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GO2-15-019
January 30, 2015

10 CFR 50.91

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

Subject: **COLUMBIA GENERATING STATION, DOCKET NO. 50-397
EMERGENCY LICENSE AMENDMENT ASSOCIATED WITH
TECHNICAL SPECIFICATIONS 3.5.1.A, 3.6.1.5.A, AND 3.6.2.3.A**

Dear Sir or Madam:

In accordance with 10 CFR 50.91(a)(5), Energy Northwest requests an Emergency Technical Specification Change for Columbia Generating Station (Columbia) for a one-time extension of the Completion Time of Technical Specification (TS) Actions 3.5.1.A, 3.6.1.5.A, and 3.6.2.3.A specifically associated with Residual Heat Removal (RHR) System B inoperability.

This LAR was necessitated by emergent issues that have delayed completion of activities to modify the 24 inch Division 2 (Loop B) RHR suction piping. The proposed amendment modifies the TS Completion Time for TS Actions 3.5.1.A, 3.6.1.5.A, and 3.6.2.3.A from 7 days to 14 days to allow for the completion of installation of Phase 2 of the Fuel Pool Cooling Assist (FPC) Modification.

Energy Northwest requests that the proposed TS change be reviewed and approved by 0500 hours PST on February 2, 2015. The proposed CT extension for RHR System B will expire at 0500 on February 9, 2015.

Attachment 1 to this letter provides Energy Northwest's Evaluation. Attachment 2 provides the existing TS pages marked up to show the proposed change. Attachment 3 provides revised (clean) TS pages. Attachment 4 contains commitments being made in this submittal. If you have any questions or require additional information, please contact Ms. L. L. Williams at (509) 377-8148.

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

Executed this 30TH day of JANUARY, 2015.

Respectfully

A handwritten signature in black ink, appearing to read 'W.G. Hettel', with a stylized flourish at the end.

W.G. Hettel

Vice President, Operations

Attachments: As stated

cc: NRC Region IV Administrator

NRC NRR Project Manager

NRC Senior Resident Inspector/988C

NRC NRR Division of Policy and Rulemaking (DPR) Director (e-mail)

NRC NRR Plant Licensing Branch Chief (BC) (e-mail)

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LICENSEE'S EVALUATION

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1. SUMMARY DESCRIPTION

The proposed change would revise the completion time (CT) for TS 3.5.1.A, 3.6.1.5.A and 3.6.2.3.A by adding a footnote, to the completion time for restoring RHR Loop B, to each of the required actions to allow a one-time 14 day completion time. The extended CTs will allow sufficient time to complete a modification that was commenced on January 26, 2015.

2. DETAILED DESCRIPTION

2.1 Proposed Change

The proposed change would revise the CT for TS 3.5.1.A, 3.6.1.5.A and 3.6.2.3.A by adding a footnote to the completion time for restoring RHR-B, to each of the required actions to allow a one-time, 7 day extension (14 day completion time). This footnote will state:

¹ *The Completion Time that one train of RHR (RHR-B) can be inoperable as specified by Required Action A.1 may be extended beyond the 7 day completion time up to 7 days to support restoration of RHR-B from the modification activity. Upon successful restoration of RHR-B, this footnote is no longer applicable and will expire at 05:00 PST on February 9, 2015.*

The markup to the proposed changes to TS 3.5.1.A, 3.6.1.5.A, and 3.6.2.3.A is provided in Attachment 2 of this letter.

2.2 Reason for Request

Why the Condition Occurred:

Residual heat removal pump RHR-P-2B was declared inoperable to support completion of the final phase (Phase 2) of a modification to the suction side of the pump at 0500 on January 26, 2015. Unanticipated delays occurred with the installation of the RHR modification. This was due primarily to issues in fit-up and installation of a sweep-o-let connection to the 24" suction line of the RHR B pump. On the morning of January 29, 2015 the results of a radiographic test (RT) on welds to install the sweep-o-let revealed a number of minor flaws that needed to be repaired. Work is ongoing per a revised completion schedule which added time to perform the weld repairs. However, there is little margin to the existing 7 day completion. The proposed one time extension would allow sufficient time to complete repairs should additional problems be presented.

Why this Situation Could Not be Avoided:

Since this work impacts the shutdown cooling system, a system relied upon for decay heat removal when the plant is shutdown, the decision was made to perform the work while on-

line, thus minimizing station risk. This modification would allow a means to provide alternate fuel pool and core cooling during refueling operations and facilitate future work on a degraded valve in the RHR shutdown cooling suction line by establishing a cross connection between the RHR and Fuel Pool Cooling (FPC) System piping.

The implementation plan for this modification was designed in 2 phases, as depicted in Figure 1, to minimize the time during which RHR Loop B would be required to be inoperable. Phase 1 of the modification was previously completed and the existing RHR-B outage is associated with Phase 2. Phase 2 specifically involves cutting the 24" RHR Loop B suction side piping and welding a new pipe section connecting to the 10" FPC piping installed in Phase 1. The time required for completion of the work required in Phase 2 was estimated to be approximately 4 days.

The pre-planned implementation schedule was designed to maximize margin towards the 7 day allowed CT and to afford time to address unforeseen complications. The project implementation plan included many provisions to ensure timely execution of the work including the use of experienced personnel, pre-assembled components, pre-staging of equipment and training mock-ups. Therefore, efforts were made to minimize the likelihood for delays due to job planning or preparation. Contingencies were developed and carried out for the existing problems. Any further challenge could result in the station reaching the 7 day completion time, thus requiring a shutdown with only one division of shutdown cooling available.

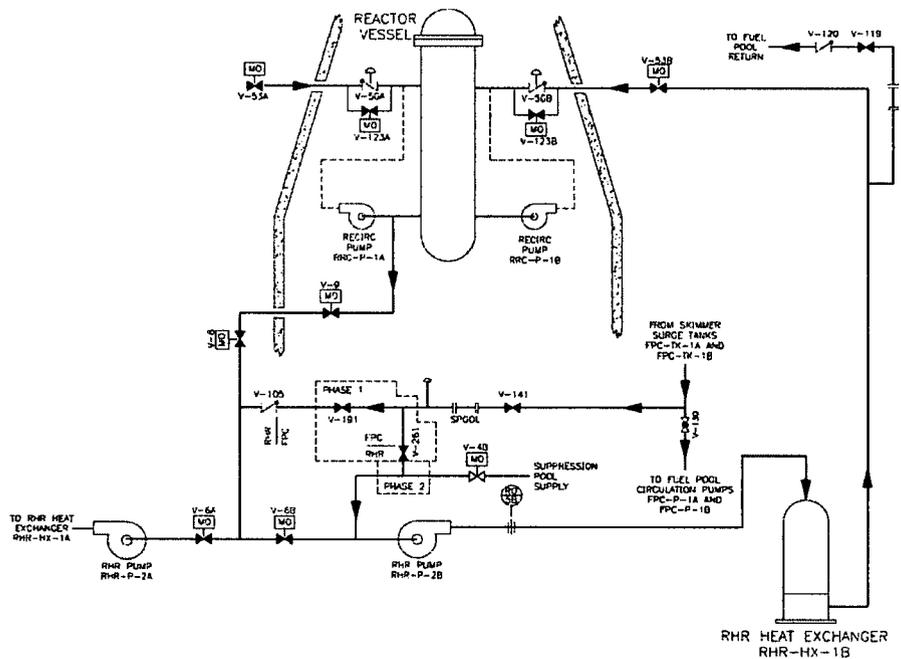


Figure 1 - Scope of Modification to Cross-Tie RHR to FPC

3. TECHNICAL EVALUATION

The proposed change to TS 3.5.1.A, 3.6.1.5.A, and 3.6.2.3.A Completion Times is based upon a deterministic/qualitative analysis and will rely on defense-in-depth measures and configuration management measures. Conformance with NRC General Design Criteria (GDC) Section 3.1 of the Final Safety Analysis Report (FSAR) provides the basis for concluding that Columbia fully satisfies and complies with the GDC in Appendix A to 10 CFR 50. These proposed changes do not affect the basis for this conclusion and do not affect compliance with the GDC.

3.1 PRA Evaluation

3.1.1 Introduction

This analysis addresses quantitative calculations performed to support an emergency technical specification (TS) change to limiting condition for operation (LCO) 3.5.1.A, 3.6.1.5.A and 3.6.2.3.A for Low Pressure ECCS injection systems for Columbia Generating Station (CGS). The work consists of the following:

- Perform risk informed sensitivity analyses for the plant condition for low pressure coolant injection (LPCI) B and RHR B out of service (OOS). This analysis provided input to calculate the average change in core damage frequency (CDF)/ large early release frequency (LERF) and incremental conditional core damage probabilities and incremental conditional large early release probabilities for the internal events, seismic and fire Probabilistic Risk Assessments (PRAs).
- Determine if the risk increases meet the minimal quantitative requirements for an notice of enforcement discretion (NOED)/emergency TS change per regulatory issue summary (RIS) 2005-1.
- Review dominant risk contributors (cutsets / sequences) and summarize the risk insights for the configurations.
- Characterize and evaluate the impact of uncertainties and assumptions to the application through the identification of key assumptions and approximations relevant to the application. The sensitivity of the model results to boundary conditions and other assumptions is evaluated using sensitivity analyses, both individually and in logical combinations.
- Document the following and reference all sources of information:
 - The methodology used to perform each aspect of the work;
 - Evaluation results

3.1.2 Technical Approach

Revision 7.2 of the CGS internal events, fire and seismic PRAs were used to perform the calculations. Revision 7.2 was completed in 2014. The following subsections discuss the technical approach used to perform the calculations.

3.1.2.1 Core Damage Frequency Calculations

3.1.2.1.1 The Zero Maintenance PRA Model

The core damage frequency calculations employed the following model:

Zero maintenance (ZM) model – The ZM model is solved with all maintenance terms set to 0.0. The ZM model results were developed as directed by RIS 2005-1.

3.1.2.1.2 Treatment of Common Cause Failures for the Preventive Maintenance Case

The PRA solution is for the preventive maintenance case (i.e., train is electively taken out of service). RG 1.177 describes the methodology to be used to appropriately adjust common cause failure unavailabilities for the preventive-maintenance case.

For preventive maintenance, the affected train is electively removed from service. Use of conditional common cause unavailabilities (as would be the case for corrective maintenance) is not applicable, as the train removed from service is operable prior to the time it is taken out of service. Common cause terms that involve the train in question are not applicable when the train is removed from service, and are set to zero. The common cause terms that involve the RHR trains A and C that remain in service are recomputed assuming a common cause group of two.

3.1.2.1.3 Modeling of Compensatory Measures

No compensatory measures were credited in the PRA calculations and results, which produced the most conservative set of results.

3.1.2.2 LERF Calculations

ICLERP was computed using the Rev. 7.2 PRA LERF modeling. See the table below for conclusions.

3.1.2.3 Computation Results for RHR B and LPCI B Out of Service

Results for each PRA computation were placed in an Excel file for calculation of ICCDP, incremental conditional large early release probability (ICLERP), delta-CDF, and delta-LERF.

The following equations were used for the computations:

The change in the annual average CDF because of the CT extension, ΔCDF , was evaluated by computing:

$$\Delta CDF = [T1/T_{CYCLE}]CDF_{LB} + [1- T1 / T_{CYCLE}]CDF_{BASE} - CDF_{BASE}$$

Where the following definitions were applied:

CDF_{LB} is the CDF evaluated from the zero maintenance PRA models with RHR B OOS.

T1 is the total time per fuel cycle (T_{CYCLE}) that RHR B is OOS for the extended CT.

CDF_{BASE} is the baseline annual average CDF, zero maintenance model. This is the CDF result from the current baseline internal events, internal fire and/or seismic PRAs.

A similar approach was used to evaluate the change in the average LERF because of the requested CT extension with normal risk management measures, $\Delta LERF$:

$$\Delta LERF = [T1/T_{CYCLE}] LERF_{LB} + [1 - T1 / T_{CYCLE}] LERF_{BASE} - LERF_{BASE}$$

Where the following definitions were applied:

$LERF_{LB}$ is the LERF evaluated from the PRA models with LPCI C OOS.

T1 is the total time per fuel cycle (T_{CYCLE}) that RHR B is OOS for the extended CT.

$LERF_{BASE}$ is the baseline annual average LERF. This is the LERF result from the current baseline internal events, internal fire and/or seismic PRAs.

The evaluation was performed based on the assumption that the full, extended CT would be applied once per refueling cycle, hence $T1 = 7$ days. The cycle time is based on the current 24-month fuel cycle (allowing for planned and unplanned plant outage time, which yields $T_{CYCLE} = 670$ days).

The ICCDP and ICLERP are computed using their definitions in RG 1.177. The formulas are as follows:

$$ICCDP(YOOS) = (CDF_{YOOS} - CDF_{BASE}) * \Delta T$$

Where:

$ICCDP(YOOS)$ is the ICCDP with train Y out of service

CDF_{YOOS} is the CDF computed with train Y out of service

CDF_{BASE} is the base case CDF

ΔT is the extension of the CT converted to units consistent with the CDF frequency units (7 days * 1yr / 365 days = 1.92E-2yr).

Similarly, ICLERP is computed as follows:

$$ICLERP(YOOS) = (LERF_{YOOS} - LERF_{BASE}) * 1.92E-2$$

Where:

$ICLERP(YOOS)$ is the ICLERP with train Y out of service

$LERF_{YOOS}$ is the LERF computed with train Y out of service

$LERF_{BASE}$ is the base case LERF

3.1.3 Results

The CDF and LERF results are presented in Table 1. For the plant-specific configuration the plant intends to operate in during the period of the extended CT, the delta-CDF, delta-LERF, incremental conditional core damage probability (ICCDP) and incremental conditional large early release probability (ICLERP) were compared with guidance thresholds of less than or equal to a delta-CDF of 1E-6/reactor year, a delta-LERF of 1E-7/reactor year, an ICCDP of 5E-7 and an ICLERP of 5E-8. All results for the CT extension application were less than the guidance thresholds.

Table 1 7-DAY EXTENSION RHR B PREVENTIVE MAINTENANCE Zero Maintenance Model - No Compensatory Measures Credited		
Risk Metric	Acceptance Guideline	PRA Results
ΔCDF (Total)	< 1.0E-6/reactor-year	1.04E-7
ΔCDF (Internal Events)	< 1.0E-6/reactor-year	3.03E-8
ΔCDF (Fire)	< 1.0E-6/reactor-year	6.95E-8
ΔCDF (Seismic)	< 1.0E-6/reactor-year	3.91E-9
RHR B - ICCDP (Total)	< 5.0E-7	1.91E-7
RHR B - ICCDP (Internal Events)	< 5.0E-7	5.57E-8
RHR B - ICCDP (Fire)	< 5.0E-7	1.28E-7
RHR B - ICCDP (Seismic)	< 5.0E-7	7.18E-9
ΔLERF (Total)	< 1.0E-7/reactor-year	4.32E-9
ΔLERF (Internal Events)	< 1.0E-7/reactor-year	1.58E-11
ΔLERF (Fire)	< 1.0E-7/reactor-year	4.31E-9
ΔLERF (Seismic)	< 1.0E-7/reactor-year	0.00E+0
RHR B - ICLERP (Total)	< 5.0E-8	7.94E-9
RHR B - ICLERP (Internal Events)	< 5.0E-8	2.90E-11
RHR B - ICLERP (Fire)	< 5.0E-8	7.91E-9
RHR B - ICLERP (Seismic)	< 5.0E-8	0.00E+0

3.2 Compensatory Measures

Although no credit is taken in the PRA analysis for compensatory measures to support an additional 7 day completion time, Energy Northwest will implement the following measures to provide additional margin of safety to mitigate the unavailability of the RHR System B. They consist of protecting systems that support the plant's critical safety functions and protecting the non-safety related systems with the potential to cause a plant transient.

1. The following actions are planned to reduce the likelihood of initiating events or impact on mitigating systems:
 - Any other work which could cause a plant transient will be deferred during the extended completion time period. Any other work that would affect the ability to mitigate an event or would affect any equipment that would be relied upon to mitigate an event will be deferred during the extended period
 - The exception will be that the required surveillances to support Technical Specification Operability of other SSCs will still be performed.
2. To reduce the likelihood of unavailability of the remaining methods of decay heat removal the following compensatory measures are planned:
 - Maintenance which could affect the remaining reactor water inventory control or decay heat removal systems will be deferred during the extend of period. In addition the following will be performed:
 - Performance of a walkdown of the Turbine Building and Radwaste building 525 elevation to provide potential early detection of internal floods.
 - Continued performance of fire risk mitigating actions (e.g., plant walkdowns, etc.) per the requirements of station procedures.
3. To increase the likelihood of successful operator recovery actions in response to initiating events the following measures are planned:
 - Increase operator awareness of the increased significance of these actions through the use of briefing sheets or procedural reviews

4. REGULATORY EVALUATION

4.1 Applicable Regulatory Requirements/Criteria

The Emergency Core Cooling System (ECCS) is designed to provide protection against postulated loss-of-coolant accidents (LOCAs) caused by ruptures in primary system piping. The functional requirements are such that the system performance under all postulated LOCA conditions satisfies the requirements of 10 CFR 50.46.

The ECCS uses two independent methods (flooding and spraying) to cool the core during a LOCA. The ECCS network is composed of the High Pressure Core Spray (HPCS) System, the Low Pressure Core Spray (LPCS) System, and the low pressure coolant injection (LPCI) mode of the Residual Heat Removal (RHR) System. The ECCS also consists of the Automatic Depressurization System (ADS). The suppression pool provides the required source of water for the ECCS.

With regard to GDC 38, Containment Heat Removal functions, the containment heat removal function is accomplished by the RHR system. Following a LOCA, one or both of the following operating modes of the RHR system would be initiated:

- a. Containment spray - condenses steam within the containment, and
- b. Suppression pool cooling - limits the temperature within the containment by removing heat from the suppression pool water by way of the RHR heat exchangers. Either or both redundant RHR heat exchangers can be manually activated.

The RHR containment cooling system is an integral part of the RHR system. Water is drawn from the suppression pool, pumped through one or both RHR heat exchangers and delivered to the vessel, the suppression pool, the drywell spray header, or the suppression pool vapor space spray header. Water from the SW system is pumped through the heat exchanger tube side to remove heat from the process water. Two cooling loops are provided, each mechanically and electrically separate from the other to achieve redundancy.

The proposed emergency TS change does not alter the redundant design capability of the RHR system to accomplish these functions.

4.2 Precedent

November 2005: North Anna Unit 1 – An amendment was granted that revised TS 3.5.2, ECCS Operating, to add a note to the Completion Time that allowed a temporary 7-day

Completion Time in order to repair a weld leak that was discovered on the "A" train of the low-head safety injection pump suction piping. (Ref #ML053080307)

December 2008: Diablo Canyon Units 1 and 2 – The station was granted an amendment that increased the Completion Times for Required Actions related to TS 3.5.2, ECCS Operating, and TS 3.6.6, Containment Spray and Cooling Systems, from 72 hours to 14 days. The additional time was required to restore a single inoperable ECCS subsystem to operable status. (Ref #ML083460173)

July 2009: Monticello – An amendment was granted to revise TS 3.5.1, ECCS Operating, Required Actions and Completion Times to allow a 72-hour CT to restore a low-pressure ECCS subsystem to operable status after discovery of two low-pressure ECCS subsystems inoperable. (Ref #ML091480782)

4.3 No Significant Hazards Consideration

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

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

Response: No.

The proposed amendment does not increase the probability of an accident because the RHR system cannot initiate an accident. The RHR system provides coolant injection to the reactor core, cooling of the suppression pool water inventory, and drywell sprays following a design basis accident.

The proposed one time 14 day CT change does not alter the conditions, operating configurations, or minimum amount of operating equipment assumed in the safety analysis for accident mitigation. No changes are proposed in the manner in which the ECCS provides plant protection or which create new modes of plant operation. In addition, a PSA evaluation concluded that the risk contribution of the increased CT is a very small increase in risk. The proposed change in CT will not affect the probability of any event initiators. There will be no degradation in the performance of, or an increase in the number of challenges imposed on, safety related equipment assumed to function during an accident situation. There will be no change to normal plant operating parameters or accident mitigation performance. Therefore, the proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

Response: No.

The proposed amendment will not create the possibility of a new or different kind of accident because inoperability of one RHR subsystem is not an accident precursor. There are no hardware changes nor are there any changes in the method by which any plant system performs a safety function. This request does not affect the normal method of plant operation. The proposed amendment does not introduce new equipment, or new way of operation of the system which could create a new or different kind of accident. No new external threats, release pathways, or equipment failure modes are created. No new accident scenarios, transient precursors, failure mechanisms, or limiting single failures are introduced as a result of this request. Therefore, the implementation of the proposed amendment will not create a possibility for an accident of a new or different type than those previously evaluated.

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

Response: No.

Columbia's ECCS is designed with sufficient redundancy such that a low pressure ECCS subsystem may be removed from service for maintenance or testing and the remaining subsystems are capable of providing water and removing heat loads to satisfy the FSAR requirements for accident mitigation or plant shutdown. A PSA evaluation concluded that the risk contribution of the CT extension is within allowable limits. There will be no change to the manner in which safety limits or limiting safety system settings are determined nor will there be any change to those plant systems necessary to assure the accomplishment of protection functions. For these reasons, the proposed amendment does not involve a significant reduction in a margin of safety.

Based on the above, Energy Northwest concludes that the proposed amendment presents no significant hazards considerations 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

The proposed change will provide a one-time change to the TS 3.5.1.A, 3.6.1.5.A and 3.6.2.3.A completion times, to allow RHR-P-1B inoperable for 14 days. The completion time of 14 days will provide additional time to complete the modification to the RHR system. The Plant Operations Committee (onsite review board) has reviewed the proposed change to the Technical Specifications and concluded that it does not involve a significant hazard

consideration and will not endanger the health and safety of the public.

5. ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed changes would change a requirement with respect to the installation or use of a facility component located within the restricted area, as defined in 10 CFR 20.

However, the proposed changes do 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 changes meet the eligibility criterion for categorical exclusion set for in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), an environmental assessment of the proposed change is not required.

TECHNICAL SPECIFICATION MARKUPS

3.5.1

3.6.1.5

3.6.2.3

3.5 EMERGENCY CORE COOLING SYSTEMS (ECCS) AND REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM

3.5.1 ECCS - Operating

LCO 3.5.1 Each ECCS injection/spray subsystem and the Automatic Depressurization System (ADS) function of six safety/relief valves shall be OPERABLE.

APPLICABILITY: MODE 1, MODES 2 and 3, except ADS valves are not required to be OPERABLE with reactor steam dome pressure \leq 150 psig.

ACTIONS

-----NOTE-----
LCO 3.0.4.b is not applicable to HPCS.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One low pressure ECCS injection/spray subsystem inoperable.	A.1 Restore low pressure ECCS injection/spray subsystem to OPERABLE status.	7 days ⁽¹⁾
B High Pressure Core Spray (HPCS) System inoperable.	B.1 Verify by administrative means RCIC System is OPERABLE when RCIC System is required to be OPERABLE.	Immediately
	<u>AND</u> B.2 Restore HPCS System to OPERABLE status.	14 days

⁽¹⁾ The Completion Time that one train of RHR (RHR-B) can be inoperable as specified by Required Action A.1 may be extended beyond the 7 day completion time up to 7 days to support restoration of RHR-B from the modification activity. Upon successful restoration of RHR-B, this footnote is no longer applicable and will expire at 05:00 PST on February 9, 2015.

3.6 CONTAINMENT SYSTEMS

3.6.1.5 Residual Heat Removal (RHR) Drywell Spray

LCO 3.6.1.5 Two RHR drywell spray subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One RHR drywell spray subsystem inoperable.	A.1 Restore RHR drywell spray subsystem to OPERABLE status.	7 days ⁽¹⁾
B. Two RHR drywell spray subsystems inoperable.	B.1 Restore one RHR drywell spray subsystem to OPERABLE status.	8 hours
C. Required Action and associated Completion Time not met.	C.1 Be in MODE 3.	12 hours
	<u>AND</u> C.2 Be in MODE 4.	36 hours

⁽¹⁾ The Completion Time that one train of RHR (RHR-B) can be inoperable as specified by Required Action A.1 may be extended beyond the 7 day completion time up to 7 days to support restoration of RHR-B from the modification activity. Upon successful restoration of RHR-B, this footnote is no longer applicable and will expire at 05:00 PST on February 9, 2015.

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.1.5.1	Verify each RHR drywell spray subsystem manual, power operated, and automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, is in the correct position or can be aligned to the correct position.	31 days
SR 3.6.1.5.2	Verify each spray nozzle is unobstructed.	10 years

3.6 CONTAINMENT SYSTEMS

3.6.2.3 Residual Heat Removal (RHR) Suppression Pool Cooling

LCO 3.6.2.3 Two RHR suppression pool cooling subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One RHR suppression pool cooling subsystem inoperable.	A.1 Restore RHR suppression pool cooling subsystem to OPERABLE status.	7 days ⁽¹⁾
B. Required Action and associated Completion Time of Condition A not met. <u>OR</u> Two RHR suppression pool cooling subsystems inoperable.	B.1 Be in MODE 3. <u>AND</u> B.2 Be in MODE 4.	12 hours 36 hours

⁽¹⁾ The Completion Time that one train of RHR (RHR-B) can be inoperable as specified by Required Action A.1 may be extended beyond the 7 day completion time up to 7 days to support restoration of RHR-B from the modification activity. Upon successful restoration of RHR-B, this footnote is no longer applicable and will expire at 05:00 PST on February 9, 2015.

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.2.3.1	Verify each RHR suppression pool cooling subsystem manual, power operated, and automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, is in the correct position or can be aligned to the correct position.	31 days
SR 3.6.2.3.2	Verify each RHR pump develops a flow rate ≥ 7100 gpm through the associated heat exchanger while operating in the suppression pool cooling mode.	In accordance with the Inservice Testing Program

TECHNICAL SPECIFICATION REVISED (CLEAN)

3.5.1
3.6.1.5
3.6.2.3

3.5 EMERGENCY CORE COOLING SYSTEMS (ECCS) AND REACTOR CORE ISOLATION COOLING (RCIC) SYSTEM

3.5.1 ECCS - Operating

LCO 3.5.1 Each ECCS injection/spray subsystem and the Automatic Depressurization System (ADS) function of six safety/relief valves shall be OPERABLE.

APPLICABILITY: MODE 1, MODES 2 and 3, except ADS valves are not required to be OPERABLE with reactor steam dome pressure \leq 150 psig.

ACTIONS

-----NOTE-----
LCO 3.0.4.b is not applicable to HPCS.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One low pressure ECCS injection/spray subsystem inoperable.	A.1 Restore low pressure ECCS injection/spray subsystem to OPERABLE status.	7 days ⁽¹⁾
B High Pressure Core Spray (HPCS) System inoperable.	B.1 Verify by administrative means RCIC System is OPERABLE when RCIC System is required to be OPERABLE.	Immediately
	<u>AND</u> B.2 Restore HPCS System to OPERABLE status.	14 days

⁽¹⁾ The Completion Time that one train of RHR (RHR-B) can be inoperable as specified by Required Action A.1 may be extended beyond the 7 day completion time up to 7 days to support restoration of RHR-B from the modification activity. Upon successful restoration of RHR-B, this footnote is no longer applicable and will expire at 05:00 PST on February 9, 2015.

3.6 CONTAINMENT SYSTEMS

3.6.1.5 Residual Heat Removal (RHR) Drywell Spray

LCO 3.6.1.5 Two RHR drywell spray subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One RHR drywell spray subsystem inoperable.	A.1 Restore RHR drywell spray subsystem to OPERABLE status.	7 days ⁽¹⁾
B. Two RHR drywell spray subsystems inoperable.	B.1 Restore one RHR drywell spray subsystem to OPERABLE status.	8 hours
C. Required Action and associated Completion Time not met.	C.1 Be in MODE 3.	12 hours
	<u>AND</u> C.2 Be in MODE 4.	36 hours

⁽¹⁾ The Completion Time that one train of RHR (RHR-B) can be inoperable as specified by Required Action A.1 may be extended beyond the 7 day completion time up to 7 days to support restoration of RHR-B from the modification activity. Upon successful restoration of RHR-B, this footnote is no longer applicable and will expire at 05:00 PST on February 9, 2015.

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.1.5.1	Verify each RHR drywell spray subsystem manual, power operated, and automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, is in the correct position or can be aligned to the correct position.	31 days
SR 3.6.1.5.2	Verify each spray nozzle is unobstructed.	10 years

3.6 CONTAINMENT SYSTEMS

3.6.2.3 Residual Heat Removal (RHR) Suppression Pool Cooling

LCO 3.6.2.3 Two RHR suppression pool cooling subsystems shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One RHR suppression pool cooling subsystem inoperable.	A.1 Restore RHR suppression pool cooling subsystem to OPERABLE status.	7 days ⁽¹⁾
B. Required Action and associated Completion Time of Condition A not met. <u>OR</u> Two RHR suppression pool cooling subsystems inoperable.	B.1 Be in MODE 3. <u>AND</u> B.2 Be in MODE 4.	12 hours 36 hours

⁽¹⁾ The Completion Time that one train of RHR (RHR-B) can be inoperable as specified by Required Action A.1 may be extended beyond the 7 day completion time up to 7 days to support restoration of RHR-B from the modification activity. Upon successful restoration of RHR-B, this footnote is no longer applicable and will expire at 05:00 PST on February 9, 2015.

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.2.3.1	Verify each RHR suppression pool cooling subsystem manual, power operated, and automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, is in the correct position or can be aligned to the correct position.	31 days
SR 3.6.2.3.2	Verify each RHR pump develops a flow rate ≥ 7100 gpm through the associated heat exchanger while operating in the suppression pool cooling mode.	In accordance with the Inservice Testing Program

List of Regulatory Commitments

The following table identifies the regulatory commitments in this document. Any other statements in this submittal intended or planned actions, are provided for information purposes, and are not considered to be regulatory commitments.

COMMITMENT	TYPE SCHEDULED		COMPLETION DATE
	one-time	continuing compliance	
Compensatory measures outlined in section 3.2 of this letter will be implemented during the period of the additional 7 day completion time.	X		0500 February 2, 2015 through 0500 February 9, 2015