

April 22, 2021

Docket No.: 50-366

NL-21-0423

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

Edwin I. Hatch Nuclear Plant Unit 2
Emergency License Amendment Request for Technical Specification 3.5.1
Regarding One-Time Extension of Completion Time for 2D RHR Pump – PRA RAI Response

Ladies and Gentlemen:

Pursuant to the provisions of Section 50.90 of Title 10 of the Code of Federal Regulations (CFR), on April 19, 2021, Southern Nuclear Operating Company (SNC) submitted a license amendment request to the Technical Specifications (TS) for Hatch Nuclear Plant (HNP) Unit 2 renewed facility operating license NPF-5. The proposed amendment (ADAMS Accession Number ML21109A388), as supplemented on April 20, 2021 (ML21110A652 and ML21110A722), would revise Condition A of TS 3.5.1, ECCS - Operating, by allowing a one-time increase in the Completion Time from 7 days to 15 days. The increased Completion Time would expire on May 1, 2021 at 0955 eastern daylight time (EDT).

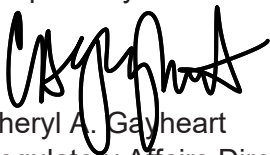
By email dated April 21, 2021, the NRC provided requests for additional information (RAIs) in regard to SNC's request. The enclosure to this letter provides the RAIs with SNC's response.

The RAI responses have no impact on the no significant hazards consideration or the environmental considerations of the original submittal.

This letter contains no NRC commitments. If you have any questions, please contact Jamie Coleman at 205.992.6611.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 22nd day of April 2021.

Respectfully submitted,



Cheryl A. Gayheart
Regulatory Affairs Director
CAG/tle

Enclosure: RAI Response

Attachments:

1. HNP Unit 2 Technical Specification Marked-up Page
2. HNP Unit 2 Revised Technical Specification Pages
3. HNP Unit 2 Technical Specification Bases Marked-up Pages (information only)

cc: NRC Regional Administrator, Region II
NRC NRR Project Manager – Hatch
NRC Senior Resident Inspector – Hatch
Director, Environmental Protection Division – State of Georgia
RType: CHA02.004

Edwin I. Hatch Nuclear Plant Unit 2

**Emergency License Amendment Request for Technical Specification 3.5.1
Regarding One-Time Extension of Completion Time for 2D RHR Pump –
PRA RAI Response**

Enclosure

RAI Response

NRC RAI

By letter dated April 19, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21010A388), as supplemented on April 20, 2021 (two letters) (ADAMS Accession Nos. ML21110A652 and ML21110A722), Southern Nuclear Operating Company (SNC, the licensee) submitted a one-time emergency residual heat removal (RHR) license amendment request (LAR) for Edwin I. Hatch Nuclear Plant, Unit 2. The proposed amendment would make a one-time revision to Condition A of Technical Specification 3.5.1, "ECCS [Emergency Core Cooling System] – Operating," to extend the Completion Time (CT) from 7 days to 15 days.

To complete its review of the inspection, the U.S. Nuclear Regulatory Commission (NRC) staff requests the following additional information:

APLA-RAI-1

Revision 1 of RG 1.177, "An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications" (ADAMS Accession No. ML100910008), describes an acceptable risk-informed approach specifically for assessing proposed TS changes. This regulatory guide identifies a three-tiered approach for a licensee's evaluation of the risk associated with a proposed TS completion time change. Section 2.4, states, "For one-time only changes to TS CTs, the frequency of entry into the CT may be known, and the configuration of the plant SSCs may be established. Further, there is no permanent change to the plant CDF or LERF, and hence the risk guidelines of Regulatory Guide 1.174 (Ref. 11) cannot be applied directly. The following TS acceptance guidelines specific to one-time only CT changes are provided for evaluating the risk associated with the revised CT:

- 1. The licensee has demonstrated that implementation of the one-time only TS CT change impact on plant risk is acceptable (Tier 1):*
 - ICCDP of less than 1.0×10^{-6} and an ICLERP of less than 1.0×10^{-7} , or*
 - ICCDP of less than 1.0×10^{-5} and an ICLERP of less than 1.0×10^{-6} with effective compensatory measures implemented to reduce the sources of increased risk.*
- 2. The licensee has demonstrated that there are appropriate restrictions on dominant risk-significant configurations associated with the change (Tier 2).*
- 3. The licensee has implemented a risk-informed plant configuration control program. The licensee has implemented procedures to utilize, maintain, and control such a program (Tier 3)."*

LAR Table 2.2-1 states that the ICCDP for the 15-day configuration of RHR Pump 2D out-of-service was 1.17×10^{-6} which exceeded 1×10^{-6} but, is less than 1×10^{-5} . RG 1.177 guidance allows for effective compensatory measures to be implemented. Furthermore, in the LAR, it was stated that "risk insights from this configuration were examined by comparing the change in Birnbaum values between the base and configuration specific importance rankings. The events and components that become more important are associated with the redundant ECCS pumps and the containment hardened vent system, which is an alternate heat sink if RHR is not available."

- a. *In light of this, provide a discussion of containment venting as a potential compensatory measure for this configuration since it has increased in dominance on failure of suppression pool cooling scenarios which rely on the hardened containment vent system.*
- b. *Provide what compensatory measures will be taken including procedural guidance to Operations personnel during the RHR Pump 2D outage.*
- c. *Provide descriptions for components which have become dominant on Attachment 4, p.11 and any compensatory measures which need to be taken regarding them. If there aren't any necessary, please state the reasons why.*
- d. *For any fire scenarios significantly impacted by the RHR Pump 2D outage, provide any compensatory actions which may be credited such as existing or new fire watches.*

SNC Response to APLA-RAI-1

In addition to the compensatory measures described in letter NL-21-0411 dated April 19, 2021 (ADAMS Accession Number ML21109A388), SNC is proposing additional compensatory measures related to the hardened vent. The TS 3.5.1 Required Action A.2.1 is being revised to reference this letter, which contains all compensatory actions. The following comprehensive list of compensatory measures will be in place as required by TS 3.5.1 Required Action A.2.1, as provided in Attachment 1 (marked-up) and Attachment 2 ("clean") of this letter:

- Equipment is protected as required by SNC Procedure NMP-OS-010-002 (Reference 1) for 2D RHR pump out-of-service.
- No elective maintenance will be performed on equipment related to the U2 ECCS or RCIC System.
- No elective maintenance will be performed on the U2 emergency diesel generators (EDGs) or the swing (1B) EDG.
- Operations personnel will be briefed on hardened containment vent procedure NMP-OS-019-286 (Reference 2) at the beginning of each shift.
- The following components will be protected per NMP-OS-010 (Reference 3), and no elective maintenance will be performed. See response to APLA-RAI-1.c for component description.
 - 2P52F1171
 - 2P52F1187
 - 2T48F082
 - 2T48F081
 - 2R25S067
 - 2R25S006
 - 2T48D346

- The following controls will be in place for fire area 0040:
 - The room will be protected per NMP-OS-010 (Reference 3).
 - No hot work or transient combustible permits will be issued.

References:

1. SNC Procedure NMP-OS-010-002, Hatch Protected Equipment Logs, Version 11.1.
2. SNC Procedure NMP-OS-019-286, Hatch Unit 2 SIG-6, Containment Integrity, Version 3.3.
3. SNC Procedure NMP-OS-010, Protected Train/Division and Protected Equipment Program, Version 8.1.

- a. *In light of this, provide a discussion of containment venting as a potential compensatory measure for this configuration since it has increased in dominance on failure of suppression pool cooling scenarios which rely on the hardened containment vent system.*

SNC Response:

As previously stated, to meet proposed TS 3.5.1 Required Action A.2.1, components necessary for the hardened containment vent system will be protected, and no elective maintenance will be performed.

- b. *Provide what compensatory measures will be taken including procedural guidance to Operations personnel during the RHR Pump 2D outage.*

SNC Response:

As previously stated, to meet proposed TS 3.5.1 Required Action A.2.1, Operations personnel will be briefed on hardened containment vent procedure NMP-OS-019-286 prior to each shift.

- c. *Provide descriptions for components which have become dominant on Attachment 4, p.11 and any compensatory measures which need to be taken regarding them. If there aren't any necessary, please state the reasons why.*

SNC Response:

A description of components which have become dominant on Attachment 4 is provided below. As previously stated, to meet proposed TS 3.5.1 Required Action A.2.1, these components will be protected, and no elective maintenance will be performed.

Component	Description
2P52F1171	2P52F1171 is the isolation valve for the two nitrogen accumulators in the reactor building pneumatic system. This is a normally open manual valve.
2P52F1187	2P52F1187 is the isolation valve from the reactor building pneumatic system to valve 2T48F082. This is a normally open manual valve.
2T48F082	2T48F082 is a normally closed 18-inch air operated valve that is required to open to allow the containment hardened vent path to function
2T48F081	2T48F081 is a normally open 18-inch air operated valve that is required to close to allow the containment hardened vent path to function.
2R25S067	2R25S067 is the Division 2 Critical Instrument Bus. It provides control power to the hardened vent system and other loads.
2R25S006	2R25S006 is the 125-volt DC distribution panel providing control power to the 2C diesel generator and to the circuit breaker for the 2B RHR pump and other loads.
2T48D346	2T48D346 is a rupture disc in the hardened vent path line.

As stated in the overall response to APLA-RAI-1, Operations will protect the above components so that they will not be worked on and to reduce the potential for misalignment due to inadvertent contact. Operations will also brief each shift on the Hardened Vent procedure NMP-OS-019-286. This procedure contains instruction on how to operate the vent path if the normal pneumatic supply is not available and if the normal electrical power is not available. This provides alternate success paths if the above components randomly fail.

d. For any fire scenarios significantly impacted by the RHR Pump 2D outage, provide any compensatory actions which may be credited such as existing or new fire watches.

SNC Response:

The Fire PRA results were analyzed to identify Fire scenarios that have a contribution to overall risk of 0.5% or greater and where the CCDP increased by a factor of 1.5. A second approach was taken to ensure all risk significant scenarios were captured. This second approach looked at the relative contribution of the scenario delta (2D RHR - Base) and included any scenario that has a 1% or greater delta risk contribution. This identified the following scenarios:

%HF_0101A_ALL_W– A full room burnout bounding scenario for the main turbine deck elevation 164, Unit 1 side.

%HF_0101J_ALL_W– A full room burnout bounding scenario for the main turbine deck elevation 164 on the Unit 2 side of the Turbine building.

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RAI Response

%HF_2205R_ALL_W – A full room burnout bounding scenario for the Unit 2 reactor building south area on elevation 185.

%HF_2101G_ALL_W – A full room burnout bounding scenario for the Offgas recombiner room on elevation 112 of the turbine building. This area is a locked high radiation area with the unit on-line.

There is conservatism built into the full room burnout scenarios (those that end in “ALL_W”). These scenarios assume all ignition sources are on fire at the same time and all targets are failed at $t=0$. This is conservative in that a Fire PRA assumes one fire ignites at any given time. In addition, the nearby targets are not failed till either the damage temperature or critical heat flux is reached. Given these conservatisms, no additional compensatory measures beyond existing rounds are recommended for the four full room burnout scenarios.

%HF_0024C_2H11P656_Y1 – A fire in control room panel 2H11P656 that spreads to nearby panels.

%HF_0024C_2H11P663_Y – A fire in control room panel 2H11P663 that spreads to nearby panels.

The control room is continuously manned, so no additional compensatory measures are recommended for the control room scenarios.

%HF_2104_2N34D006_O_Y2 – An oil fire in the Unit 2 Turbine Lube Oil Room on Elevation 130 of the Control Building.

There are existing operator rounds that verify oil level and room condition. No additional compensatory measures beyond existing rounds are recommended for this scenario.

%HF_0040_TS01_Y – A transient fire in vertical cableway 0040.

Hot work, transient combustibles, storage, maintenance, and occupancy in vertical cableway 0040 will be limited.

RAI APLA-2

In LAR Attachment 4, Section 2.1.3, “Calculation Approach”, the description of the calculation for CDF_{2D} is “the annual average CDF calculated with RHR Pump 2D OOS and other currently OOS equipment assuming the configuration listed in Table 2.1-2 (all quantified hazards)”. It is not clear if this was calculated for only RHR pump 2D and other currently OOS equipment which implies that remainder of modeled SSCs are set at zero maintenance. However, the CDF_{BASE} case is described to be computed by the average test and maintenance unavailability for all modeled SSCs. An inconsistently applied testing and maintenance unavailability has the potential of making the computed ICCDP less conservative.

Confirm how testing and maintenance were consistently applied to both the base and RHR Pump 2D cases.

If they were not consistently applied, revise the calculations with actual testing and maintenance configurations reflecting operation over the requested 15-day period.

SNC Response to APLA-RAI-2

As described in NL-21-0411 section 2.1.1, test and maintenance probabilities were left at their nominal values in the base case. All test and maintenance probabilities except for those associated with the RHR 2D pump were left at their nominal values for increased risk case. This increases the RHR 2D out of service risk and was done to ensure that the resulting risk values were conservative. The wording in Equation 2-1 is changed as shown below to clarify this approach.

$$ICCDP_{2d} = (CDF_{2d} - CDF_{BASE}) \times CT_{NEW} \quad [Eq. 2-1]$$

where

CDF_{2d} = the annual average CDF calculated with average unavailability for all equipment (except RHR 2D) and with RHR Pump 2D OOS assuming the configuration listed in Table 2.1-2 (all quantified hazards)

CDF_{BASE} = baseline annual average CDF with average unavailability for all equipment. This is the CDF result of the baseline PRA (all quantified hazards).

Edwin I. Hatch Nuclear Plant Unit 2

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PRA RAI Response**

Attachment 1

HNP Unit 2 Technical Specification Marked-up Page

3.5 EMERGENCY CORE COOLING SYSTEMS (ECCS), RPV WATER INVENTORY CONTROL, 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 of seven safety/relief valves shall be OPERABLE.

APPLICABILITY: MODE 1, MODES 2 and 3, except high pressure coolant injection (HPCI) and 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 HPCI.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One low pressure ECCS injection/spray subsystem inoperable. <u>OR</u> One LPCI pump in both LPCI subsystems inoperable.	A.1 Restore low pressure ECCS injection/spray subsystem(s) to OPERABLE status. <u>OR</u> -----NOTES----- 1. Only applicable during 2D RHR pump repair. 2. Only applicable until May 1, 2021. -----	7 days
	A.2.1 Establish compensatory measures as described in letter NL-21-0423, dated April 22, 2021.	7 days
	<u>AND</u> A.2.2 Restore low pressure ECCS injection/spray subsystem(s) to OPERABLE status.	15 days

(continued)

Edwin I. Hatch Nuclear Plant Unit 2

**Emergency License Amendment Request for Technical Specification 3.5.1
Regarding One-Time Extension of Completion Time for 2D RHR Pump –
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Attachment 2

HNP Unit 2 Revised Technical Specification Pages

3.5 EMERGENCY CORE COOLING SYSTEMS (ECCS), RPV WATER INVENTORY CONTROL, 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 of seven safety/relief valves shall be OPERABLE.

APPLICABILITY: MODE 1, MODES 2 and 3, except high pressure coolant injection (HPCI) and 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 HPCI.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One low pressure ECCS injection/spray subsystem inoperable. <u>OR</u> One LPCI pump in both LPCI subsystems inoperable.	A.1 Restore low pressure ECCS injection/spray subsystem(s) to OPERABLE status. <u>OR</u> -----NOTES----- 1. Only applicable during 2D RHR pump repair. 2. Only applicable until May 1, 2021. -----	7 days
	A.2.1 Establish compensatory measures as described in letter NL-21-0423, dated April 22, 2021. <u>AND</u>	7 days
	A.2.2 Restore low pressure ECCS injection/spray subsystem(s) to OPERABLE status.	15 days

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>B. Required Action and associated Completion Time of Condition A not met.</p>	<p>B.1 -----NOTE----- LCO 3.0.4.a is not applicable when entering MODE 3. ----- Be in MODE 3.</p>	<p>12 hours</p>
<p>C. HPCI System inoperable.</p>	<p>C.1 Verify by administrative means RCIC System is OPERABLE. <u>AND</u> C.2 Restore HPCI System to OPERABLE status.</p>	<p>1 hour 14 days</p>
<p>D. HPCI System inoperable. <u>AND</u> Condition A entered.</p>	<p>D.1 Restore HPCI System to OPERABLE status. <u>OR</u> D.2 Restore low pressure ECCS injection/spray subsystem to OPERABLE status.</p>	<p>72 hours 72 hours</p>
<p>E. Required Action and associated Completion Time of Condition C or D not met.</p>	<p>E.1 -----NOTE----- LCO 3.0.4.a is not applicable when entering MODE 3. ----- Be in MODE 3.</p>	<p>12 hours</p>
<p>F. Two or more ADS valves inoperable.</p>	<p>F.1 Be in MODE 3. <u>AND</u> F.2 Reduce reactor steam dome pressure to ≤ 150 psig.</p>	<p>12 hours 36 hours</p>

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>G. Two or more low pressure ECCS injection/spray subsystems inoperable for reasons other than Condition A.</p> <p><u>OR</u></p> <p>HPCI System and two or more ADS valves inoperable.</p>	G.1 Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.5.1.1 Verify, for each ECCS injection/spray subsystem, locations susceptible to gas accumulation are sufficiently filled with water.</p>	In accordance with the Surveillance Frequency Control Program
<p>SR 3.5.1.2 -----NOTES-----</p> <p>1. Low pressure coolant injection (LPCI) subsystems may be considered OPERABLE during alignment and operation for decay heat removal with reactor steam dome pressure less than the Residual Heat Removal (RHR) low pressure permissive pressure in MODE 3, if capable of being manually realigned and not otherwise inoperable.</p> <p>2. Not required to be met for system vent flowpaths opened under administrative control.</p> <p>-----</p> <p>Verify each ECCS injection/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.</p>	In accordance with the Surveillance Frequency Control Program
<p>SR 3.5.1.3 Verify ADS air supply header pressure is \geq 90 psig.</p>	In accordance with the Surveillance Frequency Control Program

(continued)

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY												
SR 3.5.1.4	Verify the RHR System cross tie valve is closed and power is removed from the valve operator.	In accordance with the Surveillance Frequency Control Program												
SR 3.5.1.5	(Not used.)													
SR 3.5.1.6	<p>-----NOTE-----</p> <p>Only required to be performed prior to entering MODE 2 from MODE 3 or 4, when in MODE 4 > 48 hours.</p> <p>-----</p> <p>Verify each recirculation pump discharge valve cycles through one complete cycle of full travel or is de-energized in the closed position.</p>	In accordance with the Surveillance Frequency Control Program												
SR 3.5.1.7	<p>Verify the following ECCS pumps develop the specified flow rate against a system head corresponding to the specified reactor pressure.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th><u>SYSTEM</u></th> <th><u>FLOW RATE</u></th> <th><u>NO. OF PUMPS</u></th> <th><u>SYSTEM HEAD CORRESPONDING TO A REACTOR PRESSURE OF</u></th> </tr> </thead> <tbody> <tr> <td>CS</td> <td>≥ 4250 gpm</td> <td>1</td> <td>≥ 113 psig</td> </tr> <tr> <td>LPCI</td> <td>≥ 17,000 gpm</td> <td>2</td> <td>≥ 20 psig</td> </tr> </tbody> </table>	<u>SYSTEM</u>	<u>FLOW RATE</u>	<u>NO. OF PUMPS</u>	<u>SYSTEM HEAD CORRESPONDING TO A REACTOR PRESSURE OF</u>	CS	≥ 4250 gpm	1	≥ 113 psig	LPCI	≥ 17,000 gpm	2	≥ 20 psig	In accordance with the INSERVICE TESTING PROGRAM
<u>SYSTEM</u>	<u>FLOW RATE</u>	<u>NO. OF PUMPS</u>	<u>SYSTEM HEAD CORRESPONDING TO A REACTOR PRESSURE OF</u>											
CS	≥ 4250 gpm	1	≥ 113 psig											
LPCI	≥ 17,000 gpm	2	≥ 20 psig											
SR 3.5.1.8	<p>-----NOTE-----</p> <p>Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test.</p> <p>-----</p> <p>Verify, with reactor pressure ≤ 1058 psig and ≥ 920 psig, the HPCI pump can develop a flow rate ≥ 4250 gpm against a system head corresponding to reactor pressure.</p>	In accordance with the Surveillance Frequency Control Program												

(continued)

Edwin I. Hatch Nuclear Plant Unit 2

**Emergency License Amendment Request for Technical Specification 3.5.1
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Attachment 3

HNP Unit 2 Technical Specification Bases Marked-up Pages (information only)

BASES

ACTIONS

A.1 (continued)

based on a reliability study (Ref. 12) that evaluated the impact on ECCS availability, assuming various components and subsystems were taken out of service. The results were used to calculate the average availability of ECCS equipment needed to mitigate the consequences of a LOCA as a function of allowed outage times (i.e., Completion Times).

A.2.1 and A.2.2

The Completion Time to restore the low pressure ECCS injection/spray subsystem to OPERABLE status to facilitate the 2D RHR pump repair may be extended to 15 days, provided action is taken within 7 days to establish compensatory and risk management controls.

The A.2.1 and A.2.2 Required Actions are modified by two Notes. Note 1 ensures that the A.2.1 and A.2.2 Required Actions are only applied during the 2D RHR pump repair. Note 2 limits the time period the A.2.1 and A.2.2 Required Actions may be used.

The extended Completion Time is subject to additional compensatory controls specified in SNC letter NL-21-0423, dated April 22, 2021, that consist of controls that must be established and maintained during the extended Completion Time period to preserve defense-in-depth.

If Required Action A.2.1 is met, the allowed time to restore the ECCS injection/spray subsystem to OPERABLE status can be extended to 15 days from entry into Condition A. The extended Completion Time of Required Action A.2.2 represents a balance between the risk associated with continued plant operation with less than the required system or component redundancy and the risk associated with initiating a plant transient while transitioning the unit based on the loss of redundancy. With compensatory and risk management controls established, the remaining OPERABLE ECCS injection/spray subsystems are adequate to provide low pressure coolant injection to the reactor core. The extended Completion Time takes into account the low probability of a DBA or an LOSP occurring during this period.

The Completion Time of Required Action A.2.2 is based on a defense-in-depth philosophy, and is risk informed using the plant PRA. The risk impact of the extended Completion Time has been evaluated pursuant to the risk assessment and management provisions of the Maintenance Rule, 10 CFR 50.65(a)(4), and the associated implementation guidance, Regulatory Guide 1.160. Regulatory Guide 1.160 endorses the guidance in Section 11 of NUMARC 93-01. This guidance provides for the consideration of dynamic plant configuration

(continued)

issues, emergent conditions, and other aspects pertinent to plant operation with the 2D RHR pump inoperable for an extended period of time. These considerations may result in additional risk management and other compensatory actions being required during the extended period that the 2D RHR pump is inoperable.

B.1

If the inoperable low pressure ECCS subsystem cannot be restored to OPERABLE status within the associated Completion Time, the plant must be brought to a MODE in which overall plant risk is minimized. To achieve this status, the plant must be brought to at least MODE 3 within 12 hours.

Remaining in the Applicability of the LCO is acceptable because the plant risk in MODE 3 is similar to or lower than the risk in MODE 4, because the time spent in MODE 3 to perform the necessary repairs to restore the system to OPERABLE status will be short. However, voluntary entry into MODE 4 may be made as it is also an acceptable low-risk state.

Required Action B.1 is modified by a Note that states that LCO 3.0.4.a is not applicable when entering MODE 3. This Note prohibits the use of LCO 3.0.4.a to enter MODE 3 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 addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering MODE 3, and establishment of risk management actions, if appropriate. LCO 3.0.4 is not applicable to, and the Note does not preclude, changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

The allowed Completion Time is reasonable, based on operating experience, to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

C.1 and C.2

If the HPCI System is inoperable and the RCIC System is verified to be OPERABLE, the HPCI System must be restored to OPERABLE

(continued)