UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

PACIFIC GAS AND ELECTRIC COMPANY

DIABLO CANYON NUCLEAR POWER PLANT, UNIT 2

DOCKET NO. 50-323

FACILITY OPERATING LICENSE

License No. DPR-82

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for licenses by Pacific Gas and Electric Company (PG&E) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations set forth in 10 CFR Chapter I, and all required notifications to other agencies or bodies have been duly made;

   B. Construction of the Diablo Canyon Nuclear Power Plant, Unit 2 (the facility), has been substantially completed in conformity with Provisional Construction Permit No. CPPR-69 and the application, as amended, the provisions of the Act, and the regulations of the Commission;

   C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission, except as exempted from compliance in Section 2.D below;

   D. There is reasonable assurance (i) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the regulations of the Commission set forth in 10 CFR Chapter I, except as exempted from compliance in Section 2.D below;

   E. The Pacific Gas and Electric Company is technically qualified to engage in the activities authorized by this operating license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;

   F. The Pacific Gas and Electric Company has satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements", of the Commission's regulations;

G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;

H. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of Facility Operating License No. DPR-82, subject to the conditions for protection of the environment set forth herein, is in accordance with applicable Commission regulations governing environmental reviews (10 CFR Part 50, Appendix D and 10 CFR Part 51) and all applicable requirements have been satisfied; and

I. The receipt, possession, and use of source, byproduct, and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30, 40 and 70.

2. Pursuant to approval by the Nuclear Regulatory Commission in its Memorandum and Order (CLI-85-14) dated August 1, 1985, the license for fuel loading and low power testing, Facility Operating License No. DPR-81, issued on April 26, 1985, is superseded by Facility Operating License No. DPR-82, hereby issued to Pacific Gas and Electric Company to read as follows:

A. This License applies to the Diablo Canyon Nuclear Power Plant, Unit 2, a pressurized water nuclear reactor and associated equipment (the facility), owned by PG&E. The facility is located in San Luis Obispo County, California, and is described in PG&E's Final Safety Analysis Report as supplemented and amended, and the Environmental Report as supplemented and amended.

B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses the Pacific Gas and Electric Company:

(1) Pursuant to Section 104(b) of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities", to possess, use, and operate the facility at the designated location in San Luis Obispo County, California, in accordance with the procedures and limitations set forth in this license;

(2) Pursuant to the Act and 10 CFR Part 70, to receive, possess, and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;

(3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

(4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and

(5) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This License shall be deemed to contain and is subject to the conditions specified in the Commission's regulations set forth in 10 CFR Chapter I and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The Pacific Gas and Electric Company is authorized to operate the facility at reactor core power levels not in excess of 3411 megawatts thermal (100% rated power) in accordance with the conditions specified herein.

(2) Technical Specifications (SSER 32, Section 8)* and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 254, are hereby incorporated in the license. Pacific Gas & Electric Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan, except where otherwise stated in specific license conditions.

(3) Initial Test Program (SSER 31, Section 4.4.1)

Any changes to the Initial Test Program described in Section 14 of the FSAR made in accordance with the provisions of 10 CFR 50.59 shall be reported in accordance with 50.59(b) within one month of such change.

*The parenthetical notation following the title of many license conditions denotes the section of the Safety Evaluation Report and/or its supplements wherein the license condition is discussed.

(4) Fire Protection

a. PG&E shall implement and maintain all provisions of the approved fire protection program that comply with 10 CFR 50.48(a) and 10 CFR 50.48(c), as specified in the PG&E amendment request dated June 26, 2013, as supplemented by letters dated October 3, 2013; September 29, 2014, October 27, 2014, October 29, 2014, November 26, 2014, and December 31, 2014, February 25, 2015 (two letters), May 7, 2015, October 15, 2015, and December 31, 2015; and January 28, 2016, and as approved in the safety evaluation dated April 14, 2016. Except where NRC approval for changes or deviations is required by 10 CFR 50.48(c), and provided no other regulation, technical specification, license condition or requirement would require prior NRC approval, PG&E may make changes to the Fire Protection Program without prior approval of the Commission if those changes satisfy the provisions set forth in 10 CFR 50.48(a) and 10 CFR 50.48(c), the change does not require a change to a technical specification or a license condition, and the criteria listed below are satisfied.

b. Risk-Informed Changes that May Be Made Without Prior NRC Approval

A risk assessment of a change must demonstrate that the acceptance criteria below are met. The risk assessment approach, methods, and data shall be acceptable to the NRC and shall be appropriate for the nature and scope of the change being evaluated; be based on the as-built, as-operated, and maintained plant; and reflect the operating experience at DCPP. Acceptable methods to assess the risk of the change may include methods that have been used in the peer-reviewed Fire Probabilistic Risk Assessment model, methods that have been approved by NRC through a plant-specific license amendment or NRC approval of generic methods specifically for use in NFPA 805 risk assessments, or methods that have been demonstrated to bound the risk impact:

(1) Prior NRC review and approval is not required for changes that clearly result in a decrease in risk. The proposed change must also be consistent with the defense-in-depth philosophy and must maintain sufficient safety margins. The change may be implemented following completion of the plant change evaluation.

(2) Prior NRC review and approval is not required for individual changes that result in a risk increase less than 1×10^{-7}/year (yr) for CDF and less than 1×10^{-8}/yr for LERF. The proposed change must also be consistent with the defense-in-depth philosophy and must maintain sufficient safety margins. The change may be implemented following completion of the plant change evaluation.

c. Other Changes that May Be Made Without Prior NRC Approval

(1) Changes to NFPA 805, Chapter 3, Fundamental Fire Protection Program

Prior NRC review and approval are not required for changes to the NFPA 805, Chapter 3, fundamental Fire Protection Program elements and design requirements for which an engineering evaluation demonstrates that the alternative to the Chapter 3 element is functionally equivalent or adequate for the hazard. PG&E may use an engineering evaluation to demonstrate that a change to an NFPA 805, Chapter 3, element is functionally equivalent to the corresponding technical requirement. A qualified fire protection engineer shall perform the engineering evaluation and conclude that the change will not affect the functionality of the component, system, procedure, or physical arrangement, using a relevant technical requirement or standard.

PG&E may use an engineering evaluation to demonstrate that changes to certain NFPA 805, Chapter 3, elements are acceptable because the alternative is "adequate for the hazard." Prior NRC review and approval would not be required for alternatives to four specific sections of NFPA 805, Chapter 3, for which an engineering evaluation demonstrates that the alternative to the Chapter 3 element is adequate for the hazard. A qualified fire protection engineer shall perform the engineering evaluation and conclude that the change will not affect the functionality of the component, system, procedure, or physical arrangement, using a relevant technical requirement or standard. The four specific sections of NFPA 805, Chapter 3, are as follows:

- "Fire Alarm and Detection Systems" (Section 3.8);
- "Automatic and Manual Water-Based Fire Suppression Systems" (Section 3.9);
- "Gaseous Fire Suppression Systems" (Section 3.10); and,
- "Passive Fire Protection Features" (Section 3.11).

This License Condition does not apply to any demonstration of equivalency under Section 1.7 of NFPA 805.

(2) Fire Protection Program Changes that Have No More than Minimal Risk Impact

Prior NRC review and approval are not required for changes to PG&E's Fire Protection Program that have been demonstrated to have no more than a minimal risk impact. PG&E may use its screening process as approved in the NRC safety evaluation dated April 14, 2016, to determine that certain Fire Protection Program changes meet the minimal criterion. PG&E shall ensure that fire protection defense-in-depth and safety margins are maintained when changes are made to the Fire Protection Program.

This License Condition does not apply to any demonstration of equivalency under Section 1.7 of NFPA 805.

d. Transition License Conditions:

(1) Before achieving full compliance with 10 CFR 50.48(c), as specified by (2) and (3) below, risk-informed changes to PG&E's Fire Protection Program may not be made without prior NRC review and approval unless the change has been demonstrated to have no more than a minimal risk impact, as described in c.(2) above.

(2) PG&E shall implement the modifications described in Attachment-S, Table S-2, "Plant Modifications Committed," of PG&E Letter DCL-16-014, dated January 28, 2016, by the end of the Units 1 and 2 refueling outages currently scheduled for April/May 2017 (1R20) and February/March 2018 (2R20). PG&E shall maintain appropriate compensatory measures in place until completion of the modifications delineated above.

(3) PG&E shall implement the items as listed in Attachment-S, Table S-3, "Implementation Items," of PG&E Letter DCL-16-014, dated January 28, 2016, within 365 days after receipt of the safety evaluation/license amendment with the exception of Implementation Item S-3.24, which will be completed for each unit within 90 days after all modifications for the respective unit are operable (as listed in Attachment S, Table S-2).

(5) NUREG-0737 Items

Each of the following conditions shall be completed to the satisfaction of the NRC as indicated below. Each condition references the appropriate Section in SER Supplements.

a. I.D.1 Detailed Control Room Design Review (SSER 31, Section 4.13)

PG&E shall comply with the requirements of Supplement 1 to NUREG-0737 for the conduct of a Detailed Control Room Design Review (DCRDR) in accordance with a schedule acceptable to the NRC staff.

b. II.E.4.2 Containment Isolation Dependability (SSER 31, Section 4.21)

PG&E shall limit the 12-inch vacuum/overpressure relief valve opening to less than or equal to 50 degrees.

(6) Emergency Preparedness (SSER 31, Section 4.23.2 and SSER 32, Section 7)

In the event that the NRC finds that the lack of progress in completion of the procedures in the Federal Emergency Management Agency's final rule, 44 CFR Part 350, is an indication that a major substantive problem exists in achieving or maintaining an adequate state of preparedness, the provisions of 10 CFR Section 50.54(s)(2)will apply.

(7) Masonry Walls (SSER 31, Section 4.7)

Prior to start-up following the first refueling outage, PG&E shall (1) evaluate the differences in margins between the staff criteria as set forth in the Standard Review Plan and the criteria used by the licensee, and (2) provide justification acceptable to the staff for those cases where differences exist between the staff's and PG&E's criteria.

(8) Reactor Trip System Reliability - Generic Letter 83-28 (SSER 31, Section 4.8)

PG&E shall submit responses to and implement the requirements of Generic Letter 83-28 on a schedule which is consistent with that given in the PG&E letters dated January 24, and March 13, 1985.

(9) Steam Generator Tube Rupture Analysis (SSER 31, Section 4.25)

By April 1988, PG&E shall submit for NRC review and approval an analysis which demonstrates that the steam generator tube rupture (SGTR) analysis presented in the FSAR is the most severe case with respect to the release of fission products and calculated doses. Consistent with the analytical assumptions, PG&E shall propose all necessary changes to the Technical Specifications (Appendix A) to this license.

(10) Pipeway Structure DE and DDE Analysis (SSER 32, Section 4)

Prior to start-up following the first refueling outage PG&E shall complete a confirmatory analysis for the pipeway structure to further demonstrate the adequacy of the pipeway structure for load combinations that include the design earthquake (DE) and double design earthquake (DDE).

(11) Spent Fuel Pool Modification

The licensee is authorized to modify the spent fuel pool as described in the application dated October 30, 1985 (LAR 85-13) as supplemented. Amendment No. 6 issued on May 30, 1986 and stayed by the U.S. Court of Appeals for the Ninth Circuit pending completion of NRC hearings is reinstated.

Prior to final conversion to the modified rack design, fuel may be stored, as needed, in either the modified storage racks described in Technical Specification 5.6.1.1 or in the unmodified storage racks (or both) which are designed and shall be maintained with a nominal 21-inch center-to-center distance between fuel assemblies placed in the storage racks.

(12) 10 CFR 50.69

The Pacific Gas and Electric Company is approved to implement 10 CFR 50.69 using the processes for categorization of Risk-Informed Safety Class (RISC)-1, RISC-2, RISC-3, and RISC-4 structures, systems, and components (SSCs) using: Probabilistic Risk Assessment (PRA) models to evaluate risk associated with internal events, including internal flooding, internal fire, and seismic hazards; the shutdown safety assessment process to assess shutdown risk; the Arkansas Nuclear One, Unit 2 (ANO- 2) passive categorization method to assess passive component risk for Class 2 and Class 3 and non-Class SSCs and their associated supports; the results of the non-PRA evaluations that are based on the Individual Plant Examination of External Events (IPEEE) Screening Assessment for External Hazards updated using the external hazard screening significance process identified in ASME/ANS PRA Standard RA-Sa-2009 for other external hazards.

Prior NRC approval, under 10 CFR 50.90, is required for a change to the categorization process specified above.

(13) Additional Conditions

The Additional Conditions contained in Appendix D, as revised through Amendment No. 232, are hereby incorporated into this license. Pacific Gas and Electric Company shall operate the facility in accordance with the Additional Conditions.

D. Exemption (SSER 31, Section 6.2.6)

An exemption from certain requirements of Appendix J to 10 CFR Part 50 is described in the Office of Nuclear Reactor Regulation's Safety Evaluation Report, Supplement No. 9. This exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest. Therefore, this exemption previously granted in Facility Operating License No. DPR-81 pursuant to 10 CFR 50.12 is hereby reaffirmed. The facility will operate, with the exemption authorized, in conformity with the application, as amended, the provisions of the Act, and the regulations of the Commission.

E. Physical Protection

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to provision of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contains Safeguards Information protected under 10 CFR 73.21, is entitled: "Diablo Canyon Power Plant, Units 1 and 2 Physical Security Plan, Training and Qualification Plan and Safeguards Contingency Plan," submitted by letter dated May 16, 2006.

PG&E shall fully implement and maintain in effect all provisions of the Commission-approved cyber security plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The PG&E CSP was approved by License Amendment No. 212, as supplemented by a change approved by License Amendment No. 222.

Pursuant to NRC's Order EA-13-092, dated June 5, 2013, NRC reviewed and approved the license amendment 224 that permitted the security personnel of the licensee to possess and use certain specific firearms, ammunition, and other devices, such as large-capacity ammunition feeding devices, notwithstanding local, State, and certain Federal firearms laws that may prohibit such possession and use.

F. Deleted.

G. Deleted.

H. Financial Protection

PG&E shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.

I. Mitigation Strategy

Develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

(a) Fire fighting response strategy with the following elements:

1. Pre-defined coordinated fire response strategy and guidance
2. Assessment of mutual aid fire fighting assets
3. Designated staging areas for equipment and materials
4. Command and control
5. Training of response personnel

(b) Operations to mitigate fuel damage considering the following:
1. Protection and use of personnel assets
2. Communications
3. Minimizing fire spread
4. Procedures for implementing integrated fire response strategy
5. Identification of readily-available pre-staged equipment
6. Training on integrated fire response strategy
7. Spent fuel pool mitigation measures

(c) Actions to minimize release to include consideration of:
1. Water spray scrubbing
2. Dose to onsite responders

J. Term of License

This License is effective as of the date of issuance and shall expire at midnight on August 26, 2025.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed by: Harold R. Denton

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Attachments:
1. Appendix A Technical Specifications (NUREG-1151)
2. Appendix B - Environmental Protection Plan
3. Appendix C - Deleted
4. Appendix D - Additional Conditions

Date of Issuance: August 26, 1985

Appendix A: Technical Specifications

Diablo Canyon 2 uses the same Appendix A as Diablo Canyon 1. Please refer to Diablo Canyon 1 for Appendix A (ML053140349).

Appendix B: Environmental Protection Plan

Diablo Canyon 2 uses the same Appendix B as Diablo Canyon 1. Please refer to Diablo Canyon 1 for Appendix B (ML053140349).

Appendix C: Antitrust Conditions

Diablo Canyon 2 uses the same Appendix C as Diablo Canyon 1. Please refer to Diablo Canyon 1 for Appendix C (ML053140349).

Appendix D

ADDITIONAL CONDITIONS

FACILITY OPERATING LICENSE NO. DPR-82

Pacific Gas & Electric Company shall comply with the following conditions on the schedules given below:

Amendment Number	Additional Conditions	Implementation Date
118	The licensee is authorized to relocate certain technical specifications requirements to the equipment control guidelines (ECGs) as referenced in the Updated Final Safety Analysis Report. Implementation of these amendments shall include relocation of these technical specification requirements to the ECGs as described in the licensee's application dated October 4, 1995, as supplemented by letters dated July 17, 1996, August 20, 1996, and June 2, 1997, and evaluated in the staff's safety evaluation dated February 3, 1998.	The amendment shall be implemented within 90 days of its issuance.
135	This amendment authorizes the relocation of certain Technical Specification requirements to licensee-controlled documents. Implementation of this amendment shall include the relocation of these Technical Specification requirements to the appropriate documents, as described in Table LG of Details Relocated from Current Technical Specifications, Table R of Relocated Current Technical Specifications, Table LS of Less Restrictive Changes to Current Technical Specifications, and Table A of Administrative Changes to Current Technical Specifications that are attached to the NRC staff's Safety Evaluation enclosed with this amendment.	The amendment shall be implemented by June 30, 2000.

Amendment Number	Additional Conditions	Implementation Date
135	The schedule for the performance of new and revised Surveillance Requirements (SRs) shall be as follows: For SRs that are new in this amendment, the first performance is due at the end of the first surveillance interval that begins on the date of implementation of this amendment. For SRs that existed prior to this amendment whose intervals of performance are being reduced, the first reduced surveillance interval begins upon completion of the first surveillance performed after implementation of this amendment. For SRs that existed prior to this amendment that have modified acceptance criteria, the first performance is due at the end of the first surveillance interval that began on the date the surveillance was last performed prior to the implementation of this amendment. For SRs that existed prior to this amendment whose intervals of performance are being extended, the first extended surveillance interval begins upon completion of the last surveillance performed prior to implementation of this amendment.	The amendment shall be implemented by June 30, 2000.

Amendment Number	Additional Conditions	Implementation Date
202	Determination of CRE unfiltered air inleakage as required by surveillance requirement (SR) 3.7.10.5, in accordance with TS 5.5.19.c.(i). The assessment of CRE habitability as required by TS 5.5.19.c.(ii). The measurement of CRE pressure as required by TS 5.5.19.d. Following implementation, this condition will be performed as stated in the condition: The first performance of SR 3.7.10.5, in accordance with Specification 5.5.19.c.(i), shall be within the specified Frequency of 6 years, plus the 18-month allowance of SR 3.0.2, as measured from February 3, 2005, the date of the most recent successful tracer gas test, or within the next 18 months if the time period since the most recent successful tracer gas test is greater than 6 years. The first performance of the periodic assessment of CRE habitability, Specification 5.5.19.c.(ii), shall be within 3 years, plus the 9-month allowance of SR 3.0.2, as measured from February 3, 2005, the date of the most recent successful tracer gas test, or within the next 9 months if the time period since the most recent successful tracer gas test is greater than 3 years. The first performance of the periodic measurement of CRE pressure, Specification 5.5.19.d, shall be within 24 months, plus the 182 days allowed by SR 3.0.2, as measured from February 3, 2005, the date of the most recent successful pressure measurement test, or within 182 days if not performed previously.	The amendment is effective as of the date of its issuance and the condition shall be implemented within 180 days of its issuance

Amendment Number	Additional Conditions	Implementation Date
232	Implementation of the amendment adopting the alternative source term shall include the following plant modifications: Install shielding material, equivalent to that provided by the Control Room outer walls, at the external concrete west wall of the Control Room briefing room. Install a high efficiency particulate air filter in the Technical Support Center normal ventilation system. Re-classify a portion of the 40-inch Containment Penetration Area (GE/GW) Ventilation line from PG&E Design Class II to PG&E Design Class I and upgrade the damper actuators, pressure switches, and the damper solenoid valves to PG&E Design Class I. Update setpoints for the redundant safety related gamma sensitive area radiation monitors (1-RE 25/26, 2-RE 25/26).	The amendment is effective as of the date of its issuance and the condition shall be implemented within 365 days of its issuance