearing held before an Atomic Safety Licensing Board (ASLB) which would provide an opportunity to any concerned citizen to have input. Dr. Lam reported he sat on the ASLB that approved the original license for the ISFSI at Diablo Canyon in 2004 and he wrote the consensus technical opinion on the merits of the Holtec cask. Dr. Budnitz observed future generations may make other decisions as to the storage of

spent fuel. Ms. Danoff commented she also has concerns about protecting the ISFSI against domestic terrorism and sabotage. Dr. Budnitz replied the DCISC is satisfied the current security regime is adequate but that conclusion could be revisited if conditions change.

Mr. Eric Greening was recognized. Mr. Greening remarked and questioned whether any of the DCISC's independent reviews rose to the level of a study in terms of being a peer reviewed product. He observed that relative to long-term future planning political and cultural continuity cannot be presumed and problems cannot be left to future generations who may not have the culture, knowledge, or equipment to deal with them and these issues should be repeatedly raised when talking about future plans for fifty or one hundred years or beyond. Dr. Budnitz replied the Environmental Protection Agency adopted 40 CFR 191 as the first regulation intended to govern disposal of radioactive waste deep underground. This was followed by the NRC's adoption of 10 CFR 60 and he observed both regulations state for the long-term stability of society and as a matter of public policy the correct approach is to dispose of high level radioactive waste deep underground where it would be isolated from societal disruption. However, Dr. Budnitz reported Congress must implement the regulations and did so with the Yucca Mountain Project in Nevada for which approval was subsequently rescinded. Dr. Budnitz reported the policy is still in place under the Nuclear Waste Policy Act of 1982 as amended in 1987 which continues to find deep underground disposal is the appropriate solution. Dr. Budnitz commented that over a period of 30 years the DCISC has completed several different studies which have sometimes been in the form of a letter and all have formed a part of the DCISC's Annual Reports, however, in his experience on the Committee none of these studies have been submitted to a peer review process.

Dr. Gene Nelson representing Californians for Green Nuclear Power was recognized. Dr. Nelson remarked the issues raised by Mr. Greening have been brought up periodically and he reported peer reviewed studies performed by a group in Canada on what happens to spent nuclear fuel over time found that in a period of 300-500 years, which he described as manageable, the material decays to be comparable to a good grade of uranium ore. Dr. Nelson stated he wanted to remind members of the public that spent nuclear fuel does decay and the "hot stuff" is what decays the quickest.

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

Dr. Budnitz requested Mr. Jones to introduce the next presentation. Mr. Jones introduced DCPD Quality Verification Manager Mr. Raymond Robins to make the next informational presentation and reported Mr. Robins has 14 years of oversight and nuclear experience and has been employed at DCPD for 17 years in roles and organizations including in the Security and Performance Improvement organizations. Mr. Robins holds a Bachelor's Degree in Political Science from Princeton University and resides presently in Atascadero, California.

Quality Verification's Perspective on Plant Performance, Top Issues, and the Quality Performance Assessment Report.

Mr. Robins reported during the first period of 2022 DCPD exhibited traits reflecting a strong nuclear safety culture and effectively implemented the Quality Assurance Program and met regulatory requirement and commitments. Improvement was observed in three key departments, Engineering, Maintenance and Operations focus. This period also included successful completion of the 1R23 refueling outage and focus continued on workforce management and industrial safety. Mr. Robins discussed each area he described as follows:

- Operational Focus – increasing communication on equipment issues and leveraging new processes to implement prioritization, including an improvement in the ability to timely identify and correct trends.
- Maintenance – increase in the use of error reduction tools and implementation of the crew notebook and management review meetings similar to those used by Operations. In response to Dr. Lam’s inquiry, Mr. Robins stated the crew notebook functions to document and track in an electronic database format observations by their leadership of an individual’s performance in the field to identify and provide feedback on areas for improvement.
- Engineering – good engineering support during 1R23 and effective and timely resolution of issues identified in the 2021 Engineering audit.
- Industrial Safety – actions include reestablishing a station level safety oversight committee and improving peer-to-peer coaching.
- Workforce Management – implementation of processes to ensure appropriate qualifications and proficiencies are maintained and knowledge transfer now includes oversight and participation by Quality Verification observers in the knowledge transfer working groups.

In response to Dr. Budnitz query, Mr. Robins confirmed Quality Verification is an independent organization that reports directly to the Chief Nuclear Officer. At the present time there are 18 persons working in the Quality Verification organization which has experienced some attrition. Dr. Budnitz observed metrics are used in the Quality Performance Assessment Report (QPAR) and he inquired if there has been any evolution of those metrics. Mr. Robins responded the metrics developed by the Institute of Nuclear Power Operations have been modified over time while the NRC metrics have remained stable and he remarked the Quality Verification organization uses all that information for audit planning purposes. In response to Consultant McWhorter’s question as to leading indicators of performance issues that could be caused by inadequate staffing or inadequate training attributable to workforce management, Mr. Robins replied there aren’t necessarily specific things but his organization does review future projected vacancies as to the activities or functions provided by those positions. In response to Consultant McWhorter’s follow up inquiry Mr. Robins stated the DCPD Quality Verification organization has recently benchmarked the organizational transition during the transition from

power generation operation to decommissioning at the Fort Calhoun Nuclear Generating Station in Nebraska and he reported the audit function required by regulation is not expected to change very much, while supplier quality control and nuclear quality control inspections will diminish and he commented staffing will to some degree depend on how DCPD implements decommissioning. Dr. Budnitz and Mr. McWhorter observed and Mr. Robins agreed that during the last few months of operation, as the plant approached decommissioning, complexities can be expected to increase and accordingly increased vigilance is called for. Mr. Jones reported once the plant enters decommissioning a greater than 50% reduction in Quality Verification staffing is anticipated. Dr. Budnitz remarked that inherent in Quality Verification is a backward-looking implication, but it has always been true that an important part of Mr. Robins's organization is assessing current and future trends and this will continue and may need to be amplified as decommissioning approaches. In response to Consultant Wardell's inquiry Mr. Robins stated the Quality Verification organization is itself assessed by the Nuclear Industry Evaluation Program (NIEP) while the NRC leverages the products of the Quality Verification organization. In response to Dr. Lam's query as to what extent Quality Verification incorporates regulations imposed by the Occupational Safety and Health Administration (OSHA) Mr. Robins responded Quality Verification would potentially be the originator of programs and discussion on station safety trends as part of its consistent focus on industrial safety at DCPD.

Mr. Jones introduced Assistant Director of Engineering Mr. Robert Waltos to make the next of the informational presentations requested by the Committee for this public meeting. Mr. Jones reported Mr. Waltos has been employed at DCPD for 36 years and has held leadership positions in the Operations, Maintenance, Engineering, Emergency Services, Emergency Planning and Outage Management organizations. Mr. Waltos currently serves as the Emergency Director for Emergency Response Team Alpha which successfully completed a recent Federal Emergency Management Agency (FEMA) and NRC evaluated emergency exercise.

Engineering Department Update Including Current and Future Activities for Major Groups (Strategic, Tactical, Component, Design, Nuclear and Programs), Staffing and Turnover, and Major Project Activities.

Mr. Waltos reported during 2021 the Engineering organization underwent a large reorganization and now includes a Director, Assistant Director (Mr. Waltos), and four Engineering Managers for the areas of Strategic Engineering, Tactical Engineering, Program Engineering and Design Engineering. He commented this organizational change was benchmarked and is intended to make the Engineering organization more efficient as decommissioning approaches. Mr. Waltos reported Engineering performance was evaluated by Quality Verification as favorable at this time and the organization continues to adjust to achieve continuous improvement and maintain its proficiency through its self-assessment and benchmarking efforts. He reported there has been some loss of personnel in the Engineering organization and accordingly a strong focus has been on the Engineering Fix It Now (EFIN) Team which he stated provide a point of contact for the various DCPD organizations with the Engineering organization.

In response to Consultant McWhorter's inquiry Mr. Waltos described the role of the EFIN Team as to handle a composite of engineering functions on what he described as a fundamental level, with the exception of long-term planning. This includes equipment problems, design and licensing basis, and maintenance issues. In response to Consultant McWhorter Mr. Waltos stated EFIN Teams can on occasion turn around a design change in the field, depending upon its complexity, within the duration of one operational shift. In response to Dr. Lam's query Mr. Waltos reported the EFIN Team is staffed by 12 individuals and the entire Engineering organization consists at this time of 110 individuals. He remarked that for the EFIN Team to be effective the Engineering organization as a whole must be effective. Mr. Waltos confirmed that in previous periods the Engineering organization was much larger and consisted of 150-160 individuals with components located in San Francisco and in the San Francisco Bay Area. He reported at this time the DCPD engineering organization's staffing is comparable to that of other plants. Dr. Budnitz observed there was a need for a greater amount engineering analysis during the early days of the operation of DCPD, as the total amount of new designs was greater but that need diminished over time, although Dr. Budnitz commented there is a countervailing trend for increased analysis as systems and components age. Mr. Waltos agreed and observed that capacity factors for nuclear power plants have also improved significantly over time but it takes continued vigilance to achieve and maintain top performance. In response to Consultant Wardell's query Mr. Waltos reported DCPD presently has available two contract engineering groups who serve as engineer of choice and these groups continue to be available as resources and are employed on what he described as smaller projects. He confirmed that DCPD Engineering organization consults on a regular basis with the PG&E organization in San Ramon, California.

Mr. Waltos described the four areas of the Engineering organization as follows:

- Tactical Engineering – primarily consisting of component engineers assigned to assure reliability through interaction with the Maintenance and Operations organizations and to serve as a resource to the EFIN Team in the area of subject matter expertise .
- Strategic Engineering – primarily consisting of system engineers who are assigned to review trends and monitor performance of important systems.
- Program Engineering – primarily to ensure regulatory programs are strong and continuing to perform satisfactorily.
- Design Engineering – a smaller component due to the reduction in projects. Mr. Waltos reported the project management group has moved from Design Engineering into the Maintenance organization, with some personnel moving to other areas including to the EFIN Team, with Design Engineering having the ability to pull them back to the Engineering organization if necessary.

Mr. Waltos reported a Knowledge Transfer & Proficiency Committee was created to monitor knowledge transfer and the retention of proficiency as personnel transition and to ensure functions are not lost and a knowledge gap is not created. He stated a knowledge transfer plan is in place in anticipation of areas expected to see a transition of personnel and those plans are monitored and managed by supervisors. He reported the Engineering People Committee was formed to assess how the Engineering organization may become more efficient and effective in terms of processes and policies.

Mr. Waltos stated DCPD is planning within the next two or three months to move to a three-part organizational structure for the Engineering organization which will incorporate Design Engineering fully into the other three components without affecting the organization's core functions and will remain under the supervision of the Quality Verification organization. **Mr. McWhorter suggested the Committee should review the Engineering organization and the changes described by Mr. Waltos during the first quarter of 2023.**

Mr. Waltos described the Engineering Excellence Plan as focused on personnel safety, and human performance including on the implementation of more effective pre-job briefings, equipment reliability including promptly addressing equipment-related issues, and improving organizational response through the use of contractor personnel or by bringing back retirees to assist with project implementation or knowledge transfer. He reported Westinghouse and the Strategic Teaming and Resource Sharing (STARS) joint utility alliance, of which DCPD is a member, remain as resources.

In concluding his presentation Mr. Waltos stated the DCPD Engineering organization will soon move from a four-structure to a three-structure organization, ensuring no impact on knowledge transfer or loss of proficiency, while working to find efficiencies in how the organization does business and retaining the necessary technical expertise and a strong safety culture in terms of plant reliability while never compromising safety as DCPD transitions to decommissioning. He reported favorable comments have been received from the Nuclear Safety Oversight Committee (NSOC) and the Institute of Nuclear Power Operations (INPO) regarding the Engineering organization's ability to support safe and reliable operations.

In response to three observations by Consultant Wardell, Mr. Waltos replied working on the EFIN Team requires its personnel to work in and adopt to a fast paced environment, that in order to reach the level of Principal Engineer in the Engineering organization a professional engineering license is required, and the engineers' union is supportive of the approaching cessation of power operations. In response to Dr. Budnitz' inquiry Mr. Waltos replied that perhaps six times each year the Engineering organization reaches out to another nuclear power plant concerning a problem experienced at DCPD and he agreed with Dr. Budnitz' observation on the value of industry operating experience.

Dr. Gene Nelson, representing Californians for Green Nuclear Power was recognized. Dr. Nelson inquired as to Mr. Waltos view on whether, in the event the State of California were to

keep DCPD open beyond 2025, the plant could respond to that challenge with reference to bringing back retired employees. Mr. Waltos replied that at this time there is no direction other than to proceed to decommission the power plant by 2025 and accordingly there would be a need, and there would be the ability, to make adjustments in the scenario described by Dr. Nelson.

Mr. Tom Marré was recognized. Mr. Marré inquires as to the reasons Unit 1 has historically performed better than Unit 2. Mr. Waltos replied there is some uniqueness in the environment of the outdoor equipment between the two units, demonstrated by the Auxiliary Feedwater System piping corrosion issue as well as some differences in equipment, such as was demonstrated by the Unit 2 Main Generator Stator Replacement Project. He remarked in some cases knowledge was captured first on Unit 2 and this kept some issues experienced with Unit 2 from impacting the operation of Unit 1.

Dr. Budnitz thanked Mr. Waltos for an excellent presentation.

The Chair requested Mr. Garcia to continue with the informational presentations for this public meeting requested by the Committee. Mr. Garcia introduced Mr. Tom Jones, Director of Strategic Initiatives and reported Mr. Jones oversees the transition from operations to decommissioning for DCPD. Mr. Jones has more than 24 years' experience with PG&E and previously served in Corporate Affairs for Energy and local government relations. Prior to his current role he had more than ten years' experience with local, state and federal governmental relations. Mr. Jones previously worked for State Senator O'Connell as his District Director. Mr. Jones holds a Bachelor's Degree from the University of California at Santa Barbara and resides in Atascadero, California.

Presentation by PG&E on Plans for Procurement of Spent Fuel Storage Canisters, Vendor Selectin Results, and Schedules for Licensing, Cask Deliveries, and Spent Fuel Transfers.

Mr. Jones stated there is a key nexus between used fuel storage and decommissioning due to the location of the Spent Fuel Building in proximity to Containments, the Control Rooms and the Spent Fuel Pools for both units. He reported until the spent fuel is transferred there can be no meaningful demolition of those adjacent structures and this also impacts the second and third decommissioning phases for the DCPD site regarding repurposing and public access. Mr. Jones reported the new Orano system is able to transfer and accept the fuel sooner than is currently allowed by the present Holtec system and this simplifies the decommissioning process and results in achieving the goal of emptying the spent fuel pools sooner while affording a lower cost to PG&E's customers.

Mr. Jones reported the CPUC in the 2015 Nuclear Decommissioning Cost Triennial Proceeding (NDCTP) mandated that PG&E review the complete transfer of spent fuel within seven years of plant closure, akin to the schedule achieved by the San Onofre Nuclear Generating Station (SONGS) in Southern California. In the 2018 NDCTP a settlement was reached which required the transfer of spent nuclear fuel to be achieved within four years and

with the responses to the Request for Proposals (RFP) for a spent fuel storage system the successful proposer and all other proposers proposed a transfer period of 23 months. He provided an overview of the steps taken to date including public input by the Diablo Canyon Decommissioning Engagement Panel through the Panels' Strategic Vision document, from the California Energy Commission's technical review, and from the risk study performed by the B. John Garrick Institute for the Risk Sciences, all of which he stated provided input into the technical specifications for the RFP. He remarked the DCPD loading campaign is one of the larger loading campaign opportunities and there was a great deal of interest in the RFP. Mr. Jones reported PG&E has now announced its selection of the Orano system which will result in switching the configuration of spent fuel storage from vertical [Holtec] to horizontal [Orano]. Preparations are now beginning for completion of the final part of the licensing documents to update the current license Orano will use for DCPD which Mr. Jones stated Orano will submit by the fourth quarter of 2022. Mr. Jones in response to Dr. Budnitz' observation confirmed this will initiate a new public process in which persons can raise contentions or concerns. In response to Consultant McWhorter's request Mr. Jones confirmed there were more than four proposals received in response to the RFP and each vendor had the ability to, and some did, submit differing proposals. Mr. McWhorter observed Orano holds a general 10 CFR Part 72 license and will need to submit an amendment and in response to Mr. McWhorter's request Mr. Jones confirmed that PG&E will need to concur with Orano's licensing approach. **Mr. Jones stated he would need to check and get back to the Committee on how the Orano licensing approach may effect DCPD's 10 CFR Part 50 license.**

Mr. Jones reported the RFP was informed by the Diablo Canyon Decommissioning Engagement Panel's Strategic Vision document and by independent technical expertise from an expert advisory panel of consultants to challenge the licensing approach and the selection of a vendor. He reported the selection process went on for several years and he emphasized concerning the scoring of the proposals that price had only a very small input into the selection process, with public safety and the technical capabilities of the systems being a significantly greater percentage factor in the decision. He stated the industrial and occupational safety record of the proposers also played a significant role as did the ability of the proposers to provide long-term support for its products throughout the licensing period. Mr. Jones reported that Orano, a robust and financially stable firm in its own right, is a nationalized firm with the financial backing of the French government with an excellent outlook to be a long-term, viable partner. In response to Dr. Lam's query Mr. Jones confirmed PG&E does not have an express financial commitment from the French government with respect to its selection of Orano.

Mr. Jones reported Orano spent fuel storage systems are in use at two of the four locations in California including the decommissioned Rancho Seco Nuclear Generating Station near Sacramento, California, and at SONGS which is now in the process of decommissioning. Orano also operates an INPO certified training center located in South Carolina and any Orano or PG&E employees who will work on the system will receive training through what Mr. Jones described as a rigorous six week training class. He reported Orano has a global presence with its systems in use in Europe, Asia and Australia.

Mr. Jones remarked key reasons for PG&E's choice of the Orano system include the performance and design of the system, its simplicity, and its horizontal configuration. He provided photos of the DCPD ISFSI site with the proposed Orano system superimposed. He reported all fuel will be stored at the ISFSI and the 58 Holtec casks now on the site will remain along with the Orano concrete horizontal storage modules. Mr. Jones remarked with the Orano system it will no longer be necessary to use the Cask Transfer Facility and the fuel will go directly from protected area to protected area without the need to have compensatory measures at the Cask Transfer Facility.

Regarding the licensing approach for the Orano system, Mr. Jones reported a number of sites have both site-specific and general licenses. He stated both the North Anna Nuclear Generating Station and the Surry Power Station in Virginia have multiple licensing approaches and multiple vendors for their spent fuel storage systems. Dr. Lam observed Orano has a general license and upon improving some thermal capability and subject to NRC approval DCPD intends to submit a 10 CFR Part 50 license amendment and Dr. Lam inquired why PG&E did not simply opt to accept the general license for use at DCPD and thereby meet the CPUC's four year offload schedule. Mr. Jones responded that was Orano's initial proposal but PG&E believes the project schedule allows time to pursue thermal modification of the general license and he stated without the thermal modification the timeline would be somewhat extended. In response to Consultant McWhorter Mr. Jones confirmed Orano's proposal, if the amendment is granted, is for a 23-month commitment but he confirmed that if for some reason the amendment is not granted, the existing general license could be used. **Mr. Jones committed to provide the difference in time between 23 months and the time which would be required under an unmodified general license and commented that the number would be somewhere between 23 and 48 months.**

Mr. Jones displayed a list of the 16 ISFSIs, now to include DCPD, with multiple dry cask storage systems and remarked the independent technical group stressed pursuing the most robust technical solution available without consideration of what he characterized as an in-house incumbent advantage. Mr. Jones and Dr. Budnitz discussed the differences between dynamic systems such as a power plant and a static system such as used for spent fuel storage. Mr. Jones reported PG&E has made commitments to the local community through the NDCTP including real-time monitoring of the ISFSI, although he observed that the 58 casks now on the site cannot be backfit, and he stated this information would be shared with the County of San Luis Obispo Office of Emergency Services.

Mr. Jones reported that in moving forward, Orano will continue to provide information and the California Energy Commission will continue to review the technical specifications and he observed the DCISC will now also become involved in its independent review role. He remarked PG&E will continue to maintain its internal safety and technical advisory committee, all of which will provide different perspectives. Dr. Budnitz stated the Second Restated Charter for the DCISC provides for the Committee to come to an independent assessment and evaluation of the new Orano system as to whether it is adequately safe, which is separate from whatever the

NRC finds. Dr. Budnitz remarked the fuel loading configuration and the seismic environment present differences from other sites, with no other nuclear power plant in the world having the level of demand concerning its seismic qualities as DCP. Mr. Jones committed to making all necessary information available to the Committee in due course including during fact-finding.

Mr. Jones reviewed the project schedule for which the public announcement of the selected vendor has already taken place and which includes significant licensing activity during the fourth quarter of 2022, although he observed Orano has already licensed their system for what he stated was a comparable thermal load for a boiling water reactor. Fabrication of the system is scheduled during 2023 to 2025 and this schedule forecasts completing the unloading the Unit 1 Spent Fuel Pool first before moving to Unit 2. In response to Consultant McWhorter's query as to where the casting of the horizontal storage modules may take place Mr. Jones replied that will be a decision for Orano but there are potential fabrication facilities located within 200 miles of DCP. He reported and provided QR codes for videos showing the inspection of the Orano horizontal system which took place at SONGS. In response to Dr. Lam's observation Mr. Jones remarked it could be possible to arrange a visit by DCISC representatives and Diablo Canyon Decommissioning Engagement Panel members to Orano's manufacturing facility and the training academy.

Dr. Gene Nelson of Californians for Green Nuclear Power was recognized. Dr. Nelson remarked he believed from the photos displayed during Mr. Jones' presentation that planned access to some part of the spent fuel horizontal storage modules' proposed configuration may be blocked, preventing removal of the dry storage canisters and he inquired whether it might be possible to incorporate the use of the seismic anchorage embedment rings used with the Holtec overpacks into the design of the Orano system. Mr. Jones responded and confirmed there is no blockage of access to any of the modules as the horizontal storage module closest to the sloping hillside adjacent to the ISFSI have the backs of the modules facing the slope and there is adequate room for the transporters to move in and out.

Mr. Eric Greening was recognized. Mr. Greening inquired whether any of the Orano systems at other plants cited by Mr. Jones are located within an enclosed building and could that alternative be available at DCP and, if so, would it be able to include the Holtec vertical casks and if same were required as part of the licensing process would Orano continue forward with its plans. Mr. Jones replied he was unaware of any Orano system being located as described by Mr. Greening, which he stated would change the system's configuration from a passive to an active system, and the inquiry concerning the licensing process was too speculative for a response.

Consultant McWhorter remarked the Committee may want to review and reopen an effort by the Electric Power Research Institute (EPRI) in 2017 to quantify the potential radiological impacts if a cask were to leak with reference to the need for a secondary layer of protection. Mr. Jones committed to take an independent look-up to review the EPRI's work. Dr. Lam stated the issue described by Mr. McWhorter was examined, as required by regulatory guidelines concerning consequences, in context of the original license for the DCP

ISFSI and at that time Dr. Lam stated he sat on the ASLB which reviewed and approved the ISFSI application for DCPD and wrote the technical opinion for the facility. Dr. Lam remarked the examination suggested by Consultant McWhorter is valuable in the sense that it is quantitative but it carries a great deal of uncertainty because assumptions must be made as to number of bundles, the inventory, and the meteorological conditions. He stated he posed questions as to whether the NRC's offsite boundary dose limit would be exceeded and was satisfied by the responses as to what would happen in that context if an earthquake were to cause a cask to tip over, to tip over and break, to be buried underground, or to roll downhill toward the ocean. He stated for this examination a very sophisticated numerical model was developed. Consultant Wardell remarked that for most nuclear safety licensing applications there is an accident analysis done with a release calculation included and he assumed the Orano general license application or safety analysis report would have included such an analysis. Mr. Wardell commented an offsite boundary calculation would likely use the same model as used for the reactor or for a fuel accident at a spent fuel pool and this would be part of the licensing record for the plant. **Mr. McWhorter observed the Diablo Canyon Decommissioning Engagement Panel Strategic Vision document includes discussion of whether there would be a need for a secondary containment and the DCISC may want to consider reviewing that issue in support of the Panel, in which case it would be necessary to understand the implications and impacts of a leaking cask. Mr. Wardell advised commencing such an inquiry by reviewing the Orano application to the NRC for its general license. Mr. McWhorter recommended that during fact-finding in July, August or September 2022 a request be made for a briefing on what technical information is available from Orano as part of the general licensing documentation and how that information is organized Mr. McWhorter remarked the DCISC may also want to consider reviewing any update on the industry effort led by EPRI to evaluate the radiological consequences of a leaking cask. Dr. Budnitz remarked an inquiry into the use of a secondary boundary must necessarily include the criterion for what is considered adequate and Mr. McWhorter agreed and remarked that any proposal to cover a cask as a secondary boundary will necessarily have unintended consequences.**

The Chair thanked Mr. Jones for his presentation.

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

Dr. Budnitz observed at this meeting the DCISC Members approved a scope of services for a proposal to be made to a new consultant and the next step must be to identify the person to assume the role as a consultant and to negotiate and approve an agreement for his or her services. In response to Dr. Lam's comment concerning the potential for the Joint Proposal to be reversed, Dr. Budnitz replied the scope of such an engagement, which provides for such services from time to time, would necessarily need to change.

Dr. Budnitz reported that all matters on the Committee's agenda for this public meeting have now been addressed and he expressed the thanks of the Committee to Mr. Garcia and to the DCPD management team for their assistance and participation in this public meeting, to the

AGENDA PACKET DRAFT – SEPTEMBER 15, 2022

members of the public who participated in person or by Zoom or watched the livestream broadcast, and to the AGP Video team for supporting this Zoom webinar and livestream internet format. Dr. Budnitz closed the meeting with the hope to see everyone at the end of September 2022.

XXXI ADJOURNMENT OF ONE HUNDRED AND SECOND PUBLIC MEETING

There being no further business the one hundred and second public meeting of the Diablo Canyon Independent Safety Committee was then adjourned by its Chair, Dr. Robert J. Budnitz at 3:27 P.M.

DIABLO CANYON INDEPENDENT SAFETY COMMITTEE	
AGENDA TRANSMITTAL FORM	
MEETING DATE:	September 28, 2022
AGENDA ITEM:	VI-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 2022.	
RECOMMENDED COMMITTEE ACTION: None, information item only.	

May 2022
List of Documents Transmitted Electronically

A. Licensing Basis Impact Evaluations

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

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

Date	Letter No.	Title
5/12/2022	DCL-22-035	Core Operating Limits Report for Unit 1 Cycle 24
05/25/2022	DCL-22-038	(OUO) Cyber Security Plan, Revision 2 (OUO)

C. NRC Incoming Correspondence (including Inspection Reports)

Date	Title
5/5/2022	DIABLO CANYON POWER PLANT, UNITS 1 AND 2 – INTEGRATED INSPECTION REPORT 05000275/2022001 AND 05000323/2022001
5/9/2022	SUMMARY OF APRIL 27, 2022, CLOSED TELECONFERENCE WITH PACIFIC GAS AND ELECTRIC COMPANY REGARDING ALTERNATIVE SECURITY MEASURES FOR EARLY WARNING SYSTEM LICENSE AMENDMENT REQUEST FOR DIABLO CANYON NUCLEAR POWER PLANT, UNITS 1 AND 2 (EPID L-2022-LLA-0029)
5/26/22	DCPP U1 AND 2 – REVISED INTEGRATED INSPECTION REPORT 05000275 2022001 AND 05000323 2022001

D. PSRC Documents (PSRC Minutes)

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

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

Type	Doc. No.	Title
2 WGE	51139339	DA-Failure to Specify Elastomer Replacem
2 WGE	51148201	DA-Contractor performing work w/o qual
2 WGE	51149053	DA-U1 Eagle 21 Rack 08 Potential FME iss
2 WGE	51150140	DA-Work Performed outside Scope
2 WGE	51135096	DA-Adverse Trend - MR Evals
2 WGE	51137589	DA-NRC Question - use of Buna-N with ULS
Eff. Eval		
05/31/2021		List of DN 5 Priority 5.1 and 5.2 Created 05-01-2022 – 05-31-2022
05/31/2022		DCPP 1 WGE and 2 WGE Notifications Completed 05/31/2022
05/02/2022		RCE Report as of 5/2/22
04/30/2022		Significant Level 1 & 2 WGE Created 04-01-2022 – 04-30-2022
04/28/2022		Significant Level 1 LTCA Report Template 04/28/2022

May 2022
List of Documents Transmitted Electronically

04/28/2022		Significance Level 3 LTCA Report Template 04/28/2022
05/02/2022		20 Oldest Non LTCA-DA notifications as of 05/02/2022
05/02/2022		DCPP Station Index as of 05/02/2022

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

Date	Doc. No.	Title
05/03/2022		Quality Digest, May Edition 2022 Updated
05/17/2022		Quality Digest, May 2022 Second Edition
05/09/2022	#2022-IA-05	2022 Operations and Technical Specifications Audit

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
05/31/2022	51089943	2022 Self-Assessment - SPM
08/17/2021	51106560	QHSA: NO Continuing Training POI
09/24/2020	51089651	Benchmark self assessment PM Program

I. Performance Information (PIR, Operating Plan, Station Initiatives)

Date	Doc. No.	Title
1/11/2021		Generation Operating Plan 2021 – 2025, No new updates this month.
05/11/2022	PPIR	Diablo Canyon Power Plant; Plant Performance Improvement Report; Data: March 2022
05/19/2022	PPIR	Diablo Canyon Power Plant; Plant Performance Improvement Report; Data: April 2022
05/10/2022		May 2022 PI Status Summary
05/31/2022		May 2022 Operations Services Performance Improvement Dashboard
05/16/2022		May 2022 Maintenance PI Dashboard
05/16/2022		May 2022 Engineering Services Performance Improvement Dashboard
05/17/2022		May 2022 Security & Emergency Services Performance Improvement Dashboard
05/17/2022		May 2022 Industrial Safety Performance Improvement Dashboard
05/02/2022		May 2022 Learning Services Performance Improvement Dashboard

May 2022
List of Documents Transmitted Electronically

05/16/2022		May 2022 Emergency Planning Performance Improvement Dashboard
05/24/2022		May 2022 PI Status Summary
Station Initiative		There are no new Station Initiatives 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
		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.

N. Miscellaneous

Date	Title
	There are no miscellaneous documents for this month.

O. Functional Area Documents

Subcommittee	Date/Doc	Title
Maintenance	Week 202218	T+1 Performance Critique
	Week 202219	T+1 Performance Critique
	Week 202220	T+1 Performance Critique
	Week 202221	T+1 Performance Critique
	Week 202222	T+1 Performance Critique
	May	T+1 Monthly Performance Critique 2218-2221

June 2022
List of Documents Transmitted Electronically

A. Licensing Basis Impact Evaluations

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

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

Date	Letter No.	Title
6/14/2022	DCL-22-043	DRC2021-00092 – Diablo Canyon Power Plant Decommissioning: Response to Request for Additional Information
6/20/2022	DCL-22-044	(OUO) Supplement to License Amendment Request 22-01; Request for Approval of Alternative Security Measures for Early Warning System (OUO)
6/29/2022	DCL-22-051	(OUO) Request for a Temporary Exemption from 10 CFR 73, Appendix B, Section VI, Subsection C.3.(I)(1) and Subsection A.7, Regarding Annual Force-on-Force (FOF) Exercises, Due to COVID-19 Pandemic (OUO)

C. NRC Incoming Correspondence (including Inspection Reports)

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5/9/2022	SUMMARY OF APRIL 27, 2022, CLOSED TELECONFERENCE WITH PACIFIC GAS AND ELECTRIC COMPANY REGARDING ALTERNATIVE SECURITY MEASURES FOR EARLY WARNING SYSTEM LICENSE AMENDMENT REQUEST FOR DIABLO CANYON NUCLEAR POWER PLANT, UNITS 1 AND 2 (EPID L-2022-LLA-0029)
5/26/2022	DIABLO CANYON POWER PLANT, UNITS 1 AND 2 – REVISED INTEGRATED INSPECTION REPORT 05000275/2022001 AND 05000323/2022001
6/17/2022	DIABLO CANYON NUCLEAR POWER PLANT, UNITS 1 AND 2 – NOTIFICATION OF THE AVAILABILITY OF THE POST-SHUTDOWN DECOMMISSIONING ACTIVITIES REPORT, INCLUDING THE SITE-SPECIFIC DECOMMISSIONING COST ESTIMATE AND THE IRRADIATED FUEL MANAGEMENT PLAN, IN THE <i>FEDERAL REGISTER</i> (EPID L-2019-LRL-0004, EPID L-2019-LRL-0005, AND EPID L-2019-LRL-0006)
6/21/2022	DIABLO CANYON NUCLEAR POWER PLANT, UNITS 1 AND 2 – REQUEST FOR ADDITIONAL INFORMATION REGARDING LICENSE AMENDMENT REQUEST FOR TECHNICAL SPECIFICATIONS AND REVISED LICENSE CONDITIONS FOR THE PERMANENTLY DEFUELED CONDITION (EPID L-2020-LLA-0261)
06/27/2022	DCPP, U1 and U2, Post-Shutdown Decommissioning Activities Report Public Meeting (EPID L-2019-LRL-0004, EPID L-2019-LRL-0005, and EPID L-2019-LRL-0006)

June 2022
List of Documents Transmitted Electronically

D. PSRC Documents (PSRC Minutes)

Date	Doc. No.	Title
06/14/2022	2022-008	PSRC Meeting 2022-008
7/5/2022		PSRC Members/Alternates

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

Type	Doc. No.	Title
2 WGE	51145774	DA-Trend Late RMS of RP Record
2 WGE	51145773	DA-Possible Misapplied ECG 18.7
2 WGE	51149042	DA-1Q22 GNCV Inadequate proc guidance
2 WGE	51143060	DA-Rad Waste Cont Iso Valves Went Closed
2 WGE	51151565	DA-Trend: Unsecured Delay Gates
2 WGE	51145525	DA-EAL TBM SU4.1 Pg 183 Incorrect
2 WGE	51152320	DA-QAAF - X11.ID5 not consistently follo
2 WGE	50862262	LTCA - DA-FCV-23 Failed to stroke open
2 WGE	51141071	DA-Evaluate Recent Eng. HU Events
2 WGE	51126111	DA-DG 2-3 ISOC freq is out of limits
EE_RCE	51026480	ASW PP 2-1 Motor Bearing Degraded
EE IER	51103869	IER L2-15-29 Effectiveness Review
DA-DG23	51128221	DA-DG23 Reliability Adverse Trend
Eff. Eval		
05/26/2022		Open RCEs as of 05/26/2022
05/26/2022		Significance Level 1 and 2 Work Group Evaluations Created 05/01/22 - 05/26/22
06/30/2022		List of DN 5.1 and 5.2 Created 06/01/22 - 06/30/22
06/30/2022		DCPP 1 WGE and 2 WGE Notifications Completed 06/30/2022
05/26/2022		Open LTCA DA Notifications Station Significance 3 as of 05/26/2022
05/26/2022		20 Oldest Non-LTCA DA Notifications as of 05/26/2022
05/26/2022		DCPP CAP Station Index
05/26/2022		Open LTCA DA Notifications Station Significance 1 & 2

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

Date	Doc. No.	Title
06/01/2022		Quality Digest, June Edition 2022
06/14/2022		Quality Digest, June Second Edition 2022
06/21/2022	2022-QP-01	Quality Performance Assessment Report, First Period 2022

G. Nuclear Safety Culture Monitoring Panel Reports

Date	Doc. No.	Title
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June 2022
List of Documents Transmitted Electronically

03/31/2022	19-003	Formal Self-Assessment Report: Finishing on Top Self-Assessment (51135994)
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H. Self Assessment/Benchmarking (SA/BM Reports/Schedules)

Date	Doc. No.	Title
04/13/2022	51087506	Biennial Target Set SA 2022
06/23/2022	51050751	Track Quick Hit Self-Assess for CF3.ID11
06/22/2022	51156768	Benchmarking SONGS Decommissioning
06/14/2022	51151644	Sec Trng 71130.07 Self-Assessment 2022
06/22/2022	51151750	Perform QHSA against NRC IP 71124.05
06/09/2022	51138184	STARS SCRAM Benchmarking Implementation
02/28/2022	51137973	QHSA - Injury Reporting per OM6.ID1
06/21/2022	51155750	ECP Informal Benchmark

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

Date	Doc. No.	Title
1/11/2021		Generation Operating Plan 2021 – 2025, No new updates this month.
05/25/2022		June 2022 Learning Services PI Dashboard
06/14/2022		June 2022 Emergency Planning PI Dashboard
06/23/2022		June 2022 PI Status Summary
06/21/2022		June 2022 Operations Services PI Dashboard
06/16/2022		June 2022 Maintenance PI Dashboard
06/15/2022		June 2022 Safety Performance PI Dashboard
06/06/2022		June 2022 Engineering Services PI Dashboard
06/13/2022		June 2022 Security & Emergency Services PI Dashboard
06/09/2022		June 2022 PI Status Summary
Station Initiative		There are no new Station Initiatives 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
		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
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June 2022
List of Documents Transmitted Electronically

		There are no Safety Limit Violation Reports for this month.
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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 202223 Updated	T+1 Performance Critique
	Week 202224 Updated	T+1 Performance Critique
	Week 202225	T+1 Performance Critique
	Week 202226	T+1 Performance Critique
	June	T+1 Monthly Performance Critique 2222-2226

July 2022
List of Documents Transmitted Electronically

A. Licensing Basis Impact Evaluations

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

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

Date	Letter No.	Title
07/06/2022	DCL-22-052 DIL-22-009	Emergency Plan Update
07/07/2022	DCL-22-053	(OUO) Response to Request for Additional Information on "Request for a Temporary Exemption from 10 CFR 73, Appendix B, Section VI, Subsection C.3.(I)(1) and Subsection A.7, Regarding Annual Force-on-Force (FOF) Exercises, Due to COVID-19 Pandemic" (OUO)
07/12/2022	DCL-22-054	Withdrawal of Request for a Temporary Exemption from 10 CFR 73, Appendix B, Section VI, Subsection C.3.(I)(1) and Subsection A.7, Regarding Annual Force-on-Force (FOF) Exercises, Due to COVID-19 Pandemic
7/13/2022	DCL-22-048	10 CFR 50.46 Annual Report of Emergency Core Cooling System Evaluation Model Changes for Peak Cladding Temperature for 2021
7/14/2022	DCL-22-057	DCL-22-057, Diablo Canyon Units 1 and 2 - 2Q2022 - PI Data Elements (QR)
7/20/2022	DCL-22-058	Responses to NRC Requests for Additional Information on LAR 20-03, Proposed Technical Specifications and Revised License Conditions for the Permanently Defueled Condition
7/21/2022	DCL-22-060	Owner's Activity Report for Unit 1 Twenty-Third Refueling Outage
7/27/2022	DCL-22-059	License Amendment Request 22-03 Application to Revise Technical Specifications to Adopt TSTF-569, "Revision of Response Time Testing Definitions"

C. NRC Incoming Correspondence (including Inspection Reports)

Date	Title
7/25/2022	20220725, DCPP U1&2 WITHDRAWAL ACKNOWLEDGEMENT OF TEMPOR EXEMPTION FROM ANNUAL FOF

D. PSRC Documents (PSRC Minutes)

Date	Doc. No.	Title
06/28/22	2022-009	PSRC Meeting Minutes
07/26/22	2022-010	PSRC Meeting Minutes

July 2022
List of Documents Transmitted Electronically

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

Type	Doc. No.	Title
2 WGE	51149642	DA-4KV bus E failed to transfer to AUX
2 WGE	51150556	DA-Control of DS80 Orders (trend)
2 WGE	51149743	DA-SI-1-RV-8855D - STP M-77 Test Require
2 WGE	51150553	DA-FW-1-361, 1R23 Inspection Required
2 WGE	51151017	DA-QAAF: PSRC records and tracking
2 WGE	51150914	DA-QAAF Incorrect SFP Daily Crane Check
2 WGE	51151561	DA-QAAF Crane Logbook RMS and Storage Re
2 WGE	51153037	DA-QAAF: Grace W/Inadequate Proc. Guidan
2 WGE	50997251	LTCA DA-PIMS Lacks Disaster Recovery
2WGE	51153674	DA-Shoulder strain reported
2WGE	51136623	DA-U2 Sys 39B NSR Rad Monitors - Goal Se
2WGE	51142123	DA-Unit 1 PPC Dead Computer
2WGE	51148661	Faulted inspections from past outages
2WGE	51148664	DA-Core Offload suspended due to HU
Eff. Eval		
06/07/2022	51096258	Effectiveness Evaluation - AFW Pipe Leak
06/27/2022		Significance Level 1 and 2 Work Group Evaluations Created 05/27/22 - 06/27/22
07/31/2022		List of DN 5.1 and 5.2 Created 7-1-2022 – 7-31-2022
05/26/2022		20 Oldest non-LTCA DA notifications as of 05/26/22
07/31/2022		DCPP 1 WGE and 2 WGE Notifications Completed 7/1/22 - 7/31/2022
06/23/2022		Open LTCA DA Notifications Station Significance 3 as of 6/23/22
06/22/2022		20 Oldest non-LTCA DA notifications as of 06/22/22
06/27/2022		DCPP CAP Station Index
06/23/2022		Open RCEs as of 06/23/22
06/23/2022		Open LTCA DA Notifications Station Significance 1 & 2

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

Date	Doc. No.	Title
07/05/2022		Quality Digest, July Edition 2022
07/19/2022		Quality Digest, July Edition 2022

G. Nuclear Safety Culture Monitoring Panel Reports

Date	Doc. No.	Title
03/18/2022		Nuclear Safety Monitoring Panel Report ~ 1st Period 2022
06/03/2022		DCLD-2021 Care to Coach

July 2022
List of Documents Transmitted Electronically

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

Date	Doc. No.	Title
05/26/2022	51154616	Ops Benchmark of Electric Ops
07/14/2022	51144950	Benchmarking: Fermi
06/30/2022	51151751	Perform QHSA against NRC IP 71124.08
07/07/2022	51157813	Security Benchmarking, Access Levels
06/28/2022	51124159	Perform 2022 Part 37 Annual Review
07/19/2022	51158947	Sec - Palo Verde Benchmark Trip Report
07/12/2022	51140986	2022 Rx Management QHSA
07/14/2022	51152968	Benchmarking PI - Callaway
07/07/2022	51145034	Quick Hit SA-Access Control 2022
07/26/2022	51154559	STARS Benchmark - Trend Code Use

I. Performance Information (PIR, Operating Plan, Station Initiatives)

Date	Doc. No.	Title
1/11/2021		Generation Operating Plan 2021 – 2025, No new updates this month.
07/18/2022	PIR	Diablo Canyon Power Plant; Plant Performance Improvement Report; Data: May 2022
07/18/2022	PIR	Diablo Canyon Power Plant; Plant Performance Improvement Report; Data: June 2022
07/26/2022		July 2022 EP PI Dashboard
07/01/2022		July 2022 Learning Services PI Dashboard
07/11/2022		July 2022 PI Status Summary
07/12/2022		July 2022 Operations Services PI Dashboard
07/19/2022		July 2022 Maintenance PI Dashboard
07/19/2022		July 2022 Maintenance PI Dashboard rev 1
07/11/2022		July 2022 Engineering Services PI Dashboard
07/18/2022		July 2022 Security & Emergency Services Performance Improvement Dashboard
07/28/2022		July 2022 PI Status Summary
07/19/2022		July 2022 Industrial Safety PI Dashboard
Station Initiative		There are no new Station Initiatives 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
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July 2022
List of Documents Transmitted Electronically

7/22/2022		Intake Salp Conditions
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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 for this month.

O. Functional Area Documents

Subcommittee	Date/Doc	Title
Maintenance	Week 202226	T+1 Performance Critique
	Week 202227	T+1 Performance Critique
	Week 202228	T+1 Performance Critique
	Week 202229	T+1 Performance Critique
	Week 202230	T+1 Performance Critique
	July	T+1 Monthly Performance Critique 2126-2130

August 2022
List of Documents Transmitted Electronically

A. Licensing Basis Impact Evaluations

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

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

Date	Letter No.	Title
08/11/2022	DCL-22-062	Alert and Notification System Siren 0818 Request to Disable
08/24/2022	DCL-22-065	Nuclear Material Transaction Report for New Fuel 1n2
08/31/2022	DCL-22-067	Nuclear Material Transaction Report for New Fuel 3n4

C. NRC Incoming Correspondence (including Inspection Reports)

Date	Title
08/09/2022	DCPP DBAI 050002752022011 AND 050003232022011
08/10/2022	DCPP, UNITS 1 AND 2 IIR 050002752022002 AND 050003232022002
08/23/2022	UPDATED INSPECTION PLAN FOR DCPP U1 n 2 REPORT 2022005 AND 2022005
08/29/2022	DCPP, UNITS 1 and 2 Post-Shutdown Decommissioning Activities Report Public Meeting (EPID L-2019-LRL-0004, EPID L-2019-LRL-0005, and EPID L-2019-LRL-0006)

D. PSRC Documents (PSRC Minutes)

Date	Doc. No.	Title
9/1/2022		PSRC Members-Altemates

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

Type	Doc. No.	Title
2 WGE	51153050	DA-QAAF: CP M-16 Walkdowns Ineffective
2 WGE	51151941	DA-QAAF: PSRC Review of LERs
2 WGE	51160822	DA-DEP Failure in PEG Performance
2 WGE	51157468	DA-QAAF - SRO Biennial Exam Grading Error
2 WGE	51160719	DA-DEP-PI Failure on Simulator
2 WGE	51159598	DA-Control switches found out of position
2 WGE	51157469	DA-QAAF - Procedural Non-compliances TQ2
2 WGE	51150940	DA-1R23 Injury Gflex Roll Struck Left Foot
2 WGE	51160760	DA-DEP Failure during As-Found Evaluation
2 WGE	51151671	DA-QAAF - EOP Setpoints not updated time
EE-CE	51104640	Effectiveness Eval For Scaffold CE
CE	51148666	DA-SFP : N Hoist Load Cell Error

August 2022
List of Documents Transmitted Electronically

RCE	51151560	DCPP Unit 1 Root Cause Evaluation Report forced Outage 1X24 – Unit 1 Blowdown Pressure Control System Failure
Eff. Eval		
07/31/2022		Significance Level 1 and 2 Work Group Evaluations Created 06/28/2022 - 07/31/2022
08/31/2022		List of DN 5.1 and 5.2 Created 8/1/2022 – 8/31/2022
08/31/2022		DCPP 1 WGE and 2 WGE Notifications Completed 8/31/2022
07/27/2022		Open LTCA DA Notifications Station Significance 3 as of 7/27/2022
07/27/2022		Open LTCA DA Notifications Station Significance 1&2 as of 7/27/2022
07/27/2022		20 Oldest Non-LTCA DA Notifications as of 07/27/2022
08/01/2022		DCPP CAP Station Index
08/01/2022		Open RCEs as of 08/01/2022

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

Date	Doc. No.	Title
8/3/2022		Nuclear Quality Digest, August 2022

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
08/16/2022	51158523	Benchmark - 2022 Mid Cycle Self-Assessme
06/15/2022	51156352	Benchmark - Incipient Fire Detection Flo
04/14/2022	51135994	19-003 Finishing on Top Self-Assessment
08/31/2022	51158458	Benchmark - 2022 NEI RP/Rad Safety Meeti
08/10/2022	51159643	ECP Informal Benchmark
06/19/2022	51558883	Byron Station Safety Benchmark

I. Performance Information (PIR, Operating Plan, Station Initiatives)

Date	Doc. No.	Title
1/11/2021		Generation Operating Plan 2021 – 2025, No new updates this month.
08/11/2022		August 2022 PI Status Summary

August 2022
List of Documents Transmitted Electronically

08/16/2022		August 2022 Operations Services PI Dashboard
08/15/2022		August 2022 Maintenance PI Dashboard
08/15/2022		August 2022 Engineering Services PI Dashboard
08/15/2022		August 2022 Security & Emergency Services PI Dashboard
08/25/2022		August 2022 PI Status Summary
08/01/2022		August 2022 Learning Services PI Dashboard
08/16/2022		August 2022 EP PI Dashboard
08/16/2022		August 2022 Safety PI Dashboard
Station Initiative		There are no new Station Initiatives 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
		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.

N. Miscellaneous

Date	Title
	There are no miscellaneous documents for this month.

O. Functional Area Documents

Subcommittee	Date/Doc	Title
Maintenance	Week 202231	T+1 Performance Critique
	Week 202232	T+1 Performance Critique
	Week 202233	T+1 Performance Critique
	Week 202234	T+1 Performance Critique
	Week 202235	T+1 Performance Critique

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

MEETING DATE:	September 28, 2022
AGENDA ITEMS:	VII-A & B, XIII-C & D
AGENDA TITLE:	Consultant & Legal Counsel Reports; Receive, Accept 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 Mr. 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 2022. These reports may be received by the Committee, accepted as to form and content and be authorized for transmittal to PG&E for its consideration and response. The Committee reserves the right to revise any fact-finding prior to the inclusion in an Annual Report. Fact finding reports in their final "as accepted form" become a part of the next DCISC Annual Report. Fact Finding Reports and are available for public inspection following their acceptance by the Committee at a public meeting.

RECOMMENDED COMMITTEE ACTION:

Receive reports by Consultants and Assistant Legal Counsel and provide direction.

Motions to accept Fact Finding Reports concerning fact-findings conducted on July 20-21, August 16-17 and September 13-14, 2022.

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

MEETING DATE:	September 28, 2022
AGENDA ITEM:	XVII-A
AGENDA TITLE:	Committee Discussion and Receive Comments Regarding Committee Activities Related to Potential Extended DCPD Operation.

CONSENT [] ACTION [X] INFORMATION [X]

Staff Summary: On August 31, 2022, in the California Assembly, and on September 1, 2022, in the California Senate, the California Legislature passed and on September 2, 2022, Governor Newsom signed urgency legislation to invalidate the Joint Proposal which would have retired DCPD Unit 1 in 2024 and Unit 2 in 2025 in order to preserve the option of continued operation of DCPD for an additional five years beyond 2025.

The legislation amends sections of the California Government Code, the Public Resources Code, the Public Utilities Code and the Water Code to require the Public Utilities Commission to set new retirement dates for DCPD, conditioned upon the NRC extending the plant's operating licenses.

The legislation also established the DCISC in the Public Utilities Commission and continues and ensures funding for the Committee operation and to undertake additional duties including concerning the transmittal of its findings and recommendations.

It is anticipated the Members, Technical Consultants and Legal Counsel will hold a discussion on the above matters and the resulting effect on DCISC operation and planning.

RECOMMENDED COMMITTEE ACTION: Discussion and provide direction as appropriate.