PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

 **Agenda ID: 19402**

**ENERGY DIVISION RESOLUTION E-5145**

 **May 20, 2021**

RESOLUTION

Resolution E-5145. Confirmation of candidates for appointment to the Diablo Canyon Independent Safety Committee (DCISC) for a three-year term beginning July 1, 2021.

PROPOSED OUTCOME:

* The California Public Utilities Commission (CPUC) ratifies the President’s selection of candidates for consideration by the Chair of the California Energy Commission (CEC) for appointment to the DCISC.

SAFETY CONSIDERATIONS:

* The DCISC reviews operations at Pacific Gas and Electric Company’s (PG&E) Diablo Canyon Power Plant (DCPP) for the purpose of assessing the safety of current operations and suggesting recommendations for continued safe operations. The appointed candidate will serve a three-year term on the DCISC.

ESTIMATED COST:

* All ongoing DCISC costs were funded previously. Ratification of the CPUC President’s selection of candidates for appointment to the DCISC will not result in any additional costs.

As required by Decision (D.) 07-01-028, dated January 25, 2007.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Summary

The Diablo Canyon Independent Safety Committee (DCISC) consists of three members, each appointed in turn by the California Governor, the California Attorney General, and the Chair of the California Energy Commission (CEC), serving staggered three-year terms. Section 1.B of the restated charter of the DCISC describes the process for appointment of DCISC members: it requires the CPUC to select and forward to the appointing authority no more than three new candidates plus the incumbent for DCISC membership. The appointing authority for the current cycle is the Chair of the CEC. This Resolution ratifies the California Public Utilities Commission (CPUC) President’s selection of Dr. Peter S. Lam as a candidate for reappointment, and Dr. Michael D. Quinn as candidates for appointment to the DCISC, for a three-year term commencing on July 1, 2021.

# Background

**Establishment of the DCISC and Member Selection Process:**

The CPUC created the DCISC in Decision (D.)88-12-083 as part of the overall settlement of ratemaking issues for the DCPP, which is owned and operated by Pacific Gas and Electric Company (PG&E). The DCISC is an independent,

three-member committee responsible for monitoring the safety of PG&E’s operation of DCPP. The DCISC’s budget is paid out of PG&E’s revenues and charged to PG&E’s ratepayers.[[1]](#footnote-2) D.88-12-083 established the qualifications and procedures for appointment of members to the DCISC and defined the scope of the Committee’s operations and responsibilities.[[2]](#footnote-3) Membership on the DCISC is a compensated position.[[3]](#footnote-4)

On October 24, 2006, the DCISC submitted Application (A.) 06-10-024 proposing a restated charter. The CPUC adopted the restated charter in D.07-01-028 on January 25, 2007.

Section 1.B of the restated charter describes the process for appointment of DCISC members. It requires the CPUC to select no more than three candidates for DCISC membership from among those applicants responding to an open request by the CPUC for applications. The incumbent member whose term is about to expire is to be deemed an additional candidate if he or she consents. The CPUC is charged with the responsibility to provide for public comment on the applicants’ qualifications and potential conflicts of interest. The President of the CPUC is to review the applicants’ qualifications, experience, and background, including any conflicts of interest,[[4]](#footnote-5) together with any public comments, and propose as candidates to the appointing authority only persons with knowledge, background, and experience in the field of nuclear power plants and nuclear safety issues. The Energy Division prepares a draft resolution ratifying the President’s selection of candidates for the Commission.

**Current Applicants:**

On December 18, 2020, an open request for applications to fill the July 1, 2021 vacancy on the DCISC was posted on the CPUC’s website.[[5]](#footnote-6)

An application was timely received from Dr. Michael Quinn. In addition,
Dr. Peter Lam, the incumbent member of the DCISC whose term is set to expire, sent a letter to the Energy Division confirming his willingness to continue serving as a member of the DCISC.

Dr. Lam provided a synopsis of his experience as a consultant to governmental organizations and the nuclear industry on nuclear safety matters, and as an Administrative Judge of the U.S. Nuclear Regulatory Commission (NRC) from 1990 until 2007. Dr. Lam was originally appointed to the DCISC in 2009 by Karen Douglas, then Chair of the CEC; and again in 2012, 2015, and 2018 by former Chair of the CEC, Dr. Robert Weisenmiller. Dr. Lam’s fourth term is set to expire on June 30, 2021.[[6]](#footnote-7)

In Dr. Quinn’s application, he describes his experience working in the nuclear power industry, and consulting on nuclear operations and safety for industry clients as well as the U.S. and Canadian governments. Dr. Quinn was previously selected by the Commission as one of the qualified candidates considered for appointment in 2014, 2015, 2017, 2018, 2019, and 2020.[[7]](#footnote-8)

**Public Comments on Applicants:**

On February 23, 2021, an announcement was posted on the CPUC’s website inviting comments on the candidates. [[8]](#footnote-9) Summaries of their qualifications were included with the announcement. The full text of the public comments is included in Appendix B of this Resolution.

Comments in support of Dr. Quinn’s appointment were submitted by
Rochelle Becker, Jane Swanson, Joseph Drago, Matthew Sunseri, and Bruce O’Brien. Ms. Becker, Executive Director for the Alliance for Nuclear Responsibility, supports the nomination of Dr. Quinn based on his acknowledgment that the “human performance aspects of nuclear power operations” will be critical for the DCISC as the power plant approaches closure, the fresh eyes he will bring to DCPP oversight, and his technical background. Ms. Swanson, President of San Luis Obispo Mothers for Peace, supports Dr. Quinn in concurrence with Ms. Becker. Mr. Drago, Director at Marathon Consulting Group, recommends Dr. Quinn based on his experience with nuclear power plants, corrective action management processes, and safety culture. Mr. Sunseri, a nuclear industry professional, recommends Dr. Quinn based on his nuclear power plant experience, his consulting experience in event and organization analysis, and his service as a board member and chairman of a community board. Mr. O’Brien, President and CEO of Marathon Consulting Group, recommends Dr. Quinn based on his experience in the nuclear industry, safety culture assessment skills, and root cause analysis expertise.

# Notice

Notice of this Resolution was made by publication in the CPUC’s Daily Calendar. A copy of the Draft Resolution was sent to all of the applicants and to those submitting comments on their behalf. A copy of the Draft Resolution was also sent to the Chair of the CEC and to the service list in PG&E’s 2018 Nuclear Decommissioning Cost Triennial proceeding (A.18-12-008).

# Discussion

**The restated charter adopted in D.07-01-028 requires that candidates for appointment to the DCISC be persons with knowledge, background, and experience in the field of nuclear power facilities and nuclear safety issues who demonstrate they have no conflicts of interest.[[9]](#footnote-10)**

Summaries of the qualifications of each applicant are included in Appendix A of this Resolution.

**Dr. Peter S. Lam is qualified to continue to serve on the Diablo Canyon Independent Safety Committee.**

Dr. Lam is an incumbent member of the DCISC, having been appointed to his initial three-year term in 2009 by Karen Douglas, then Chair of the CEC, and reappointed in 2012, 2015, and 2018 by Dr. Robert Weisenmiller, former Chair of the CEC. Dr. Lam previously served as an Administrative Judge of the NRC from 1990 until 2007 where he adjudicated nuclear safety issues in a jurisdiction that included all 104 nuclear power plants, approximately 21,000 medical and material licensees, and nuclear waste storage in the U.S. During this time,
Dr. Lam also sat on the Atomic Safety and Licensing Boards from 2002 to 2003 to conduct the public proceedings concerning the application of PG&E to construct and operate the Diablo Canyon independent fuel storage installation. Prior to his judicial appointment at the NRC, Dr. Lam worked in managerial and technical capacities in the nuclear energy business for 20 years. Dr. Lam has published numerous technical papers, reports, and international publications addressing nuclear reactor operations, design, and safety. Dr. Lam has also presented several lectures at international conferences for the International Atomic Energy Agency regarding comprehensive analyses of nuclear reactor operating experience. He earned a B.S. in mechanical engineering from Oregon State University in 1966, and an M.S. and Ph.D. in nuclear engineering from Stanford University in 1968 in 1971 respectively.

Dr. Lam has no conflicts of interest that would preclude his continuing to serve on the DCISC. His qualifications show that he has the requisite knowledge, background, and experience in the field of nuclear power plants and nuclear safety issues.

**Dr. Michael Quinn is qualified to serve on the Diablo Canyon Independent Safety Committee.**

Dr. Quinn has spent over forty years in the nuclear industry: since 1999 he has facilitated regulatory compliance, reliability assessments, and performance improvement in the commercial nuclear power industry; during the 25 years prior he worked in the power block of a nuclear unit for a large nuclear utility. His experience includes developing and delivering root cause evaluation training to NRC staff, assessing significant issues during refueling operations at nuclear power plants, and leading root cause assessments at nuclear facilities. Dr. Quinn has also managed a team that developed and implemented corrective actions to address performance resulting in radiation contamination of several hundred workers at the Bruce Nuclear Generating Station in Ontario, Canada. He has led teams in developing, implementing, and evaluating programs to establish a safety culture at nuclear power plants. Dr. Quinn was Manager of Nuclear Planning and Operational Standards for Northeast Nuclear Energy Company, and has held positions as Radio-Chemist, and Manager of Chemistry and Radiochemistry, in addition to other positions at the Connecticut Yankee Haddam Neck Nuclear Station. Dr. Quinn has a Doctorate in Organizational Management Systems and a Masters of Business Administration degree, both from the University of New Haven, and a B.S. degree in Chemistry from Charter Oak College. He previously held a U.S. NRC Senior Reactor Operator License on a Westinghouse pressurized water reactor.

Dr. Quinn has no conflicts of interest that would preclude his serving on the DCISC. His qualifications show that he has knowledge, background, and experience in the field of nuclear power plants and nuclear safety issues.

**The candidates nominated by the Commission are the most qualified candidates from the pool of applicants.**

The CPUC’s President, Marybel Batjer, has reviewed the qualifications, experience, and backgrounds of all the applicants and selected Dr. Peter Lam and Dr. Michael Quinn for submission to the Chair of the CEC as candidates for the three-year DCISC position beginning July 1, 2021.

**President Batjer’s selection of Dr. Peter Lam and Dr. Michael Quinn as the candidates for the July 1, 2021 vacancy on the Diablo Canyon Independent Safety Committee is ratified.**

President Batjer’s selection of Dr. Lam as a candidate for reappointment, and Dr. Quinn as a candidate for appointment to the DCISC for a three-year term beginning July 1, 2021 is ratified. As mentioned above, President Batjer recognizes that all of the applicants possess the qualifications to competently serve on the DCISC. The President’s selections shall be provided to the Chair of the CEC.

# Comments

Public Utilities Code section 311(g)(1) provides that this resolution must be served on all parties and subject to at least 30 days public review. Please note that comments are due 20 days from the mailing date of this resolution. Section 311(g)(2) provides that this 30-day review period and 20-day comment period may be reduced or waived upon the stipulation of all parties in the proceeding.

The 30-day review and 20-day comment period for the draft of this resolution was neither waived nor reduced. Accordingly, this draft resolution was mailed to parties for comments, and will be placed on the Commission's agenda no earlier than 30 days from today.

# Findings

1. D.88-12-083 created the Diablo Canyon Independent Safety Committee (DCISC).
2. The DCISC is an independent, three-member committee responsible for monitoring the safety of PG&E’s operation of the Diablo Canyon Power Plant.
3. D.07-01-028 adopted a restated charter for the DCISC including revised procedures for appointments of DCISC members.
4. On December 18, 2020, in accordance with D.07-01-028, an announcement was posted on the CPUC’s website seeking applications for the July 1, 2021 vacancy on the DCISC.
5. The Chair of the California Energy Commission (CEC) is the appointing authority for the July 1, 2021 vacancy on the DCISC.
6. Dr. Peter Lam, the incumbent member of the DCISC whose term expires on June 30, 2021, responded to the CPUC’s December 18, 2020 announcement and consents to being a candidate for reappointment to the DCISC.
7. Dr. Michael Quinn, a professional nuclear energy consultant, responded to the CPUC’s December 18, 2020 announcement, and submitted an application to be considered as a candidate for appointment to the DCISC.
8. The CPUC invited comments on Dr. Lam’s and Dr. Quinn’s qualifications in an announcement posted on the CPUC’s website on February 23, 2021.
9. Comments supporting the appointment of Dr. Quinn to the DCISC were received in response to the CPUC’s February 23, 2021 announcement inviting comments.
10. The CPUC’s President, Marybel Batjer, has reviewed the qualifications, experience, and backgrounds of Dr. Lam and Dr. Quinn.
11. Dr. Lam and Dr. Quinn have knowledge, background, and experience in the field of nuclear power plants and nuclear safety issues, and are qualified candidates for appointment to the DCISC.
12. President Batjer has chosen to provide the names of Dr. Lam as a candidate for reappointment, and Dr. Quinn as a candidate for appointment to the DCISC for a three-year term beginning July 1, 2021.
13. President Batjer’s selection of Dr. Lam and Dr. Quinn as the candidates for appointment to the DCISC for a three-year term beginning July 1, 2021 should be ratified and provided to the Chair of the CEC.

# Therefore it is ordered that:

* + 1. President Batjer’s selection of Dr. Lam and Dr. Quinn as qualified candidates for consideration by the Chair of the CEC for appointment to the Diablo Canyon Independent Safety Committee for a three-year term beginning July 1, 2021 is hereby ratified.

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on May 20, 2021; the following Commissioners voting favorably thereon:

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 RACHEL PETERSON

 Executive Director

**APPENDIX A**

The following statements were supplied by the applicants as part of the application process and were available for public review and comment starting on February 23, 2021. The assertions of fact contained within these statements have not been disputed. These statements are provided verbatim.

**Dr. Peter Lam (Incumbent)**

Dr. Peter Lam served as an Administrative Judge of the U.S. Nuclear Regulatory Commission for 18 years, from 1990 until his retirement in 2007. Judge Lam's responsibility was to adjudicate safety issues in public proceedings mandated by the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974. These public administrative proceedings were related to the granting, suspending, revoking or amending licenses issued by the U.S. Nuclear Regulatory Commission, especially those involving nuclear power plants. His jurisdiction covered all 104 nuclear power plants, some 21,000 medical and material licensees, and nuclear waste storage in the United States. One of his duties was to encourage fair and reasonable settlements of contested issues consistent with the hearing requirements of the Atomic Energy Act, and to impose requirements, when necessary and appropriate, as part of the adjudicative process to protect public health and safety. He has presided over numerous proceedings to decide technical issues of major safety significance in litigation on nuclear power plants, nuclear waste disposal, and the use of nuclear materials. The ultimate resolution of these significant technical issues has contributed to the enhancement of safety in the use of nuclear technology, particularly in the safe operation of nuclear power plants.

It is relevant to note that, from 2002 to 2003, Judge Lam sat on the Atomic Safety and Licensing Boards to conduct the public proceeding concerning the application of Pacific Gas & Electric Company under 10 CFR Part 72 to construct and operate an independent spent fuel storage installation at the Diablo Canyon Power Plant. The Atomic Safety and Licensing Board issuances for this Diablo Canyon proceeding are LBP-02-15, LBP-02-23, LBP-02-25, and LBP-03-11, cited as 56 NRC 42 (2002), 56 NRC 413 (2002), 56 NRC 467 (2002), and 58 NRC 47 (2003), respectively.

Prior to Dr. Lam's judicial appointment 31 years ago, he had extensive technical and managerial experience in the nuclear energy business over a period of 20 years. His technical expertise is in the areas of nuclear power plants operating experience, nuclear reactor safety and probabilistic risk assessment. Dr. Lam was a nuclear engineer at General Electric Company, participating in the design and analysis of BWR advanced fuels. He served as a program manager at Argonne National Laboratory, managing the research and development of advanced fast reactor metal fuels. He was a manager at Science Applications, Inc., and a consultant at NUS Corporation, both major consulting firms in the nuclear industry. His responsibilities there involved the management of probabilistic risk assessments of operating nuclear reactors. He managed a group of technical specialists in the U.S. Nuclear Regulatory Commission in the analysis and evaluation of nuclear reactor operating experience. He was also a visiting faculty member at California State University at San Jose, and at George Washington University.

Dr. Lam has published 71 technical papers and reports in national and international journals and in proprietary company publications, which focus on major issues in nuclear transport theory, nuclear reactor fuel design, nuclear reactor operating experience, and nuclear reactor safety. He has also issued more than 110 published judicial decisions related to some 50 cases of litigations. These judicial decisions resolved a wide range of technical and legal issues regarding nuclear power plants operation and safety, nuclear waste disposal, and other civilian use of nuclear technology.

Dr. Lam has presented lectures at IAEA international conferences at Austria, Korea, and Spain, on significant results in comprehensive analyses of nuclear reactor operating experience. He has chaired an IAEA working group to develop a technical treatise for the analysis and evaluation of operating experience of the world’s nuclear power plants. These activities contribute to the international exchange of important information to improve nuclear reactor safety.

Dr. Lam has earned a Ph.D. in nuclear engineering from Stanford University in 1971; a M.S. in nuclear engineering from Stanford University in 1968; and a B.S. in mechanical engineering from Oregon State University in 1967.

Dr. Lam was appointed by the honorable Dr. Robert B. Weisenmiller, Chair of the CEC on June 6, 2018 to the DCISC for a fourth three-year term beginning on July 1, 2018. He is currently serving as the Chair of the DCISC for a second year.

**Dr. Michael Quinn**

Michael Quinn has invested 40-plus years into the public health and safety of the nuclear power industry, entailing 25 years in power block operations at a nuclear power station, and during the past 20 years as an executive operations consultant to the nuclear industry in the U.S. and Canada.

Dr. Quinn’s expertise entails, but is not limited to: nuclear safety; nuclear operations; significant operational event assessments; nuclear inspection and evaluation; technical program rigor; high reliability and corrective action program/human performance/safety culture programs.

Throughout his career, Michael has brought the tenets of Compliance, Integrity, Transparency, and Competency to nuclear and high-reliability organizations with whom he has been engaged.

**Current Nuclear Operations Experience: Nuclear Regulators, Nuclear Licensees, and Suppliers**

Since 1999 Michael has been engaged by executives in the safe operation of nuclear units, as well as in the new build, refurbishment, decommissioning and spent nuclear fuel storage installation sectors of the nuclear industry in the U.S. and Canada.  On the regulatory side, during the 2006-2021 period he has trained U.S. NRC resident inspectors and regional office technical staff on evaluating significant nuclear licensee operational events and processes, with a focus on nuclear safety and the three cross-cutting areas of *Human Performance, Problem Identification and Resolution (PI&R), and Safety Culture.*

During the past 20-plus years, Michael has been, and is presently: advising on performance improvement; conducting program and operational assessments of nuclear licensee organizations; leading/performing root cause evaluations on significant nuclear events; and leading recovery project management for nuclear licensees and suppliers. His primary focus is on nuclear safety and the three cross-cutting areas.

In addition, Dr. Quinn continues to evaluate and to remediate licensee and supplier organizational and corrective action programs; providing PI&R, Human Performance, and Safety Culture consulting, coaching, assessment, and training. He provides related consulting services to several nuclear industry sectors, including: the commercial nuclear power industry in the U.S. and Canada; U.S. Government
(e.g., U.S. NRC, U.S. Department of Energy); nuclear supplier organizations - large nuclear steam supply system providers (e.g., Westinghouse and Mitsubishi); as well as smaller nuclear suppliers to the industry.

Selected nuclear industry assessments that Dr. Quinn has led or consulted to include:

* Significant safety issues in a high-level, trans-uranic nuclear waste underground facility;
* Consequential design phase issues on the new build nuclear project for North Anna 3;
* Significant safety issues on the disassembly and reassembly of components on two CANDU reactors under refurbishment;
* Loss of Offsite Power to the Operations power block of a 1200 MWe nuclear unit;
* Nuclear fuel handling project upgrade failures at five separate nuclear sites involving distinctly different failures during a four-month refueling season;
* A nuclear unit cooling tower failure;
* Reliability assessment of Vermont Yankee Nuclear Station operations preceding license extension decision
* Collective Significance assessment on six safety systems’ performance challenges at a PWR;
* Investigating safety-related components that did not meet acceptance criteria at each of the four
Westinghouse ‘new build’ nuclear units in SC and GA;
* Radioactive effluents (planned and unplanned airborne and liquid discharges)
* Collective Significance on Spent Fuel Transfer issues at a decommissioning station;
* Significant transuranic (alpha) ingestion/ uptake to over 500 craft workers at a nuclear power station;
* Led an assessment to determine  factors contributing to ‘engineering rigor’ challenges in a large engineering organization responsible for nuclear wastewater management (over 50 million gallons) in underground storage tanks at a US Department of Energy site.

From a major nuclear industry ‘campaign’ perspective, Dr. Quinn has been/is engaged in many industry issue campaigns and challenges that include/have included:

* Nuclear fuel handling, storage, cask operations;
* Safety culture challenges to nuclear operations;
* Safeguards at operating and decommissioning nuclear units
* Technical program rigor and quality challenges resulting in non-compliances
* Independent Spent Fuel Storage Installations (ISFSI) operations and events;
* Radioactive effluents and radioactive waste treatment; Groundwater tritium;
* Radiological/ trans-uranic worker uptake events;
* Corrective action program and 10CFR50 Appendix B Criteria challenges;
* Post-accident response and subsequent upgrades (NUREG 0737);
* Containment sump screen upgrade (GSI-191);
* And very importantly, the impact that a ‘final shutdown decision’ (as Diablo Canyon is facing in 3-4 years) has had on nuclear station staffs’ performance while attempting to maintain focus on operational excellence.  Experience includes maintaining operations ‘within the envelope,’ key staff retention, addressing increases in event frequency and severity, increased employee concerns, and safety culture/ safety conscious work environment (SCWE) declines, among others.

Starting in 2006 and continuing into 2021, Dr. Quinn has trained U.S. NRC inspectors and technical staff in a concentrated three-day workshop to evaluate significant nuclear licensee events, training over 600 U.S. NRC inspectors and technical staff during 40+ deliveries. He is contracted through 2022. In 2017, Dr. Quinn was requested to present this training to the first cohort from the Japan Nuclear Regulation Authority, and in later 2017, he was requested to present the training to the first cohort of the Canadian Nuclear Safety Commission.

He is the only individual who has taught nuclear event causal analysis evaluation to the US Nuclear Regulatory Commission, the Japan Nuclear Regulation Authority, and the Canadian Nuclear Safety Commission.

Since 2001, Dr. Quinn has presented workshops and seminars on current nuclear industry issues and challenges at industry conferences and forums in the US and Canada, as well as for the International Atomic Energy Agency (IAEA) and Argonne National Laboratory. He has also taught 20+ courses in Management Systems, Strategy, Organizational Behavior, and Organizational Management at two Connecticut universities.

**Nuclear Operations Experience within the Power Block 1975-1999**

While in the power block of a pressurized water reactor unit with a large nuclear utility from 1975 to 1999, Michael earned a U.S. NRC Senior Reactor Operator License on a Westinghouse Pressurized Water Reactor unit, and held leadership positions that included Director of Nuclear Station Services; Nuclear Station Duty Officer;  Chair-Nuclear Plant Operations Review Committee [operations oversight including 50.59 Reviews]; Corrective Action Review Board (CARB) Chair; Director of Nuclear Station Emergency Operations (DSEO); Refueling and Maintenance Outage Shift Manager; Manager of Chemistry and Radiochemistry;  and Project Manager, reporting to the President, on a three-unit, four-year Nuclear Station Recovery Team.

During this time frame Michael was a member of the senior station leadership team at Haddam Neck Station, a nuclear unit that consistently performed at U.S. NRC SALP-1 and INPO-1 performance levels (presently termed U.S. NRC ROP Column 1 and INPO-1 respectively).

**LICENSES/ CERTIFICATIONS CONTRIBUTORY TO A POTENTIAL POSITION ON THE DCISC:**

* U.S. NRC Senior Reactor Operator License #10071 on a Westinghouse PWR
(Diablo Canyon is a Westinghouse PWR NSSS design)
* Certified Root Cause Investigator (Nuclear Safety Review Concepts Event Evaluation and PII)
* Certified Root Cause Training Instructor
* Certified Radiation Safety Officer

Michael earned a Doctorate in Organizational Management Systems (organizational system dynamics), and preceding that effort he had completed an Executive Master of Business Administration degree and had earned a Bachelor of Science degree in Chemistry.

Michael’s collective current and past nuclear power experience is congruent with the Diablo Canyon Independent Safety Committee’s (DCISC) mission and requirements.  He can bring current and comprehensive assessment experience in nuclear operations, decommissioning, and *Independent Spent Fuel Storage Installation* (ISFSI) management to complement the depth and breadth of the DCISC team.

Dr. Quinn has a demonstrated history of articulating his evaluations in an objective, empirically-based, and plain language manner to a spectrum of stakeholders (e.g., utility commissions, the public, station staff, utility staff, state and federal regulators, interest groups, and the boardroom).

In summary, Michael offers current and comprehensive nuclear industry assessment and evaluation experience that support consideration of his candidacy for a role on the Diablo Canyon Independent Safety Committee.

On a personal note, Michael is a several decade American Red Cross blood donor, and for the past 18 years has served on the Connecticut Community Care Inc. Board of Directors, a non-profit health care service provider for over 9,000 individuals in need.

LinkedIn:       https://www.linkedin.com/in/quinnmd/

**END OF APPENDIX A**

**APPENDIX B**

The following are all of the public comments submitted regarding the applicants for the Diablo Canyon Independent Safety Committee. The comments are presented in chronological order and are provided verbatim.

PO Box 1328

San Luis Obispo, CA 93406

 (858) 337-2703

 (805) 704-1810

**www.a4nr.org**

March 17, 2021

David Zizmor

California Public Utilities Commission

505 Van Ness Avenue

Energy Division, Fourth Floor

San Francisco, CA 94102

Via email: david.zizmor@cpuc.ca.gov

 Re: Diablo Canyon Independent Safety Committee

 Appointment of Dr. Michael Quinn—SUPPORT

Dear Mr. Zizmor:

The Alliance for Nuclear Responsibility would like to support the nomination of Dr. Michael Quinn to the Diablo Canyon Independent Safety Committee (DCISC) as the appointee of the California Energy Commissioner.

The Alliance’s mission includes monitoring ratepayer investments to improve safety and mitigate environmental damage from the operation of the state’s last aging reactor. The DCISC is charged with monitoring safety oversight at Diablo Canyon. However, as their charter is a creation of the CPUC, no less an obligation should be their consideration of ratepayer impacts, for safety comes at a price.

These oversight concerns grow more pressing as Diablo Canyon enters its final years, and much of the infrastructure nears the end of its life expectancy. Among the issues would be:

* Will PG&E maintain the required level of capitol improvement and maintenance needed for the remaining years?
* How will workforce morale and diligence be maintained as the PG&E corporation writ large deals with bankruptcy and the legal ramifications of their criminal negligence?
* How and who will monitor the NRC’s oversight with regards to waivers that may or may not be issued for repairs and upgrades, given the shortened plant life?

The current DCISC members have been in place for over a decade, and while this may indicate experience and familiarity with the plant and the utility, regrettably collegiality has given way to complacency. Review of the recent public meetings of the DCISC will offer evidence of this. For example, at their fall 2019 meeting, PG&E presented a report on the replacement project of the Unit 2 main generator, whose costs were approved by the CPUC in PG&E’s GRC. The DCISC members effusively praised PG&E for their work-in-progress presentation and highlighted the need for this repair because of the dangers leaking hydrogen posed in the presence of high voltage. No critical questions were posed to the utility spokesperson. No discussion raised the possible issues associated with the “bathtub curve”—a well-known engineering phenomenon that acknowledges the increasing likelihood of failures of mechanical systems at both the startup and later end of life.

Within a year the situation would be entirely reversed: The “replaced” Unit 2 main generator would fail several times—including unexpected reactor trips—*which can be a safety concern*. Ultimately, this led to week-long and eventually month-long outages. At the winter 2021 DCISC meeting, PG&E made a subsequent presentation on their examination of the failures, in which PG&E *downplayed* the threat of hydrogen leaks, and the DCISC members again agreed with the utility—in contravention to their prior concerns and statements. “Independence” that vacillates with the utility’s preferred outcomes is not the independent oversight that ratepayers pay for and deserve.

 That is why the Alliance welcomes the candidacy of Dr. Quinn to the DCISC. With all due respect to the long-term tenure of the current candidate, it is far past due to have fresh eyes examining an increasingly geriatric and frail patient.

While it is true that all the candidates show strong backgrounds and work experience with nuclear science and regulation, Dr. Quinn’s resume stands out. In addition numerous technical positions (including “NRC senior reactor operator license”) his career features additional areas of concentration (as was the focus of his Ph.D) in *the management and human relations aspects* of operating complex, technical systems. As such, *only his* curriculum vitae acknowledges this changed situation for Diablo Canyon:

“And very importantly, the impact that a ‘final shutdown decision’ (as Diablo Canyon is facing in 3-4 years) has had on nuclear station staffs’ performance while attempting to maintain focus on operational excellence. Experience includes maintaining operations ‘within the envelope,’ key staff retention, addressing increases in event frequency and severity, increased employee concerns, and safety culture/ safety conscious work environment (SCWE) declines, among others.”

Of the current candidates, Dr. Quinn’s recognition of Diablo’s changed status is unique, and we believe a valuable insight into his thought process and expertise. Continuing with the example of the failed Unit 2 main generator replacement, Dr. Quinn’s expertise would be appropriate as PG&E’s efforts have now include multiple “root cause evaluations.” And it is only Dr. Quinn’s resume that notes his competency as a

- Certified Root Cause Investigator (Nuclear Safety Review Concepts Event Evaluation and PII) - Certified Root Cause Training Instructor

Review of subject areas covered by the DCISC during the past two years will demonstrate the increasing number of “root cause analyses” that are being undertaken at Diablo. One example of both a workplace procedure and equipment failure root cause evaluation generated last year stemmed from the unnoticed leak of water from piping corrosion in the AFW system.

The human performance aspects of nuclear power operations are likely to be looming as large as the technical considerations in these final countdown years to closure. The experiences of a candidate such as Dr. Quinn in identifying and working to mitigate any shortcomings that could impact reactor operations and public safety would be welcomed by ratepayers and stakeholders alike.

The Alliance for Nuclear Responsibility endorses Dr. Michael Quinn for appointment to the Diablo Canyon Independent Safety Committee.

Yours truly.

 /s/

Rochelle Becker

Executive Director

Alliance for Nuclear Responsibility



1. D.88-12-083, Appendix C, Paragraph 16. [↑](#footnote-ref-2)
2. D.88-12-083, Appendix C, Attachment A. [↑](#footnote-ref-3)
3. In Resolution E-3152, the Commission established that DCISC member compensation be set at levels commensurate with fees paid by PG&E for comparable services.
The compensation levels set in E-3152 have since been revised, most recently on
May 8, 2020 in PG&E Advice Letter (AL) 5797-E-A. The current compensation levels are as follows: annual retainer of $10,400; $260/hour fee for attendance at DCISC meetings; $260/hour fee for DCISC work performed outside of committee meetings in excess of 40 hours/year; and reimbursement of expenses incurred in performance of DCISC work. PG&E submitted AL 6144-E on April 1, 2021 requesting the same DCISC compensation levels affirmed in AL 5797-E-A. Disposition of PG&E AL 6144-E is still pending. [↑](#footnote-ref-4)
4. As conflicts of interest are a legal question, their review was conducted by the CPUC’s legal department which the President then approved. [↑](#footnote-ref-5)
5. A link to the announcement posted on the CPUC’s website was sent to the service list of A.18-12-008 to ensure that parties interested in issues relating to the DCPP were aware of the announcement. A.18-12-008 is PG&E’s 2018 Nuclear Decommissioning Cost Triennial Proceeding. [↑](#footnote-ref-6)
6. *See* CPUC Resolution E-4219 (February 2, 2009), CPUC Resolution E-4499
(June 8, 2012), and CPUC Resolution E-4711 (February 26, 2015), and CPUC Resolution E-4936 (May 31, 2018). [↑](#footnote-ref-7)
7. *See* CPUC Resolution E-4657 (June 12, 2014), CPUC Resolution E-4711
(February 26, 2015), CPUC Resolution E-4849 (June 16, 2017), CPUC Resolution E-4936 (May 31, 2018), CPUC Resolution E-5001 (June 13, 2019), and CPUC Resolution E-5081 (June 11, 2020). [↑](#footnote-ref-8)
8. A link to the announcement was also sent to the service list in A.18-12-008.
*See* footnote 5 above. [↑](#footnote-ref-9)
9. Conflicts of interest guidelines are set forth in Section I.C of the restated charter. They establish limits for DCISC members on income and gifts from PG&E or an affiliated company, and investments in PG&E or an affiliate. They also prohibit members of the DCISC from attempting to use their position to influence action of the Committee in which they have a financial interest. DCISC members are required to file a Statement of Economic Interest in the same manner as designated CPUC employees. No person shall serve on the DCISC who has a prior history of supporting or opposing PG&E as a witness or intervenor in nuclear licensing or CPUC proceedings associated with the Diablo Canyon Power Plant. [↑](#footnote-ref-10)