

# **ENERGY NORTHWEST**

P.O. Box 968 ■ Richland, Washington 99352-0968

November 4, 2003  
GO2-03-167

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

Subject: **COLUMBIA GENERATING STATION  
DOCKET NO. 50-397  
LICENSE AMENDMENT REQUEST  
REVISION TO TECHNICAL SPECIFICATION LCO 3.0.4 AND SR 3.0.4  
REGARDING MODE CHANGE LIMITATIONS USING THE  
CONSOLIDATED LINE ITEM IMPROVEMENT PROCESS (CLIIP)**

Dear Sir or Madam:

In accordance with the provisions of 10 CFR 50.90, Energy Northwest is submitting a request for an amendment to the Columbia Generating Station (Columbia) Operating License (NFP-21) by incorporating the attached change into Columbia's Technical Specifications (TS).

The proposed amendment would modify TS requirements for MODE change limitations in LCO 3.0.4 and SR 3.0.4. This change is consistent with NRC-approved Technical Specification Task Force (TSTF) Traveler number TSTF-359, "Increase Flexibility in Mode Restraints." The availability of this technical specification improvement was announced in the *Federal Register* on April 4, 2003.

Attachment 1 provides a description of the proposed change, confirmation of applicability and plant-specific verification. Attachment 2 provides the affected TS pages marked up to show the proposed change. Attachment 3 provides retyped TS pages, which incorporate the requested changes. Attachment 4 provides the proposed TS Bases changes for information only. Upon approval of the requested amendment, these TS Bases changes will be implemented concurrently with the TS change in accordance with Columbia's TS Bases Control Program.

A601

**REVISION TO TECHNICAL SPECIFICATION LCO 3.0.4 AND SR 3.0.4  
REGARDING MODE CHANGE LIMITATIONS USING THE CONSOLIDATED LINE  
ITEM IMPROVEMENT PROCESS (CLIIP)**

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Energy Northwest requests approval of the proposed license amendment on or around May 7, 2004, with an implementation period of 60 days. The approval date was administratively selected to allow for NRC review and to accommodate the Energy Northwest resources needed for implementation. The plant does not require this amendment to allow continued operations.

Energy Northwest has determined there are no significant hazards considerations associated with the proposed change and the Technical Specification change qualifies for a categorical exclusion from environmental review pursuant to the provision of 10 CFR 51.22(c)(9).

In accordance with 10 CFR 50.91, a copy of this application, with attachments, is being provided to the designated Washington State Official.

This communication contains no new or revised commitments.

Should you have any questions or require additional information regarding this matter, please contact Ms. CL Perino, Licensing Manager, at (509) 377-2075.

Respectfully,



RL Webring  
Vice President, Nuclear Generation  
Mail Drop PE04

- Attachments:
1. Description and Assessment
  2. Proposed Technical Specification Changes (markup)
  3. Revised Technical Specification Pages (typed)
  4. Proposed Technical Specification Bases Changes


cc: BS Mallett - NRC RIV  
BJ Benney - NRC NRR  
NRC Sr. Resident Inspector - 988C  
RN Sherman - BPA/1399  
TC Poindexter - Winston & Strawn  
JO Luce - EFSEC

STATE OF WASHINGTON )  
 )  
COUNTY OF BENTON )

Subject: Revision To Technical  
Specification LCO 3.0.4  
and SR 3.0.4 Regarding  
MODE Change Limitations

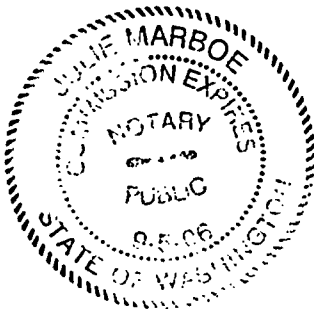
I, RL Webring, being duly sworn, subscribe to and say that I am the Vice President, Nuclear Generation for ENERGY NORTHWEST, the applicant herein; that I have the full authority to execute this oath; that I have reviewed the foregoing; and that to the best of my knowledge, information, and belief the statements made in it are true.

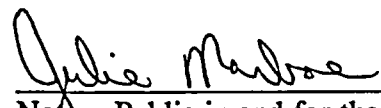
DATE 11/4/, 2003

  
\_\_\_\_\_  
RL Webring  
Vice President, Nuclear Generation

On this date personally appeared before me RL Webring, to me known to be the individual who executed the foregoing instrument, and acknowledged that he signed the same as his free act and deed for the uses and purposes herein mentioned.

GIVEN under my hand and seal this 4th day of November 2003.



  
\_\_\_\_\_  
Notary Public in and for the  
STATE OF WASHINGTON

Residing at Kennecworth, WA

My Commission Expires 9/5/06

# **REVISION TO TECHNICAL SPECIFICATION LCO 3.0.4 AND SR 3.0.4 REGARDING MODE CHANGE LIMITATIONS USING THE CONSOLIDATED LINE ITEM IMPROVEMENT PROCESS (CLIIP)**

**Attachment 1**

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## **Description and Assessment**

### **1.0 DESCRIPTION**

The proposed license amendment would modify Technical Specification (TS) requirements for MODE change limitations in LCO 3.0.4 and SR 3.0.4.

A description of the proposed TS/TS Bases changes that directly adopt Technical Specification Task Force (TSTF) 359 Revision 9, with no variations, is provided directly below. The mark-up of the BWR-6 version of the Standard Technical Specifications (NUREG-1434) provided in the TSTF was used as the template for the proposed changes at Columbia Generating Station (Columbia). A description of the TS changes where variances are required to adopt TSTF-359 Revision 9, due to differences between Columbia's TS and NUREG-1434, is provided in Section 2.2 of this attachment.

- A. LCO 3.0.4 is revised to allow entry into a MODE or other specified condition in the Applicability when: 1) the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time, 2) there is a risk assessment performed which justifies the use of LCO 3.0.4, or 3) an NRC approved allowance is provided in the Specification to be entered.
- B. SR 3.0.4 is revised to reflect the concepts of the change to LCO 3.0.4.
- C. The applicability of LCO 3.0.4 and SR 3.0.4 is expanded to include transition into all MODES or other specified conditions in the Applicability, except when required to comply with ACTIONS that are part of a shutdown of the unit.
- D. In LCO 3.3.3.1, Post Accident Monitoring (PAM) Instrumentation, ACTIONS Note 1, "LCO 3.0.4 is not applicable" is deleted.
- E. In LCO 3.3.3.2, Remote Shutdown System, ACTIONS Note 1, "LCO 3.0.4 is not applicable" is deleted.
- F. In LCO 3.4.7, RCS Leakage Detection Instrumentation, the ACTIONS Note, "LCO 3.0.4 is not applicable" is deleted from both ACTION A and ACTION B.
- G. In LCO 3.4.8, RCS Specific Activity, the ACTIONS Note, "LCO 3.0.4 is not applicable" is revised to "LCO 3.0.4.c is applicable."
- H. In LCO 3.4.9, Residual Heat Removal (RHR) Shutdown Cooling System - Hot Shutdown, ACTIONS Note 1, "LCO 3.0.4 is not applicable" is deleted.
- I. In LCO 3.5.1, ECCS - Operating, the ACTIONS Note, "LCO 3.0.4.b provision is not applicable to HPCS" is added.
- J. In LCO 3.5.3, RCIC System, the ACTIONS Note, "LCO 3.0.4.b is not applicable to RCIC" is added.
- K. In LCO 3.6.3.1, Primary Containment Hydrogen Recombiners, the ACTIONS Note, "LCO 3.0.4 is not applicable" is deleted.
- L. In LCO 3.8.1, AC Sources - Operating, the ACTIONS Note, "LCO 3.0.4.b is not applicable to DGs" is added.
- M. The associated Bases for the above Specifications are likewise being modified in accordance with TSTF-359 Revision 9.

# REVISION TO TECHNICAL SPECIFICATION LCO 3.0.4 AND SR 3.0.4 REGARDING MODE CHANGE LIMITATIONS USING THE CONSOLIDATED LINE ITEM IMPROVEMENT PROCESS (CLIIP)

## Attachment 1

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The changes are consistent with Nuclear Regulatory Commission (NRC) approved TSTF-359, Revision 9, NUREG-1434, as modified by the notice in the *Federal Register* published on April 4, 2003. The *Federal Register* notice announced the availability of this TS improvement through the Consolidated Line Item Improvement Process (CLIIP).

No changes to Columbia's Final Safety Analysis Report are anticipated at this time as a result of the license amendment request.

## 2.0 ASSESSMENT

### 2.1 Applicability of Published Safety Evaluation

Energy Northwest has reviewed the NRC's safety evaluation dated April 4, 2003, as part of the CLIIP. This included a review of the NRC staff's evaluation and the NRC-approved TSTF-359, Revision 8 (as updated by Revision 9). TSTF-359, Revision 9 is the equivalent of TSTF-359, Revision 8, as modified by the notice in the *Federal Register* published on April 4, 2003. Energy Northwest has concluded the justifications presented in the approved TSTF and the safety evaluation prepared by the NRC staff are applicable to Columbia and justify this amendment for the incorporation of the changes to the Columbia TS.

### 2.2 Optional Changes and Variations

In accordance with the NRC staff's model safety evaluation dated April 4, 2003, general requirements for deleting existing plant specific LCO 3.0.4 exemptions, Energy Northwest has identified two existing plant specific LCO 3.0.4 exemptions. Columbia LCO 3.3.7.1, Control Room Emergency Filtration (CREF) System Instrumentation, and LCO 3.6.3.2, Primary Containment Atmosphere Mixing System, each contain an ACTION Note that states, "LCO 3.0.4 is not applicable." It is proposed these plant specific notes be deleted. Additionally, in two cases, variances from the TSTF-359 mark-up changes are necessary due to the design of Columbia being a BWR-5, Mark 2 Containment. TSTF-359, NUREG-1434 LCO 3.6.3.2, Primary Containment and Drywell Hydrogen Ignitors, and LCO 3.6.3.3, Drywell Purge Systems, are not applicable to Columbia because these LCO Sections do not exist (i.e., the section numbers exist but are for different systems) in Columbia's TS. These variances do not affect the adoption or application of TSTF-359 Revision 9. All other TS Sections are modified without variance as described in Section 1 above.

Columbia is not proposing any other changes or variations from the TS changes described in TSTF-359, Revision 9.

# REVISION TO TECHNICAL SPECIFICATION LCO 3.0.4 AND SR 3.0.4 REGARDING MODE CHANGE LIMITATIONS USING THE CONSOLIDATED LINE ITEM IMPROVEMENT PROCESS (CLIIP)

Attachment 1

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## 3.0 REGULATORY ANALYSIS

### 3.1 No Significant Hazards Consideration Determination

Energy Northwest has reviewed the proposed No Significant Hazards Consideration Determination (NSHCD) published in the *Federal Register* as part of the CLIIP. Energy Northwest has concluded the proposed NSHCD presented in the Federal Register notice is applicable to Columbia Generating Station and is hereby incorporated by reference to satisfy the requirements of 10 CFR 50.91(a).

### 3.2 Verification and Commitments

Energy Northwest has established TS Bases for LCO 3.0.4 and SR 3.0.4 which state that use of the TS MODE change limitation flexibility established by LCO 3.0.4 and SR 3.0.4 is not to be interpreted as endorsing the failure to exercise the good practice of restoring systems or components to operable status before entering an associated MODE or other specified condition in the TS Applicability.

The revision also includes changes to the TS Bases for LCO 3.0.4 and SR 3.0.4 that provide details on how to implement the new requirements. The bases changes provide guidance for changing MODES or other specified conditions in the Applicability when an LCO is not met. The bases changes describe in detail how LCO 3.0.4.a allows entry into a MODE or other specified condition in the Applicability with the LCO not met when the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time; LCO 3.0.4.b allows entry into a MODE or other specified condition in the Applicability with the LCO not met after performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate; and LCO 3.0.4.c allows entry into a MODE or other specified condition in the Applicability with the LCO not met based on a note in the Specification, which is typically applied to Specifications which describe values and parameters. Although it may be applied to other Specifications based on NRC plant-specific approval, only one LCO 3.0.4.c allowance in TS 3.4.8 is proposed consistent with the approved TSTF.

The revised TS Bases also state any risk impact should be managed through the program in place to implement 10 CFR 50.65(a)(4) and its implementation guidance, NRC Regulatory Guide 1.182, "Assessing and Managing Risks Before Maintenance Activities at Nuclear Power Plants," and the results of the risk assessment shall be considered in determining the acceptability of entering the MODE or other specified condition in the Applicability, and any corresponding risk management actions.

# **REVISION TO TECHNICAL SPECIFICATION LCO 3.0.4 AND SR 3.0.4 REGARDING MODE CHANGE LIMITATIONS USING THE CONSOLIDATED LINE ITEM IMPROVEMENT PROCESS (CLIIP)**

## **Attachment 1**

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In addition, the revised TS Bases state that upon entry into a MODE or other specified condition in the Applicability with the LCO not met, LCO 3.0.1 and LCO 3.0.2 require entry into the applicable Conditions and Required Actions until the Condition is resolved, until the LCO is met, or until the unit is not within the Applicability of the Technical Specification.

The revised TS Bases also state SR 3.0.4 does not restrict changing MODES or other specified conditions of the Applicability when a surveillance has not been performed within the specified frequency, provided the requirement to declare the LCO not met has been delayed in accordance with SR 3.0.3.

Finally, the revised TS Bases will be implemented concurrently with the TS change in accordance with Columbia's Technical Specification Bases Control Program as described in TS 5.5.10.

## **4.0 ENVIRONMENTAL EVALUATION**

Energy Northwest has reviewed the environmental consideration included in the model safety evaluation dated April 4, 2003, as part of the CLIIP. Energy Northwest has concluded the staff's findings presented in that evaluation are applicable to Columbia and the evaluation is hereby incorporated by reference for this application.

**REVISION TO TECHNICAL SPECIFICATION LCO 3.0.4 AND SR 3.0.4 REGARDING  
MODE CHANGE LIMITATIONS USING THE CONSOLIDATED LINE ITEM  
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**Attachment 2**

**PROPOSED TECHNICAL SPECIFICATION CHANGES (Markup)**

Pages	3.0-1
	3.0-2
	3.0-5
	3.3.3.1-1
	3.3.3.2-1
	3.3.7.1-3
	3.4.7-1
	3.4.8-1
	3.4.9-1
	3.5.1-1
	3.5.3-1
	3.6.3.1-1
	3.6.3.2-1
	3.8.1-1



### 3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

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LCO 3.0.1 LCOs shall be met during the MODES or other specified conditions in the Applicability, except as provided in LCO 3.0.2 and LCO 3.0.7.

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LCO 3.0.2 Upon discovery of a failure to meet an LCO, the Required Actions of the associated Conditions shall be met, except as provided in LCO 3.0.5 and LCO 3.0.6.

If the LCO is met or is no longer applicable prior to expiration of the specified Completion Time(s), completion of the Required Action(s) is not required, unless otherwise stated.

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LCO 3.0.3 When an LCO is not met and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS, the unit shall be placed in a MODE or other specified condition in which the LCO is not applicable. Action shall be initiated within 1 hour to place the unit, as applicable, in:

- a. MODE 2 within 7 hours;
- b. MODE 3 within 13 hours; and
- c. MODE 4 within 37 hours.

Exceptions to this Specification are stated in the individual Specifications.

Where corrective measures are completed that permit operation in accordance with the LCO or ACTIONS, completion of the actions required by LCO 3.0.3 is not required.

LCO 3.0.3 is only applicable in MODES 1, 2, and 3.

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LCO 3.0.4

Insert 1  
(LCO 3.0.4)

When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall not be made except when the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time. This Specification shall not prevent changes in MODES or other

(continued)

### 3.0 LCO APPLICABILITY

LCO 3.0.4  
(continued)

specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

Exceptions to this Specification are stated in the individual Specifications. These exceptions allow entry into MODES or other specified conditions in the Applicability when the associated ACTIONS to be entered allow unit operation in the MODE or other specified condition in the Applicability only for a limited period of time.

LCO 3.0.4 is only applicable for entry into a MODE or other specified condition in the Applicability in MODES 1, 2, and 3.

LCO 3.0.5

Equipment removed from service or declared inoperable to comply with ACTIONS may be returned to service under administrative control solely to perform testing required to demonstrate its OPERABILITY or the OPERABILITY of other equipment. This is an exception to LCO 3.0.2 for the system returned to service under administrative control to perform the testing required to demonstrate OPERABILITY.

LCO 3.0.6

When a supported system LCO is not met solely due to a support system LCO not being met, the Conditions and Required Actions associated with this supported system are not required to be entered. Only the support system LCO ACTIONS are required to be entered. This is an exception to LCO 3.0.2 for the supported system. In this event, additional evaluations and limitations may be required in accordance with Specification 5.5.11, "Safety Function Determination Program (SFDP)." If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

When a support system's Required Action directs a supported system to be declared inoperable or directs entry into Conditions and Required Actions for a supported system, the applicable Conditions and Required Actions shall be entered in accordance with LCO 3.0.2.

(continued)

**REVISION TO TECHNICAL SPECIFICATION LCO 3.0.4 AND SR 3.0.4 REGARDING  
MODE CHANGE LIMITATIONS USING THE CONSOLIDATED LINE ITEM  
IMPROVEMENT PROCESS (CLIIP)**

**Attachment 2**

**INSERT 1 (LCO 3.0.4)**

When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall only be made:

- a. When the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time;
- b. After performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate; exceptions to this Specification are stated in the individual Specifications, or
- c. When an allowance is stated in the individual value, parameter, or other Specification.

This Specification shall not prevent 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.

### 3.0 SR APPLICABILITY

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SR 3.0.3 (continued) When the Surveillance is performed within the delay period and the Surveillance is not met, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

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SR 3.0.4 Entry into a MODE or other specified condition in the Applicability of an LCO shall not be made unless the LCO's Surveillances have been met within their specified Frequency. This provision shall not prevent entry into 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.

SR 3.0.4 is only applicable for entry into a MODE or other specified condition in the Applicability in MODES 1, 2, and 3.

INSERT 2  
(SR 3.0.4)

**REVISION TO TECHNICAL SPECIFICATION LCO 3.0.4 AND SR 3.0.4 REGARDING  
MODE CHANGE LIMITATIONS USING THE CONSOLIDATED LINE ITEM  
IMPROVEMENT PROCESS (CLIIP)**

**Attachment 2**

**INSERT 2 (SR 3.0.4)**

Entry into a MODE or other specified condition in the Applicability of an LCO shall only be made when the LCO's Surveillances have been met within their specified Frequency, except as provided by SR 3.0.3. When an LCO is not met due to Surveillances not having been met, entry into a MODE or other specified condition in the Applicability shall only be made in accordance with LCO 3.0.4.

This provision shall not prevent entry into 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.

### 3.3 INSTRUMENTATION

#### 3.3.3.1 Post Accident Monitoring (PAM) Instrumentation

LC0 3.3.3.1 The PAM instrumentation for each Function in Table 3.3.3.1-1 shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

#### ACTIONS

#### NOTES

1. LC0 3.0.4 is not applicable.
2. Separate Condition entry is allowed for each Function.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more Functions with one required channel inoperable.	A.1 Restore required channel to OPERABLE status.	30 days
B. Required Action and associated Completion Time of Condition A not met.	B.1 Initiate action in accordance with Specification 5.6.6.	Immediately
C. One or more Functions with two or more required channels inoperable.	C.1 Restore all but one required channel to OPERABLE status.	7 days

(continued)

### 3.3 INSTRUMENTATION

#### 3.3.3.2 Remote Shutdown System

LCO 3.3.3.2 The Remote Shutdown System Functions shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

#### ACTIONS

#### NOTES

1. LCO 3.0.4 is not applicable.

2. Separate Condition entry is allowed for each Function.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more required Functions inoperable.	A.1 Restore required Function to OPERABLE status.	30 days
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3.	12 hours

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. As required by Required Action A.1 and referenced in Table 3.3.7.1-1.	<div style="border: 1px dashed black; padding: 5px; text-align: center;"> <del>-----NOTE-----</del>  <del>LCO 3.0.4 is not applicable.</del> </div>	
	E.1 -----NOTE----- Enter applicable Conditions and Required Actions of LCO 3.7.3, "Control Room Emergency Filtration (CREF) System," when both remote air intakes are isolated. -----	
	Isolate the associated remote air intake.	1 hour from discovery of loss of radiation monitoring capability in a remote air intake
	<u>AND</u> E.2 Restore channel to OPERABLE status.	7 days from discovery of inoperable channels associated with both remote air intakes  <u>AND</u> 30 days

(continued)



### 3.4 REACTOR COOLANT SYSTEM (RCS)

#### 3.4.7 RCS Leakage Detection Instrumentation

LCO 3.4.7 The following RCS leakage detection instrumentation shall be OPERABLE:

- a. Drywell floor drain sump flow monitoring system; and
- b. One channel of either drywell atmospheric particulate or atmospheric gaseous monitoring system.

APPLICABILITY: MODES 1, 2, and 3.

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Drywell floor drain sump flow monitoring system inoperable.	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>-----NOTE----- LCO 3.0.4 is not applicable.</p> </div> <p>A.1 Restore drywell floor drain sump flow monitoring system to OPERABLE status.</p>	30 days
B. Required drywell atmospheric monitoring system inoperable.	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>-----NOTE----- LCO 3.0.4 is not applicable.</p> </div> <p>B.1 Analyze grab samples of drywell atmosphere.</p> <p><u>AND</u></p>	<p>Once per 12 hours</p> <p>(continued)</p>

### 3.4 REACTOR COOLANT SYSTEM (RCS)

#### 3.4.8 RCS Specific Activity

LCO 3.4.8 The specific activity of the reactor coolant shall be limited to DOSE EQUIVALENT I-131 specific activity  $\leq 0.2 \mu\text{Ci/gm}$ .

APPLICABILITY: MODE 1,  
MODES 2 and 3 with any main steam line not isolated.

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Reactor coolant specific activity $> 0.2 \mu\text{Ci/gm}$ and $\leq 4.0 \mu\text{Ci/gm}$ DOSE EQUIVALENT I-131.	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center;"><del>NOTE</del></p> <p><del>LCO 3.0.4 is not applicable.</del></p> </div> <p>A.1 Determine DOSE EQUIVALENT I-131.</p>	Once per 4 hours
	<p><u>AND</u></p> <p>A.2 Restore DOSE EQUIVALENT I-131 to within limits.</p>	48 hours
B. Required Action and associated Completion Time of Condition A not met.	B.1 Determine DOSE EQUIVALENT I-131.	Once per 4 hours
	<p><u>AND</u></p> <p>B.2.1 Isolate all main steam lines.</p>	12 hours
<p><u>OR</u></p> <p>Reactor coolant specific activity <math>&gt; 4.0 \mu\text{Ci/gm}</math> DOSE EQUIVALENT I-131.</p>	<p><u>OR</u></p>	(continued)

**REVISION TO TECHNICAL SPECIFICATION LCO 3.0.4 AND SR 3.0.4 REGARDING  
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**Attachment 2**

**INSERT 7 (RCS SPECIFIC ACTIVITY)**

-----  
-NOTE-

LCO 3.0.4.c is applicable.  
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### 3.4 REACTOR COOLANT SYSTEM (RCS)

#### 3.4.9 Residual Heat Removal (RHR) Shutdown Cooling System - Hot Shutdown

LCO 3.4.9 Two RHR shutdown cooling subsystems shall be OPERABLE, and, with no recirculation pump in operation, at least one RHR shutdown cooling subsystem shall be in operation.

- NOTES-----
1. Both RHR shutdown cooling subsystems and recirculation pumps may be removed from operation for up to 2 hours per 8 hour period.
  2. One RHR shutdown cooling subsystem may be inoperable for up to 2 hours for performance of Surveillances.
- 

APPLICABILITY: MODE 3 with reactor steam dome pressure less than 48 psig.

#### ACTIONS

- NOTES-----
1. LCO 3.0.4 is not applicable.
  2. Separate Condition entry is allowed for each RHR shutdown cooling subsystem.
- 

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or two RHR shutdown cooling subsystems inoperable.	A.1 Initiate action to restore RHR shutdown cooling subsystem to OPERABLE status.  <u>AND</u>	Immediately       (continued)

### 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.

BWR 6 INSERT 1

ACTIONS ←

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
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

(continued)

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

#### 3.5.3 RCIC System

LCO 3.5.3 The RCIC System shall be OPERABLE.

APPLICABILITY: MODE 1,  
MODES 2 and 3 with reactor steam dome pressure > 150 psig.

ACTIONS *BWR 6 Insert 2*

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. RCIC System inoperable.	A.1 Verify by administrative means High Pressure Core Spray System is OPERABLE.	Immediately
	<u>AND</u> A.2 Restore RCIC System to OPERABLE status.	14 days
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3.	12 hours
	<u>AND</u> B.2 Reduce reactor steam dome pressure to $\leq 150$ psig.	36 hours

**REVISION TO TECHNICAL SPECIFICATION LCO 3.0.4 AND SR 3.0.4 REGARDING  
MODE CHANGE LIMITATIONS USING THE CONSOLIDATED LINE ITEM  
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**Attachment 2**

**BWR6 INSERT 1 (LCO 3.5.1, ECCS - OPERATING)**

-----  
-NOTE-

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

**BWR6 INSERT 2 (LCO 3.5.3, RCIC SYSTEM)**

-----  
-NOTE-

LCO 3.0.4.b is not applicable to RCIC.  
-----

### 3.6 CONTAINMENT SYSTEMS

#### 3.6.3.1 Primary Containment Hydrogen Recombiners

LCO 3.6.3.1 Two primary containment hydrogen recombiners shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One primary containment hydrogen recombinder inoperable.	<p>A.1</p> <div style="border: 1px dashed black; padding: 5px; margin: 10px 0;"> <p style="text-align: center;"><del>NOTE</del></p> <p style="text-align: center;"><del>LCO 3.0.4 is not applicable.</del></p> </div> <p>Restore primary containment hydrogen recombinder to OPERABLE status.</p>	30 days
B. Two primary containment hydrogen recombinders inoperable.	<p>B.1</p> <p>Verify by administrative means that the hydrogen and oxygen control function is maintained.</p> <p><u>AND</u></p> <p>B.2</p> <p>Restore one primary containment hydrogen recombinder to OPERABLE status.</p>	<p>1 hour</p> <p><u>AND</u></p> <p>Once per 12 hours thereafter</p> <p>7 days</p>

(continued)



Primary Containment Atmosphere Mixing System  
3.6.3.2

3.6 CONTAINMENT SYSTEMS

3.6.3.2 Primary Containment Atmosphere Mixing System

LCO 3.6.3.2 Two head area return fans shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One head area return fan inoperable.	<div>-----NOTE----- LCO 3.0.4 is not applicable.</div> A.1 Restore head area return fan to OPERABLE status.	30 days
B. Two head area return fans inoperable.	B.1 Verify by administrative means that the hydrogen and oxygen control function is maintained.  <u>AND</u> B.2 Restore one head area return fan to OPERABLE status.	1 hour  7 days
C. Required Action and associated Completion Time not met.	C.1 Be in MODE 3.	12 hours

### 3.8 ELECTRICAL POWER SYSTEMS

#### 3.8.1 AC Sources - Operating

LC0 3.8.1 The following AC electrical power sources shall be OPERABLE:

- a. Two qualified circuits between the offsite transmission network and the onsite Class 1E AC Electric Power Distribution System; and
- b. Three diesel generators (DGs).

APPLICABILITY: MODES 1, 2, and 3.

-----NOTE-----  
Division 3 AC electrical power sources are not required to be OPERABLE when High Pressure Core Spray System is inoperable.  
-----

*BWR6 Insert 3*

ACTIONS		
CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One offsite circuit inoperable.	A.1 Perform SR 3.8.1.1 for OPERABLE offsite circuit.	1 hour
	<u>AND</u>	<u>AND</u> Once per 8 hours thereafter
		(continued)

**REVISION TO TECHNICAL SPECIFICATION LCO 3.0.4 AND SR 3.0.4 REGARDING  
MODE CHANGE LIMITATIONS USING THE CONSOLIDATED LINE ITEM  
IMPROVEMENT PROCESS (CLIIP)**

**Attachment 2**

**BWR6 INSERT 3 (LCO 3.8.1, AC SOURCES - OPERATING)**

-----  
-NOTE-

LCO 3.0.4.b is not applicable to DGs.

---

**REVISION TO TECHNICAL SPECIFICATION LCO 3.0.4 AND SR 3.0.4 REGARDING  
MODE CHANGE LIMITATIONS USING THE CONSOLIDATED LINE ITEM  
IMPROVEMENT PROCESS (CLIIP)**

**Attachment 3**

**REVISED TECHNICAL SPECIFICATION PAGES (Typed)**

Pages	3.0-1 / 3.0-2
	3.0-5 / blank
	3.3.3.1-1 / 3.3.3.1-2
	3.3.3.2-1 / 3.3.3.2-2
	3.3.7.1-3 / 3.3.7.1-4
	3.4.7-1 / 3.4.7-2
	3.4.8-1 / 3.4.8-2
	3.4.9-1 / 3.4.9-2
	3.5.1-1 / 3.5.1-2
	3.5.3-1 / 3.5.3-2
	3.6.3.1-1 / 3.6.3.1-2
	3.6.3.2-1 / 3.6.3.2-2
	3.8.1-1 / 3.8.1-2

### 3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

---

LCO 3.0.1 LCOs shall be met during the MODES or other specified conditions in the Applicability, except as provided in LCO 3.0.2 and LCO 3.0.7.

---

LCO 3.0.2 Upon discovery of a failure to meet an LCO, the Required Actions of the associated Conditions shall be met, except as provided in LCO 3.0.5 and LCO 3.0.6.

If the LCO is met or is no longer applicable prior to expiration of the specified Completion Time(s), completion of the Required Action(s) is not required, unless otherwise stated.

---

LCO 3.0.3 When an LCO is not met and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS, the unit shall be placed in a MODE or other specified condition in which the LCO is not applicable. Action shall be initiated within 1 hour to place the unit, as applicable, in:

- a. MODE 2 within 7 hours;
- b. MODE 3 within 13 hours; and
- c. MODE 4 within 37 hours.

Exceptions to this Specification are stated in the individual Specifications.

Where corrective measures are completed that permit operation in accordance with the LCO or ACTIONS, completion of the actions required by LCO 3.0.3 is not required.

LCO 3.0.3 is only applicable in MODES 1, 2, and 3.

---

LCO 3.0.4 When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall only be made:

- a. When the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time;

(continued)

### 3.0 LCO APPLICABILITY

---

LCO 3.0.4  
(continued)

- b. After performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate; exceptions to this Specification are stated in the individual Specifications, or
- c. When an allowance is stated in the individual value, parameter, or other Specification.

This Specification shall not prevent 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.

---

LCO 3.0.5

Equipment removed from service or declared inoperable to comply with ACTIONS may be returned to service under administrative control solely to perform testing required to demonstrate its OPERABILITY or the OPERABILITY of other equipment. This is an exception to LCO 3.0.2 for the system returned to service under administrative control to perform the testing required to demonstrate OPERABILITY.

---

LCO 3.0.6

When a supported system LCO is not met solely due to a support system LCO not being met, the Conditions and Required Actions associated with this supported system are not required to be entered. Only the support system LCO ACTIONS are required to be entered. This is an exception to LCO 3.0.2 for the supported system. In this event, additional evaluations and limitations may be required in accordance with Specification 5.5.11, "Safety Function Determination Program (SFDP)." If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

When a support system's Required Action directs a supported system to be declared inoperable or directs entry into Conditions and Required Actions for a supported system, the applicable Conditions and Required Actions shall be entered in accordance with LCO 3.0.2.

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(continued)

### 3.0 SR APPLICABILITY

---

SR 3.0.3  
(continued)      When the Surveillance is performed within the delay period and the Surveillance is not met, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.

---

SR 3.0.4      Entry into a MODE or other specified condition in the Applicability of an LCO shall only be made when the LCO's Surveillances have been met within their specified Frequency, except as provided by SR 3.0.3. When an LCO is not met due to Surveillances not having been met, entry into a MODE or other specified condition in the Applicability shall only be made in accordance with LCO 3.0.4.

This provision shall not prevent entry into 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.

---

### 3.3 INSTRUMENTATION

#### 3.3.3.1 Post Accident Monitoring (PAM) Instrumentation

LC0 3.3.3.1 The PAM instrumentation for each Function in Table 3.3.3.1-1 shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

#### ACTIONS

-----NOTE-----  
Separate Condition entry is allowed for each Function.  
-----

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more Functions with one required channel inoperable.	A.1 Restore required channel to OPERABLE status.	30 days
B. Required Action and associated Completion Time of Condition A not met.	B.1 Initiate action in accordance with Specification 5.6.6.	Immediately
C. One or more Functions with two or more required channels inoperable.	C.1 Restore all but one required channel to OPERABLE status.	7 days

(continued)



ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. Required Action and associated Completion Time of Condition C not met.	D.1 Enter the Condition referenced in Table 3.3.3.1-1 for the channel.	Immediately
E. As required by Required Action D.1 and referenced in Table 3.3.3.1-1.	E.1 Be in MODE 3.	12 hours
F. As required by Required Action D.1 and referenced in Table 3.3.3.1-1.	F.1 Initiate action in accordance with Specification 5.6.6.	Immediately

### 3.3 INSTRUMENTATION

#### 3.3.3.2 Remote Shutdown System

LCO 3.3.3.2 The Remote Shutdown System Functions shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

#### ACTIONS

-----NOTE-----  
Separate Condition entry is allowed for each Function.  
-----

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more required Functions inoperable.	A.1 Restore required Function to OPERABLE status.	30 days
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3.	12 hours

# SURVEILLANCE REQUIREMENTS

-----NOTE-----  
When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 6 hours.  
-----

SURVEILLANCE		FREQUENCY
SR 3.3.3.2.1	Perform CHANNEL CHECK for each required instrumentation channel that is normally energized.	31 days
SR 3.3.3.2.2	Perform CHANNEL CALIBRATION for each required instrumentation channel, except the suppression pool water level instrumentation channel.	18 months
SR 3.3.3.2.3	Perform CHANNEL CALIBRATION for the suppression pool water level instrumentation channel.	24 months
SR 3.3.3.2.4	Verify each required control circuit and transfer switch is capable of performing the intended functions.	24 months

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. As required by Required Action A.1 and referenced in Table 3.3.7.1-1.	<p>E.1 -----NOTE----- Enter applicable Conditions and Required Actions of LCO 3.7.3, "Control Room Emergency Filtration (CREF) System," when both remote air intakes are isolated. -----</p> <p>Isolate the associated remote air intake.</p>	1 hour from discovery of loss of radiation monitoring capability in a remote air intake
	<p><u>AND</u></p> <p>E.2 Restore channel to OPERABLE status.</p>	<p>7 days from discovery of inoperable channels associated with both remote air intakes</p> <p><u>AND</u></p> <p>30 days</p>
F. Required Action and associated Completion Time of Condition E not met.	F.1 Declare both CREF subsystems inoperable.	Immediately

## SURVEILLANCE REQUIREMENTS

- NOTES-----
1. Refer to Table 3.3.7.1-1 to determine which SRs apply for each CREF System Function.
  2. When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 6 hours provided the associated Function maintains CREF initiation or radiation monitoring capability, as applicable.
- 

SURVEILLANCE	FREQUENCY
SR 3.3.7.1.1 Perform CHANNEL CHECK.	12 hours
SR 3.3.7.1.2 Perform CHANNEL FUNCTIONAL TEST.	92 days
SR 3.3.7.1.3 Perform CHANNEL CALIBRATION.	18 months
SR 3.3.7.1.4 Perform LOGIC SYSTEM FUNCTIONAL TEST.	24 months

### 3.4 REACTOR COOLANT SYSTEM (RCS)

#### 3.4.7 RCS Leakage Detection Instrumentation

LCO 3.4.7      The following RCS leakage detection instrumentation shall be OPERABLE:

- a. Drywell floor drain sump flow monitoring system; and
- b. One channel of either drywell atmospheric particulate or atmospheric gaseous monitoring system.

APPLICABILITY:    MODES 1, 2, and 3.

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Drywell floor drain sump flow monitoring system inoperable.	A.1      Restore drywell floor drain sump flow monitoring system to OPERABLE status.	30 days
B. Required drywell atmospheric monitoring system inoperable.	B.1      Analyze grab samples of drywell atmosphere.	Once per 12 hours
	<u>AND</u> B.2      Restore required drywell atmospheric monitoring system to OPERABLE status.	30 days

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. Required Action and associated Completion Time of Condition A or B not met.	C.1 Be in MODE 3.	12 hours
	<u>AND</u> C.2 Be in MODE 4.	36 hours
D. All required leakage detection systems inoperable.	D.1 Enter LCO 3.0.3.	Immediately

### 3.4 REACTOR COOLANT SYSTEM (RCS)

#### 3.4.8 RCS Specific Activity

LCO 3.4.8      The specific activity of the reactor coolant shall be limited to DOSE EQUIVALENT I-131 specific activity  $\leq 0.2 \mu\text{Ci/gm}$ .

APPLICABILITY:    MODE 1,  
                      MODES 2 and 3 with any main steam line not isolated.

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Reactor coolant specific activity $> 0.2 \mu\text{Ci/gm}$ and $\leq 4.0 \mu\text{Ci/gm}$ DOSE EQUIVALENT I-131.	-----NOTE----- LCO 3.0.4.c is applicable. -----	
	A.1      Determine DOSE EQUIVALENT I-131.  <u>AND</u>  A.2      Restore DOSE EQUIVALENT I-131 to within limits.	Once per 4 hours   48 hours
B. Required Action and associated Completion Time of Condition A not met.  <u>OR</u>  Reactor coolant specific activity $> 4.0 \mu\text{Ci/gm}$ DOSE EQUIVALENT I-131.	B.1      Determine DOSE EQUIVALENT I-131.  <u>AND</u>	Once per 4 hours
	B.2.1    Isolate all main steam lines.  <u>OR</u>	12 hours   (continued)



ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
B. (continued)	B.2.2.1 Be in MODE 3.	12 hours
	<u>AND</u> B.2.2.2 Be in MODE 4.	36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.4.8.1 -----NOTE----- Only required to be performed in MODE 1. ----- Verify reactor coolant DOSE EQUIVALENT I-131 specific activity is $\leq 0.2 \mu\text{Ci/gm.}$	7 days

### 3.4 REACTOR COOLANT SYSTEM (RCS)

#### 3.4.9 Residual Heat Removal (RHR) Shutdown Cooling System – Hot Shutdown

LC0 3.4.9 Two RHR shutdown cooling subsystems shall be OPERABLE, and, with no recirculation pump in operation, at least one RHR shutdown cooling subsystem shall be in operation.

-----NOTES-----

1. Both RHR shutdown cooling subsystems and recirculation pumps may be removed from operation for up to 2 hours per 8 hour period.
  2. One RHR shutdown cooling subsystem may be inoperable for up to 2 hours for performance of Surveillances.
- 

APPLICABILITY: MODE 3 with reactor steam dome pressure less than 48 psig.

#### ACTIONS

-----NOTE-----

Separate Condition entry is allowed for each RHR shutdown cooling subsystem.

-----

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or two RHR shutdown cooling subsystems inoperable.	A.1 Initiate action to restore RHR shutdown cooling subsystem to OPERABLE status.	Immediately
	<u>AND</u>	(continued)

**ACTIONS**

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. (continued)	A.2      Verify an alternate method of decay heat removal is available for each inoperable RHR shutdown cooling subsystem.	1 hour
	<u>AND</u> A.3      Be in MODE 4.	24 hours
B.    No RHR shutdown cooling subsystem in operation.  <u>AND</u>  No recirculation pump in operation.	B.1      Initiate action to restore one RHR shutdown cooling subsystem or one recirculation pump to operation.	Immediately
	<u>AND</u> B.2      Verify reactor coolant circulation by an alternate method.	1 hour from discovery of no reactor coolant circulation
	<u>AND</u> B.3      Monitor reactor coolant temperature and pressure.	<u>AND</u> Once per 12 hours thereafter  Once per hour

### 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
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

(continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
C. Two ECCS injection subsystems inoperable.  <u>OR</u>  One ECCS injection and one ECCS spray subsystem inoperable.	C.1 Restore one ECCS injection/spray subsystem to OPERABLE status.	72 hours
D. Required Action and associated Completion Time of Condition A, B, or C not met.	D.1 Be in MODE 3.  <u>AND</u>  D.2 Be in MODE 4.	12 hours   36 hours
E. One required ADS valve inoperable.	E.1 Restore ADS valve to OPERABLE status.	14 days
F. One required ADS valve inoperable.  <u>AND</u>  One low pressure ECCS injection/spray subsystem inoperable.	F.1 Restore ADS valve to OPERABLE status.  <u>OR</u>  F.2 Restore low pressure ECCS injection/spray subsystem to OPERABLE status.	72 hours   72 hours

(continued)

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

#### 3.5.3 RCIC System

LCO 3.5.3 The RCIC System shall be OPERABLE.

APPLICABILITY: MODE 1,  
MODES 2 and 3 with reactor steam dome pressure > 150 psig.

#### ACTIONS

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

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. RCIC System inoperable.	A.1 Verify by administrative means High Pressure Core Spray System is OPERABLE.	Immediately
	<u>AND</u> A.2 Restore RCIC System to OPERABLE status.	14 days
B. Required Action and associated Completion Time not met.	B.1 Be in MODE 3.	12 hours
	<u>AND</u> B.2 Reduce reactor steam dome pressure to $\leq$ 150 psig.	36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.5.3.1	Verify the RCIC System piping is filled with water from the pump discharge valve to the injection valve.	31 days
SR 3.5.3.2	Verify each RCIC System 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.	31 days
SR 3.5.3.3	<p>-----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</p> <p>Verify, with reactor pressure <math>\leq 1035</math> psig and <math>\geq 935</math> psig, the RCIC pump can develop a flow rate <math>\geq 600</math> gpm against a system head corresponding to reactor pressure.</p>	92 days
SR 3.5.3.4	<p>-----NOTE----- Not required to be performed until 12 hours after reactor steam pressure and flow are adequate to perform the test. -----</p> <p>Verify, with reactor pressure <math>\leq 165</math> psig, the RCIC pump can develop a flow rate <math>\geq 600</math> gpm against a system head corresponding to reactor pressure.</p>	24 months

(continued)

### 3.6 CONTAINMENT SYSTEMS

#### 3.6.3.1 Primary Containment Hydrogen Recombiners

LC0 3.6.3.1 Two primary containment hydrogen recombiners shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One primary containment hydrogen recombiner inoperable.	A.1 Restore primary containment hydrogen recombiner to OPERABLE status.	30 days
B. Two primary containment hydrogen recombiners inoperable.	B.1 Verify by administrative means that the hydrogen and oxygen control function is maintained.	1 hour <u>AND</u> Once per 12 hours thereafter
	<u>AND</u> B.2 Restore one primary containment hydrogen recombiner to OPERABLE status.	7 days
C. Required Action and associated Completion Time not met.	C.1 Be in MODE 3.	12 hours



SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.6.3.1.1	Perform a system functional test for each primary containment hydrogen recombiner.	24 months
SR 3.6.3.1.2	Visually examine each primary containment hydrogen recombiner enclosure and verify there is no evidence of abnormal conditions.	24 months
SR 3.6.3.1.3	Perform a resistance to ground test for each heater phase.	24 months

### 3.6 CONTAINMENT SYSTEMS

#### 3.6.3.2 Primary Containment Atmosphere Mixing System

LC0 3.6.3.2 Two head area return fans shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

#### ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One head area return fan inoperable.	A.1 Restore head area return fan to OPERABLE status.	30 days
B. Two head area return fans inoperable.	B.1 Verify by administrative means that the hydrogen and oxygen control function is maintained.	1 hour
	<u>AND</u> B.2 Restore one head area return fan to OPERABLE status.	7 days
C. Required Action and associated Completion Time not met.	C.1 Be in MODE 3.	12 hours

Primary Containment Atmosphere Mixing System  
3.6.3.2

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.6.3.2.1    Operate each head area return fan for $\geq$ 15 minutes.	92 days

### 3.8 ELECTRICAL POWER SYSTEMS

#### 3.8.1 AC Sources – Operating

LCO 3.8.1 The following AC electrical power sources shall be OPERABLE:

- a. Two qualified circuits between the offsite transmission network and the onsite Class 1E AC Electric Power Distribution System; and
- b. Three diesel generators (DGs).

APPLICABILITY: MODES 1, 2, and 3.

-----NOTE-----  
Division 3 AC electrical power sources are not required to be OPERABLE when High Pressure Core Spray System is inoperable.  
-----

#### ACTIONS

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

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One offsite circuit inoperable.	A.1 Perform SR 3.8.1.1 for OPERABLE offsite circuit.  <u>AND</u>	1 hour <u>AND</u> Once per 8 hours thereafter  (continued)

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. (continued)	A.2 Declare required feature(s) with no offsite power available inoperable when the redundant required feature(s) are inoperable.	24 hours from discovery of no offsite power to one division concurrent with inoperability of redundant required feature(s)
	<u>AND</u> A.3 Restore offsite circuit to OPERABLE status.	72 hours <u>AND</u> 6 days from discovery of failure to meet LCO
B. One required DG inoperable.	B.1 Perform SR 3.8.1.1 for OPERABLE offsite circuit(s).  <u>AND</u>	1 hour <u>AND</u> Once per 8 hours thereafter  (continued)

**REVISION TO TECHNICAL SPECIFICATION LCO 3.0.4 AND SR 3.0.4 REGARDING  
MODE CHANGE LIMITATIONS USING THE CONSOLIDATED LINE ITEM  
IMPROVEMENT PROCESS (CLIIP)**

**Attachment 4**

**PROPOSED CHANGES TO TECHNICAL SPECIFICATION BASES PAGES  
(For Information)**

Pages	B 3.0-5
	B 3.0-6
	B 3.0-15
	B 3.0-16
	B 3.3.3.1-7
	B 3.3.3.2-3
	B 3.3.7.1-11
	B 3.4.7-3
	B 3.4.7-4
	B 3.4.8-2
	B 3.4.8-3
	B 3.4.9-3
	B 3.5.1-5
	B 3.5.3-2
	B 3.6.3.1-4
	B 3.6.3.2-3
	B 3.8.1-6

BASES

LCO 3.0.3  
(continued)

assemblies in the associated fuel storage pool." Therefore, this LCO can be applicable in any or all MODES. If the LCO and the Required Actions of LCO 3.7.7 are not met while in MODE 1, 2, or 3, there is no safety benefit to be gained by placing the unit in a shutdown condition. The Required Action of LCO 3.7.7 of "Suspend movement of irradiated fuel assemblies in the spent fuel storage pool" is the appropriate Required Action to complete in lieu of the actions of LCO 3.0.3. These exceptions are addressed in the individual Specifications.

LCO 3.0.4

LCO 3.0.4 establishes limitations on changes in MODES or other specified conditions in the Applicability when an LCO is not met. It precludes placing the unit in a MODE or other specified condition stated in that Applicability (e.g., Applicability desired to be entered) when the following exist:

- a. Unit conditions are such that the requirements of the LCO would not be met in the Applicability desired to be entered; and
- b. Continued noncompliance with the LCO requirements, if the Applicability were entered, would result in the unit being required to exit the Applicability desired to be entered to comply with the Required Actions.

Compliance with Required Actions that permit continued operation of the unit for an unlimited period of time in a MODE or other specified condition provides an acceptable level of safety for continued operation. This is without regard to the status of the unit before or after the MODE change. Therefore, in such cases, entry into a MODE or other specified condition in the Applicability may be made in accordance with the provisions of the Required Actions. The provisions of this Specification should not be interpreted as endorsing the failure to exercise the good practice of restoring systems or components to OPERABLE status before entering an associated MODE or other specified condition in the Applicability.

(continued)

BASES

LCO 3.0.4  
(continued)

The provisions of LCO 3.0.4 shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS. In addition, the provisions of LCO 3.0.4 shall not prevent changes in MODES or other specified conditions in the Applicability that result from any unit shutdown.

Exceptions to LCO 3.0.4 are stated in the individual Specifications. Exceptions may apply to all the ACTIONS or to a specific Required Action of a Specification.

Surveillances do not have to be performed on the associated inoperable equipment (or on variables outside the specified limits), as permitted by SR 3.0.1. Therefore, changing MODES or other specified conditions while in an ACTIONS Condition, either in compliance with LCO 3.0.4, or where an exception to LCO 3.0.4 is stated, is not a violation of SR 3.0.1 or SR 3.0.4 for those Surveillances that do not have to be performed due to the associated inoperable equipment. However, SRs must be met to ensure OPERABILITY prior to declaring the associated equipment OPERABLE (or variable within limits) and restoring compliance with the affected LCO.

LCO 3.0.4 is only applicable when entering MODE 3 from MODE 4, MODE 2 from MODE 3 or 4, or MODE 1 from MODE 2. Furthermore, LCO 3.0.4 is applicable when entering any other specified condition in the Applicability only while operating in MODE 1, 2, or 3. The requirements of LCO 3.0.4 do not apply in MODES 4 and 5, or in other specified conditions of the Applicability (unless in MODE 1, 2, or 3) because the ACTIONS of individual Specifications sufficiently define the remedial measures to be taken.

LCO 3.0.5

LCO 3.0.5 establishes the allowance for restoring equipment to service under administrative controls when it has been removed from service or declared inoperable to comply with ACTIONS. The sole purpose of this Specification is to provide an exception to LCO 3.0.2 (e.g., to not comply with the applicable Required Action(s)) to allow the performance of SRs to demonstrate:

- a. The OPERABILITY of the equipment being returned to service; or

(continued)



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**INSERT 3 (LCO 3.0.4 BASES)**

LCO 3.0.4 establishes limitations on changes in MODES or other specified conditions in the Applicability when an LCO is not met. It allows placing the unit in a MODE or other specified condition stated in the Applicability (i.e., the Applicability desired to be entered) when unit conditions are such that the requirements of the LCO would not be met, in accordance with LCO 3.0.4.a, LCO 3.0.4.b, or LCO 3.0.4.c.

LCO 3.0.4.a allows entry into a MODE or other specified condition in the Applicability with the LCO not met when the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time. Compliance with Required Actions that permit continued operation of the unit for an unlimited period of time in a MODE or other specified condition provides an acceptable level of safety for continued operation. This is without regard to the status of the unit before or after the MODE change. Therefore, in such cases, entry into a MODE or other specified condition in the Applicability may be made in accordance with the provisions of the Required Actions.

LCO 3.0.4.b allows entry into a MODE or other specified condition in the Applicability with the LCO not met after performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate.

The risk assessment may use quantitative, qualitative, or blended approaches, and the risk assessment will be conducted using the plant program, procedures, and criteria in place to implement 10 CFR 50.65(a)(4), which requires risk impacts of maintenance activities to be assessed and managed. The risk assessment, for the purposes of LCO 3.0.4.b, must take into account all inoperable Technical Specification equipment regardless of whether the equipment is included in the normal 10 CFR 50.65(a)(4) risk assessment scope. The risk assessments will be conducted using the procedures and guidance endorsed by Regulatory Guide 1.182, "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants." Regulatory Guide 1.182 endorses the guidance in Section 11 of NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." These documents address general guidance for conduct of the risk assessment, quantitative and qualitative guidelines for establishing risk management actions, and example risk management actions. These include actions to plan and conduct other activities in a manner that controls overall risk, increased risk awareness by shift and management personnel, actions to reduce the duration of the condition, actions to minimize the magnitude of risk increases (establishment of

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**INSERT 3 (LCO 3.0.4 BASES) Continued (Page 2)**

backup success paths or compensatory measures), and determination that the proposed MODE change is acceptable. Consideration should also be given to the probability of completing restoration such that the requirements of the LCO would be met prior to the expiration of ACTIONS Completion Times that would require exiting the Applicability.

LCO 3.0.4.b may be used with single, or multiple systems and components unavailable. NUMARC 93-01 provides guidance relative to consideration of simultaneous unavailability of multiple systems and components.

The results of the risk assessment shall be considered in determining the acceptability of entering the MODE or other specified condition in the Applicability, and any corresponding risk management actions. The LCO 3.0.4.b risk assessments do not have to be documented.

The Technical Specifications allow continued operation with equipment unavailable in MODE 1 for the duration of the Completion Time. Since this is allowable, and since in general the risk impact in that particular MODE bounds the risk of transitioning into and through the applicable MODES or other specified conditions in the Applicability of the LCO, the use of the LCO 3.0.4.b allowance should be generally acceptable, as long as the risk is assessed and managed as stated above. However, there is a small subset of systems and components that have been determined to be more important to risk and use of the LCO 3.0.4.b allowance is prohibited. The LCOs governing these system and components contain Notes prohibiting the use of LCO 3.0.4.b by stating that LCO 3.0.4.b is not applicable.

LCO 3.0.4.c allows entry into a MODE or other specified condition in the Applicability with the LCO not met based on a Note in the Specification which states LCO 3.0.4.c is applicable. These specific allowances permit entry into MODES or other specified conditions in the Applicability when the associated ACTIONS to be entered do not provide for continued operation for an unlimited period of time and a risk assessment has not been performed. This allowance may apply to all the ACTIONS or to a specific Required Action of a Specification. The risk assessments performed to justify the use of LCO 3.0.4.b usually only consider systems and components. For this reason, LCO 3.0.4.c is typically applied to Specifications, which describe values and parameters (e.g., RCS Specific Activity), and may be applied to other Specifications based on NRC plant-specific approval.

The provisions of this Specification should not be interpreted as endorsing the failure to exercise the good practice of restoring systems or components to OPERABLE status before entering an associated MODE or other specified condition in the Applicability.

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**INSERT 3 (LCO 3.0.4 BASES) Continued (Page 3)**

The provisions of LCO 3.0.4 shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS. In addition, the provisions of LCO 3.0.4 shall not prevent changes in MODES or other specified conditions in the Applicability that result from any unit shutdown. In this context, a unit shutdown is defined as a change in MODE or other specified condition in the Applicability associated with transitioning from MODE 1 to MODE 2, MODE 2 to MODE 3, and MODE 3 to MODE 4.

Upon entry into a MODE or other specified condition in the Applicability with the LCO not met, LCO 3.0.1 and LCO 3.0.2 require entry into the applicable Conditions and Required Actions until the Condition is resolved, until the LCO is met, or until the unit is not within the Applicability of the Technical Specification.

Surveillances do not have to be performed on the associated inoperable equipment (or on variables outside the specified limits), as permitted by SR 3.0.1. Therefore, utilizing LCO 3.0.4 is not a violation of SR 3.0.1 or SR 3.0.4 for any Surveillances that have not been performed on inoperable equipment. However, SRs must be met to ensure OPERABILITY prior to declaring the associated equipment OPERABLE (or variable within limits) and restoring compliance with the affected LCO.

BASES (continued)

SR 3.0.4

INSERT 4  
SR 3.0.4 BASES

SR 3.0.4 establishes the requirement that all applicable SRs must be met before entry into a MODE or other specified condition in the Applicability.

This Specification ensures that system and component OPERABILITY requirements and variable limits are met before entry into MODES or other specified conditions in the Applicability for which these systems and components ensure safe operation of the unit.

The provisions of this Specification should not be interpreted as endorsing the failure to exercise the good practice of restoring systems or components to OPERABLE status before entering an associated MODE or other specified condition in the Applicability.

However, in certain circumstances, failing to meet an SR will not result in SR 3.0.4 restricting a MODE change or other specified condition change. When a system, subsystem, division, component, device, or variable is inoperable or outside its specified limits, the associated SR(s) are not required to be performed per SR 3.0.1, which states that Surveillances do not have to be performed on inoperable equipment. When equipment is inoperable, SR 3.0.4 does not apply to the associated SR(s) since the requirement for the SR(s) to be performed is removed. Therefore, failing to perform the Surveillance(s) within the specified Frequency, on equipment that is inoperable, does not result in an SR 3.0.4 restriction to changing MODES or other specified conditions of the Applicability. However, since the LCO is not met in this instance, LCO 3.0.4 will govern any restrictions that may (or may not) apply to MODE or other specified condition changes.

The provisions of SR 3.0.4 shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS. In addition, the provisions of SR 3.0.4 shall not prevent changes in MODES or other specified conditions in the Applicability that result from any unit shutdown.

The precise requirements for performance of SRs are specified such that exceptions to SR 3.0.4 are not necessary. The specific time frames and conditions necessary for meeting the SRs are specified in the Frequency, in the Surveillance, or both. This allows

(continued)

BASES

SR 3.0.4  
(continued)

INSERT 4  
SR 3.0.4 BASES

performance of Surveillances when the prerequisite condition(s) specified in a Surveillance procedure require entry into the MODE or other specified condition in the Applicability of the associated LCO prior to the performance or completion of a Surveillance. A Surveillance that could not be performed until after entering the LCO Applicability would have its Frequency specified such that it is not "due" until the specific conditions needed are met. Alternately, the Surveillance may be stated in the form of a Note as not required (to be met or performed) until a particular event, condition, or time has been reached. Further discussion of the specific formats of SRs' annotation is found in Section 1.4, Frequency.

SR 3.0.4 is only applicable when entering MODE 3 from MODE 4, MODE 2 from MODE 3 or 4, or MODE 1 from MODE 2. Furthermore, SR 3.0.4 is applicable when entering any other specified condition in the Applicability only while operating in MODE 1, 2, or 3. The requirements of SR 3.0.4 do not apply in MODES 4 and 5, or in other specified conditions of the Applicability (unless in MODE 1, 2, or 3) because the ACTIONS of individual Specifications sufficiently define the remedial measures to be taken.

REFERENCES

1. NRC Generic Letter 87-09, "Sections 3.0 and 4.0 of the Standard Technical Specifications (STS) on the Applicability of Limiting Conditions for Operation and Surveillance Requirements."

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**INSERT 4 (SR 3.0.4 BASES)**

SR 3.0.4 establishes the requirement that all applicable SRs must be met before entry into a MODE or other specified condition in the Applicability. This Specification ensures that system and component OPERABILITY requirements and variable limits are met before entry into MODES or other specified conditions in the Applicability for which these systems and components ensure safe operation of the unit. The provisions of this Specification should not be interpreted as endorsing the failure to exercise the good practice of restoring systems or components to OPERABLE status before entering an associated MODE or other specified condition in the Applicability.

A provision is included to allow entry into a MODE or other specified condition in the Applicability when an LCO is not met due to Surveillance not being met in accordance with LCO 3.0.4.

However, in certain circumstances, failing to meet an SR will not result in SR 3.0.4 restricting a MODE change or other specified condition change. When a system, subsystem, division, component, device, or variable is inoperable or outside its specified limits, the associated SR(s) are not required to be performed, per SR 3.0.1, which states that surveillances do not have to be performed on inoperable equipment. When equipment is inoperable, SR 3.0.4 does not apply to the associated SR(s) since the requirement for the SR(s) to be performed is removed. Therefore, failing to perform the Surveillance(s) within the specified Frequency does not result in an SR 3.0.4 restriction to changing MODES or other specified conditions of the Applicability. However, since the LCO is not met in this instance, LCO 3.0.4 will govern any restrictions that may (or may not) apply to MODE or other specified condition changes. SR 3.0.4 does not restrict changing MODES or other specified conditions of the Applicability when a Surveillance has not been performed within the specified Frequency, provided the requirement to declare the LCO not met has been delayed in accordance with SR 3.0.3.

The provisions of SR 3.0.4 shall not prevent entry into MODES or other specified conditions in the Applicability that are required to comply with ACTIONS. In addition, the provisions of SR 3.0.4 shall not prevent changes in MODES or other specified conditions in the Applicability that result from any unit shutdown. In this context, a unit shutdown is defined as a change in MODE or other specified condition in the Applicability associated with transitioning from MODE 1 to MODE 2, MODE 2 to MODE 3, and MODE 3 to MODE 4.

The precise requirements for performance of SRs are specified such that exceptions to SR 3.0.4 are not necessary. The specific time frames and conditions necessary for meeting the SRs are specified in the Frequency, in the Surveillance, or both. This allows performance of Surveillances when the prerequisite condition(s) specified in a Surveillance procedure require entry into the MODE or other specified condition in the Applicability of the associated LCO prior to the performance or completion of a Surveillance. A Surveillance that could not be

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**INSERT 4 (SR 3.0.4 BASES) Continued (Page 2)**

performed until after entering the LCO's Applicability, would have its Frequency specified such that it is not "due" until the specific conditions needed are met. Alternately, the Surveillance may be stated in the form of a Note, as not required (to be met or performed) until a particular event, condition, or time has been reached. Further discussion of the specific formats of SRs' annotation is found in Section 1.4, Frequency.

BASES

LCO

10. ECCS Pump Room Flood Level (continued)

room's floor level. These annunciators are the primary indication used by the operator during an accident. Therefore, the PAM Specification deals specifically with this portion of the instrument channel.

APPLICABILITY

The PAM instrumentation LCO is applicable in MODES 1 and 2. These variables are related to the diagnosis and preplanned actions required to mitigate DBAs. The applicable DBAs are assumed to occur in MODES 1 and 2. In MODES 3, 4, and 5, plant conditions are such that the likelihood of an event that would require PAM instrumentation is extremely low; therefore, PAM instrumentation is not required to be OPERABLE in these MODES.

ACTIONS

Note 1 has been added to the ACTIONS to exclude the MODE change restriction of LCO 3.0.4. This exception allows entry into the applicable MODE while relying on the ACTIONS even though the ACTIONS may eventually require plant shutdown. This exception is acceptable due to the passive function of the instruments, the operator's ability to diagnose an accident using alternate instruments and methods, and the low probability of an event requiring these instruments.

A Note has ~~also~~ been provided to modify the ACTIONS related to PAM instrumentation channels. Section 1.3, Completion Times, specifies that once a Condition has been entered, subsequent divisions, subsystems, components, or variables expressed in the Condition, discovered to be inoperable or not within limits, will not result in separate entry into the Condition. Section 1.3 also specifies that Required Actions of the Condition continue to apply for each additional failure, with Completion Times based on initial entry into the Condition. However, the Required Actions for inoperable PAM instrumentation channels provide appropriate compensatory measures for separate inoperable functions. As such, a Note has been provided that allows separate Condition entry for each inoperable PAM Function.

(continued)



BASES (continued)

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APPLICABILITY      The Remote Shutdown System LCO is applicable in MODES 1 and 2. This is required so that the plant can be placed and maintained in MODE 3 for an extended period of time from a location other than the control room.

This LCO is not applicable in MODES 3, 4, and 5. In these MODES, the plant is already subcritical and in a condition of reduced Reactor Coolant System energy. Under these conditions, considerable time is available to restore necessary instrument control Functions if control room instruments or control becomes unavailable. Consequently, the LCO does not require OPERABILITY in MODES 3, 4, and 5.

---

ACTIONS

A Note is included that excludes the MODE change restriction of LCO 3.0.4. This exception allows entry into an applicable MODE while relying on the ACTIONS even though the ACTIONS may eventually require a plant shutdown. This exception is acceptable due to the low probability of an event requiring this system.

A → Note 2 has been provided to modify the ACTIONS related to Remote Shutdown System Functions. Section 1.3, Completion Times, specifies that once a Condition has been entered, subsequent divisions, subsystems, components, or variables expressed in the Condition, discovered to be inoperable or not within limits, will not result in separate entry into the Condition. Section 1.3 also specifies that Required Actions of the Condition continue to apply for each additional failure, with Completion Times based on initial entry into the Condition. However, the Required Actions for inoperable Remote Shutdown System Functions provide appropriate compensatory measures for separate Functions.

As such, a Note has been provided that allows separate Condition entry for each inoperable Remote Shutdown System Function.

A.1

Condition A addresses the situation where one or more required Functions of the Remote Shutdown System is inoperable. This includes any Function listed in Reference 3, as well as the control and transfer switches.

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(continued)

BASES

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ACTIONS

E.1 and E.2 (continued)

Radiation Monitors on both remote air intakes are inoperable. The 7 day Completion Time is based on the low probability of a DBA occurring during this time period, and is consistent with the time provided in the CREF System ACTIONS when one subsystem is inoperable (the monitors could be in a condition susceptible to a single failure that results in a loss of CREF System function, similar to when one subsystem is inoperable).

A Note has also been added to Required Actions E.1 and E.2 to exclude the MODE change restriction of LCO 3.0.4. This exception allows entry into the applicable MODE while relying on the ACTIONS even though the ACTIONS may eventually require plant shutdown. This exception is acceptable due to the passive function of the instruments, the operator's ability to use alternate means to monitor radiation at the remote air intakes, and the low probability of an event requiring these monitors.

F.1

With any Required Action and associated Completion Time of Condition E not met, the radiation monitoring capability for one or both remote air intakes may be lost, therefore both CREF subsystems must be declared inoperable immediately.

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SURVEILLANCE  
REQUIREMENTS

As noted at the beginning of the SRs, the SRs for each CREF System instrumentation Function are located in the SRs column of Table 3.3.7.1-1.

The Surveillances are also modified by a Note to indicate that when a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 6 hours, provided the associated Function maintains CREF System initiation or radiation monitoring capability, as applicable. Upon completion of the Surveillance, or expiration of the 6 hour allowance, the channel must be returned to OPERABLE status or the applicable Condition entered and Required Actions taken.

(continued)

BASES (continued)

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APPLICABILITY      In MODES 1, 2, and 3, leakage detection systems are required to be OPERABLE to support LCO 3.4.5. This Applicability is consistent with that for LCO 3.4.5.

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ACTIONS            A.1

With the drywell floor drain sump flow monitoring system inoperable, no other form of sampling can provide the equivalent information to quantify leakage. However, the drywell atmospheric activity monitor will provide indications of changes in leakage.

With the drywell floor drain sump flow monitoring system inoperable, but with RCS unidentified and total LEAKAGE being determined every 12 hours (SR 3.4.5.1), operation may continue for 30 days. The 30 day Completion Time of Required Action A.1 is acceptable, based on operating experience, considering the multiple forms of leakage detection that are still available. Required Action A.1 is modified by a Note that states that the provisions of LCO 3.0.4 are not applicable. As a result, a MODE change is allowed when the drywell floor drain sump flow monitoring system is inoperable. This allowance is provided because other instrumentation is available to monitor RCS leakage.

B.1 and B.2

With both gaseous and particulate drywell atmospheric monitoring channels inoperable (i.e., the required drywell atmospheric monitoring system), grab samples of the drywell atmosphere shall be taken and analyzed to provide periodic leakage information. Provided a sample is obtained and analyzed every 12 hours, the plant may be operated for up to 30 days to allow restoration of at least one of the required monitors.

The 12 hour interval provides periodic information that is adequate to detect LEAKAGE. The 30 day Completion Time for restoration recognizes that at least one other form of leakage detection is available.

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(continued)

BASES

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ACTIONS

B.1 and B.2 (continued)

The Required Actions are modified by a Note that states that the provisions of LCO 3.0.4 are not applicable. As a result, a MODE change is allowed when both the gaseous and particulate primary containment atmospheric monitoring channels are inoperable. This allowance is provided because other instrumentation is available to monitor RCS leakage.

C.1 and C.2

If any Required Action and associated Completion Time of Condition A or B cannot be met, the plant must be brought to a MODE in which the LCO does not apply. To achieve this status, the plant must be brought to at least MODE 3 within 12 hours and to MODE 4 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required plant conditions in an orderly manner and without challenging plant systems.

D.1

With all required monitors inoperable, no required automatic means of monitoring LEAKAGE are available, and immediate plant shutdown in accordance with LCO 3.0.3 is required.

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SURVEILLANCE  
REQUIREMENTS

The Surveillances are modified by a Note to indicate that when a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 6 hours, provided the other required instrumentation (either the drywell floor drain sump flow monitoring system or the drywell atmospheric monitoring channel, as applicable) is OPERABLE. Upon completion of the Surveillance, or expiration of the 6 hour allowance, the channel must be returned to OPERABLE status or the applicable Condition entered and Required Actions taken. The 6 hour testing allowance is acceptable since it does not significantly reduce the probability of properly monitoring drywell leakage.

(continued)

BASES

APPLICABLE  
SAFETY ANALYSES  
(continued)

The limit on specific activity is a value from a parametric evaluation of typical site locations. This limit is conservative because the evaluation considered more restrictive parameters than for a specific site, such as the location of the site boundary and the meteorological conditions of the site.

RCS specific activity satisfies Criterion 2 of Reference 3.

LCO

The specific iodine activity is limited to  $\leq 0.2$   $\mu\text{Ci/gm}$  DOSE EQUIVALENT I-131. This limit ensures the source term assumed in the safety analysis for the MSLB is not exceeded, so any release of radioactivity to the environment during an MSLB is less than a small fraction of the 10 CFR 100 limits.

APPLICABILITY

In MODE 1, and MODES 2 and 3 with any main steam line not isolated, limits on the primary coolant radioactivity are applicable since there is an escape path for release of radioactive material from the primary coolant to the environment in the event of an MSLB outside of primary containment.

In MODES 2 and 3 with the main steam lines isolated, such limits do not apply since an escape path does not exist. In MODES 4 and 5, no limits are required since the reactor is not pressurized and the potential for leakage is reduced.

ACTIONS

A.1 and A.2

When the reactor coolant specific activity exceeds the LCO DOSE EQUIVALENT I-131 limit, but is  $\leq 4.0$   $\mu\text{Ci/gm}$ , samples must be analyzed for DOSE EQUIVALENT I-131 at least once every 4 hours. In addition, the specific activity must be restored to the LCO limit within 48 hours. The Completion Time of once every 4 hours is based on the time needed to take and analyze a sample. The 48 hour Completion Time to restore the activity level provides a reasonable time for temporary coolant activity increases (iodine spikes or crud bursts) to be cleaned up with the normal processing systems.

Insert 8

A Note to the Required Actions of Condition A excludes the MODE change restriction of LCO 3.0.4. This exception allows entry into the applicable MODE(S) while relying on the

(continued)

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**INSERT 8 (RCS SPECIFIC ACTIVITY BASES)**

A Note permits the use of the provisions of LCO 3.0.4.c. This allowance permits entry into the applicable MODE(S) while relying on the ACTIONS.

BASES

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ACTIONS

A.1 and A.2 (continued)

ACTIONS even though the ACTIONS may eventually require plant shutdown. This exception is acceptable due to the significant conservatism incorporated into the specific activity limit, the low probability of an event which is limiting due to exceeding this limit, and the ability to restore transient specific activity excursions while the plant remains at, or proceeds to power operation.

allowance

B.1, B.2.1, B.2.2.1, and B.2.2.2

If the DOSE EQUIVALENT I-131 cannot be restored to  $\leq 0.2$   $\mu\text{Ci/gm}$  within 48 hours, or if at any time it is  $> 4.0$   $\mu\text{Ci/gm}$ , it must be determined at least every 4 hours and all the main steam lines must be isolated within 12 hours. Isolating the main steam lines precludes the possibility of releasing radioactive material to the environment in an amount that is more than a small fraction of the requirements of 10 CFR 100 during a postulated MSLB accident.

Alternately, the plant can be brought to MODE 3 within 12 hours and to MODE 4 within 36 hours. This option is provided for those instances when isolation of main steam lines is not desired (e.g., due to the decay heat loads). In MODE 4, the requirements of the LCO are no longer applicable.

The Completion Time of once every 4 hours is the time needed to take and analyze a sample. The 12 hour Completion Time is reasonable, based on operating experience, to isolate the main steam lines in an orderly manner and without challenging plant systems. Also, the allowed Completion Times for Required Actions B.2.2.1 and B.2.2.2 for bringing the plant to MODES 3 and 4 are reasonable, based on operating experience, to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

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(continued)

BASES

APPLICABILITY  
(continued)

The requirements for decay heat removal in MODES 4 and 5 are discussed in LCO 3.4.10, "Residual Heat Removal (RHR) Shutdown Cooling System—Cold Shutdown"; LCO 3.9.8, "Residual Heat Removal (RHR)—High Water Level"; and LCO 3.9.9, "Residual Heat Removal (RHR)—Low Water Level."

ACTIONS

A Note to the ACTIONS excludes the MODE change restriction of LCO 3.0.4. This exception allows entry into the applicable MODE(S) while relying on the ACTIONS even though the ACTIONS may eventually require plant shutdown. This exception is acceptable due to the redundancy of the OPERABLE subsystems, the low pressure at which the plant is operating, the low probability of an event occurring during operation in this condition, and the availability of alternate methods of decay heat removal capability.

A ~~Second~~ Note has been provided to modify the ACTIONS related to RHR shutdown cooling subsystems. Section 1.3, Completion Times, specifies once a Condition has been entered, subsequent divisions, subsystems, components or variables expressed in the Condition, discovered to be inoperable or not within limits, will not result in separate entry into the Condition. Section 1.3 also specifies Required Actions of the Condition continue to apply for each additional failure, with Completion Times based on initial entry into the Condition. However, the Required Actions for inoperable shutdown cooling subsystems provide appropriate compensatory measures for separate inoperable shutdown cooling subsystems. As such, a Note has been provided that allows separate Condition entry for each inoperable RHR shutdown cooling subsystem.

A.1, A.2, and A.3

With one RHR shutdown cooling subsystem inoperable for decay heat removal, except as permitted by LCO Note 2, the inoperable subsystem must be restored to OPERABLE status without delay. In this condition, the remaining OPERABLE subsystem can provide the necessary decay heat removal. The overall reliability is reduced, however, because a single failure in the OPERABLE subsystem could result in reduced RHR shutdown cooling capability. Therefore an alternate method of decay heat removal must be provided.

(continued)



BASES (continued)

LCO

Each ECCS injection/spray subsystem and six ADS valves are required to be OPERABLE. The ECCS injection/spray subsystems are defined as the three LPCI subsystems, the LPCS System, and the HPCS System. The low pressure ECCS injection/spray subsystems are defined as the LPCS System and the three LPCI subsystems.

With less than the required number of ECCS subsystems OPERABLE during a limiting design basis LOCA concurrent with the worst case single failure, the limits specified in 10 CFR 50.46 (Ref. 10) could potentially be exceeded. All ECCS subsystems must therefore be OPERABLE to satisfy the single failure criterion required by 10 CFR 50.46 (Ref. 10).

LPCI subsystems may be considered OPERABLE during alignment and operation for decay heat removal when below 48 psig reactor steam dome pressure in MODE 3, if capable of being manually realigned (remote or local) to the LPCI mode and not otherwise inoperable. Alignment and operation for decay heat removal includes when the required RHR pump is not operating or when the system is being realigned from or to the RHR shutdown cooling mode. At these low pressures and decay heat levels, a reduced complement of ECCS subsystems should provide the required core cooling, thereby allowing operation of RHR shutdown cooling when necessary.

APPLICABILITY

All ECCS subsystems are required to be OPERABLE during MODES 1, 2, and 3 when there is considerable energy in the reactor core and core cooling would be required to prevent fuel damage in the event of a break in the primary system piping. In MODES 2 and 3, the ADS function is not required when pressure is  $\leq 150$  psig because the low pressure ECCS subsystems (LPCS and LPCI) are capable of providing flow into the RPV below this pressure. ECCS requirements for MODES 4 and 5 are specified in LCO 3.5.2, "ECCS-Shutdown."

ACTIONS

A.1

If any one low pressure ECCS injection/spray subsystem is inoperable, the inoperable subsystem must be restored to OPERABLE status within 7 days. In this condition, the remaining OPERABLE subsystems provide adequate core cooling during a LOCA. However, overall ECCS reliability is reduced because a single failure in one of the remaining OPERABLE

(continued)

BWR 6  
INSERT  
1B

**REVISION TO TECHNICAL SPECIFICATION LCO 3.0.4 AND SR 3.0.4 REGARDING  
MODE CHANGE LIMITATIONS USING THE CONSOLIDATED LINE ITEM  
IMPROVEMENT PROCESS (CLIIP)**

**Attachment 4**

**BWR6 INSERT 1B (LCO 3.5.1, ECCS - OPERATING)**

A Note prohibits the application of LCO 3.0.4.b to an inoperable HPCS subsystem. There is an increased risk associated with entering a MODE or other specified condition in the Applicability with an inoperable HPCS subsystem and the provisions of LCO 3.0.4.b, which allow entry into a MODE or other specified condition in the Applicability with the LCO not met after performance of a risk assessment addressing inoperable systems and components, should not be applied in this circumstance.

BASES

BACKGROUND  
(continued)

The RCIC pump is provided with a minimum flow bypass line, which discharges to the suppression pool. The valve in this line automatically opens to prevent pump damage due to overheating when other discharge line valves are closed. To ensure rapid delivery of water to the RPV and to minimize water hammer effects, the RCIC System discharge line "keep fill" system is designed to maintain the pump discharge line filled with water.

APPLICABLE  
SAFETY ANALYSES

The function of the RCIC System is to respond to transient events by providing makeup coolant to the reactor. The RCIC System is not an Engineered Safety Feature System and no credit is taken in the safety analyses for RCIC System operation. Based on its contribution to the reduction of overall plant risk, however, the system satisfies Criterion 4 of Reference 3.

LCO

The OPERABILITY of the RCIC System provides adequate core cooling such that actuation of any of the ECCS subsystems is not required in the event of RPV isolation accompanied by a loss of feedwater flow. The RCIC System has sufficient capacity to maintain RPV inventory during an isolation event.

APPLICABILITY

The RCIC System is required to be OPERABLE in MODE 1, and MODES 2 and 3 with reactor steam dome pressure > 150 psig since RCIC is the primary non-ECCS water source for core cooling when the reactor is isolated and pressurized. In MODES 2 and 3 with reactor steam dome pressure  $\leq$  150 psig, and in MODES 4 and 5, RCIC is not required to be OPERABLE since the ECCS injection/spray subsystems can provide sufficient flow to the vessel.

ACTIONS

A.1 and A.2

BWR6  
Insert 2B

If the RCIC System is inoperable during MODE 1, or MODES 2 or 3 with reactor steam dome pressure > 150 psig, and the HPCS System is immediately verified to be OPERABLE, the RCIC System must be restored to OPERABLE status within 14 days. In this Condition, loss of the RCIC System will not affect the overall plant capability to provide makeup inventory at high RPV pressure since the HPCS System is the only high

(continued)

**REVISION TO TECHNICAL SPECIFICATION LCO 3.0.4 AND SR 3.0.4 REGARDING  
MODE CHANGE LIMITATIONS USING THE CONSOLIDATED LINE ITEM  
IMPROVEMENT PROCESS (CLIIP)**

**Attachment 4**

**BWR6 INSERT 2B (LCO 3.5.3, RCIC SYSTEM)**

A Note prohibits the application of LCO 3.0.4.b to an inoperable RCIC system. There is an increased risk associated with entering a MODE or other specified condition in the Applicability with an inoperable RCIC system and the provisions of LCO 3.0.4.b, which allow entry into a MODE or other specified condition in the Applicability with the LCO not met after performance of a risk assessment addressing inoperable systems and components, should not be applied in this circumstance.

BASES (continued)

ACTIONS

A.1

With one primary containment hydrogen recombiner inoperable, the inoperable primary containment hydrogen recombiner must be restored to OPERABLE status within 30 days. In this condition, the remaining OPERABLE primary containment recombiner is adequate to perform the hydrogen and oxygen control function. However, the overall reliability is reduced because a single failure in the OPERABLE recombiner could result in reduced hydrogen and oxygen control capability. The 30 day Completion Time is based on the low probability of the occurrence of a LOCA that would generate hydrogen and oxygen in amounts capable of exceeding the flammability limits, the amount of time available after the event for operator action to prevent hydrogen and oxygen accumulation exceeding this limit, and the low probability of failure of the OPERABLE primary containment hydrogen recombiner.

~~Required Action A.1 has been modified by a Note stating that the provisions of LCO 3.0.4 are not applicable. As a result, a MODE change is allowed when one recombiner is inoperable. This allowance is provided because of the low probability of the occurrence of a LOCA that would generate hydrogen and oxygen in amounts capable of exceeding the flammability limits, the low probability of the failure of the OPERABLE recombiner, and the amount of time available after a postulated LOCA for operator action to prevent exceeding the flammability limits.~~

B.1 and B.2

With two primary containment hydrogen recombiners inoperable, the ability to perform the hydrogen and oxygen control function via an alternate capability must be verified by administrative means within 1 hour. The alternate hydrogen and oxygen control capability is provided by the Containment Purge System. The 1 hour Completion Time allows a reasonable period of time to verify that a loss of hydrogen and oxygen control function does not exist. In addition, the alternate hydrogen and oxygen control capability must be verified once per 12 hours thereafter to ensure its continued availability. Both the initial

(continued)

BASES

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APPLICABILITY (continued)	accident requiring the Containment Atmosphere Mixing System is low. Therefore, the Primary Containment Atmosphere Mixing System is not required in MODE 3. In MODES 4 and 5, the probability and consequences of a LOCA are reduced due to the pressure and temperature limitations in these MODES. Therefore, the Primary Containment Atmosphere Mixing System is not required in these MODES.
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ACTIONS

A.1

With one head area return fan inoperable, the inoperable fan must be restored to OPERABLE status within 30 days. In this condition, the remaining OPERABLE fan is adequate to perform the hydrogen and oxygen mixing function. However, the overall reliability is reduced because a single failure in the OPERABLE fan could result in reduced hydrogen and oxygen mixing capability. The 30 day Completion Time is based on the availability of the second fan, the low probability of the occurrence of a LOCA that would generate hydrogen and oxygen in amounts capable of exceeding the flammability limits, the amount of time available after the event for operator action to prevent exceeding these limits, and the availability of the Residual Heat Removal (RHR) Drywell Spray System.

~~Required Action A.1 has been modified by a Note indicating that the provisions of LCO 3.0.4 are not applicable. As a result, a MODE change is allowed when one head area return fan is inoperable. This allowance is provided because of the low probability of the occurrence of a LOCA that would generate hydrogen and oxygen in amounts capable of exceeding the flammability limits, the low probability of the failure of the OPERABLE fan, and the amount of time available after a postulated LOCA for operator action to prevent exceeding the flammability limits.~~

B.1 and B.2

With two head area return fans inoperable, the ability to perform the hydrogen and oxygen control function via alternate capabilities must be verified by administrative means within 1 hour. The alternate hydrogen and oxygen control capability is provided by one RHR Drywell Spray

(continued)

BASES

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LCO  
(continued)      provided the automatic transfer capability from TR-N1 to TR-S is OPERABLE for SM-4 and either SM-7 or SM-8. For TR-B to be considered OPERABLE, the automatic transfer capability to TR-B must be OPERABLE for both SM-7 and SM-8. (The automatic transfer capability from TR-N1 to TR-B is allowed to go through an intermediate step of transferring to the first offsite source, i.e., TR-S.)

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APPLICABILITY      The AC sources are required to be OPERABLE in MODES 1, 2, and 3 to ensure that:

- a.    Acceptable fuel design limits and reactor coolant pressure boundary limits are not exceeded as a result of AOOs or abnormal transients; and
- b.    Adequate core cooling is provided and containment OPERABILITY and other vital functions are maintained in the event of a postulated DBA.

A Note has been added taking exception to the Applicability requirements for Division 3 sources, provided the HPCS System is declared inoperable. This exception is intended to allow declaring of the Division 3 inoperable either in lieu of declaring the Division 3 source inoperable, or at any time subsequent to entering ACTIONS for an inoperable Division 3 source. This exception is acceptable since, with the Division 3 inoperable and the associated ACTIONS entered, the Division 3 AC sources provide no additional assurance of meeting the above criteria.

AC power requirements for MODES 4 and 5 and other conditions in which AC sources are required are covered in LCO 3.8.2, "AC Sources - Shutdown."

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ACTIONS

A.1

To ensure a highly reliable power source remains, it is necessary to verify the availability of the remaining offsite circuits on a more frequent basis. Since the Required Action only specifies "perform," a failure of SR 3.8.1.1 acceptance criteria does not result in the

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**REVISION TO TECHNICAL SPECIFICATION LCO 3.0.4 AND SR 3.0.4 REGARDING  
MODE CHANGE LIMITATIONS USING THE CONSOLIDATED LINE ITEM  
IMPROVEMENT PROCESS (CLIIP)**

**Attachment 4**

**BWR6 INSERT 3B (LCO 3.8.1, AC SOURCES - OPERATING)**

A Note prohibits the application of LCO 3.0.4.b to an inoperable DG. There is an increased risk associated with entering a MODE or other specified condition in the Applicability with an inoperable DG and the provisions of LCO 3.0.4.b, which allow entry into a MODE or other specified condition in the Applicability with the LCO not met after performance of a risk assessment addressing inoperable systems and components, should not be applied in this circumstance.