



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

April 29, 2009

Mr. John T. Conway
Senior Vice President – Generation
and Chief Nuclear Officer
Pacific Gas and Electric Company
Diablo Canyon Power Plant
P.O. Box 3, Mail Code 104/6/601
Avila Beach, CA 93424

SUBJECT: DIABLO CANYON POWER PLANT, UNIT NOS. 1 AND 2 - ISSUANCE OF
AMENDMENTS RE: DELETION OF THE HIGH NEGATIVE RATE TRIP
FUNCTION IN TECHNICAL SPECIFICATION 3.3.1, "REACTOR TRIP SYSTEM
(RTS) INSTRUMENTATION," (TAC NOS. ME0713 AND ME0714)

Dear Mr. Conway:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 205 to Facility Operating License No. DPR-80 and Amendment No. 206 to Facility Operating License No. DPR-82 for the Diablo Canyon Power Plant, Unit Nos. 1 and 2 (DCPP), respectively. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated February 24, 2009.

The amendments delete the requirement for the power range neutron flux rate-high negative rate trip (Function 3.b) in the DCPP TS Table 3.3.1-1, "Reactor Trip System Instrumentation." The changes are consistent with the NRC-approved methodology presented in Westinghouse Topical Report, WCAP-11394-P-A, "Methodology for the Analysis of the Dropped Rod Event," dated January 1990. The amendments also incorporate editorial changes to reflect the deletion of Function 3.b in TS Table 3.3.1-1.

A copy of the related Safety Evaluation is enclosed. The Notice of Issuance will be included in the Commission's next regular biweekly *Federal Register* notice.

Sincerely,

A handwritten signature in cursive script that reads "Alan Wang".

Alan Wang, Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323

Enclosures:

1. Amendment No. 205 to DPR-80
2. Amendment No. 206 to DPR-82
3. Safety Evaluation

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

PACIFIC GAS AND ELECTRIC COMPANY

DOCKET NO. 50-275

DIABLO CANYON NUCLEAR POWER PLANT, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 205
License No. DPR-80

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Pacific Gas and Electric Company (the licensee), dated February 24, 2009, 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;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

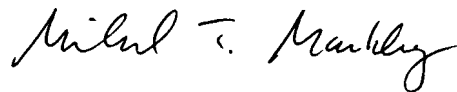
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Facility Operating License No. DPR-80 is hereby amended to read as follows:

- (2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 205, 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. This license amendment is effective as of its date of issuance and shall be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Michael T. Markley, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Facility
Operating License No. DPR-80
and Technical Specifications

Date of Issuance: April 29, 2009



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

PACIFIC GAS AND ELECTRIC COMPANY

DOCKET NO. 50-323

DIABLO CANYON NUCLEAR POWER PLANT, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 206
License No. DPR-82

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Pacific Gas and Electric Company (the licensee), dated February 24, 2009, 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;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

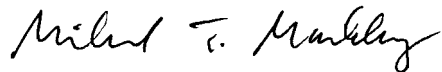
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and Paragraph 2.C.(2) of Facility Operating License No. DPR-82 is hereby amended to read as follows:

(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. 206, 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. This license amendment is effective as of its date of issuance and shall be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Michael T. Markley, Chief
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Facility
Operating License No. DPR-82
and Technical Specifications

Date of Issuance: April 29, 2009

ATTACHMENT TO LICENSE AMENDMENT NO. 205

TO FACILITY OPERATING LICENSE NO. DPR-80

AND AMENDMENT NO. 206 TO FACILITY OPERATING LICENSE NO. DPR-82

DOCKET NOS. 50-275 AND 50-323

Replace the following pages of the Facility Operating License Nos. DPR-80 and DPR-82, and Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Facility Operating License Nos. DPR-80 and DPR-82

REMOVE

INSERT

-3-

-3-

Technical Specifications

REMOVE

INSERT

3.3-3

3.3-3

3.3-12

3.3-12

- (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

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 205, 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

The Pacific Gas and Electric Company shall conduct the post-fuel-loading initial test program (set forth in Section 14 of Pacific Gas and Electric Company's Final Safety Analysis Report, as amended), without making any major modifications of this program unless modifications have been identified and have received prior NRC approval. Major modifications are defined as:

- a. Elimination of any test identified in Section 14 of PG&E's Final Safety Analysis Report as amended as being essential;

- (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. 206, 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.

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. One channel inoperable.	<p>-----NOTE----- For functions 6, 7, and 8.b, the inoperable channel and/or one additional channel may be surveillance tested with one channel in bypass and one channel in trip for up to 12 hours, or both the inoperable and the additional channel may be surveillance tested in bypass for up to 12 hours. For functions 2.b and 3, only the inoperable channel may be bypassed for surveillance testing of other channels. For function 14.a, the inoperable channel and/or one additional channel may be surveillance tested with one channel in bypass and one channel in trip for up to 12 hours. This note is not intended to allow simultaneous testing of coincident channels on a routine basis -----</p> <p>E.1 Place channel in trip. <u>OR</u> E.2 Be in MODE 3.</p>	<p>72 hours 78 hours</p>
F. One Intermediate Range Neutron Flux channel inoperable.	<p>F.1 Reduce THERMAL POWER to < P-6. <u>OR</u> F.2 Increase THERMAL POWER to > P-10.</p>	<p>24 hours 24 hours</p>

(continued)

Table 3.3.1-1 (page 1 of 7)
Reactor Trip System Instrumentation

FUNCTION	APPLICABLE MODES OR OTHER SPECIFIED CONDITIONS	REQUIRED CHANNELS	CONDITIONS	SURVEILLANCE REQUIREMENTS	ALLOWABLE VALUE	NOMINAL ^(a) TRIP SETPOINT
1. Manual Reactor Trip	1,2	2	B	SR 3.3.1.14	NA	NA
	3 ^(b) , 4 ^(b) , 5 ^(b)	2	C	SR 3.3.1.14	NA	NA
2. Power Range Neutron Flux						
a. High	1,2	4	D	SR 3.3.1.1 SR 3.3.1.2 SR 3.3.1.7 SR 3.3.1.11 SR 3.3.1.16	≤ 110.2% RTP	109% RTP
b. Low	1 ^(c) , 2	4	E	SR 3.3.1.1 SR 3.3.1.8 SR 3.3.1.11 SR 3.3.1.16	≤ 26.2% RTP	25% RTP
3. Power Range Neutron Flux Rate						
High Positive Rate	1,2	4	E	SR 3.3.1.7 SR 3.3.1.11 SR 3.3.1.16	≤ 5.6% RTP with time constant ≥ 2 sec	5% RTP with time constant ≥ 2 sec
4. Intermediate Range Neutron Flux	1 ^(c) , 2 ^(d)	2	F,G	SR 3.3.1.1 SR 3.3.1.8 SR 3.3.1.11	≤ 30.6% RTP	25% RTP

(continued)

- (a) A channel is OPERABLE with an actual Trip Setpoint value outside its calibration tolerance band provided the Trip Setpoint value is conservative with respect to its associated Allowable Value and the channel is re-adjusted to within the established calibration tolerance band of the Nominal Trip Setpoint. A Trip Setpoint may be set more conservative than the Nominal Trip Setpoint as necessary in response to plant conditions.
- (b) With Rod Control System capable of rod withdrawal or one or more rods not fully inserted.
- (c) Below the P-10 (Power Range Neutron Flux) interlocks.
- (d) Above the P-6 (Intermediate Range Neutron Flux) interlocks.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 205 TO FACILITY OPERATING LICENSE NO. DPR-80
AND AMENDMENT NO. 206 TO FACILITY OPERATING LICENSE NO. DPR-82
PACIFIC GAS AND ELECTRIC COMPANY
DIABLO CANYON POWER PLANT, UNITS 1 AND 2
DOCKET NOS. 50-275 AND 50-323

1.0 INTRODUCTION

By application dated February 24, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML090570330) (Reference 1), Pacific Gas and Electric Company (PG&E, the licensee) requested changes to the Technical Specifications (Appendix A to Facility Operating License Nos. DPR-80 and DPR-82) for the Diablo Canyon Power Plant, Units 1 and 2 (DCPP).

The proposed amendments would revise the DCPP Technical Specification (TS) 3.3.1. "Reactor Trip System (RTS) Instrumentation." Specifically, the proposed changes would delete the requirement for the power range neutron flux rate-high negative rate trip (Function 3.b) in the DCPP TS Table 3.3.1-1, "Reactor Trip System Instrumentation." The amendments also incorporate editorial changes to TS 3.3.1.E and Table 3.3.1-1, Item 3 to reflect the deletion Function 3.b. The request is based on the conclusion of the Westinghouse Topical Report (TR) WCAP-11394-P-A, "Methodology for the Analysis of the Dropped Rod Event," that has been reviewed and approved by the U.S. Nuclear Regulatory Commission (NRC) staff (Reference 2). TR WCAP-11394-P-A supports the argument that there exists sufficient thermal margin for Westinghouse plant designs and fuel types to meet departure from nucleate boiling ratio limits, without crediting the power range neutron flux-high negative rate reactor trip function, regardless of the reactivity worth of the dropped rod cluster control assemblies (RCCAs) when confirmed on a plant-specific and a cycle-by-cycle basis.

2.0 REGULATORY EVALUATION

The NRC's regulatory requirements related to the content of the TSs are set forth in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36, "Technical specifications." This regulation requires that the TSs include items in five specific categories. These categories include (1) safety limits, limiting safety system settings, and limiting control settings, (2) limiting conditions for operation (LCOs), (3) surveillance requirements (SRs), (4) design features, and (5) administrative controls. However, the regulation does not specify the particular TSs to be included in a plant's TSs.

Additionally, 10 CFR 50.36(c)(2)(ii) sets forth four criteria to be used in determining whether an LCO is required to be included in TSs. These criteria are:

- Criterion 1 - Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary (RCPB);
- Criterion 2 - A process variable, design feature, or operating restriction that is an initial condition of a design-basis accident (DBA) or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier;
- Criterion 3 - A structure, system, or component (SSC) that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; and
- Criterion 4 - An SSC which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

General Design Criterion (GDC) 10, "*Reactor design*," in Appendix A to 10 CFR Part 50 states that the reactor core and associated coolant, control, and protection systems shall be designed with appropriate margin to assure that specified acceptable fuel design limits are not exceeded during any condition of normal operation, including the effects of anticipated operational occurrences [AOOs]. In addition, the NRC staff has reviewed and approved TR WCAP-11394-P-A that includes the NRC staff evaluation and the conditions for its application.

3.0 TECHNICAL EVALUATION

Currently, DCCP Unit 2 has a single control rod that is slightly misaligned. The licensee's operability determination concluded that the rod is trippable and still operable. Due to industry operating experience with misaligned rods, there is a concern that manipulation of this rod may result in it dropping. Due to the location, dropping this rod in the core would likely result in a reactor trip. Deleting the TS trip function would allow operators to realign this rod with the associated bank, without the increased threat of an unnecessary reactor trip. This rod must be manipulated in the next quarterly TS surveillance, which is due May 2, 2009, but must be completed no later than May 25, 2009.

3.1 Power Range Neutron Flux-High Negative Rate Trip Function

The power range neutron flux-high negative rate trip function was designed as part of the reactor protection system (RPS) to mitigate the consequences of one or more dropped RCCAs event. The dropped RCCAs event is an AOO, and is caused by a single electrical or mechanical failure that results in any number and combination of RCCAs from the same group of a given bank to drop to the bottom of the core. The resulting negative reactivity insertion causes nuclear power to quickly decrease and the core peaking factor to increase. The reduced power and continued steam supply to the turbine cause the reactor coolant temperature to decrease. In the manual control mode, the positive reactivity feedback causes the reactor power to rise to initial power

level at a reduced reactor vessel inlet temperature with no power overshoot. In the automatic control mode, the plant control system detects the reduction in core power and initiates control bank withdrawal in order to restore core power. A power overshoot occurs resulting in lower calculated departure from nucleate boiling ratios (DNBRs). At higher power levels, in the event of a dropped RCCA event, the RPS will detect the rapidly decreasing neutron flux due to the dropped RCCAs and trip the reactor based on the power range neutron flux-high negative rate trip function, thus ending the transient and assuring that DNBR design limits are maintained. Since the dropped RCCAs event is an AOO, it must be shown that to satisfy GDC 10 requirements, the DNBR design limits are met for the combination of high nuclear power, high radial peaking factor, and other system conditions that exist following the dropped RCCAs event.

The negative flux rate trip (negative reactivity insertion) was established originally to end a rod drop or RCCA drop transient that could exceed the DNBR limits. In 1982, Westinghouse submitted WCAP-10297, "Dropped Rod Methodology for Negative Flux Rate Trip Plants." WCAP-10297 concluded that the negative flux trip was required only if the plant exceeded a threshold value of reactivity worth, depending on plant design and fuel type. By letter dated May 22, 1987, the Westinghouse Owners Group submitted TR WCAP-11394-P, "Methodology for the Analysis of the Dropped Rod Event." This methodology provides a means to be used to demonstrate that DNBR limits are met during a dropped RCCA event. The analysis using this methodology takes no credit for any direct trip due to the dropped RCCAs, and assumes that no automatic power reduction features are actuated by the dropped RCCAs. The conclusion reached in WCAP-11394-P was that sufficient margin is expected with all Westinghouse plant designs and fuel types, such that the power range neutron flux-high negative rate trip is not required, regardless of the worth of the dropped RCCA (or bank), subject to a plant cycle-specific analysis. As discussed in a safety evaluation (SE) dated October 23, 1989 (ADAMS Legacy Accession No. 89110134), the NRC reviewed the Westinghouse analysis and results and concluded that the approach in WCAP-11394-P was acceptable for analyzing the dropped RCCAs event for which no credit is taken for any direct trip, such as the power range neutron flux-high negative rate trip or automatic power reduction features. The NRC's SE noted that further review by the NRC staff for each cycle is not necessary, subject to a licensee's verification that the analysis described in WCAP-11394-P has been performed and makes comparison specified in the topical report with favorable results. An approved version of the topical report (WCAP-11394-P-A) was issued in January 1990.

As described in PG&E's application dated February 24, 2009, the licensee reviewed the DCPD safety analyses in the analysis of record and confirmed that Final Safety Analysis Report (FSAR) Update Section 15.2.3.2(1), "Analysis of Effects and Consequences," documents the analyses performed in accordance with the methodology of WCAP-11394 for one or more dropped RCCAs and for the dropped RCCA bank. Westinghouse has been performing these conservative analyses for DCPD, which does not credit the power range neutron flux-high negative rate trip function, and has determined that for the cases of dropped RCCAs or dropped RCCA bank, the DNBR remains greater than the safety limit value. Therefore, the DNBR design acceptance criterion is met and the event does not result in core damage, meeting the GDC 10 fuel integrity requirement. In addition, as shown in Section 3.4 to the licensee's application (Reference 1), PG&E will use the NRC-approved methodology in WCAP-11394-P-A for each fuel cycle to assure the minimum DNBR is maintained above the DNBR safety limit.

Based on the above, the NRC staff concludes that the proposed deletion of the power range neutron flux-high negative rate trip function (Function 3.b in the DCPD TS Table 3.3.1-1) does

not affect the analyses for the dropped RCCAs or dropped RCCA bank event, and that the proposed TS changes are consistent with the NRC-approved methodology described in WCAP-11394-P-A.

In addition, the NRC staff reviewed the neutron flux rate trip (NFRT) function against the criteria specified in 10 CFR 50.36(c)(2)(ii) as follows:

- Criterion 1: The NFRT function is not used to detect and indicate a significant abnormal degradation of the RCPB.
- Criterion 2: The NFRT function is not a process variable, design feature, or operating restriction that is an initial condition of a DBA or transient analysis.
- Criterion 3: No credit is taken for the NFRT in the DCPD accident analysis. The NFRT is not considered as part of the primary success path related to the integrity of a fission product barrier. Therefore, the NFRT function is not an SSC that is part of the primary success path and which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
- Criterion 4: The NFRT is not relied upon as a signal to initiate a reactor trip for any events modeled in the scope of the probabilistic risk analysis model. The NFRT function is not significant to public health and safety in that no credit was taken for this trip in any accident analysis. Therefore, the NFRT is not an SSC which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

Based on the above, the NRC staff finds that the existing LCOs and related SRs associated with the power range neutron flux-high negative rate trip function do not satisfy any of the criteria in 10 CFR 50.36(c)(2)(ii).

The NRC staff concludes the proposed deletion of the TS requirements associated with the power range neutron flux-high negative rate trip function is acceptable since: (1) the power range neutron flux-high negative rate trip function does not affect the analyses for the dropped RCCAs or dropped RCCA bank event; (2) the proposed TS changes are consistent with the NRC-approved methodology described in WCAP-11394-P-A; (3) the existing LCOs and related SRs associated with the power range neutron flux-high negative rate trip function do not satisfy any of the criteria in 10 CFR 50.36(c)(2)(ii); and (4) this analysis will be part of the reload analysis for future cycles.

3.2 Editorial Changes

The licensee also proposed the following administrative and editorial changes to the TSs:

- An editorial change is proposed for TS 3.3.1.E to reflect the deletion Function 3.b. TS 3.3.1.E, which read "2.b, 3.a, and 3.b" will now read "2.b and 3."
- An editorial change is proposed Table 3.3.1-1, Item 3, to delete the annotation "a" since it is no longer needed.

The NRC staff finds that the above proposed TS change is editorial in nature and has no impact on safety. Therefore, the NRC staff concludes the change is acceptable.

4.0 REGULATORY COMMITMENT

The licensee made the following regulatory commitment with respect to its license amendment request. This commitment was identified in Attachment 4 to its application.

Pacific Gas and Electric Company will use the NRC-approved methodology in WCAP-11394-P-A for each fuel cycle to ensure the minimum departure from nucleate boiling ratio (DNBR) is maintained above the DNBR safety limit.

This is a commitment that will be implemented on a continuing basis without expiration.

5.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission may issue the license amendments before the expiration of the 60-day period provided that its final determination is that the amendments involve no significant hazards considerations. These amendments are being issued prior to the expiration of the 60-day period. Therefore, a final finding of no significant hazards consideration follows.

The Commission has made a final determination that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendments do not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration which is presented below.

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The removal of the power range neutron flux rate-high negative rate trip function from the DCPD TS does not increase the probability or consequences of accidents resulting from dropped RCCA [rod cluster control assembly] events previously analyzed. The safety functions of other safety-related systems and components, which are related to mitigation of these events, have not been altered. All other reactor trip system protection functions are not impacted by the deletion of the trip function. The dropped RCCA accident analysis does not rely on the negative flux rate trip to safely shut down the plant. The safety analysis of the plant is unaffected by the proposed change. Since the safety analysis is unaffected, the calculated radiological releases associated with the analysis are not affected.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different accident from any accident previously evaluated?

Response: No.

The proposed change does not adversely alter the design assumptions, conditions, or configuration of the facility or the manner in which the plant is operated. No new accident scenarios, failure mechanisms, or limiting single failures are introduced as a result of the proposed change. The proposed change does not challenge the performance or integrity of any safety-related systems or components. NRC-approved Westinghouse Topical Report WCAP-11394-P-A, "Methodology for the Analysis of the Dropped Rod Event," dated January 1990, has demonstrated that the negative flux rate trip function can be deleted.

Therefore, the proposed change does not create the possibility of a new or different accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

The margin of safety associated with the acceptance criteria of any accident is unchanged. It has been demonstrated that the negative flux rate trip function can be deleted by the NRC-approved methodology described in WCAP-11394-P-A. DCPD cycle-specific analyses have confirmed that for dropped RCCA events, limits on DNB [departure from nucleate boiling] are not exceeded by deleting the negative flux rate trip. The proposed change will have no effect on the availability, operability, or performance of safety-related systems and components.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and, based on this review, determined that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff has determined that the amendments involve no significant hazards consideration.

6.0 STATE CONSULTATION

In accordance with the Commission's regulations, the California State official was notified of the proposed issuance of the amendments. The State official had no comments.

7.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration and there has been no public comment on such finding as published in the *Federal Register* on March 24, 2009 (74 FR 12394). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

8.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) the amendments do not (a) involve a significant increase in the probability or consequences of an accident previously evaluated; or (b) create the possibility of a new or different kind of accident from any accident previously evaluated; or (c) involve a significant reduction in a margin of safety; (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner; (3) such activities will be conducted in compliance with the Commission's regulations; and (4) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

9.0 REFERENCES

1. Letter from J. R. Becker, Pacific Gas and Electric Company, to U.S. Nuclear Regulatory Commission "Revision to Technical Specification 3.3.1, "Reactor Trip System (RTS) Instrumentation," Deletion of the High Negative Rate Trip Function," dated February 24, 2009 (ADAMS Accession No. ML090570330).
2. Letter from Ashok C. Thadani, Director, Division of Systems Technology, NRR/NRC, to Roger A. Newton, Chairman, Westinghouse Owners Group, Subject: Acceptance for Referencing of Licensing Topical Reports WCAP-11394(P) and WCAP-11395(NP), "Methodology for the Analysis of the Dropped Rod Event," dated October 23, 1989 (ADAMS Legacy Accession No. 89119134)[Non-Publicly Available].
3. WCAP-11394-P-A, "Methodology for the Analysis of the Dropped Rod Event," by R.L. Heasler, et al., Westinghouse Electric Corporation, January 1990.

Principal Contributor: A. Wang

Date: April 29, 2009

April 29, 2009

Mr. John T. Conway
Senior Vice President – Generation
and Chief Nuclear Officer
Pacific Gas and Electric Company
Diablo Canyon Power Plant
P.O. Box 3, Mail Code 104/6/601
Avila Beach, CA 93424

SUBJECT: DIABLO CANYON POWER PLANT, UNIT NOS. 1 AND 2 - ISSUANCE OF
AMENDMENTS RE: DELETION OF THE HIGH NEGATIVE RATE TRIP
FUNCTION IN TECHNICAL SPECIFICATION 3.3.1, "REACTOR TRIP SYSTEM
(RTS) INSTRUMENTATION," (TAC NOS. ME0713 AND ME0714)

Dear Mr. Conway:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 205 to Facility Operating License No. DPR-80 and Amendment No. 206 to Facility Operating License No. DPR-82 for the Diablo Canyon Power Plant, Unit Nos. 1 and 2 (DCPP), respectively. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated February 24, 2009.

The amendments delete the requirement for the power range neutron flux rate-high negative rate trip (Function 3.b) in the DCPP TS Table 3.3.1-1, "Reactor Trip System Instrumentation." The changes are consistent with the NRC-approved methodology presented in Westinghouse Topical Report, WCAP-11394-P-A, "Methodology for the Analysis of the Dropped Rod Event," dated January 1990. The amendments also incorporate editorial changes to reflect the deletion of Function 3.b in TS Table 3.3.1-1.

A copy of the related Safety Evaluation is enclosed. The Notice of Issuance will be included in the Commission's next regular biweekly *Federal Register* notice.

Sincerely,
/RA/

Alan Wang, Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323

Enclosures:

1. Amendment No. 205 to DPR-80
2. Amendment No. 206 to DPR-82
3. Safety Evaluation

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*** See previous concurrence**

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NAME	AWang*	JBurkhardt*	WKemper*	GCranston*	RElliott*	MSmith	MMarkley	AWang
DATE	3/23/09	3/23/09	3/26/09	3/31/09	3/24/09	4/6/09	4/29/09	4/29/09

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