

August 30, 2004

TSTF-04-11

Thomas H. Boyce, Section Chief  
Technical Specifications Section  
Reactor Operations Branch  
Division of Inspection Program Management  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

SUBJECT: TSTF-477, Revision 0, "Add Action for Two Inoperable Control Room AC Subsystems"

Dear Mr. Boyce:

Enclosed for NRC review is Revision 0 of TSTF-477, Revision 0, "Add Action for Two Inoperable Control Room AC Subsystems."

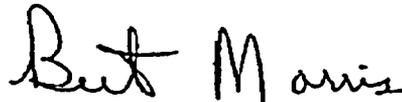
TSTF-477 provides a Condition for two inoperable control room air conditioning systems. This allowance currently exists in the plant specific Technical Specifications for all BWR/6 plants.

Any NRC review fees associated with the review of TSTF-477, Revision 0 should be billed to the Boiling Water Reactors Owners Group.

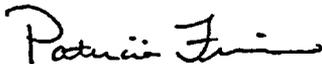
Should you have any questions, please do not hesitate to contact us.



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Enclosure



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## Technical Specification Task Force

### Improved Standard Technical Specifications Change Traveler

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#### Add Action for Two Inoperable Control Room AC Subsystems

NUREGs Affected:  1430  1431  1432  1433  1434

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Classification: 1) Technical Change

Recommended for CLIIP?: Yes

Correction or Improvement: Improvement

NRC Fee Status: Not Exempt

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Industry Contact: Bert Morris, (256) 729-7909, bcmorris3@tva.gov

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#### 1.0 Description

The Actions of the [Control Room AC] System Technical Specification are revised to provide a new Action for both [control room AC] subsystems inoperable. The new Action allows 7 days to restore one [control room AC] subsystem to operable status and requires verification that control room temperature is maintained  $\leq$  [90]F once every 4 hours.

#### 2.0 Proposed Change

BWR/4 (NUREG-1433) Specification 3.7.5, [Control Room AC] System, and BWR/6 (NUREG-1434) Specification 3.7.4, [Control Room AC] System are revised to add a new Action B. Action B applies when two [control room AC] subsystems are inoperable. Required Action B.1 requires verification once per 4 hours that control room area temperature is  $\leq$  [90] F. Required Action B.2 requires restoration of one [control room AC] subsystem to operable status within 7 days.

Action B, now renamed Action C, which applies when the Required Action and associated Completion Time of Condition A (one [control room AC] subsystem inoperable) is not met in MODES 1, 2, or 3, is revised to also be applicable when the Required Actions and associated Completion Times of Condition B are not met. Renumbered Condition C requires being in Mode 3 in 12 hours and Mode 4 in 36 hours.

Action D, which applied when two [control room AC] subsystems are inoperable in MODE 1, 2, or 3, and requires entry into LCO 3.0.3, is deleted.

Action E, which applies when two [control room AC] subsystems are inoperable during movement of [recently] irradiated fuel assemblies in the [secondary] containment or during OPDRVs, is revised to be applicable when the Required Actions and associated Completion Times of Condition B are not met.

The Bases are revised to reflect the changes to the Specifications.

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### **3.0 Background**

The [Control Room AC] System provides temperature control for the control room following isolation of the control room. The [Control Room AC] System consists of two independent, redundant subsystems that provide cooling and heating of recirculated control room air. Each subsystem consists of heating coils, cooling coils, fans, chillers, compressors, ductwork, dampers, and instrumentation and controls to provide for control room temperature control.

The [Control Room AC] System is designed to provide a controlled environment under both normal and accident conditions. The design basis of the [Control Room AC] System is to maintain the control room temperature for a 30 day continuous occupancy. During emergency operation, the [Control Room AC] System maintains a habitable environment and ensures the OPERABILITY of components in the control room.

### **4.0 Technical Analysis**

A recent survey of BWR plants determined that the Technical Specifications of all of the BWR/6 plants (Grand Gulf, River Bend, Clinton, and Perry) contain an Action for two [control room AC] subsystems inoperable that allows 7 days to restore an inoperable system and requires verification that the control room temperature is within a temperature limit every 4 hours. This action was added during conversion to the ITS. Therefore, the changes to the BWR/6 NUREG are considered administrative, intended to have the BWR/6 Standard Technical Specifications reflect the plant-specific specifications of all of the BWR/6 plants.

This change approved for the BWR/6 plants is also expanded to be applicable to the BWR/4 plants. There are no significant design or operational differences between the BWR/4 and BWR/6 [control room AC] systems. There are no differences in the BWR/4 or BWR/6 accident analysis assumptions regarding the [control room AC] system. Therefore, there should be no difference in the TS requirements for these systems.

With one [control room AC] subsystem inoperable, 30 days is provided to restore the inoperable subsystem. Technical Specifications with 30 day Completion Times for one inoperable train typically provide a finite time to restore one train when both trains are inoperable. Examples are:

- Post Accident Monitoring,
- Penetration Valve Leakage Control System (PVLCS),
- Main Steam Isolation Valve (MSIV) Leakage Control System (LCS),
- Primary Containment and Drywell Hydrogen Igniters, [ Drywell Purge System ],
- [Drywell Cooling System Fans],
- Containment Atmosphere Dilution (CAD) System,
- Residual Heat Removal Service Water (RHRSW) System, and
- [Plant Service Water (PSW)] System and [Ultimate Heat Sink (UHS)].

The requirement to monitor control room temperature ensures the environment for the control room equipment is maintained with the design limits. Provided that temperature may be maintained within the design limits, 7 days is allowed to restore one [control room AC] subsystem. The 7 day Completion Time is reasonable considering that control room temperature is being maintained within limits and the low probability of an event occurring that would require control room isolation.

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## 5.0 Regulatory Analysis

### 5.1 No Significant Hazards Consideration

The TSTF has evaluated whether or not a significant hazards consideration is involved with the proposed generic change by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

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

Response: No.

The proposed change allows 7 days to restore an inoperable [control room AC] subsystem when both subsystems are inoperable provided temperature is verified to be within the design limits every 4 hours. The [control room AC] system is not an initiator of any accident previously evaluated. As a result, the probability of any accident previously evaluated is not significantly increased. The consequences of any accident previously evaluated during the requested Completion Time are no different that that accident during the current Completion Time. As a result, the consequences of any accident previously evaluated are not significantly increased.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

Response: No.

No new or different accidents result from utilizing the proposed change. The changes do not involve a physical alteration of the plant (i.e., no new or different type of equipment will be installed) or a change in the methods governing normal plant operation. In addition, the changes do not impose any new or different requirements. The changes do not alter assumptions made in the safety analysis. The proposed changes are consistent with the safety analysis assumptions.

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

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

Response: No.

The proposed change allows 7 days to restore an inoperable [control room AC] subsystem when both subsystems are inoperable provided temperature is verified to be within the design limits every 4 hours. The requirement to monitor control room temperature ensures the environment for the control room equipment is maintained with the design limits. Provided that temperature may be maintained within the design limits, the 7 day Completion Time to restore one [control room AC] subsystem will not cause a significant reduction in the margin of safety considering that control room temperature is being maintained within limits, the low probability of an event occurring that would require control room isolation, and the availability of alternate cooling methods.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

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Based on the above, the TSTF concludes that the proposed change presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

## **5.2 Applicable Regulatory Requirements/Criteria**

The operability requirements of the [control room AC] system have not changed. The regulatory requirements do not specifically address Completion Times with inoperable systems. As a result, the regulatory requirements and criteria are not affected by the proposed change.

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the approval of the proposed change will not be inimical to the common defense and security or to the health and safety of the public.

## **6.0 Environmental Consideration**

A review has determined that the proposed change would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed change does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed change meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed change.

## **7.0 References**

None

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## **Revision History**

### **OG Revision 0**

**Revision Status: Active**

Revision Proposed by: BWROG

Revision Description:  
Original Issue

### **Owners Group Review Information**

Date Originated by OG: 10-May-04

Owners Group Comments:  
(No Comments)

Owners Group Resolution: Approved Date: 10-May-04

### **TSTF Review Information**

30-Aug-04

**OG Revision 0****Revision Status: Active**

TSTF Received Date: 19-Jun-04 Date Distributed for Review: 19-Jun-04

OG Review Completed:  BWOG  WOG  CEOG  BWROG

TSTF Comments:

(No Comments)

TSTF Resolution: Approved

Date: 25-Aug-04

**NRC Review Information**

NRC Received Date: 30-Aug-04

**Affected Technical Specifications**

Action 3.7.5.B	[Control Room AC] System Change Description: Renumbered C	NUREG(s)- 1433 Only
Action 3.7.5.B	[Control Room AC] System Change Description: New Action	NUREG(s)- 1433 Only
Action 3.7.5.B Bases	[Control Room AC] System Change Description: New Action	NUREG(s)- 1433 Only
Action 3.7.5.B Bases	[Control Room AC] System Change Description: Renumbered C	NUREG(s)- 1433 Only
Action 3.7.5.C	[Control Room AC] System Change Description: Renumbered D	NUREG(s)- 1433 Only
Action 3.7.5.C Bases	[Control Room AC] System Change Description: Renumbered D	NUREG(s)- 1433 Only
Action 3.7.5.D	[Control Room AC] System Change Description: Action deleted	NUREG(s)- 1433 Only
Action 3.7.5.D Bases	[Control Room AC] System Change Description: Action deleted	NUREG(s)- 1433 Only
Action 3.7.5.E	[Control Room AC] System	NUREG(s)- 1433 Only
Action 3.7.5.E Bases	[Control Room AC] System	NUREG(s)- 1433 Only
Action 3.7.4.B	[Control Room AC] System Change Description: Renumbered C	NUREG(s)- 1434 Only

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Action 3.7.4.B	[Control Room AC] System Change Description: New Action	NUREG(s)- 1434 Only
Action 3.7.4.B Bases	[Control Room AC] System Change Description: New Action	NUREG(s)- 1434 Only
Action 3.7.4.B Bases	[Control Room AC] System Change Description: Renumbered C	NUREG(s)- 1434 Only
Action 3.7.4.C	[Control Room AC] System Change Description: Renumbered D	NUREG(s)- 1434 Only
Action 3.7.4.C Bases	[Control Room AC] System Change Description: Renumbered D	NUREG(s)- 1434 Only
Action 3.7.4.D	[Control Room AC] System Change Description: Action deleted	NUREG(s)- 1434 Only
Action 3.7.4.D Bases	[Control Room AC] System Change Description: Action deleted	NUREG(s)- 1434 Only
Action 3.7.4.E	[Control Room AC] System	NUREG(s)- 1434 Only
Action 3.7.4.E Bases	[Control Room AC] System	NUREG(s)- 1434 Only

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Insert 1

B. Two [control room AC] subsystems inoperable.	B.1	Verify control room area temperature $\leq$ [90]°F.	Once per 4 hours
	<u>AND</u>		
	B.2	Restore one [control room AC] subsystem to OPERABLE status.	7 days

Insert 2B.1 and B.2

If both [control room AC] subsystems are inoperable, the [Control Room AC] System may not be capable of performing its intended function. Therefore, the control room area temperature is required to be monitored to ensure that temperature is being maintained low enough that equipment in the control room is not adversely affected. With the control room temperature being maintained within the temperature limit, 7 days is allowed to restore a [control room AC] subsystem to OPERABLE status. This Completion time is reasonable considering that the control room temperature is being maintained within limits and the low probability of an event occurring requiring control room isolation.

3.7 PLANT SYSTEMS

3.7.5 [Control Room Air Conditioning (AC)] System

LCO 3.7.5 Two [control room AC] subsystems shall be OPERABLE.

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

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One [control room AC] subsystem inoperable.	A.1 Restore [control room AC] subsystem to OPERABLE status.	30 days
<i>Insert 1</i> cβ. Required Action and associated Completion Time of Condition A not met in MODE 1, 2, or 3.	cβ.1 Be in MODE 3. <u>AND</u> cβ.2 Be in MODE 4.	12 hours  36 hours
D β. Required Action and associated Completion Time of Condition A not met during movement of [recently] irradiated fuel assemblies in the [secondary] containment or during OPDRVs.	-----NOTE----- LCO 3.0.3 is not applicable. ----- φ.1 Place OPERABLE [control room AC] subsystem in operation. <u>OR</u>	Immediately

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
	<sup>D</sup> <del>3.2.1</del> Suspend movement of [recently] irradiated fuel assemblies in the [secondary] containment.  AND <sup>D</sup> <del>3.2.2</del> Initiate action to suspend OPDRVs.	Immediately   Immediately
<del>D. Two [control room AC] subsystems inoperable in MODE 1, 2, or 3.</del>	<del>D.1 Enter LCO 3.0.3.</del>	<del>Immediately</del>
E. Two [control room AC] subsystems inoperable during movement of [recently] irradiated fuel assemblies in the [secondary] containment or during OPDRVs.	-----NOTE----- LCO 3.0.3 is not applicable. ----- E.1 Suspend movement of [recently] irradiated fuel assemblies in the [secondary] containment.  AND E.2 Initiate actions to suspend OPDRVs.	Immediately   Immediately

Required Action and associated Completion Time of Condition B not met

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.5.1 Verify each [control room AC] subsystem has the capability to remove the assumed heat load.	[18] months

BASES

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LCO

Two independent and redundant subsystems of the [Control Room AC] System are required to be OPERABLE to ensure that at least one is available, assuming a single failure disables the other subsystem. Total system failure could result in the equipment operating temperature exceeding limits.

The [Control Room AC] System is considered OPERABLE when the individual components necessary to maintain the control room temperature are OPERABLE in both subsystems. These components include the cooling coils, fans, chillers, compressors, ductwork, dampers, and associated instrumentation and controls.

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APPLICABILITY

In MODE 1, 2, or 3, the [Control Room AC] System must be OPERABLE to ensure that the control room temperature will not exceed equipment OPERABILITY limits following control room isolation.

In MODES 4 and 5, the probability and consequences of a Design Basis Accident are reduced due to the pressure and temperature limitations in these MODES. Therefore, maintaining the [Control Room AC] 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 operations with a potential for draining the reactor vessel (OPDRVs) and
  - b. During movement of [recently] irradiated fuel assemblies in the [secondary] containment. [Due to radioactive decay, the Control Room AC System is only required to be OPERABLE during fuel handling involving handling recently irradiated fuel (i.e., fuel that has occupied part of a critical reactor core within the previous [X] days).]
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ACTIONS

A.1

With one [control room AC] subsystem inoperable, the inoperable [control room AC] subsystem must be restored to OPERABLE status within 30 days. With the unit in this condition, the remaining OPERABLE [control room AC] subsystem is adequate to perform the control room air conditioning function. However, the overall reliability is reduced because a single failure in the OPERABLE subsystem could result in loss of the control room air conditioning function. The 30 day Completion Time is based on the low probability of an event occurring requiring control room isolation, the consideration that the remaining subsystem can provide the required protection, and the availability of alternate safety and nonsafety cooling methods.

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BASES

ACTIONS (continued)

Insert 2

<sup>C</sup>  
~~C~~ 1 and ~~B~~ 2

(S)

In MODE 1, 2, or 3, if the inoperable [control room AC] 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 required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

<sup>D</sup> ~~C~~.1, <sup>D</sup> ~~C~~.2.1, and <sup>D</sup> ~~C~~.2.2

D

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

During movement of [recently] irradiated fuel assemblies in the [secondary] containment or during OPDRVs, if Required Action A.1 cannot be completed within the required Completion Time, the OPERABLE [control room AC] subsystem may be placed immediately in operation. This action ensures that the remaining subsystem is OPERABLE, that no failures that would prevent actuation will occur, and that any active failure will be readily detected.

D

An alternative to Required Action ~~C~~.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, movement of [recently] 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, actions 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.

BASES

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ACTIONS (continued)

D.1

If both [control room AC] subsystems are inoperable in MODE 1, 2, or 3, the [Control Room AC] System may not be capable of performing the intended function. Therefore, LCO 3.0.3 must be entered immediately.

E.1 and E.2

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

*if Required  
Actions B.1 and  
B.2 cannot be  
completed within  
the required  
Completion Times*

During movement of [recently] irradiated fuel assemblies in the [secondary] containment or during OPDRVs, with two [control room AC] 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, handling of [recently] irradiated fuel 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, actions 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 3.7.5.1

This SR verifies that the heat removal capability of the system is sufficient to remove the control room heat load assumed in the [safety analyses]. The SR consists of a combination of testing and calculation. The [18] month Frequency is appropriate since significant degradation of the [Control Room AC] System is not expected over this time period.

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REFERENCES

1. FSAR, Section [6.4].
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3.7 PLANT SYSTEMS

3.7.4 [Control Room Air Conditioning (AC)] System

LCO 3.7.4 Two [control room AC] subsystems shall be OPERABLE.

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

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One [control room AC] subsystem inoperable.	A.1 Restore [control room AC] subsystem to OPERABLE status.	30 days
<i>Insert 1</i> <del>C</del> B. Required Action and associated Completion Time of Condition A, not met in MODE 1, 2, or 3. <i>or B</i>	<del>C</del> β.1 Be in MODE 3. <u>AND</u> <del>C</del> β.2 Be in MODE 4.	12 hours  36 hours
<del>D</del> ϕ. Required Action and associated Completion Time of Condition A not met during movement of [recently] irradiated fuel assemblies in the [primary or secondary containment] or during OPDRVs.	-----NOTE----- LCO 3.0.3 is not applicable. <del>D</del> <del>ϕ</del> .1 Place OPERABLE [control room AC] subsystem in operation.  <u>OR</u>	Immediately

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
	<p><sup>D</sup>                      §.2.1 Suspend movement of [recently] irradiated fuel assemblies in the [primary and secondary containment].</p> <p><u>AND</u></p> <p><sup>D</sup>                      §.2.2 Initiate action to suspend OPDRVs.</p>	<p>Immediately</p> <p>Immediately</p>
<p><del>D. Two [control room AC] subsystems inoperable in MODE 1, 2, or 3.</del></p>	<p><del>D.1 Enter LCO 3.0.3.</del></p>	<p><del>Immediately</del></p>
<p>E. <del>Two [control room AC] subsystems inoperable during movement of [recently] irradiated fuel assemblies in the [primary or secondary containment] or during OPDRVs.</del></p> <p><i>Required Action and associated Completion Time of Condition B not met</i></p>	<p>-----NOTE-----                      LCO 3.0.3 is not applicable.</p> <p>E.1 Suspend movement of [recently] irradiated fuel assemblies in the [primary and secondary containment].</p> <p><u>AND</u></p> <p>E.2 Initiate action to suspend OPDRVs.</p>	<p>Immediately</p> <p>Immediately</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.7.4.1 Verify each [control room AC] subsystem has the capability to remove the assumed heat load.</p>	<p>[18] months</p>

BASES

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LCO

Two independent and redundant subsystems of the [Control Room AC] System are required to be OPERABLE to ensure that at least one is available, assuming a single failure disables the other subsystem. Total system failure could result in the equipment operating temperature exceeding limits.

The [Control Room AC] System is considered OPERABLE when the individual components necessary to maintain the control room temperature are OPERABLE in both subsystems. These components include the cooling coils, fans, chillers, compressors, ductwork, dampers, and associated instrumentation and controls.

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APPLICABILITY

In MODE 1, 2, or 3, the [Control Room AC] System must be OPERABLE to ensure that the control room temperature will not exceed equipment OPERABILITY limits following control room isolation.

In MODES 4 and 5, the probability and consequences of a Design Basis Accident are reduced due to the pressure and temperature limitations in these MODES. Therefore, maintaining the [Control Room AC] 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 operations with a potential for draining the reactor vessel (OPDRVs) and
  - b. During movement of [recently] irradiated fuel assemblies in the [primary or secondary containment]. [Due to radioactive decay, the Control Room AC System is only required to be OPERABLE during fuel handling involving handling recently irradiated fuel (i.e., fuel that has occupied part of a critical reactor core within the previous [X] days).]
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ACTIONS

A.1

With one [control room AC] subsystem inoperable, the inoperable [control room AC] subsystem must be restored to OPERABLE status within 30 days. With the unit in this condition, the remaining OPERABLE [control room AC] subsystem is adequate to perform the control room air conditioning function. However, the overall reliability is reduced because a single failure in the OPERABLE subsystem could result in loss of the control room air conditioning function. The 30 day Completion Time is based on the low probability of an event occurring requiring control room isolation, the consideration that the remaining subsystem can provide the required protection, and the availability of alternate cooling methods.

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## BASES

## ACTIONS (continued)

Insert 2

B.1 and B.2

(CS)

In MODE 1, 2, or 3, if the inoperable [control room AC] 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 required unit conditions from full power conditions in an orderly manner and without challenging unit systems.

<sup>D</sup> <sup>D</sup>  
D 3.0.1, 3.0.2.1, and 3.0.2.2

D

The Required Actions of Condition  $\phi$  are modified by a Note indicating that LCO 3.0.3 does not apply.

If moving [recently] irradiated fuel assemblies while in MODE 1, 2, or 3, the fuel movement is independent of reactor operations. Therefore, inability to suspend movement of [recently] irradiated fuel assemblies is not sufficient reason to require a reactor shutdown.

During movement of [recently] irradiated fuel assemblies in the [primary or secondary containment] or during OPDRVs, if Required Action A.1 cannot be completed within the required Completion Time, the OPERABLE [control room AC] subsystem may be placed immediately in operation. This action ensures that the remaining subsystem is OPERABLE, that no failures that would prevent actuation will occur, and that any active failure will be readily detected.

An alternative to Required Action  $\phi$ .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, movement of [recently] irradiated fuel assemblies in the [primary and 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, actions 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.

## BASES

## ACTIONS (continued)

D.1

If both [control room AC] subsystems are inoperable in MODE 1, 2, or 3, the [Control Room AC] System may not be capable of performing the intended function. Therefore, LCO 3.0.3 must be entered immediately.

E.1 and E.2

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

During movement of [recently] irradiated fuel assemblies in the [primary or secondary containment] or during OPDRVs ~~with two [control room AC] subsystems inoperable~~, action must be taken 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, handling of [recently] irradiated fuel in the [primary or 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, actions 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.

if Required  
Actions B.1 and  
B.2 cannot be  
completed within  
the required  
Completion Times

SURVEILLANCE  
REQUIREMENTSSR 3.7.4.1

This SR verifies that the heat removal capability of the system is sufficient to remove the control room heat load assumed in the [safety analyses]. The SR consists of a combination of testing and calculation. The [18] month Frequency is appropriate since significant degradation of the [Control Room AC] System is not expected over this time period.

## REFERENCES

1. FSAR, Section [6.4].
2. FSAR, Section [9.4.1].

Insert 1

B. Two [control room AC] subsystems inoperable.	B.1	Verify control room area temperature $\leq$ [90]°F.	Once per 4 hours
	<u>AND</u>		
	B.2	Restore one [control room AC] subsystem to OPERABLE status.	7 days

Insert 2B.1 and B.2

If both [control room AC] subsystems are inoperable, the [Control Room AC] System may not be capable of performing its intended function. Therefore, the control room area temperature is required to be monitored to ensure that temperature is being maintained low enough that equipment in the control room is not adversely affected. With the control room temperature being maintained within the temperature limit, 7 days is allowed to restore a [control room AC] subsystem to OPERABLE status. This Completion time is reasonable considering that the control room temperature is being maintained within limits and the low probability of an event occurring requiring control room isolation.