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PG&E Letter DCL-03-019

U.S. Nuclear Regulatory Commission
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Docket No. 50-275, OL-DPR-80
Docket No. 50-323, OL-DPR-82
Diablo Canyon Units 1 and 2

License Amendment Request 03-03

Revision to Technical Specification 3.5.2 – Increase in Completion Time for
Charging Pump During Unit 1 Cycle 12 from 72 Hours to 7 Days

Dear Commissioners and Staff:

In accordance with 10 CFR 50.90, enclosed is an application for amendment to Facility Operating License Nos. DPR-80 and DPR-82 for Units 1 and 2 of the Diablo Canyon Power Plant. The enclosed license amendment request (LAR) proposes a one-time change to Technical Specification (TS) 3.5.2, "ECCS – Operating," Action A, to increase the completion time for the Unit 1 Centrifugal Charging Pump (CCP) 1-1 during Unit 1 cycle 12, from 72 hours to 7 days. CCP 1-1 is experiencing greater than normal leakage from the outboard seal which eventually will need to be replaced. Based on experience, there is a likelihood that the inboard seal will be damaged in the process of replacing the outboard seal, so both seals will be replaced at the same time. Pacific Gas and Electric Company (PG&E) plans to replace the CCP 1-1 seals during the week of April 28, 2003. As a result PG&E requests that the NRC staff review this LAR on an expedited basis. Without the relief requested in this LAR, Unit 1 may have to shut down to replace the CCP 1-1 inboard and outboard seals.

The NRC previously approved the same one-time change in completion time for CCP 2-1 for Unit 2 cycle 10 in License Amendment 146 to Facility Operating License No. DPR-82 for DCP Unit 2, dated April 20, 2001.

This LAR represents a risk-informed licensing change. The proposed change meets the criteria of Regulatory Guide (RG) 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," and RG 1.177, "An Approach for Plant-Specific Risk-Informed Decisionmaking: Technical Specifications," for risk-informed changes.

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Enclosure 1 contains a description of the proposed change, the supporting technical analyses, and the no significant hazards consideration determination. Enclosures 2 and 3 contain marked-up and revised (clean) TS pages, respectively.

PG&E has determined that this LAR does not involve a significant hazard consideration as determined per 10 CFR 50.92. Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment needs to be prepared in connection with the issuance of this amendment.

If CCP 1-1 seal leakage increases significantly, PG&E would request that this LAR be reviewed on an emergency basis. This would eliminate the need for enforcement discretion. PG&E requests the license amendment be made immediately effective upon NRC issuance.

If you have any questions or require additional information, please contact Stan Ketelsen at (805) 545-4720.

Sincerely,



David H. Oatley
Vice President and General Manager - Diablo Canyon

jer/3664
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**REVISION TO TECHNICAL SPECIFICATION 3.5.2 - INCREASE IN
COMPLETION TIME FOR CHARGING PUMP DURING UNIT 1
CYCLE 12 FROM 72 HOURS to 7 DAYS**

1.0 DESCRIPTION

This letter is a request to amend Operating Licenses DPR-80 and DPR-82 for Units 1 and 2 of the Diablo Canyon Power Plant (DCPP). This license amendment request (LAR) proposes to revise Technical Specification (TS) 3.5.2, "ECCS – Operating," Action A, to change the completion time for restoring Centrifugal Charging Pump (CCP) 1-1 to operable status during Unit 1 cycle 12, from 72 hours to 7 days. In response to excessive outboard pump seal leakage, planning has been done to replace both the inboard and outboard seals. The 72-hour allowed completion time is not sufficient to accomplish such emergent repairs on an inoperable CCP. This LAR also removes a similar one-time change for Unit 2 CCP 2-1 which has expired.

2.0 PROPOSED CHANGE

TS 3.5.2, Required Action A.1, for one or more emergency core cooling system (ECCS) trains inoperable and at least 100 percent of the ECCS flow equivalent to a single operable ECCS train available, requires that the inoperable train be restored to operable status within 72 hours. The completion time is modified by a note which states, "The Completion Time may be extended to 7 days for Unit 2 cycle 10 for repair or replacement of centrifugal charging pump 2-1."

This note (which has expired for Unit 2) will be revised to state, "The Completion Time may be extended to 7 days for Unit 1 cycle 12 for centrifugal charging pump 1-1 seal replacement."

In summary, PG&E requests a one-time completion time extension to allow adequate time to replace both the inboard and outboard mechanical seals on Unit 1 CCP 1-1, from 72 hours to 7 days.

The proposed TS change is noted on the markup TS page provided in Enclosure 2. The revised TS is provided in Enclosure 3.

3.0 BACKGROUND

3.1 Emergency Core Cooling System Description

The function of the ECCS is to provide core cooling and negative reactivity to ensure that the reactor core is protected after a design basis accident. The ECCS consists of three separate subsystems: 1) centrifugal charging (high head), 2) safety injection (SI) (intermediate head), and 3) residual heat removal (RHR) (low head). Each subsystem consists of two

100 percent capacity trains that are interconnected and redundant such that either train is capable of supplying 100 percent of the flow required to mitigate the accident consequences. Each ECCS train consists of a CCP, SI pump, RHR pump, piping, valves, and heat exchangers. The ECCS pumps are normally in a standby mode, although they may sometimes be used during normal operation. For example, the CCPs are used for normal charging. In Modes 1, 2, and 3, two independent (and redundant) ECCS trains are required to protect against a single failure affecting either train.

For high-head SI, both CCPs start automatically on an SI signal. Two CCPs, each with 100 percent flow capacity, are available to operate during the injection and recirculation phase following an accident to ensure that the SI function is fulfilled assuming a single active failure. On receipt of an SI signal, CCP suction flow is automatically transferred from the volume control tank to the refueling water storage tank (RWST). The normal charging path is automatically isolated on an SI signal and the ECCS injection path valves are automatically opened to provide flow to the reactor coolant system (RCS) cold legs. When the RWST water inventory is depleted to approximately 33 percent, the RHR pumps are automatically shut off and the ECCS suction is manually transferred to the containment recirculation sump to place the system in the recirculation mode of operation. During the recirculation mode of operation, the RHR pumps provide suction to the CCPs and SI pumps. The recirculation mode of operation consists of a cold leg recirculation phase in which flow is supplied to the RCS cold legs and a hot leg recirculation phase in which flow is supplied to the RCS hot legs.

3.2 CCP 1-1 Outboard Seal Leakage History

On January 30, 2003 during functional testing of CCP 1-1, greater than normal leakage, as high as 160 drops per minute (dpm), was observed coming from the outboard mechanical seal. Several additional measurements were taken using a graduated cylinder with the pump running and stopped. With the pump running the leakage was consistent at about 22 to 25 cubic centimeters per minute (cc/min). With the pump stopped, leakage varied from 61 to 111 cc/min. One cc/min is equivalent to approximately 20 dpm.

Over the next several days seal leakage returned to normal (about 1-2 dpm with the pump running). But on February 13, 2003, seal leakage increased again to about 35 cc/min (700 dpm). It has subsequently dropped to about 3 cc/min. Based on this erratic history, it appears seal replacement will be needed soon, and before the next Unit 1 refueling outage scheduled for March 2004. Plans are being made to replace the seals the week of April 28, 2003.

The CCP 1-1 mechanical seals were last replaced during the eighth refueling outage of Unit 1, in 1997.

The pump seal manufacturer makes no recommendations on seal lifetime. The seals are not designed to be leak tight, so some leakage is normal. The upper limit on seal leakage is the Updated Final Safety Analysis (UFSAR) limit of 1.73 gallons per minute (6548 cc/min) specified by UFSAR Section 15.5.17.8.1, "Maximum Allowable Leakage From Post-LOCA Recirculation Loop." The observed leak rates are far below the UFSAR limit.

3.3 Compensatory Actions

The following actions will be taken while CCP 1-1 is out of service for replacement of the inboard and outboard mechanical seals.

- Before beginning work on CCP 1-1, the risk will be assessed per plant procedures as required by 10 CFR 50.65(a)(4) of the Maintenance Rule.
- CCP 1-2 and its system alignment will be verified operable and available to provide injection flow to the RCS in the event of an SI signal.
- No elective maintenance or surveillance testing will be performed which disables the ECCS equipment (except CCP 1-1). This will maximize the availability of ECCS flow to provide the safety injection function.
- The emergency diesel generators (EDGs) will be verified to be operable. Additionally, no elective maintenance or testing will be performed on the EDGs, the 230kV or 500kV systems. This will maximize the availability of onsite AC power should offsite power be lost and ensure that power is available to all ECCS equipment.
- The risk of performing elective maintenance or surveillance testing on other risk significant systems, structures, and components will be assessed and managed for the current plant state per plant procedures.
- Very high-risk plant evolutions as described in plant risk assessment procedures will be avoided.
- Elective load changes will not be performed.

3.4 Purpose of Proposed Amendment

The proposed change to TS 3.5.2 will allow PG&E to replace the inboard and outboard mechanical seals for CCP 1-1 in a reasonable time-frame of 7 days. Replacement of the outboard seal alone could be done within the current 72 hour completion time. However, previous experience has shown replacement of the outboard seal damages the inboard seal about 25 percent of the time. Therefore, as a prudent measure, both seals will be replaced at the same time. Replacement of both seals will require more than the current 72 hour completion time.

4.0 TECHNICAL ANALYSIS

4.1 ECCS Safety Analysis Basis

The ECCS is credited to provide core cooling and negative reactivity after any of the following accidents:

- Loss of coolant accident, non-isolable coolant leakage greater than the capability of the normal charging system;
- Rod ejection accident;
- Loss of secondary coolant accident, including uncontrolled steam release or loss of feedwater; and
- Steam generator tube rupture.

The TS limiting condition for operation 3.5.2 requires two independent (and redundant) ECCS trains to ensure that sufficient ECCS flow is available to meet the design basis analysis assumptions for the above accidents, assuming a single failure affecting either train. TS 3.5.2 action A.1 states that with one or more trains inoperable and at least 100 percent of the ECCS flow equivalent to a single operable ECCS train available, the inoperable components must be returned to operable status within 72 hours. The 72-hour completion time is based on an NRC reliability evaluation, which has shown the impact of having one full ECCS train inoperable is sufficiently small to justify continued operation for 72 hours. During the 72-hour completion time, 100 percent of the ECCS flow required to mitigate accidents can be provided without a single failure. A single failure is not required to be postulated during the completion time.

A completion time of 72 hours is usually sufficient to perform necessary preventive or corrective maintenance required on the CCPs. However, the CCP 1-1 inboard and outboard seal replacement is expected to require up to 7 days. Since the CCP 1-1 seal replacement is expected to exceed one half of the TS completion time, the replacement activities will

be planned to be worked on a 24-hour schedule until completion per DCCP Administrative Procedure AD7.ID4, "On-line Maintenance Scheduling." During the 7 day period, 100 percent of the ECCS flow required to mitigate accidents can be provided without a single failure. With no single failure, there are no situations in which entry into a 7 day completion time, due to an inoperable CCP 1-1, would result in failure to meet an intended safety function. In addition, compensatory actions will be taken during the replacement activities in order to minimize the increase in risk during the 7 day period when CCP 1-1 is inoperable.

4.2 ECCS Probabilistic Risk Assessment (PRA) Evaluation

Evaluation of Risk Impact

Risk-informed support for the proposed change is based on maintaining defense-in-depth, quantifying the PRA to determine the change in core damage frequency (CDF) and large early release frequency (LERF) produced by the increased completion time for CCP 1-1, continuation of an online risk management program to control performance of other risk significant tasks during the CCP maintenance, and consideration of specific compensatory measures to minimize risk.

The risk impact of the proposed change has been evaluated and found to be acceptable. Overall risk increases only incrementally and well within acceptable limits. The effect on risk of the proposed increase in completion time for maintenance of CCP 1-1 has been evaluated using Regulatory Guide (RG) 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," dated July 1998, and the NRC's 3-tier approach suggested in RG 1.177, "An Approach for Plant-Specific Risk-Informed Decisionmaking: Technical Specifications," dated August 1998:

Tier 1 - PRA Capability and Insights

Tier 2 - Avoidance of Risk-Significant Plant Configurations

Tier 3 - Risk-Informed Configuration Risk Management

Although the RGs require evaluation of the proposed change on the total risk, this evaluation only quantifies the on-line risk, which is then balanced against the risk associated with the alternative of shutting down Unit 1. There are risks associated with manually shutting down the unit from a stable condition, including the risk during the power and mode transition period, and the risk while shutdown. NUREG-1024, "Technical Specifications – Enhancing the Safety Impact," states:

Allowable outage times that are too short will subject the plant to unnecessary trips, transients, and fatigue cycling.

The proposed completion time extension provides the additional safety benefit of averting the transitional risk associated with shutting down the unit. Therefore, it is judged that the relative safety significance of the proposed completion time extension is low and the potential consequences of the request are preferable to the potential consequences associated with transitioning to and maintaining the unit shutdown.

Tier 1: PRA Capability and Insights

Risk-informed support for the proposed change is based on an evaluation of PRA calculations performed to quantify the change in CDF and LERF resulting from the increased completion time for the CCP.

PRA Capability

The scope, level of detail, and quality of the DCCP PRA are sufficient to support a technically defensible and realistic evaluation of the risk change from this proposed completion time extension. The DCCP PRA addresses internal, seismic, and fire events at full power.

The DCCP PRA is based on the original 1988 Diablo Canyon PRA that was performed as part of the Long Term Seismic Program. This was a full scope, Level 1 PRA that evaluated internal and external events. The PRA was subsequently updated to support the Individual Plant Examination (1991) and the Individual Plant Examination for External Events (1993). Since 1993, several other updates have been made to incorporate plant and procedure changes, update plant-specific reliability and unavailability data, improve the fidelity of the model, incorporate Westinghouse Owners' Group (WOG) peer review comments, and support other applications, such as on-line maintenance and risk-informed in-service inspection.

The DCCP PRA is a living program that is maintained through a periodic review and update process. Peer certification of the DCCP PRA using the WOG peer review certification guidelines was performed in May 2000. Certification was performed by a team of independent PRA experts from U.S. nuclear utility PRA groups and PRA consulting organizations. This intensive peer review involved approximately two person-months of engineering effort by the review team and provided a comprehensive assessment of the strengths and limitations of each element of the PRA. All of the significant findings and observations from the review team were dispositioned, resulting in several enhancements to the PRA model. On the basis of its evaluation, the certification team determined that, with certain findings and observations addressed, the quality of all elements of the PRA would be of sufficient quality to support risk significant evaluations with defense-in-depth input.

As a result of the sound basis of the original model as documented in NUREG-0675 Supplement No. 34, NUREG/CR-5726, the considerable effort to incorporate the latest industry insights into the PRA, self-assessments, and peer review certification, PG&E is confident that the results of this risk evaluation are technically sound and consistent with the expectations for PRA quality set forth in RGs 1.174 and 1.177.

Calculation of Risk Increase

To determine the effect of the proposed 7 day completion time for maintenance of CCP 1-1, the guidance suggested in RGs 1.174 and 1.177 was used. Since the proposed completion time increase is a one-time occurrence, the incremental conditional core damage probability (ICCDP) and incremental conditional large early release probability (ICLERP) also represent the increase in risk on a yearly basis.

The ICCDP value is a dimensionless probability used to evaluate the incremental probability of a core damage event over a period of time equal to the completion time (CT). The ICCDP for the proposed change is 3.46E-08.

The ICLERP value is a dimensionless probability used to evaluate the incremental probability of a large early release event over a period of time equal to the extended CT. The ICLERP for the proposed change is 1.10E-12.

The final results of the risk evaluation are compared with the risk significance criteria from RGs 1.174 and 1.177. The calculated values for ICCDP and ICLERP demonstrate that the proposed CCP 1-1 completion time change has only a small quantitative impact on plant risk, as they are less than the RG acceptance criteria.

Tier 2: Avoidance of Risk-Significant Plant Configurations

There is reasonable assurance that risk-significant plant equipment configurations will not occur when CCP 1-1 is out of service (OOS) consistent with the proposed TS change. Increases in risk posed by potential combinations of equipment OOS will be managed under the Configuration Risk Monitoring Program (CRMP).

Tier 3: Risk-Informed Configuration Risk Management

DCCP's CRMP is governed by procedure AD7.DC6, "On-Line Maintenance Risk Management," which ensures that on-line risk is appropriately evaluated prior to performing any maintenance activity. This program provides guidance for managing plant trip risk, probabilistic risk, and safety function degradation from on-line maintenance, external or internal conditions, as required by 10 CFR 50.65(a)(4) of the Maintenance Rule. The procedure addresses risk management practices in the maintenance planning and maintenance execution phases for Modes 1 through 4.

PRA Summary

The final results of the risk evaluation were compared with the risk significance criteria from RGs 1.174 and 1.177. The calculated values for ICCDP and ICLERP demonstrate that the proposed CCP 1-1 completion time change has only a small quantitative impact on plant risk.

In addition, it is judged that the relative safety significance of the proposed completion time extension is low and the potential consequences of the request are preferable to the potential consequences associated with transitioning to and maintaining the unit shutdown.

5.0 REGULATORY ANALYSIS

5.1 No Significant Hazards Consideration

Pacific Gas and Electric Company (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 emergency core cooling system (ECCS) and the centrifugal charging pumps (CCPs) are designed to respond to mitigate the consequences of an accident. They are not an accident initiator, and as such cannot increase the probability of an accident.

The loss of both CCPs, due to an inoperable CCP 1-1 and a single failure of CCP 1-2, could increase the consequences of an accident. A probabilistic risk assessment was performed to evaluate the increased

consequences. The worst case risk increment due to the increased completion time for CCP 1-1 and the maximum allowed results in only a small quantitative impact on plant risk.

Allowing 7 days to complete the seal replacement and post-maintenance testing of CCP 1-1 is acceptable since the ECCS system remains capable of performing its intended function of providing at least the minimum flow assumed in the accident analyses. During the extended maintenance and test period, appropriate compensatory measures will be implemented to restrict high risk activity. The consequences of accidents, which rely on the ECCS system, will not be significantly affected.

Therefore, the proposed changes will not result in 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.

There are no new failure modes or mechanisms created due to plant operation for an extended period to perform repairs and post-maintenance testing of CCP 1-1. Extended operation with an inoperable CCP does not involve any modification in the operational limits or physical design of the systems. There are no new accident precursors generated due to the extended allowed completion time.

Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

Response: No.

Plant operation for seven days with an inoperable CCP 1-1 does not adversely affect the margin of safety. During the extended allowable completion time the ECCS system maintains the ability to perform its safety function of providing at least the minimum flow assumed in the accident analyses. During the extended maintenance and test period, appropriate compensatory measures will be implemented to restrict high-risk activity.

Therefore, the change does not involve a significant reduction in a margin of safety as defined in the basis for any Technical Specification.

Based on the above evaluation, PG&E concludes that the proposed change presents no 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.

5.2 Applicable Regulatory Requirements/Criteria¹

Since the mid-1980s, the NRC has been reviewing and granting improvements to TS that are based, at least in part, on PRA insights. In its final policy statement on TS improvements of July 22, 1993, the NRC stated that it...

...expects that licensees, in preparing their Technical Specification related submittals, will utilize any plant-specific PSA (probabilistic safety assessment) or risk survey and any available literature on risk insights and PSAs. Similarly, the NRC staff will also employ risk insights and PSAs in evaluating Technical Specifications related submittals. Further, as a part of the Commission's ongoing program of improving Technical Specifications, it will continue to consider methods to make better use of risk and reliability information for defining future generic Technical Specification requirements.

The NRC reiterated this point when it issued the revision to 10 CFR 50.36, "Technical Specifications," in July 1995. In August 1995, the NRC adopted a final policy statement on the use of PRA methods in nuclear regulatory activities that improve safety decisionmaking and regulatory efficiency. The PRA policy statement included the following points:

1. The use of PRA technology should be increased in all regulatory matters to the extent supported by state-of-the-art in PRA methods and data and in a manner that compliments the NRC's deterministic approach and supports the NRC's traditional defense-in-depth philosophy.
2. PRA and associated analyses (e.g., sensitivity studies, uncertainty analyses, and importance measures) should be used in regulatory matters, where practical within the bounds of the state-of-the-art, to

¹ Safety Evaluation for License Amendment 146 to Facility Operating License No. DPR-82, "Issuance of Amendment Re: Revision of Technical Specifications Section 3.5.2 - One-Time Increase in Charging Pump Completion Time During Cycle 10 From 72 Hours to 7 Days (TAC No. MA9132)," dated April 20, 2001.

reduce unnecessary conservatism associated with current regulatory requirements.

3. PRA evaluations in support of regulatory decisions should be as realistic as practicable and appropriate supporting data should be publicly available for review.

In conclusion, based on the deterministic and PRA considerations discussed in this submittal, (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.

6.0 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 effluent 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.

7.0 REFERENCES

7.1 References

1. License Amendment 146 to Facility Operating License No. DPR-82, "Issuance of Amendment Re: Revision of Technical Specifications Section 3.5.2 - One-Time Increase in Charging Pump Completion Time During Cycle 10 From 72 Hours to 7 Days (TAC No. MA9132)," dated April 20, 2001.
2. Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis," dated July 1998.
3. Regulatory Guide 1.177, "An Approach for Plant-Specific Risk-Informed Decisionmaking: Technical Specifications," dated August 1998:

4. Units 1 and 2 Diablo Canyon Power Plant Final Safety Analysis Report Update, Section 15.5.17.8.1, "Maximum Allowable Leakage From Post-LOCA Recirculation Loop."

7.2 Precedent

A one-time increase in completion time was approved for Unit 2's CCP 2-1 by License Amendment 146 (Reference 1). In that case, CCP 2-1 was experiencing high vibration, and the LAR was submitted and approved as a contingency in case the pump became inoperable prior to the next refueling outage. Vibration levels never reached unacceptable levels prior to the refueling outage, and the completion time extension was not used.

Proposed Technical Specification Changes (mark-up)

Remove Page

3.5-3

Insert Page

3.5-3

3.5 EMERGENCY CORE COOLING SYSTEMS (ECCS)

3.5.2 ECCS - Operating

LCO 3.5.2 Two ECCS trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

-----NOTE-----

In MODE 3, both safety injection (SI) pump flow paths may be isolated by closing the isolation valve(s) for up to 2 hours to perform pressure isolation valve testing per SR 3.4.14.1.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>A. One or more trains inoperable.</p> <p><u>AND</u></p> <p>At least 100% of the ECCS flow equivalent to a single OPERABLE ECCS train available.</p>	<p>A.1 Restore train(s) to OPERABLE status</p>	<p>-----NOTE-----</p> <p>The Completion Time may be extended to 7 days for <u>Unit 2 cycle 10 for repair or replacement of centrifugal charging pump 2-1</u> <u>Unit 1 cycle 12 for centrifugal charging pump 1-1 seal replacement.</u></p> <p>-----</p> <p>72 hours</p>
<p>B. Required Action and associated Completion Time not met.</p>	<p>B.1 Be in MODE 3.</p> <p><u>AND</u></p> <p>B.2 Be in MODE 4.</p>	<p>6 hours</p> <p>12 hours</p>

Proposed Technical Specification Changes (retyped)

3.5 EMERGENCY CORE COOLING SYSTEMS (ECCS)

3.5.2 ECCS - Operating

LCO 3.5.2 Two ECCS trains shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

-----NOTE-----

In MODE 3, both safety injection (SI) pump flow paths may be isolated by closing the isolation valve(s) for up to 2 hours to perform pressure isolation valve testing per SR 3.4.14.1.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more trains inoperable. <u>AND</u> At least 100% of the ECCS flow equivalent to a single OPERABLE ECCS train available.	A.1 Restore train(s) to OPERABLE status	-----NOTE----- The Completion Time may be extended to 7 days for Unit 1 cycle 12 for centrifugal charging pump 1-1 seal replacement ----- 72 hours
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3.	6 hours
	<u>AND</u> B.2 Be in MODE 4.	12 hours