



PG&E Letter DCL-21-046

10 CFR 50.91

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555-0001

Diablo Canyon Unit 1
Docket No. 50-275, OL-DPR-80
Emergency License Amendment Request 21-05
Revision to Technical Specification 3.7.8, "Auxiliary Saltwater (ASW) System"

Dear Commissioners and Staff:

Pursuant to 10 CFR 50.91, Pacific Gas and Electric Company (PG&E) hereby requests approval of the enclosed proposed amendment to Facility Operating License No. DPR-80 for Unit 1 of the Diablo Canyon Power Plant (DCPP). The enclosed license amendment request (LAR) proposes to revise the DCPP combined Technical Specification (TS) 3.7.8, "Auxiliary Saltwater (ASW) System."

The proposed changes would revise the Operating License to provide a new TS 3.7.8 Condition A note to allow a one-time Completion Time (CT) of 144 hours to replace the ASW pump 1-1 motor during Cycle 23.

The enclosure to this letter contains the evaluation of the proposed change.

The TS 3.7.8 change requested in this emergency LAR provides a more appropriate TS 3.7.8 CT that is commensurate with the online risk associated with one of two ASW pumps inoperable. The online risk for the proposed ASW system CT based on risk insights is considered to not be risk significant due to the redundancy in the design of the ASW system. The TS 3.7.8 change will avoid an unnecessary plant shutdown during the expected time needed to perform the replacement of the ASW Pump 1-1 motor, and associated post-maintenance inspections and testing.

The need to replace the ASW Pump 1-1 motor occurred on an emergent basis due to an identified ground in the motor on July 5, 2021. The circumstances requiring this emergency amendment request were not foreseeable. A similar motor ground event has not occurred in the past 10 years on any four of the DCPP TS 3.7.8 required ASW pumps. At 1500 PDT on July 5, approximately 4.5 hours after the emergent failure of ASW Pump 1-1, PG&E activated the DCPP outage control center to support repair of the ASW Pump 1-1 on a 24-hour per day basis until the pump is returned to OPERABLE status.

Although this is not a weather-related submittal, it should be noted that the California Independent System Operator (CAISO) currently forecasts that grid loads will rise daily and reach over 40,000 Megawatts (MW) on July 9, 2021. At 40,000 MWs, procedures are implemented to ensure all discretionary generation is online to aid in meeting grid load. If the current temperature forecast rises further, the grid load forecast will also rise. If a DCCP unit were taken offline, with the present load forecast, it is very likely CAISO would issue a Flex Alert asking for conservation. If the temperature forecast rises it is likely CAISO would ask for further action by customers and utilities.

Prompt action is requested for the NRC to approve an emergency amendment to TS 3.7.8 Condition A to provide an additional period of 72-hours beyond the current expiration of the CT (1038 PDT hours on July 8, 2021) to 1038 PDT on July 11, 2021.

Accordingly, PG&E requests approval of this LAR on an emergency basis no later than at 07:00 PDT on July 8, 2021. PG&E requests the license amendment be made effective upon NRC issuance, to be implemented within 24 hours from the date of issuance.

PG&E makes no regulatory commitments (as defined by NEI 99-04) in this letter. This letter includes no revisions to existing regulatory commitments.

In accordance with site administrative procedures and the Quality Assurance Program, the proposed amendment has been reviewed by the Plant Staff Review Committee.

Pursuant to 10 CFR 50.91, PG&E is sending a copy of this proposed amendment to the California Department of Public Health.

If you have any questions or require additional information, please contact James Morris, Regulatory Services Manager, at 805-545-4609.

I state under penalty of perjury that the foregoing is true and correct.

Executed on Date: 07.07.2021

Sincerely,



Paula Gerfen
Site Vice President

kjse/ 51124688

Enclosures

cc: Diablo Distribution

cc/enc: Scott A. Morris, NRC Region IV Administrator

Donald R. Krause, NRC Senior Resident Inspector

Samson S. Lee, NRR Project Manager

Gonzalo L. Perez, Branch Chief, California Department of Public Health

Evaluation of the Proposed Change

Subject: License Amendment Request 21-05, Revision to Technical Specification 3.7.8, "Auxiliary Saltwater (ASW) System"

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EVALUATION

1. SUMMARY DESCRIPTION

The proposed change(s) will revise the Diablo Canyon Unit 1 Operating License to provide a new TS 3.7.8, "Auxiliary Saltwater (ASW) System," Condition A note to allow a one-time Completion Time of 144 hours to replace the ASW Pump 1-1 motor during Cycle 23.

The TS 3.7.8 change requested in this emergency LAR provides a more appropriate TS 3.7.8 Completion Time that is commensurate with the online risk associated with one of two ASW pumps inoperable. The online risk for the proposed ASW system Completion Time based on risk insights is considered to not be risk significant due to the redundancy in the design of the ASW system. The TS 3.7.8 change will avoid an unnecessary plant shutdown during the expected time needed to perform the replacement of the ASW Pump 1-1 motor, and associated post-maintenance inspections and testing.

The need to replace the ASW Pump 1-1 motor occurred on an emergent basis due to an identified ground in the motor on July 5, 2021. Accordingly, PG&E requests approval of this LAR on an emergency basis no later than at 07:00 PDT on July 8, 2021.

2. DETAILED DESCRIPTION

Proposed Amendment

The TS 3.7.8 Condition A Completion Time is revised to add the following note to the current "72 hour" Completion Time:

A Completion Time of
144 hours is
Applicable for ASW
pump 1-1 on a
one-time basis, for
Unit 1 cycle 23.

The proposed TS change is noted on the marked-up TS page provided in Attachment 1. The proposed retyped TS is provided in Attachment 2.

The TS Bases changes for TS 3.7.8 Condition A are included in Attachment 3 for information only and will be implemented in accordance with the TS Bases Control Program.

In summary, the TS 3.7.8 Condition A Completion Time is revised to allow a one-time Completion Time of 144-hours for ASW Pump 1-1 during Unit 1 Cycle 23 to support replacement of the ASW Pump 1-1 Motor. The one-time Completion Time of 144-hours for ASW Pump 1-1 supports emergent replacement of the ASW Pump 1-1 Motor. The proposed one-time 144-hour Completion Time reasonably avoids a potential forced shutdown of DCPD Unit 1 due to the current 72-hour Completion Time of TS 3.7.8 Condition A being exceeded.

ASW System

The ASW system provides a heat sink from the Pacific Ocean for the removal of process and operating heat from the component cooling water (CCW) system. The CCW system then provides cooling to PG&E Design Class I components during all modes of operation, including a design basis accident (DBA), and also to various non-PG&E Design Class I components during normal operation and shutdown.

The ASW system consists of two, 100 percent capacity, PG&E Design Class I, cooling water trains. Each train consists of one 100 percent capacity pump, one CCW heat exchanger, piping, valving, and instrumentation. The pumps are automatically started upon receipt of a safety injection signal or 4 kilovolt (kV) automatic transfer. The normal configuration is for one train operation with the second pump cross-tied in stand-by and the second heat exchanger valved out-of-service except when the ultimate heat sink temperature is 64 degrees Fahrenheit (°F) or higher; therefore no valve realignment occurs with a safety injection signal.

Cross-tie capability of the ASW system exists between the DCPD units. Manual and remote manual system realignment provides for utilization of the second CCW heat exchanger, for use of the standby pump on the same unit, for cross-tying the standby ASW pump from the opposite unit, and for train separation for long-term cooling. The ASW unit cross-tie valve allows one ASW pump on one unit to supply the CCW heat exchanger(s) on the other unit. In the event of a total loss of ASW in one unit, the capability to cross-tie units ensures the availability of sufficient redundant cooling capacity for the affected unit. If the unit cross-tie capability were used, the unit with no operable ASW train would enter Limiting Condition for Operation (LCO) 3.0.3, and the unit from which ASW was being provided would be in a TS 3.7.8 Action A 72-hour Required Action with the cross-tie then declared inoperable.

The principal PG&E Design Class I function of the ASW system is the removal of decay heat from the reactor via the PG&E Design Class I CCW System. The ASW system satisfies Criterion 3 of 10 CFR 50.36(c)(2)(ii). Additional information about the design and operation of the ASW system is presented in the Updated Final Safety Analysis Report (UFSAR), Section 9.2.7.

The design basis of the ASW system is for one ASW train, in conjunction with the CCW System and the containment cooling systems, to remove accident generated and core decay heat following a design basis loss-of-coolant accident (LOCA) as discussed in the

UFSAR, Section 6.2. The ASW system can be re-configured to maintain the CCW temperature to within its design bases limits. The ASW system is designed to perform its function with a single failure of any active component, with or without the loss of offsite power. This assumes a maximum ASW supply temperature of 64°F occurring simultaneously with maximum heat loads on the system. The ASW system, in conjunction with the CCW System, also cools the unit from residual heat removal (RHR) entry conditions to MODE 5 during normal and post-accident operations. The time required for this evolution is a function of the number of ASW pumps, CCW heat exchangers, and RHR heat exchangers that are operating. One ASW train is sufficient to remove decay heat during subsequent operations in MODES 5 and 6. However, in the split-train configuration during post-accident operation, operator action may be required to realign the ASW and CCW systems to prevent loss of all cooling to containment and PG&E Design Class 1 systems following specific active failure scenarios.

Current TS 3.7.8 Requirements

Two ASW trains are required to be OPERABLE by TS 3.7.8 to provide the required redundancy to ensure that the system functions to remove post-accident heat loads, assuming that the worst-case single active failure occurs coincident with the loss of offsite power.

An ASW train is considered OPERABLE during MODES 1, 2, 3, and 4 when:

- a. The pump is OPERABLE,
- b. The associated piping, valves, heat exchanger, and instrumentation and controls required to perform the PG&E Design Class I function are OPERABLE, and
- c. The associated pump vault drain check valve is OPERABLE.

An LCO 3.7.8 OPERABLE ASW train requires that at least one vacuum relief valve be OPERABLE. Each ASW train has a vacuum relief system consisting of two vacuum relief valves (check valves) which function to prevent water hammer in the system piping during an ASW pump trip and restart transient. The second vacuum relief valve on each header ensures reliability of the function.

Both train cross-tie valves are required to be open to support single active failure criteria. The valves may be closed in post-accident long-term phase to support passive failure criteria, if system integrity is a concern. With one or both ASW trains in service with the cross-tie valves closed, a single active failure could result in a significant reduction or loss of heat removal capability. With both ASW trains in service, approximately one-half of the total CCW flow is routed through each CCW heat exchanger. In the event of a postulated ASW pump failure in this configuration, with the cross-tie valves closed, only one ASW pump would be operating and providing heat removal to one-half of the total CCW flow via its associated in-service CCW heat exchanger. In this situation, the ASW system's heat removal capability is limited and may not meet the requirements of the system to maintain the CCW supply temperature within its design limits.

An LCO 3.7.8 OPERABLE ASW train also requires the ASW pump vault check valves prevent flooding of the ASW pump vaults during design flood events.

The TS 3.7.8 applicability for the ASW system is MODES 1, 2, 3, and 4. The ASW system is a normally operating system that is required to support the OPERABILITY of the equipment serviced by the ASW system and required to be OPERABLE in these MODES. The TS 3.7.8 applicability for MODES 5 and 6, is the OPERABILITY requirements of the ASW system are determined by the systems it supports.

TS 3.7.8 Condition A is for one ASW train inoperable. If one ASW train is inoperable, action must be taken to restore OPERABLE status within 72 hours. In this Condition, the remaining OPERABLE ASW train is adequate to perform the heat removal function. However, the overall reliability is reduced because a single failure in the OPERABLE ASW train could result in loss of ASW system function. The Condition A 72-hour Completion Time is based on the redundant capabilities afforded by the OPERABLE train, and the low probability of a DBA occurring during this time period. If the TS 3.7.8 Condition A Completion Time is not met, TS 3.7.8 Condition B must be entered and requires plant shutdown to MODE 3 entry in 6 hours and MODE 4 entry in 12 hours.

Reason for the Proposed Change

On July 5, 2021 at 1038 PDT, with operation of Unit 1 in MODE 1, Control Room Operators attempted to swap ASW pumps and CCW heat exchangers for routine weekly swaps per operations procedure. When ASW Pump 1-1 was started, multiple simultaneous alarms, including a ground alarm, were received in the control room. Prior to this, there were no indications that there were any issues with the ASW pump. A megger of the ASW Pump 1-1 motor leads and pump motor determined that the identified ground is in the pump electric motor and replacement of the motor is necessary to eliminate the identified ground condition.

Extensive actions were performed to isolate the ground to the ASW Pump 1-1 motor including the following:

- Create and hang clearances to support determination of location of ground
- Installed ground buggy
- Meggered ASW Pump 1-1 with cable and motor terminations connected
- Disconnected terminations from the ASW Pump 1-1 Motor
- Meggered ASW Pump 1-1 Motor separated from cables
- Meggered cable from switchgear breaker to the disconnected motor terminations
- Calibration checks on the Overcurrent Relay

The following actions are being performed to support replacement of the ASW Pump 1-1 Motor:

- Create work package and hang clearances to decouple and remove the motor
- Create work package to remove ocean intake hatches for motor

- Prepare new motor for installation
- Uncouple existing motor
- Remove hatches at ocean intake to support ASW Pump 1-1 Motor removal
- Remove existing motor
- Install replacement motor
- Perform uncoupled pump test run and balance shot as necessary
- Align and couple motor
- Remove clearances for ASW Pump 1-1
- Perform coupled test run
- Perform post-maintenance operational verification testing required to declare ASW Pump 1-1 OPERABLE
- Operations review of operational verification testing results for operability

As a result of the significant number of actions already taken and those that still need to be performed, it is estimated the full TS 3.7.8 Condition A Completion Time of 72 hours will be required, without any contingency time, to return the ASW Pump 1-1 to OPERABLE status.

Additional contingency actions may be needed to complete the restoration of ASW Pump 1-1 to operable status.

It is expected an additional 72 hours beyond the 72-hour completion time could be required to address contingency actions that may occur during the return of ASW Pump 1-1 to OPERABLE status. DCPD Units 1 and 2 are currently operating in MODE 1 and ASW Pump 1-2, ASW Pump 2-1, and ASW Pump 2-2 are OPERABLE. The TS 3.7.9 Ultimate Heat Sink (UHS) requirements are currently being met with the UHS (Pacific Ocean) temperature below 64°F.

DCPD has had two failures related to our ASW motors within the past ten years, but neither of these two failures were related to the ASW Pump 1-1 Motor ground.

In November 2018, ASW Pump 2-1 motor was found with high vibrations and high temperatures during normal Operations rounds. Subsequent disassembly revealed a bearing had failed, the main cause of which was attributed to end play being improperly set during the last motor overhaul.

In September 2019, Operations attempted to start ASW Pump 2-1 following removal of a normal clearance and the pump quickly tripped off. Subsequent investigation found that the breaker's latching mechanism had broken during the motor start. A washer in the latching mechanism experienced an unexpected early failure, allowing the assembly to be forced out of position when the mechanism was energized.

Quarterly surveillance testing is performed for each of the four DCPD ASW pumps. Recent surveillance performances for the four ASW pumps have been satisfactory with

no abnormal trends or unresolved issues impacting reliability or performance characteristics.

The circumstances requiring this emergency amendment request were not foreseeable. A similar motor identified ground event has not occurred in the past 10 years on any four of the DCPD TS 3.7.8 required ASW pumps. On 1500 PDT on July 5, approximately 4.5 hours after the emergent failure of ASW Pump 1-1, PG&E activated the DCPD outage control center to support repair of the ASW Pump 1-1 on a 24-hour per day basis until the pump is returned to OPERABLE status.

Prompt action is requested for the NRC to approve an emergency amendment to TS 3.7.8 Condition A to provide an additional period of 72-hours beyond the current expiration of the Completion Time (1038 PDT hours on July 8, 2021) to 1038 PDT on July 11, 2021.

3. TECHNICAL EVALUATION

Technical Specification Changes

The TS 3.7.8 Condition A Completion Time is revised to allow a one-time Completion Time of 144-hours during Unit 1 Cycle 23. The one-time Completion Time of 144-hours for the ASW Pump 1-1 supports emergent replacement of the ASW Pump 1-1 Motor.

TS 3.7.8 Condition A corresponds to a level of degradation in which one train of the ASW system is inoperable and the system has lost its redundancy to perform the heat removal function. The ASW system is designed to perform its function with a single failure of any active component, with or without the loss of offsite power. This assumes a maximum ASW temperature of 64°F occurring simultaneously with maximum heat loads on the system. In addition, cross tie capability of the ASW system exists between the DCPD units. Manual and remote manual system realignment provides for utilization of the second CCW heat exchanger, for use of the standby pump on the same unit, for cross-tying the standby ASW pump from the opposite unit, and for train separation for long term cooling. The ASW unit cross-tie valve allows one ASW pump on one unit to supply the CCW heat exchanger(s) on the other unit. In the event of a total loss of ASW in Unit 1, the capability to cross-tie units ensures the availability of sufficient redundant cooling capacity for Unit 1. It is noted that if the Unit 1 ASW Pump 1-2 were also to become inoperable and unit cross-tie capability were used, Unit 1 would have no operable ASW train and would enter LCO 3.0.3, and Unit 2 would be in a TS 3.7.8 Condition A 72-hour action with the cross-tie declared inoperable.

The one-time Completion Time of 144-hours for the ASW Pump 1-1 during Cycle 23 is reasonable based on the capabilities of the other ASW Pump 1-2 to

perform the heat removal function, the cross-tie capabilities of ASW from Unit 2, the low probability of a design basis accident occurring during this period, the one-time use of a 144-hour Completion Time, and that it provides sufficient time to perform the emergent replacement of the ASW Pump 1-1 motor and the required post-maintenance testing. In addition, based on risk insights using the DCPD Probabilistic Risk Assessment (PRA) model, the 144-hour Completion Time for ASW Pump 1-1 has been determined to not be risk significant. Risk management actions have been determined (see “Risk Insights” section below) based on evaluation of the insights from the PRA assessment and have been accepted by Operations to be implemented during the proposed TS 3.7.8 Action A 144-hour Completion Time:

The proposed one-time 144-hour Completion Time reasonably avoids a potential forced Unit 1 shutdown due to the current 72-hour Completion Time of TS 3.7.8 Condition A being exceeded during the emergent replacement of the ASW Pump 1-1 Motor. In the event of a Unit 1 shutdown, the electrical grid would lose DCPD Unit 1 as a reliable source of baseload power.

Technical Specification Bases Changes

The TS Bases for the TS 3.7.8 Condition A Completion Time are updated as follows:

“The 72-hour Completion Time is modified by a Note that allows a one-time Completion Time of 144 hours for ASW pump 1-1, for Unit 1 cycle 23 to support emergent replacement of the ASW pump 1-1 motor. The one-time Completion Time of 144 hours is reasonable considering the capabilities of the other ASW Pump 1-2 to perform the heat removal function, the cross-tie capabilities of ASW from Unit 2, the low probability of a design basis accident occurring during this period, and the one-time use of a 144-hour Completion Time.”

The TS Bases change reflects the change to TS 3.7.8 for the one-time 144-hour Completion Time for ASW Pump 1-1. The TS Bases change will be implemented in accordance with the TS Bases Control Program as part of amendment implementation.

Risk Insights

This LAR is not a risk-informed LAR. However, for additional information, the risk insights determined with the DCPD PRA model are summarized here.

Extending the Completion Time of one train of the ASW system out for maintenance has been assessed using the DCPD PRA model, which includes internal events, internal flooding, fire and seismic.

For the PRA assessment, the total additional exposure time of 72 hours is used. This is based on the proposed extension of the current Completion Time from 72-hours (3-days) to 144-hours (6-days). The incremental conditional core damage probability (ICCDP) and the incremental conditional large early release probability (ICLERP) using the Core Damage Frequency and Large Early Release Frequency increase above the baseline plant risk have been calculated. The results demonstrate that ICCDP and ICLERF are below the risk significance criteria of Regulatory Guide 1.174, $1.0\text{E-}06$ and $1.0\text{E-}07$, respectively. Therefore, the proposed separate one-time extension of TS 3.7.8 Condition A Required Action to 6-days for emergent maintenance for ASW Pump 1-1 Motor is considered to not be risk significant.

The following risk management actions have been determined to be appropriate based on evaluation of the insights from the PRA assessment and have been accepted by Operations to be implemented during the proposed TS 3.7.8 Condition A Required Action 144-hour (6-day) Completion Time:

- Protect ASW Pumps 1-2, 2-1, 2-2 and the ASW unit crosstie
- Protect both Unit 1 CCW heat exchangers
- Protect Charging Pump 1-3
- Protect AFW pump trains 1-1, 1-2 and 1-3
- Tailboard operators on the action to trip the Reactor Coolant Pumps on a loss of CCW
- Tailboard operators on the action to provide backup firewater cooling to the charging pumps

The proposed change has been determined to not be risk significant, and it does not:

- Substantially increase the likelihood or consequences of accidents that are risk significant but are beyond the design and licensing basis of the plant,
- Degrade multiple levels of defense, or cornerstones in the reactor oversight process, through plant operations or situations not explicitly considered in the development of the regulations,
- Significantly reduce the availability or reliability of structures, systems, or components that are risk significant but are not required by regulations, or
- Involve changes for which the synergistic or cumulative effects could significantly impact risk,

Therefore, the proposed change does not create a “special circumstance” described in Appendix D, “Use of Risk Information in Review of Non-Risk-Informed License Amendment Requests,” of NUREG-0800 (Standard Review Plan), Chapter 19.2, “Review of Risk Information Used to Support Permanent Plant-Specific Changes to the Licensing Basis: General Guidance.”

ASW TS 3.7.8 Action A Completion Time Change Summary/Conclusion

The impact on the ASW system has been evaluated for the proposed revised TS 3.7.8 Condition A that provides a one-time Completion Time of 144-hours for ASW Pump 1-1 during Unit 1 Cycle 23.

The redundancy of the ASW system makes the loss of one ASW pump, while in the proposed TS 3.7.8 Condition A Completion Time of 144-hours, bounded by the UFSAR accident analyses since the redundancy of the ASW system to provide the heat removal function, however the function can still be performed by the remaining OPERABLE ASW Pump 1-2.

In addition, based on risk insights using the DCPD PRA model, the one-time 144-hour Completion Time proposed for TS 3.7.8 Condition A for Unit 1 Cycle 23 has been determined to not be risk significant. Risk management actions have been determined, based on insights from the PRA evaluation, and have been accepted by Operations to be implemented during the proposed TS 3.7.8 Condition A 144-hour Completion Time.

4. REGULATORY EVALUATION

4.1 Applicable Regulatory Requirements/Criteria

The proposed change to the requirements in TS 3.7.8, "Auxiliary Saltwater (ASW) System" Condition A is to allow a one-time Completion Time of 144-hours for ASW Pump 1-1 during Unit 1 Cycle 23. The one-time Completion Time of 144-hours for ASW Pump 1-1 supports emergent replacement of the pump motor.

General Design Criteria

DCPD Units 1 and 2 were designed to comply with the Atomic Energy Commission (AEC) (now the Nuclear Regulatory Commission, or NRC) General Design Criteria (GDC) for Nuclear Power Plant Construction Permits, published in July 1967. PG&E has made subsequent commitments to GDCs issued later that are discussed in Section 3.1 of the DCPD UFSAR. Since the requested change does not involve any change to the ASW system design function and it only allows a separate one-time extension to an existing TS Completion Time, controlled by 10 CFR 50.36, for one train of the ASW system being inoperable, there is no impact on the compliance to the GDC applicable to the ASW system.

10 CFR 50.36 - TS

Regulation in 10 CFR 50.36(c)(2)(i) states, in part, that:

Limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specifications until the condition can be met.

The TS remedial actions must provide the requisite reasonable assurance of public health and safety. With the proposed change to the TS 3.7.8 Condition A Completion Time, the ASW system will continue to be able to perform the heat removal function for a DBA. The proposed 144-hour Completion Time can only be used once for ASW Pump 1-1 during Unit 1 Cycle 23. Therefore, the requisite reasonable assurance of public health and safety will continue to be provided.

There are no changes being proposed such that compliance with any of the regulatory requirements above would come into question. The evaluations documented above confirm that PG&E will continue to comply with all applicable regulatory requirements.

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

4.2 Precedent

None.

4.3 Significant Hazards Consideration

PG&E has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

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

Response: No.

The proposed change to the requirements in TS 3.7.8, "Auxiliary Saltwater (ASW) System" Condition A to allow a one-time Completion Time of 144-hours during Unit 1 Cycle 23 for Auxiliary Saltwater System (ASW) Pump 1-1 for the emergent replacement of the pump motor. The ASW system is not an initiator of any UFSAR Chapter 6 or 15 design basis accident or event, and therefore, the proposed change does not increase

the probability of any accident previously evaluated. The ASW system is used to supply cooling water to respond to accidents that have been previously evaluated. The proposed change affects only the time allowed for an ASW system train to be inoperable and does not affect the design of the ASW system. With the change to TS 3.7.8, adequate ASW continues to be provided to perform the heat removal function for accidents previously evaluated and there is no significant impact on accident consequences. The proposed change does not significantly change how the plant would mitigate an accident previously evaluated.

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 result in a change in the manner in which the ASW system provides plant protection. The ASW system will continue to perform the function of heat removal while in the proposed revised TS 3.7.8 Condition A. The change does not involve a physical alteration of the plant that impacts the capability of the ASW system to perform its design function. 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 proposed change does not alter the manner in which safety limits, limiting safety system settings, or limiting conditions for operation are determined. The safety analysis acceptance criteria are not impacted by this change. The proposed change will not result in plant operation in a configuration outside the existing design basis since TS 3.7.8 Condition A already allows one train of the ASW system to be inoperable.

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

Based on the above evaluation, PG&E concludes that the proposed change does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and accordingly, a finding of "no significant hazards consideration" is justified.

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

Based on the above evaluation, PG&E concludes that the proposed change does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and accordingly, a finding of “no significant hazards consideration” is justified.

4.4 Conclusions

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission’s regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

5. ENVIRONMENTAL CONSIDERATION

PG&E has evaluated the proposed amendment and has determined that the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

6. REFERENCES

1. NUREG-0800 (Standard Review Plan), Chapter 19.2, “Review of Risk Information Used to Support Permanent Plant-Specific Changes to the Licensing Basis: General Guidance,” Appendix D, “Use of Risk Information in Review of Non-Risk-Informed License Amendment Requests,” June 2007

Proposed Technical Specification Change(s)

Remove Page

3.7-16

Insert Page

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3.7 PLANT SYSTEMS

3.7.8 Auxiliary Saltwater (ASW) System

LCO 3.7.8 Two ASW trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One ASW train inoperable.	<p>A.1 -----NOTE----- Enter applicable Conditions and Required Actions of LCO 3.4.6, "RCS Loops - MODE 4," for residual heat removal loops made inoperable by ASW. ----- Restore ASW train to OPERABLE status</p>	<p>-----NOTE----- A Completion Time of 144 hours is applicable for ASW pump 1-1 on a one-time basis, for Unit 1 cycle 23. ----- 72 hours</p>
B. Required Action and associated Completion Time of Condition A not met.	<p>B.1 Be in MODE 3. <u>AND</u> B.2 -----NOTE----- LCO 3.0.4.a is not applicable when entering MODE 4. ----- Be in MODE 4.</p>	<p>6 hours 12 hours</p>

Revised Technical Specification Page(s)

3.7 PLANT SYSTEMS

3.7.8 Auxiliary Saltwater (ASW) System

LCO 3.7.8 Two ASW trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One ASW train inoperable.	<p>A.1 -----NOTE----- Enter applicable Conditions and Required Actions of LCO 3.4.6, "RCS Loops - MODE 4," for residual heat removal loops made inoperable by ASW. ----- Restore ASW train to OPERABLE status</p>	<p>-----NOTE----- A Completion Time of 144 hours is applicable for ASW pump 1-1 on a one-time basis, for Unit 1 cycle 23. ----- 72 hours</p>
B. Required Action and associated Completion Time of Condition A not met.	<p>B.1 Be in MODE 3. <u>AND</u> B.2 -----NOTE----- LCO 3.0.4.a is not applicable when entering MODE 4. ----- Be in MODE 4.</p>	<p>6 hours 12 hours</p>

Technical Specification Bases Change(s)
(For information only)

BASES (continued)

ACTIONS

A.1

If one ASW train is inoperable, action must be taken to restore OPERABLE status within 72 hours. In this Condition, the remaining OPERABLE ASW train is adequate to perform the heat removal function. However, the overall reliability is reduced because a single failure in the OPERABLE ASW train could result in loss of ASW system function. The Note indicates that the applicable Conditions and Required Actions of LCO 3.4.6, "RCS Loops-MODE 4," should be entered if an inoperable ASW train results in an inoperable decay heat removal train. This is an exception to LCO 3.0.6 and ensures the proper actions are taken for these components. The 72 hour Completion Time is based on the redundant capabilities afforded by the OPERABLE train, and the low probability of a DBA occurring during this time period.

The 72-hour Completion Time is modified by a Note that allows a one-time Completion Time of 144 hours for ASW pump 1-1, for Unit 1 cycle 23 to support emergent replacement of the ASW pump 1-1 motor. The one-time Completion Time of 144 hours is reasonable considering the capabilities of the other ASW Pump 1-2 to perform the heat removal function, the cross-tie capabilities of ASW from Unit 2, the low probability of a design basis accident occurring during this period, and the one-time use of a 144-hour Completion Time.

B.1 and B.2

If the ASW train cannot be restored to OPERABLE status within the associated Completion Times, the unit must be placed in a MODE in which overall plant risk is reduced. To achieve this status, the unit must be placed in at least MODE 3 within 6 hours and in MODE 4 within 12 hours.

Remaining within the Applicability of the LCO is acceptable to accomplish short duration repairs to restore inoperable equipment because the plant risk in MODE 4 is similar to or lower than MODE 5 (Ref. 4). In MODE 4 the Steam Generators and Residual Heat Removal System are available to remove decay heat, which provides diversity and defense in depth. As stated in Reference 4, the steam turbine driven Auxiliary Feedwater Pump must be available to remain in MODE 4. Should Steam Generator cooling be lost while relying on this Required Action, there are preplanned actions to ensure long-term decay heat removal. Voluntary entry into MODE 5 may be made as it is also acceptable from a risk perspective.

Required Action B.2 is modified by a Note that states that LCO 3.0.4.a is not applicable when entering MODE 4. This Note prohibits the use of LCO 3.0.4.a to enter MODE 4 during startup with the LCO not met. However, there is no restriction on the use of LCO 3.0.4.b, if applicable, because LCO 3.0.4.b requires performance of a risk assessment