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**October 8, 2001**

Docket Nos. 50-321  
50-366

HL-6122

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

Edwin I. Hatch Nuclear Plant  
Request to Revise Technical Specifications:  
Main Control Room Environmental Control System

Ladies and Gentlemen:

In accordance with the provisions set forth in 10 CFR 50.90, as required by 10 CFR 50.59(c)(1), Southern Nuclear Operating Company (SNC) is proposing changes to the Plant Hatch Unit 1 and Unit 2 Technical Specifications, Appendix A to Operating Licenses DPR-57 and NPF-5, respectively. The proposed changes provide specific Conditions and Required Actions that address a degraded main control room boundary.

The proposed changes implement Industry/Technical Specification Task Force (TSTF) Standard Technical Specification (STS) Change Traveler TSTF-287, Revision 5, which was approved by the NRC by letter dated March 16, 2000. The changes approved with TSTF-287, Revision 5, revise the STS to allow the main control room boundary to be opened intermittently under administrative control, and to add a new Condition that allows 24 hours to restore the main control room boundary to Operable status before requiring the plant to perform an orderly shutdown. With the current Plant Hatch Technical Specifications, if the main control room boundary is inoperable, both Plant Hatch Main Control Room Environmental Control (MCREC) subsystems would be unable to perform their function, and, since there is no applicable STS Condition, entry into LCO 3.0.3 would be required.

Similar Technical Specifications changes based on TSTF-287 have previously been approved for SNC's Vogtle Electric Generating Plant, a PWR, on May 14, 2001, and Duane Arnold Energy Center, a BWR/4, on August 11, 2000.

Enclosure 1 provides a description of the proposed changes and their basis. Enclosure 2 provides the 10 CFR 50.92 and 10 CFR 51.22 evaluations. Enclosure 3 provides the Technical Specifications page change instructions, marked-up pages and changed pages. Enclosure 4 provides the Bases page change instructions, marked-up pages and changed pages.

SNC requests NRC approval of the proposed changes by November 30, 2001. The allowance of 24 hours, during operating modes, to restore the main control room boundary to Operable status

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allows for more optimum scheduling of maintenance activities and enhancements currently planned in late 2001 and 2002 for the MCREC system and the associated main control room boundary.

In accordance with the requirements of 10 CFR 50.91, a copy of this letter and all applicable enclosures will be sent to the designated State official of the Environmental Protection Division of the Georgia Department of Natural Resources.

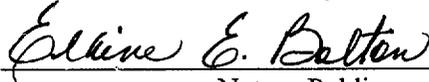
Mr. H. L. Sumner, Jr. states he is Vice President of Southern Nuclear Operating Company and is authorized to execute this oath on behalf of Southern Nuclear Operating Company, and to the best of his knowledge and belief, the facts set forth in this letter are true.

Respectfully submitted,



H. L. Sumner, Jr.

Sworn to and subscribed before me this 8<sup>th</sup> day of October 2001.



Notary Public

Commission Expiration Date: May 25, 2003

CLT/eb

Enclosures:

1. Basis for Change Request
2. 10 CFR 50.92 and 10 CFR 51.22 Evaluations
3. Technical Specifications Page Change Instructions, Marked-Up and Changed Pages
4. Bases Page Change Instructions, Marked-Up and Changed Pages

cc: Southern Nuclear Operating Company  
Mr. P. H. Wells, Nuclear Plant General Manager  
SNC Document Management (R-Type A02.001)

U.S. Nuclear Regulatory Commission, Washington, D.C.  
Mr. L. N. Olshan, Project Manager - Hatch

U.S. Nuclear Regulatory Commission, Region II  
Mr. L. A. Reyes, Regional Administrator  
Mr. J. T. Munday, Senior Resident Inspector - Hatch

State of Georgia  
Mr. L. C. Barrett, Commissioner - Department of Natural Resources

## Enclosure 1

### Edwin I. Hatch Nuclear Plant Request to Revise Technical Specifications: Main Control Room Environmental Control System

#### Basis for Change Request

#### Proposed Changes

Southern Nuclear Operating Company (SNC) proposes to revise the Plant Hatch Unit 1 and Unit 2 Technical Specifications (TS) requirements for the Main Control Room Environmental Control (MCREC) system. Changes are proposed to Limiting Condition for Operation (LCO) 3.7.4 and associated Bases to provide specific Conditions and Required Actions that address a degraded main control room boundary. The proposed changes are consistent with the Industry/Technical Specification Task Force (TSTF) Standard Technical Specification (STS) Change Traveler TSTF-287, Revision 5, approved by the NRC by letter dated March 16, 2000.

The proposed changes are as follows:

- An LCO Note is being added to LCO 3.7.4 for each unit that would allow the main control room boundary to be opened intermittently under administrative control. The associated Bases are revised, via adding a paragraph, to specify the necessary administrative controls to minimize the consequences of an open main control room boundary. Additionally, the existing sentence in the associated Bases regarding normal main control room entry and exit is deleted as redundant to the referenced added paragraph. The wording of the added paragraph is consistent with TSTF-287, Revision 5.
- A new Condition B is being added to LCO 3.7.4 for each unit to specify that 24 hours are allowed to restore an inoperable main control room boundary to Operable status. Corresponding Bases are also added to support this change which include a description of the compensatory measures to be taken during the period the main control room boundary is inoperable. The existing Conditions and Bases are also renumbered accordingly.
- Condition D (new Condition E) of LCO 3.7.4 for two inoperable MCREC subsystems in Mode 1, 2, or 3 is being modified to exclude entry into this Condition when the subsystems are inoperable because of a degraded main control room boundary. The associated Bases for this Condition are revised accordingly.

#### Basis for Proposed Changes

The existing LCO 3.7.4 Surveillance Requirements (SRs) that test the integrity of the main control room boundary require a positive pressure limit to be satisfied with one MCREC subsystem operating. While other SRs in the same Specification test the Operability and function of the MCREC ventilation subsystem, the pressure test, SR 3.7.4.4, ensures that the main control room boundary leak tightness is adequate to meet design assumptions for the post-accident operator doses.

## Enclosure 1

### Request to Revise Technical Specifications:

#### Basis for Change Request

While there are currently Conditions and Required Actions for MCREC subsystem inoperability due to ventilation train degradation, there are no corresponding Conditions, Required Actions, or Completion Times specified in LCO 3.7.4 in case the main control room boundary surveillance, SR 3.7.4.4, is not met. Under the existing Specifications, LCO 3.0.3 must be entered for two-train inoperability in Mode 1, 2, or 3. Requiring the plant to immediately enter LCO 3.0.3 when the main control room boundary is not intact in Mode 1, 2, or 3 is excessive and does not provide time for appropriate preventive or corrective maintenance activities.

The proposed changes address these issues and are consistent with TSTF-287, Revision 5.

Allowance for the main control room boundary to be opened intermittently under administrative controls, as provided by the LCO Note being added to LCO 3.7.4, is acceptable based on SNC's commitment to implement the following administrative controls, as defined in the associated proposed revised Bases. For entry and exit through doors the administrative control of the opening is performed by the person(s) entering or exiting the area. For other openings, these controls consist of stationing a dedicated individual at the opening who is in continuous communication with the main control room. This individual will have a method to rapidly close the opening when a need for the main control room isolation is indicated. These administrative controls minimize the consequences of an open main control room boundary.

Under the proposed new Condition B, if the main control room boundary is inoperable in Mode 1, 2, or 3 such that the MCREC subsystems cannot establish or maintain the required pressure, action must be taken to restore an Operable main control room boundary within 24 hours. The 24 hour Completion Time is reasonable based on the low probability of a design basis accident (DBA) occurring during this time period and SNC's commitment to implement, via administrative controls, appropriate compensatory measures consistent with the intent of 10 CFR 50, Appendix A, General Design Criteria (GDC) 19.

The probability of a DBA occurring during a 24 hour period, considering both Plant Hatch Units 1 and 2 (given the common main control room for Units 1 and 2), has been calculated as approximately  $6.16 \text{ E-}05$ . The DBAs considered in this calculation are as defined in the Plant Hatch Unit 2 Final Safety Analysis Report (FSAR) Chapter 15, the safety analysis applicable to both Units 1 and 2. Specifically, the associated probabilities of occurrence during a 24 hour period, again considering both Plant Hatch Units 1 and 2, for each DBA are approximately: 1)  $5.48 \text{ E-}05$  for the control rod drop accident, 2)  $3.1 \text{ E-}06$  for the loss-of-coolant accident (LOCA), 3)  $7.34 \text{ E-}07$  for the main steam line break accident, and 4)  $2.94 \text{ E-}06$  for the fuel-handling accident. The probability of a LOCA occurring during a 24 hour period includes LOCA events resulting from small, medium, and large pipe breaks.

During the period the main control room boundary is inoperable under the proposed new Condition B, SNC commits to implement, via administrative controls, appropriate compensatory measures consistent with the intent of 10 CFR 50, Appendix A, GDC 19. Such compensatory measures will ensure the control room operators are provided with continued provision of physical security and continued protection from potential hazards such as radioactive contamination, toxic chemicals, smoke, temperature and relative humidity. Implementation of these compensatory measures via administrative controls will assure that preplanned measures will be available to address these

Enclosure 1  
Request to Revise Technical Specifications:  
Basis for Change Request

issues for intentional and unintentional entry into the Condition. Self-contained breathing apparatus (SCBA) equipment is maintained available for the operating crew to use as a compensatory measure if determined to be appropriate.

## Enclosure 2

### Edwin I. Hatch Nuclear Plant Request to Revise Technical Specifications: Main Control Room Environmental Control System

#### 10 CFR 50.92 and 10 CFR 51.22 Evaluations

#### 10 CFR 50.92 Evaluation

Southern Nuclear Operating Company (SNC) has evaluated the proposed changes against the criteria of 10 CFR 50.92 and determined they do not involve a significant hazards consideration, as defined in 10 CFR 50.92, based on the following:

1. The proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed changes involve the Main Control Room Environmental Control (MCREC) system which provides a radiologically controlled environment from which the plant can be operated following a design basis accident (DBA). Therefore, the MCREC system is not assumed to be the initiator of any analyzed accident. The proposed changes allow the main control room boundary to be opened intermittently under administrative control, and allow 24 hours to restore the main control room boundary to Operable status before requiring the plant to perform an orderly shutdown. The 24 hour Completion Time is reasonable based on the low probability of a DBA occurring during this time period and SNC's commitment to implement, via administrative controls, appropriate compensatory measures consistent with the intent of 10 CFR 50, Appendix A, General Design Criteria (GDC) 19. These compensatory measures minimize the consequences of an open main control room boundary and assure that the MCREC system can continue to perform its function. As such, these changes will not affect the function or operation of any other systems, structures, or components.

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

The proposed changes allow the main control room boundary to be opened intermittently under administrative control, and allow 24 hours to restore the main control room boundary to Operable status before requiring the plant to perform an orderly shutdown. The 24 hour Completion Time is reasonable based on the low probability of a DBA occurring during this time period and SNC's commitment to implement, via administrative controls, appropriate compensatory measures consistent with the intent of 10 CFR 50, Appendix A, GDC 19. These compensatory measures minimize the consequences of an open main control room boundary and assure that the MCREC system can continue to perform its function. As such, these changes will not affect the function or operation of any other systems, structures, or components.

## Enclosure 2

### Request to Revise Technical Specifications:

#### 10 CFR 50.92 and 10 CFR 51.22 Evaluations

3. The proposed changes do not involve a significant reduction in a margin of safety.

The proposed changes allow the main control room boundary to be opened intermittently under administrative control, and allow 24 hours to restore the main control room boundary to Operable status before requiring the plant to perform an orderly shutdown. The 24 hour Completion Time is reasonable based on the low probability of a DBA occurring during this time period and SNC's commitment to implement, via administrative controls, appropriate compensatory measures consistent with the intent of 10 CFR 50, Appendix A, GDC 19. These compensatory measures minimize the consequences of an open main control room boundary and assure that the MCREC system can continue to perform its function such that compliance with GDC 19 is maintained.

#### 10 CFR 51.22 Evaluation

SNC has evaluated the proposed changes against the criteria of 10 CFR 51.22(c)(9) and determined the proposed changes are eligible for categorical exclusion from performing an environmental assessment. Therefore, pursuant to 10 CFR 51.22(b), an environmental assessment of the proposed amendment is not required based on the following:

1. As demonstrated in this enclosure, the proposed changes do not involve a significant hazards consideration.
2. The proposed changes do not result in a significant change in the types or significant increase in the amounts of any effluents that may be released offsite.

The proposed changes involve the MCREC system, which provides a radiologically controlled environment on site in the main control room from which the plant can be operated following a DBA. These changes will not affect the ability of the MCREC system to perform its function. As such, these changes will not affect the function or operation of any other systems, structures, or components resulting in no significant change in the types or significant increase in the amounts of any effluents that may be released offsite.

3. The proposed changes do not result in a significant increase in individual or cumulative occupational radiation exposure.

The proposed changes involve the MCREC system, which provides a radiologically controlled environment in the main control room from which the plant can be operated following a DBA. The proposed changes allow the main control room boundary to be opened intermittently under administrative control, and allow 24 hours to restore the main control room boundary to Operable status before requiring the plant to perform an orderly shutdown. The 24 hour Completion Time is reasonable based on the low probability of a DBA occurring during this time period and SNC's commitment to implement, via administrative controls, appropriate compensatory measures consistent with the intent of 10 CFR 50, Appendix A, GDC 19. These compensatory measures minimize the consequences of an open main control room boundary. As such, the proposed changes do not result in a significant increase in individual or cumulative occupational radiation exposure.

Enclosure 3

Edwin I. Hatch Nuclear Plant  
Request to Revise Technical Specifications:  
Main Control Room Environmental Control System

Technical Specifications Page Change Instructions,  
Marked-Up and Changed Pages

Unit 1

| <u>Page</u> | <u>Instruction</u> |
|-------------|--------------------|
| 3.7-9       | Replace            |
| 3.7-10      | Replace            |
| 3.7-11      | Replace            |

Unit 2

| <u>Page</u> | <u>Instruction</u> |
|-------------|--------------------|
| 3.7-9       | Replace            |
| 3.7-10      | Replace            |
| 3.7-11      | Replace            |

3.7 PLANT SYSTEMS

3.7.4 Main Control Room Environmental Control (MCREC) System

LCO 3.7.4 Two MCREC subsystems shall be OPERABLE.

← INSERT LCO NOTE

APPLICABILITY: MODES 1, 2, and 3,  
During movement of irradiated fuel assemblies in the secondary containment,  
During CORE ALTERATIONS,  
During operations with a potential for draining the reactor vessel (OPDRVs).

ACTIONS

| CONDITION  | REQUIRED ACTION  | COMPLETION TIME |
|--|--|-----------------|
| A. One MCREC subsystem inoperable.   | A.1 Restore MCREC subsystem to OPERABLE status.            | 7 days          |
| <input checked="" type="checkbox"/> Required Action and associated Completion Time of Condition A not met in MODE 1, 2, or 3.<br>(ORB) | <input checked="" type="checkbox"/> 1 Be in MODE 3.        | 12 hours        |
|  | AND<br><input checked="" type="checkbox"/> 2 Be in MODE 4. | 36 hours        |

B. Two MCREC subsystems inoperable due to inoperable control room boundary in MODE 1, 2, or 3. B.1 Restore control room boundary to OPERABLE status. (continued)  
24 hours

LCO NOTE FOR LCO 3.7.4

-----NOTE-----

The main control room boundary may be opened intermittently under administrative control.

ACTIONS (continued)

| CONDITION   | REQUIRED ACTION  | COMPLETION TIME   |
|---|--|---|
| <p> Required Action and associated Completion Time of Condition A not met during movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs.</p> | <p>-----NOTE-----<br/>                     LCO 3.0.3 is not applicable.<br/>                     -----</p> <p> 1 Place OPERABLE MCREC subsystem in pressurization mode.</p> <p>OR</p> <p> 2.1 Suspend movement of irradiated fuel assemblies in the secondary containment.</p> <p>AND</p> <p> 2.2 Suspend CORE ALTERATIONS.</p> <p>AND</p> <p> 2.3 Initiate action to suspend OPDRVs.</p> | <p>Immediately</p> <p>Immediately</p> <p>Immediately</p> <p>Immediately</p> |
| <p> Two MCREC subsystems inoperable in MODE 1, 2, or 3.</p>  | <p> 1 Enter LCO 3.0.3.</p>  | <p>Immediately</p>  |

(continued)

*for reasons other than Condition B*

ACTIONS (continued)

| CONDITION  | REQUIRED ACTION  | COMPLETION TIME |
|--|--|-----------------|
| <p> Two MCREC subsystems inoperable during movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs.</p> <p></p> | <p>-----NOTE-----<br/>LCO 3.0.3 is not applicable.<br/>-----</p>   |                 |
|  | <p> 1 Suspend movement of irradiated fuel assemblies in the secondary containment.</p> <p></p> | Immediately     |
|  | <p>AND</p> <p> 2 Suspend CORE ALTERATIONS.</p> <p></p>   | Immediately     |
|  | <p>AND</p> <p> 3 Initiate action to suspend OPDRVs.</p> <p></p>                               | Immediately     |

SURVEILLANCE REQUIREMENTS

| SURVEILLANCE  | FREQUENCY                   |
|---|-----------------------------|
| <p>SR 3.7.4.1 Operate each MCREC subsystem <math>\geq</math> 15 minutes.</p>  | 31 days                     |
| <p>SR 3.7.4.2 Perform required MCREC filter testing in accordance with the Ventilation Filter Testing Program (VFTP).</p> | In accordance with the VFTP |
| <p>SR 3.7.4.3 Verify each MCREC subsystem actuates on an actual or simulated initiation signal.</p>                       | 18 months                   |

(continued)

3.7 PLANT SYSTEMS

3.7.4 Main Control Room Environmental Control (MCREC) System

LCO 3.7.4 Two MCREC subsystems shall be OPERABLE.

← INSERT LCO NOTE

APPLICABILITY: MODES 1, 2, and 3,  
During movement of irradiated fuel assemblies in the  
secondary containment,  
During CORE ALTERATIONS,  
During operations with a potential for draining the reactor  
vessel (OPDRVs).

ACTIONS

| CONDITION   | REQUIRED ACTION                                 | COMPLETION TIME |
|---|---|-----------------|
| A. One MCREC subsystem inoperable.  | A.1 Restore MCREC subsystem to OPERABLE status. | 7 days          |
| B. Required Action and associated Completion Time of Condition A not met in MODE 1, 2, or 3.<br>(C)<br>OR B | B.1 Be in MODE 3.<br>(C)<br>AND                 | 12 hours        |
|   | B.2 Be in MODE 4.<br>(C)                        | 36 hours        |

B. Two MCREC subsystems inoperable due to inoperable control room boundary in MODE 1, 2, or 3. B.1 Restore control room boundary to OPERABLE status. (continued)  
24 hours

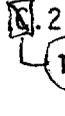
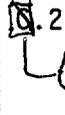
LCO NOTE FOR LCO 3.7.4

-----NOTE-----

The main control room boundary may be opened intermittently under administrative control.

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ACTIONS (continued)

| CONDITION   | REQUIRED ACTION  | COMPLETION TIME   |
|---|--|---|
| <p>            Required Action and associated Completion Time of Condition A not met during movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs.         </p> | <p>           -----NOTE-----<br/>           LCO 3.0.3 is not applicable.<br/>           -----         </p> <p>            0.1 Place OPERABLE MCREC subsystem in pressurization mode.         </p> <p>OR</p> <p>            0.2.1 Suspend movement of irradiated fuel assemblies in the secondary containment.         </p> <p>AND</p> <p>            0.2.2 Suspend CORE ALTERATIONS.         </p> <p>AND</p> <p>            0.2.3 Initiate action to suspend OPDRVs.         </p> | <p>Immediately</p> <p>Immediately</p> <p>Immediately</p> <p>Immediately</p> |
| <p>            Two MCREC subsystems inoperable in MODE 1, 2, or 3.         </p>  | <p>            0.1 Enter LCO 3.0.3.         </p>  | <p>Immediately</p>  |

for reasons other than Condition B

(continued)

ACTIONS (continued)

| CONDITION   | REQUIRED ACTION   | COMPLETION TIME  |
|---|---|--|
| <p> Two MCREC subsystems inoperable during movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs.</p> | <p>-----NOTE-----<br/>LCO 3.0.3 is not applicable.<br/>-----</p> <p> 1. Suspend movement of irradiated fuel assemblies in the secondary containment.</p> <p>AND</p> <p> 2. Suspend CORE ALTERATIONS.</p> <p>AND</p> <p> 3. Initiate action to suspend OPDRVs.</p> | <p>Immediately</p> <p>Immediately</p> <p>Immediately</p> |

SURVEILLANCE REQUIREMENTS

| SURVEILLANCE  | FREQUENCY                          |
|---|------------------------------------|
| <p>SR 3.7.4.1 Operate each MCREC subsystem <math>\geq</math> 15 minutes.</p>  | <p>31 days</p>                     |
| <p>SR 3.7.4.2 Perform required MCREC filter testing in accordance with the Ventilation Filter Testing Program (VFTP).</p> | <p>In accordance with the VFTP</p> |
| <p>SR 3.7.4.3 Verify each MCREC subsystem actuates on an actual or simulated initiation signal.</p>                       | <p>18 months</p>                   |

(continued)

3.7 PLANT SYSTEMS

3.7.4 Main Control Room Environmental Control (MCREC) System

LCO 3.7.4 Two MCREC subsystems shall be OPERABLE.

-----NOTE-----

The main control room boundary may be opened intermittently under administrative control.

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APPLICABILITY: MODES 1, 2, and 3,  
During movement of irradiated fuel assemblies in the secondary containment,  
During CORE ALTERATIONS,  
During operations with a potential for draining the reactor vessel (OPDRVs).

ACTIONS

| CONDITION   | REQUIRED ACTION                                       | COMPLETION TIME |
|---|---|-----------------|
| A. One MCREC subsystem inoperable.  | A.1 Restore MCREC subsystem to OPERABLE status.       | 7 days          |
| B. Two MCREC subsystems inoperable due to inoperable control room boundary in MODE 1, 2, or 3.    | B.1 Restore control room boundary to OPERABLE status. | 24 hours        |
| C. Required Action and associated Completion Time of Condition A or B not met in MODE 1, 2, or 3. | C.1 Be in MODE 3.                                     | 12 hours        |
|   | <u>AND</u><br>C.2 Be in MODE 4.                       | 36 hours        |

(continued)

ACTIONS (continued)

| CONDITION  | REQUIRED ACTION  | COMPLETION TIME   |
|--|--|---|
| <p>D. Required Action and associated Completion Time of Condition A not met during movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs.</p> | <p>-----NOTE-----<br/>                     LCO 3.0.3 is not applicable.<br/>                     -----</p> <p>D.1 Place OPERABLE MCREC subsystem in pressurization mode.</p> <p><u>OR</u></p> <p>D.2.1 Suspend movement of irradiated fuel assemblies in the secondary containment.</p> <p><u>AND</u></p> <p>D.2.2 Suspend CORE ALTERATIONS.</p> <p><u>AND</u></p> <p>D.2.3 Initiate action to suspend OPDRVs.</p> | <p>Immediately</p> <p>Immediately</p> <p>Immediately</p> <p>Immediately</p> |
| <p>E. Two MCREC subsystems inoperable in MODE 1, 2, or 3 for reasons other than Condition B.</p>   | <p>E.1 Enter LCO 3.0.3.</p>  | <p>Immediately</p>  |

(continued)

ACTIONS (continued)

| CONDITION   | REQUIRED ACTION  | COMPLETION TIME |
|---|--|-----------------|
| F. Two MCREC subsystems inoperable during movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs. | -----NOTE-----<br>LCO 3.0.3 is not applicable.<br>-----                          |                 |
|   | F.1 Suspend movement of irradiated fuel assemblies in the secondary containment. | Immediately     |
|   | <u>AND</u>   |                 |
|   | F.2 Suspend CORE ALTERATIONS.  | Immediately     |
| <u>AND</u>  |  |                 |
| F.3 Initiate action to suspend OPDRVs.  | Immediately  |                 |

SURVEILLANCE REQUIREMENTS

| SURVEILLANCE   | FREQUENCY                   |
|--|-----------------------------|
| SR 3.7.4.1 Operate each MCREC subsystem $\geq$ 15 minutes.   | 31 days                     |
| SR 3.7.4.2 Perform required MCREC filter testing in accordance with the Ventilation Filter Testing Program (VFTP). | In accordance with the VFTP |
| SR 3.7.4.3 Verify each MCREC subsystem actuates on an actual or simulated initiation signal.                       | 18 months                   |

(continued)

3.7 PLANT SYSTEMS

3.7.4 Main Control Room Environmental Control (MCREC) System

LCO 3.7.4 Two MCREC subsystems shall be OPERABLE.

-----NOTE-----

The main control room boundary may be opened intermittently under administrative control.

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APPLICABILITY: MODES 1, 2, and 3,  
 During movement of irradiated fuel assemblies in the secondary containment,  
 During CORE ALTERATIONS,  
 During operations with a potential for draining the reactor vessel (OPDRVs).

ACTIONS

| CONDITION   | REQUIRED ACTION                                       | COMPLETION TIME |
|---|---|-----------------|
| A. One MCREC subsystem inoperable.  | A.1 Restore MCREC subsystem to OPERABLE status.       | 7 days          |
| B. Two MCREC subsystems inoperable due to inoperable control room boundary in MODE 1, 2, or 3.    | B.1 Restore control room boundary to OPERABLE status. | 24 hours        |
| C. Required Action and associated Completion Time of Condition A or B not met in MODE 1, 2, or 3. | C.1 Be in MODE 3.                                     | 12 hours        |
|   | <u>AND</u><br>C.2 Be in MODE 4.                       | 36 hours        |

(continued)

ACTIONS (continued)

| CONDITION  | REQUIRED ACTION  | COMPLETION TIME   |
|--|--|---|
| <p>D. Required Action and associated Completion Time of Condition A not met during movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs.</p> | <p>-----NOTE-----<br/>           LCO 3.0.3 is not applicable.<br/>           -----</p> <p>D.1 Place OPERABLE MCREC subsystem in pressurization mode.</p> <p><u>OR</u></p> <p>D.2.1 Suspend movement of irradiated fuel assemblies in the secondary containment.</p> <p><u>AND</u></p> <p>D.2.2 Suspend CORE ALTERATIONS.</p> <p><u>AND</u></p> <p>D.2.3 Initiate action to suspend OPDRVs.</p> | <p> </p> <p>Immediately  </p> <p>Immediately  </p> <p>Immediately  </p> <p>Immediately  </p> <p>Immediately  </p> |
| <p>E. Two MCREC subsystems inoperable in MODE 1, 2, or 3 for reasons other than Condition B.</p>   | <p>E.1 Enter LCO 3.0.3.</p>  | <p>Immediately  </p>  |

(continued)

ACTIONS (continued)

| CONDITION  | REQUIRED ACTION  | COMPLETION TIME    |
|--|--|--------------------|
| <p>F. Two MCREC subsystems inoperable during movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs.</p> | <p>-----NOTE-----<br/>                     LCO 3.0.3 is not applicable.<br/>                     -----</p> |                    |
|  | <p>F.1 Suspend movement of irradiated fuel assemblies in the secondary containment.</p>                    | <p>Immediately</p> |
|  | <p><u>AND</u></p>  |                    |
|  | <p>F.2 Suspend CORE ALTERATIONS.</p>   | <p>Immediately</p> |
| <p><u>AND</u></p>  |  |                    |
| <p>F.3 Initiate action to suspend OPDRVs.</p>  | <p>Immediately</p>   |                    |

SURVEILLANCE REQUIREMENTS

| SURVEILLANCE  | FREQUENCY                          |
|---|------------------------------------|
| <p>SR 3.7.4.1 Operate each MCREC subsystem <math>\geq</math> 15 minutes.</p>  | <p>31 days</p>                     |
| <p>SR 3.7.4.2 Perform required MCREC filter testing in accordance with the Ventilation Filter Testing Program (VFTP).</p> | <p>In accordance with the VFTP</p> |
| <p>SR 3.7.4.3 Verify each MCREC subsystem actuates on an actual or simulated initiation signal.</p>                       | <p>18 months</p>                   |

(continued)

Enclosure 4

Edwin I. Hatch Nuclear Plant  
Request to Revise Technical Specifications:  
Main Control Room Environmental Control System

Bases Page Change Instructions,  
Marked-Up and Changed Pages

Unit 1

| <u>Page</u> | <u>Instruction</u> |
|-------------|--------------------|
| B 3.7-20    | Replace            |
| B 3.7-21    | Replace            |
| B 3.7-22    | Replace            |
| B 3.7-22a   | Add                |
| B 3.7-22b   | Add                |
| B 3.7-23    | Replace            |

Unit 2

| <u>Page</u> | <u>Instruction</u> |
|-------------|--------------------|
| B 3.7-20    | Replace            |
| B 3.7-21    | Replace            |
| B 3.7-22    | Replace            |
| B 3.7-22a   | Add                |
| B 3.7-22b   | Add                |
| B 3.7-23    | Replace            |

BASES

LCO  
(continued)

- d. One AHU fan is OPERABLE, and either operating or having its control switch in "Standby" with OPERABLE automatic start capability.

OPERABILITY of two MCREC subsystems entails satisfying the requirements listed above for each subsystem and, in addition, satisfying other limitations on AHU fan OPERABILITY. For both MCREC subsystems to be OPERABLE, the two required AHU fans must be independently powered; i.e., one fan via 1R24-S002 and one fan via 1R24-S003. (Note that AHU C is treated as powered from 1R24-S002 or S003, depending upon the source of power for 1R24-S029.) Furthermore, with one of the two required AHU fans inoperable (i.e., not independently powered, or not operating or capable of automatic start), one MCREC subsystem shall be declared inoperable. However, the inoperability may be assigned to either MCREC subsystem. OPERABILITY details for various configurations are outlined in the Technical Requirements Manual (TRM) (Ref. 8), Section 2.0.

In addition, the control room boundary must be maintained, including the integrity of the walls, floors, ceilings, ductwork, and access doors, such that the pressurization limit of SR 3.7.4.4 can be met. ~~However, it is acceptable for access doors to be opened for normal control room entry and exit and not consider it to be a failure to meet the LCO.~~

INSERT  
LCO NOTE  
BASES

Each of the main control room exhaust fan ducts is equipped with only one isolation damper (1Z41-F018A/B). During normal system operation, the dampers are maintained closed. However, when an exhaust fan is operated and its associated damper is opened, a single failure could prevent isolation of that penetration and adversely impact main control room habitability. Consequently, when a MCREC system exhaust fan (1Z41-C012A/B) is operated or its associated damper (1Z41-F018A/B) is opened, one of the two MCREC subsystems must be declared inoperable. Optional allowances for inoperable subsystems do not preclude changing the declared inoperable subsystem to best accommodate other plant circumstances; e.g., inoperable diesel generators, Safety Function Determination Program. However, in these instances, the Condition for one inoperable MCREC subsystem shall not be evaluated for Completion Time extensions, in accordance with Section 1.3.

(continued)

INSERT  
LCO NOTE FOR BASES B 3.7.4

The LCO is modified by a Note allowing the main control room boundary to be opened intermittently under administrative controls. For entry and exit through doors the administrative control of the opening is performed by the person(s) entering or exiting the area. For other openings, these controls consist of stationing a dedicated individual at the opening who is in continuous communication with the main control room. This individual will have a method to rapidly close the opening when a need for main control room isolation is indicated.

BASES (continued)

APPLICABILITY In MODES 1, 2, and 3, the MCREC System must be OPERABLE to control operator exposure during and following a DBA, since the DBA could lead to a fission product release.

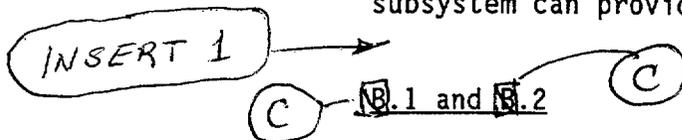
In MODES 4 and 5, the probability and consequences of a DBA are reduced because of the pressure and temperature limitations in these MODES. Therefore, maintaining the MCREC System OPERABLE is not required in MODE 4 or 5, except for the following situations under which significant radioactive releases can be postulated:

- a. During movement of irradiated fuel assemblies in the secondary containment. Moving irradiated fuel assemblies in the secondary containment may also occur in MODES 1, 2, and 3;
- b. During CORE ALTERATIONS; and
- c. During operations with potential for draining the reactor vessel (OPDRVs).

ACTIONS

A.1

With one MCREC subsystem inoperable, the inoperable MCREC subsystem must be restored to OPERABLE status within 7 days. With the unit in this condition, the remaining OPERABLE MCREC subsystem is adequate to perform control room radiation protection. However, the overall reliability is reduced because a single failure in the OPERABLE subsystem could result in reduced MCREC System capability. The 7 day Completion Time is based on the low probability of a DBA occurring during this time period, and that the remaining subsystem can provide the required capabilities.



OR control room boundary

In MODE 1, 2, or 3, if the inoperable MCREC subsystem cannot be restored to OPERABLE status within the associated Completion Time, the unit must be placed in a MODE that minimizes risk. To achieve this status, the unit must be placed in at least MODE 3 within 12 hours and in MODE 4 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the

(continued)

INSERT 1 FOR BASES PAGE B 3.7-21

B.1

If the main control room boundary is inoperable in MODE 1, 2 or 3, the MCREC trains cannot perform their intended functions. Actions must be taken to restore an OPERABLE main control room boundary within 24 hours. During the period that the main control room boundary is inoperable, appropriate compensatory measures (consistent with the intent of GDC 19) will be utilized to provide physical security and to protect control room operators from potential hazards such as radioactive contamination, toxic chemicals, smoke, temperature and relative humidity. Preplanned measures should be available to address these concerns for intentional and unintentional entry into the condition. The 24 hour Completion Time is reasonable based on the low probability of a DBA occurring during this time period, and the use of compensatory measures. The 24 hour Completion Time is a typically reasonable time to diagnose, plan and possibly repair, and test most problems with the main control room boundary.

BASES

ACTIONS

C ~~B.1~~ and ~~A.2~~ <sup>C</sup> (continued)

required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

D ~~C.1~~, D ~~C.2.1~~, D ~~C.2.2~~, and D ~~C.2.3~~

The Required Actions of Condition D are modified by a Note indicating that LCO 3.0.3 does not apply. If moving irradiated fuel assemblies while in MODE 1, 2, or 3, the fuel movement is independent of reactor operations. Therefore, inability to suspend movement of irradiated fuel assemblies is not sufficient reason to require a reactor shutdown.

During movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs, if the inoperable MCREC subsystem cannot be restored to OPERABLE status within the required Completion Time, the OPERABLE MCREC subsystem may be placed in the pressurization mode. This action ensures that the remaining subsystem is OPERABLE, that no failures that would prevent automatic actuation have occurred, and that any active failure will be readily detected.

An alternative to Required Action D 1 is to immediately suspend activities that present a potential for releasing radioactivity that might require isolation of the control room. This places the unit in a condition that minimizes risk.

If applicable, CORE ALTERATIONS and movement of irradiated fuel assemblies in the secondary containment must be suspended immediately. Suspension of these activities shall not preclude completion of movement of a component to a safe position. Also, if applicable, action must be initiated immediately to suspend OPDRVs to minimize the probability of a vessel draindown and the subsequent potential for fission product release. Actions must continue until the OPDRVs are suspended.

(continued)

BASES

ACTIONS  
(continued)

Q.1 E

for reasons other than an inoperable control room boundary (i.e., Condition B)

If both MCREC subsystems are inoperable in MODE 1, 2, or 3, the MCREC System may not be capable of performing the intended function and the unit is in a condition outside the accident analyses. Therefore, LCO 3.0.3 must be entered immediately.

F F F  
R.1, R.2, and R.3

F

The Required Actions of Condition R are modified by a Note indicating that LCO 3.0.3 does not apply. If moving irradiated fuel assemblies while in MODE 1, 2, or 3, the fuel movement is independent of reactor operations.

Therefore, inability to suspend movement of irradiated fuel assemblies is not sufficient reason to require a reactor shutdown.

During movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs, with two MCREC subsystems inoperable, action must be taken immediately to suspend activities that present a potential for releasing radioactivity that might require isolation of the control room. This places the unit in a condition that minimizes risk.

If applicable, CORE ALTERATIONS and movement of irradiated fuel assemblies in the secondary containment must be suspended immediately. Suspension of these activities shall not preclude completion of movement of a component to a safe position. If applicable, action must be initiated immediately to suspend OPDRVs to minimize the probability of a vessel draindown and subsequent potential for fission product release. Actions must continue until the OPDRVs are suspended.

SURVEILLANCE  
REQUIREMENTS

SR 3.7.4.1

This SR verifies that a subsystem in a standby mode starts on demand and continues to operate. Standby systems should be checked periodically to ensure that they start and function properly. As the environmental and normal

(continued)

BASES

LCO  
(continued)

- d. One AHU fan is OPERABLE, and either operating or having its control switch in "Standby" with OPERABLE automatic start capability.

OPERABILITY of two MCREC subsystems entails satisfying the requirements listed above for each subsystem and, in addition, satisfying other limitations on AHU fan OPERABILITY. For both MCREC subsystems to be OPERABLE, the two required AHU fans must be independently powered; i.e., one fan via 1R24-S002 and one fan via 1R24-S003. (Note that AHU C is treated as powered from 1R24-S002 or S003, depending upon the source of power for 1R24-S029.) Furthermore, with one of the two required AHU fans inoperable (i.e., not independently powered, or not operating or capable of automatic start), one MCREC subsystem shall be declared inoperable. However, the inoperability may be assigned to either MCREC subsystem. OPERABILITY details for various configurations are outlined in the Technical Requirements Manual (TRM) (Ref. 8), Section 2.0.

In addition, the control room boundary must be maintained, including the integrity of the walls, floors, ceilings, ductwork, and access doors, such that the pressurization limit of SR 3.7.4.4 can be met. ~~However, it is acceptable for access doors to be opened for normal control room entry and exit and not consider it to be a failure to meet the LCO.~~

INSERT  
LCO NOTE  
BASES

Each of the main control room exhaust fan ducts is equipped with only one isolation damper (1Z41-F018A/B). During normal system operation, the dampers are maintained closed. However, when an exhaust fan is operated and its associated damper is opened, a single failure could prevent isolation of that penetration and adversely impact main control room habitability. Consequently, when a MCREC system exhaust fan (1Z41-C012A/B) is operated or its associated damper (1Z41-F018A/B) is opened, one of the two MCREC subsystems must be declared inoperable. Optional allowances for inoperable subsystems do not preclude changing the declared inoperable subsystem to best accommodate other plant circumstances; e.g., inoperable diesel generators, Safety Function Determination Program. However, in these instances, the Condition for one inoperable MCREC subsystem shall not be evaluated for Completion Time extensions, in accordance with Section 1.3.

(continued)

INSERT  
LCO NOTE FOR BASES B 3.7.4

The LCO is modified by a Note allowing the main control room boundary to be opened intermittently under administrative controls. For entry and exit through doors the administrative control of the opening is performed by the person(s) entering or exiting the area. For other openings, these controls consist of stationing a dedicated individual at the opening who is in continuous communication with the main control room. This individual will have a method to rapidly close the opening when a need for main control room isolation is indicated.

BASES (continued)

APPLICABILITY In MODES 1, 2, and 3, the MCREC System must be OPERABLE to control operator exposure during and following a DBA, since the DBA could lead to a fission product release.

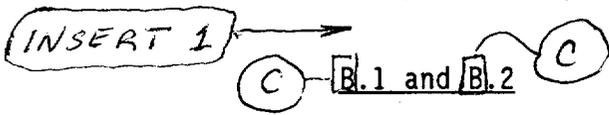
In MODES 4 and 5, the probability and consequences of a DBA are reduced because of the pressure and temperature limitations in these MODES. Therefore, maintaining the MCREC System OPERABLE is not required in MODE 4 or 5, except for the following situations under which significant radioactive releases can be postulated:

- a. During movement of irradiated fuel assemblies in the secondary containment. Moving irradiated fuel assemblies in the secondary containment may also occur in MODES 1, 2, and 3;
- b. During CORE ALTERATIONS; and
- c. During operations with potential for draining the reactor vessel (OPDRVs).

ACTIONS

A.1,

With one MCREC subsystem inoperable, the inoperable MCREC subsystem must be restored to OPERABLE status within 7 days. With the unit in this condition, the remaining OPERABLE MCREC subsystem is adequate to perform control room radiation protection. However, the overall reliability is reduced because a single failure in the OPERABLE subsystem could result in reduced MCREC System capability. The 7 day Completion Time is based on the low probability of a DBA occurring during this time period, and that the remaining subsystem can provide the required capabilities.



*OR control room boundary*

In MODE 1, 2, or 3, if the inoperable MCREC subsystem cannot be restored to OPERABLE status within the associated Completion Time, the unit must be placed in a MODE that minimizes risk. To achieve this status, the unit must be placed in at least MODE 3 within 12 hours and in MODE 4 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the

(continued)

INSERT 1 FOR BASES PAGE B 3.7-21

B.1

If the main control room boundary is inoperable in MODE 1, 2 or 3, the MCREC trains cannot perform their intended functions. Actions must be taken to restore an OPERABLE main control room boundary within 24 hours. During the period that the main control room boundary is inoperable, appropriate compensatory measures (consistent with the intent of GDC 19) will be utilized to provide physical security and to protect control room operators from potential hazards such as radioactive contamination, toxic chemicals, smoke, temperature and relative humidity. Preplanned measures should be available to address these concerns for intentional and unintentional entry into the condition. The 24 hour Completion Time is reasonable based on the low probability of a DBA occurring during this time period, and the use of compensatory measures. The 24 hour Completion Time is a typically reasonable time to diagnose, plan and possibly repair, and test most problems with the main control room boundary.

BASES

ACTIONS

C → R.1 and R.2 C (continued)

required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

D → D D D  
D → R.1, R.2.1, R.2.2, and R.2.3 D

The Required Actions of Condition R are modified by a Note indicating that LCO 3.0.3 does not apply. If moving irradiated fuel assemblies while in MODE 1, 2, or 3, the fuel movement is independent of reactor operations. Therefore, inability to suspend movement of irradiated fuel assemblies is not sufficient reason to require a reactor shutdown.

During movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs, if the inoperable MCREC subsystem cannot be restored to OPERABLE status within the required Completion Time, the OPERABLE MCREC subsystem may be placed in the pressurization mode. This action ensures that the remaining subsystem is OPERABLE, that no failures that would prevent automatic actuation have occurred, and that any active failure will be readily detected.

An alternative to Required Action R.1 is to immediately suspend activities that present a potential for releasing radioactivity that might require isolation of the control room. This places the unit in a condition that minimizes risk.

If applicable, CORE ALTERATIONS and movement of irradiated fuel assemblies in the secondary containment must be suspended immediately. Suspension of these activities shall not preclude completion of movement of a component to a safe position. Also, if applicable, action must be initiated immediately to suspend OPDRVs to minimize the probability of a vessel draindown and the subsequent potential for fission product release. Actions must continue until the OPDRVs are suspended.

(continued)

BASES

ACTIONS  
(continued)

(E) - 1.1

for reasons other than an inoperable control room boundary (i.e., Condition B)

If both MCREC subsystems are inoperable in MODE 1, 2, or 3, the MCREC System may not be capable of performing the intended function and the unit is in a condition outside the accident analyses. Therefore, LCO 3.0.3 must be entered immediately.

(F) (F) (F)  
1.1, 1.2, and 1.3

(F)

The Required Actions of Condition 1 are modified by a Note indicating that LCO 3.0.3 does not apply. If moving irradiated fuel assemblies while in MODE 1, 2, or 3, the fuel movement is independent of reactor operations.

Therefore, inability to suspend movement of irradiated fuel assemblies is not sufficient reason to require a reactor shutdown.

During movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs, with two MCREC subsystems inoperable, action must be taken immediately to suspend activities that present a potential for releasing radioactivity that might require isolation of the control room. This places the unit in a condition that minimizes risk.

If applicable, CORE ALTERATIONS and movement of irradiated fuel assemblies in the secondary containment must be suspended immediately. Suspension of these activities shall not preclude completion of movement of a component to a safe position. If applicable, action must be initiated immediately to suspend OPDRVs to minimize the probability of a vessel draindown and subsequent potential for fission product release. Actions must continue until the OPDRVs are suspended.

SURVEILLANCE  
REQUIREMENTS

SR 3.7.4.1

This SR verifies that a subsystem in a standby mode starts on demand and continues to operate. Standby systems should be checked periodically to ensure that they start and function properly. As the environmental and normal

(continued)

BASES

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LCO  
(continued)

- d. One AHU fan is OPERABLE, and either operating or having its control switch in "Standby" with OPERABLE automatic start capability.

OPERABILITY of two MCREC subsystems entails satisfying the requirements listed above for each subsystem and, in addition, satisfying other limitations on AHU fan OPERABILITY. For both MCREC subsystems to be OPERABLE, the two required AHU fans must be independently powered; i.e., one fan via 1R24-S002 and one fan via 1R24-S003. (Note that AHU C is treated as powered from 1R24-S002 or S003, depending upon the source of power for 1R24-S029.) Furthermore, with one of the two required AHU fans inoperable (i.e., not independently powered, or not operating or capable of automatic start), one MCREC subsystem shall be declared inoperable. However, the inoperability may be assigned to either MCREC subsystem. OPERABILITY details for various configurations are outlined in the Technical Requirements Manual (TRM) (Ref. 8), Section 2.0.

In addition, the control room boundary must be maintained, including the integrity of the walls, floors, ceilings, ductwork, and access doors, such that the pressurization limit of SR 3.7.4.4 can be met.

The LCO is modified by a Note allowing the main control room boundary to be opened intermittently under administrative controls. For entry and exit through doors the administrative control of the opening is performed by the person(s) entering or exiting the area. For other openings, these controls consist of stationing a dedicated individual at the opening who is in continuous communication with the main control room. This individual will have a method to rapidly close the opening when a need for main control room isolation is indicated.

Each of the main control room exhaust fan ducts is equipped with only one isolation damper (1Z41-F018A/B). During normal system operation, the dampers are maintained closed. However, when an exhaust fan is operated and its associated damper is opened, a single failure could prevent isolation of that penetration and adversely impact main control room habitability. Consequently, when a MCREC system exhaust fan (1Z41-C012A/B) is operated or its associated damper (1Z41-F018A/B) is opened, one of the two MCREC subsystems must be declared inoperable. Optional allowances for inoperable subsystems do not preclude changing the declared

(continued)

BASES

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LCO  
(continued)                      inoperable subsystem to best accommodate other plant circumstances; e.g., inoperable diesel generators, Safety Function Determination Program. However, in these instances, the Condition for one inoperable MCREC subsystem shall not be evaluated for Completion Time extensions, in accordance with Section 1.3.

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APPLICABILITY                      In MODES 1, 2, and 3, the MCREC System must be OPERABLE to control operator exposure during and following a DBA, since the DBA could lead to a fission product release.

In MODES 4 and 5, the probability and consequences of a DBA are reduced because of the pressure and temperature limitations in these MODES. Therefore, maintaining the MCREC System OPERABLE is not required in MODE 4 or 5, except for the following situations under which significant radioactive releases can be postulated:

- a. During movement of irradiated fuel assemblies in the secondary containment. Moving irradiated fuel assemblies in the secondary containment may also occur in MODES 1, 2, and 3;
- b. During CORE ALTERATIONS; and
- c. During operations with potential for draining the reactor vessel (OPDRVs).

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ACTIONS

A.1

With one MCREC subsystem inoperable, the inoperable MCREC subsystem must be restored to OPERABLE status within 7 days. With the unit in this condition, the remaining OPERABLE MCREC subsystem is adequate to perform control room radiation protection. However, the overall reliability is reduced because a single failure in the OPERABLE subsystem could result in reduced MCREC System capability. The 7 day Completion Time is based on the low probability of a DBA occurring during this time period, and that the remaining subsystem can provide the required capabilities.

(continued)

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BASES

ACTIONS  
(continued)

B.1

If the main control room boundary is inoperable in MODE 1, 2, or 3, the MCREC trains cannot perform their intended functions. Actions must be taken to restore an OPERABLE main control room boundary within 24 hours. During the period that the main control room boundary is inoperable, appropriate compensatory measures (consistent with the intent of GDC 19) will be utilized to provide physical security and to protect control room operators from potential hazards such as radioactive contamination, toxic chemicals, smoke, temperature and relative humidity. Preplanned measures should be available to address these concerns for intentional and unintentional entry into the condition. The 24 hour Completion Time is reasonable based on the low probability of a DBA occurring during this time period, and the use of compensatory measures. The 24 hour Completion Time is a typically reasonable time to diagnose, plan and possibly repair, and test most problems with the main control room boundary.

C.1 and C.2

In MODE 1, 2, or 3, if the inoperable MCREC subsystem or control room boundary cannot be restored to OPERABLE status within the associated Completion Time, the unit must be placed in a MODE that minimizes risk. To achieve this status, the unit must be placed in at least MODE 3 within 12 hours and in MODE 4 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

D.1, D.2.1, D.2.2, and D.2.3

The Required Actions of Condition D are modified by a Note indicating that LCO 3.0.3 does not apply. If moving irradiated fuel assemblies while in MODE 1, 2, or 3, the fuel movement is independent of reactor operations. Therefore, inability to suspend movement of irradiated fuel assemblies is not sufficient reason to require a reactor shutdown.

(continued)

BASES

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ACTIONS

D.1, D.2.1, D.2.2, and D.2.3 (continued) |

During movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs, if the inoperable MCREC subsystem cannot be restored to OPERABLE status within the required Completion Time, the OPERABLE MCREC subsystem may be placed in the pressurization mode. This action ensures that the remaining subsystem is OPERABLE, that no failures that would prevent automatic actuation have occurred, and that any active failure will be readily detected.

An alternative to Required Action D.1 is to immediately suspend activities that present a potential for releasing radioactivity that might require isolation of the control room. This places the unit in a condition that minimizes risk. |

If applicable, CORE ALTERATIONS and movement of irradiated fuel assemblies in the secondary containment must be suspended immediately. Suspension of these activities shall not preclude completion of movement of a component to a safe position. Also, if applicable, action must be initiated immediately to suspend OPDRVs to minimize the probability of a vessel draindown and the subsequent potential for fission product release. Actions must continue until the OPDRVs are suspended.

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BASES

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(continued)

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BASES

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ACTIONS

E.1

If both MCREC subsystems are inoperable in MODE 1, 2, or 3 for reasons other than an inoperable control room boundary (i.e., Condition B), the MCREC System may not be capable of performing the intended function and the unit is in a condition outside the accident analyses. Therefore, LCO 3.0.3 must be entered immediately.

F.1, F.2, and F.3

The Required Actions of Condition F are modified by a Note indicating that LCO 3.0.3 does not apply. If moving irradiated fuel assemblies while in MODE 1, 2, or 3, the fuel movement is independent of reactor operations.

Therefore, inability to suspend movement of irradiated fuel assemblies is not sufficient reason to require a reactor shutdown.

During movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs, with two MCREC subsystems inoperable, action must be taken immediately to suspend activities that present a potential for releasing radioactivity that might require isolation of the control room. This places the unit in a condition that minimizes risk.

If applicable, CORE ALTERATIONS and movement of irradiated fuel assemblies in the secondary containment must be suspended immediately. Suspension of these activities shall not preclude completion of movement of a component to a safe position. If applicable, action must be initiated immediately to suspend OPDVRs to minimize the probability of a vessel draindown and subsequent potential for fission product release. Actions must continue until the OPDVRs are suspended.

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SURVEILLANCE  
REQUIREMENTS

SR 3.7.4.1

This SR verifies that a subsystem in a standby mode starts on demand and continues to operate. Standby systems should be checked periodically to ensure that they start and function properly. As the environmental and normal

(continued)

BASES

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LCO  
(continued)

- d. One AHU fan is OPERABLE, and either operating or having its control switch in "Standby" with OPERABLE automatic start capability.

OPERABILITY of two MCREC subsystems entails satisfying the requirements listed above for each subsystem and, in addition, satisfying other limitations on AHU fan OPERABILITY. For both MCREC subsystems to be OPERABLE, the two required AHU fans must be independently powered; i.e., one fan via 1R24-S002 and one fan via 1R24-S003. (Note that AHU C is treated as powered from 1R24-S002 or S003, depending upon the source of power for 1R24-S029.) Furthermore, with one of the two required AHU fans inoperable (i.e., not independently powered, or not operating or capable of automatic start), one MCREC subsystem shall be declared inoperable. However, the inoperability may be assigned to either MCREC subsystem. OPERABILITY details for various configurations are outlined in the Technical Requirements Manual (TRM) (Ref. 8), Section 2.0.

In addition, the control room boundary must be maintained, including the integrity of the walls, floors, ceilings, ductwork, and access doors, such that the pressurization limit of SR 3.7.4.4 can be met.

The LCO is modified by a Note allowing the main control room boundary to be opened intermittently under administrative controls. For entry and exit through doors the administrative control of the opening is performed by the person(s) entering or exiting the area. For other openings, these controls consist of stationing a dedicated individual at the opening who is in continuous communication with the main control room. This individual will have a method to rapidly close the opening when a need for main control room isolation is indicated.

Each of the main control room exhaust fan ducts is equipped with only one isolation damper (1Z41-F018A/B). During normal system operation, the dampers are maintained closed. However, when an exhaust fan is operated and its associated damper is opened, a single failure could prevent isolation of that penetration and adversely impact main control room habitability. Consequently, when a MCREC system exhaust fan (1Z41-C012A/B) is operated or its associated damper (1Z41-F018A/B) is opened, one of the two MCREC subsystems must be declared inoperable. Optional allowances for inoperable subsystems do not preclude changing the declared

(continued)

BASES

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LCO  
(continued)                      inoperable subsystem to best accommodate other plant circumstances; e.g., inoperable diesel generators, Safety Function Determination Program. However, in these instances, the Condition for one inoperable MCREC subsystem shall not be evaluated for Completion Time extensions, in accordance with Section 1.3.

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APPLICABILITY                      In MODES 1, 2, and 3, the MCREC System must be OPERABLE to control operator exposure during and following a DBA, since the DBA could lead to a fission product release.

In MODES 4 and 5, the probability and consequences of a DBA are reduced because of the pressure and temperature limitations in these MODES. Therefore, maintaining the MCREC System OPERABLE is not required in MODE 4 or 5, except for the following situations under which significant radioactive releases can be postulated:

- a. During movement of irradiated fuel assemblies in the secondary containment. Moving irradiated fuel assemblies in the secondary containment may also occur in MODES 1, 2, and 3;
- b. During CORE ALTERATIONS; and
- c. During operations with potential for draining the reactor vessel (OPDRVs).

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ACTIONS

A.1

With one MCREC subsystem inoperable, the inoperable MCREC subsystem must be restored to OPERABLE status within 7 days. With the unit in this condition, the remaining OPERABLE MCREC subsystem is adequate to perform control room radiation protection. However, the overall reliability is reduced because a single failure in the OPERABLE subsystem could result in reduced MCREC System capability. The 7 day Completion Time is based on the low probability of a DBA occurring during this time period, and that the remaining subsystem can provide the required capabilities.

(continued)

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BASES

ACTIONS  
(continued)

B.1

If the main control room boundary is inoperable in MODE 1, 2, or 3, MCREC trains cannot perform their intended functions. Actions must be taken to restore an OPERABLE main control room boundary within 24 hours. During the period that the main control room boundary is inoperable, appropriate compensatory measures (consistent with the intent of GDC 19) will be utilized to provide physical security and to protect control room operators from potential hazards such as radioactive contamination, toxic chemicals, smoke, temperature and relative humidity. Preplanned measures should be available to address these concerns for intentional and unintentional entry into the condition. The 24 hour Completion Time is reasonable based on the low probability of a DBA occurring during this time period, and the use of compensatory measures. The 24 hour Completion Time is a typically reasonable time to diagnose, plan and possibly repair, and test most problems with the main control room boundary.

C.1 and C.2

In MODE 1, 2, or 3, if the inoperable MCREC subsystem or control room boundary cannot be restored to OPERABLE status within the associated Completion Time, the unit must be placed in a MODE that minimizes risk. To achieve this status, the unit must be placed in at least MODE 3 within 12 hours and in MODE 4 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

D.1, D.2.1, D.2.2, and D.2.3

The Required Actions of Condition D are modified by a Note indicating that LCO 3.0.3 does not apply. If moving irradiated fuel assemblies while in MODE 1, 2, or 3, the fuel movement is independent of reactor operations. Therefore, inability to suspend movement of irradiated fuel assemblies is not sufficient reason to require a reactor shutdown.

(continued)

BASES

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ACTIONS

D.1, D.2.1, D.2.2, and D.2.3 (continued) |

During movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs, if the inoperable MCREC subsystem cannot be restored to OPERABLE status within the required Completion Time, the OPERABLE MCREC subsystem may be placed in the pressurization mode. This action ensures that the remaining subsystem is OPERABLE, that no failures that would prevent automatic actuation have occurred, and that any active failure will be readily detected.

An alternative to Required Action D.1 is to immediately suspend activities that present a potential for releasing radioactivity that might require isolation of the control room. This places the unit in a condition that minimizes risk. |

If applicable, CORE ALTERATIONS and movement of irradiated fuel assemblies in the secondary containment must be suspended immediately. Suspension of these activities shall not preclude completion of movement of a component to a safe position. Also, if applicable, action must be initiated immediately to suspend OPDRVs to minimize the probability of a vessel draindown and the subsequent potential for fission product release. Actions must continue until the OPDRVs are suspended.

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BASES

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(continued)

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BASES

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ACTIONS  
(continued)

E.1

If both MCREC subsystems are inoperable in MODE 1, 2, or 3 for reasons other than an inoperable control room boundary (i.e., Condition B), the MCREC System may not be capable of performing the intended function and the unit is in a condition outside the accident analyses. Therefore, LCO 3.0.3 must be entered immediately.

F.1, F.2, and F.3

The Required Actions of Condition F are modified by a Note indicating that LCO 3.0.3 does not apply. If moving irradiated fuel assemblies while in MODE 1, 2, or 3, the fuel movement is independent of reactor operations.

Therefore, inability to suspend movement of irradiated fuel assemblies is not sufficient reason to require a reactor shutdown.

During movement of irradiated fuel assemblies in the secondary containment, during CORE ALTERATIONS, or during OPDRVs, with two MCREC subsystems inoperable, action must be taken immediately to suspend activities that present a potential for releasing radioactivity that might require isolation of the control room. This places the unit in a condition that minimizes risk.

If applicable, CORE ALTERATIONS and movement of irradiated fuel assemblies in the secondary containment must be suspended immediately. Suspension of these activities shall not preclude completion of movement of a component to a safe position. If applicable, action must be initiated immediately to suspend OPDRVs to minimize the probability of a vessel draindown and subsequent potential for fission product release. Actions must continue until the OPDRVs are suspended.

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SURVEILLANCE  
REQUIREMENTS

SR 3.7.4.1

This SR verifies that a subsystem in a standby mode starts on demand and continues to operate. Standby systems should be checked periodically to ensure that they start and function properly. As the environmental and normal

(continued)