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Detroit Edison



A DTE Energy Company

10CFR50.90

June 11, 2002
NRC-02-0044

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

- References:
- 1) Fermi 2
NRC Docket No. 50-341
NRC License No. NPF-43
 2. Detroit Edison letter to NRC, "Proposed License Amendment to Revise Technical Specifications for the Control Room Emergency Filtration (CREF) System," dated August 24, 2001
 3. NRC letter to Detroit Edison, "Fermi 2 Issuance of Amendment Re: Reevaluation of Fuel Handling Accident, Selective Implementation of 10 CFR Part 50.67," dated September 28, 2001

Subject: Response to the Request for Additional Information Concerning Technical Specification Change Request Related to the Control Room Emergency Filtration (CREF) System (TAC No. MB 2832)

On March 1, 2002, a teleconference between Detroit Edison and the NRC was conducted to discuss questions the NRC had pertaining to a Technical Specification change request for the Control Room Emergency Filtration (CREF) System (Reference 2). Detroit Edison's response to these questions, as discussed during the

A003

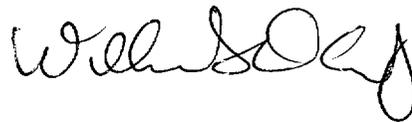
teleconference, is attached. A revised mark-up and a typed copy are also attached. The mark-up is identical to the one submitted in Reference 2, with the exception that it is made using the most recently issued Technical Specification pages (Amendment 144 pages rather than Amendment 134 pages). License Amendment 144, concerning "recently" irradiated fuel, was received from the NRC after Detroit Edison submitted the present Technical Specification change request (Reference 2).

The following commitment is being made in this letter. It replaces the commitment made in Reference 2:

Compensatory measures to address the breach of the control room pressure boundary at Fermi 2 will be implemented via administrative controls. When the control room pressure boundary is opened intermittently under administrative control for other than normal entry through doors, a dedicated individual will be stationed in the area. This individual will establish communications with the control room and will be able to rapidly restore the pressure boundary if needed. If the pressure boundary is inoperable, requiring entry into proposed new Condition B for LCO 3.7.3, compensatory measures such as operating one CREF subsystem and/or use of the self-contained breathing apparatus equipment will be implemented via administrative controls. The measures necessary to ensure physical security will also be addressed.

Should you have any questions or require additional information, please contact Mr. Norman K. Peterson of my staff at (734) 586-4258.

Sincerely,



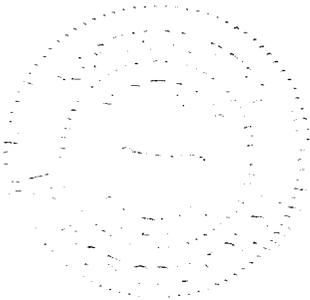
Attachments

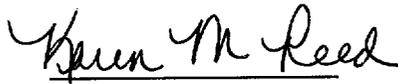
cc: T. J. Kim
M. A. Ring
NRC Resident Office
Regional Administrator, Region III
Supervisor, Electric Operators,
Michigan Public Service Commission

I, WILLIAM T. O'CONNOR, JR., do hereby affirm that the foregoing statements are based on facts and circumstances which are true and accurate to the best of my knowledge and belief.


WILLIAM T. O'CONNOR, JR.
Vice President - Nuclear Generation

On this 11th day of June, 2002 before me personally appeared William T. O'Connor, Jr., being first duly sworn and says that he executed the foregoing as his free act and deed.




Notary Public

KAREN M. REED
Notary Public, Monroe County, MI
My Commission Expires 09/02/2005

Response to Request for Additional Information

Question 1:

Clarify the proposed administrative controls for intermittently opening the control room boundary.

Response to Question 1:

Detroit Edison's submittal (Reference 2) stated that "Compensatory measures to address the breach of the control room pressure boundary will be implemented via administrative controls. When the control room pressure boundary is opened intermittently under administrative control for other than normal entry through doors, a dedicated individual will be stationed in the area. This individual will establish communications with the control room and will be able to rapidly restore the pressure boundary if needed." We clarified in the phone conversation with the NRC reviewer that this applies to situations in which the control room pressure boundary can be restored in a reasonable period of time. An example of this would be a situation in which the control room door had to be held open for a period of time in order to move equipment in or out of the control room.

Question 2:

Where are the control room dose analyses showing compliance with 10 CFR 50, Appendix A, General Design Criteria (GDC)-19, "Control Room" located?

Response to Question 2:

The control room dose analyses are presented in the Updated Final Safety Analysis Report (UFSAR), Chapter 15A.2.

Question 3:

Why does the commitment for compensatory measures when in proposed Action B preclude fuel movement, now that the NRC has granted License Amendment 144 (Reference 3), concerning recently irradiated fuel and fuel movement?

Response to Question 3:

The commitment made in Reference 2 was made prior to the granting of License Amendment 144 (Reference 3), and read as follows:

Compensatory measures to address the breach of the control room pressure boundary at Fermi 2 will be implemented via administrative controls. When the control room pressure boundary is opened intermittently under administrative control for other than normal entry through doors, a dedicated individual will be stationed in the area. This individual will establish communications with the control room and will be able to rapidly restore the pressure boundary if needed. If the pressure boundary is inoperable, requiring entry into proposed new Condition B for LCO 3.7.3, compensatory measures such as operating one CREF subsystem and/or use of the self-contained breathing apparatus equipment will be implemented via administrative controls. Administrative controls will be devised to prohibit movement of irradiated fuel assemblies when the control room pressure boundary is not intact for other than normal ingress and egress. The measures necessary to ensure physical security will also be addressed.

We agree that with the implementation of License Amendment 144, there is no longer any need to restrict fuel movement when both CREF subsystems are inoperable due to an inoperable control room pressure boundary in MODES 1, 2, or 3. Therefore, it is requested that the sentence concerning movement of irradiated fuel assemblies in our original submittal (Reference 2) be removed from the commitment statement:

Administrative controls will be devised to prohibit movement of irradiated fuel assemblies when the control room pressure boundary is not intact for other than normal ingress and egress.

The commitment statement would now read:

Compensatory measures to address the breach of the control room pressure boundary at Fermi 2 will be implemented via administrative controls. When the control room pressure boundary is opened intermittently under administrative control for other than normal entry through doors, a dedicated individual will be stationed in the area. This individual will establish communications with the control room and will be able to rapidly restore the pressure boundary if needed. If the pressure boundary is inoperable, requiring entry into proposed new Condition B for LCO 3.7.3, compensatory measures such as operating one CREF subsystem and/or use of the self-contained breathing apparatus equipment will be implemented via administrative controls. The measures necessary to ensure physical security will also be addressed.

**Attachment 2 – Part 1 to
NRC-02-0044**

**PROPOSED TECHNICAL SPECIFICATION
MARKED UP PAGES**

INCLUDED PAGE(S):

3.7.6
3.7.7
3.7.8
B3.7.3-3
B3.7.3-4
B3.7.3-5
B3.7.3-6

3.7 PLANT SYSTEMS

3.7.3 Control Room Emergency Filtration (CREF) System

LCO 3.7.3 The CREF System shall be OPERABLE.

Insert LCO NOTE

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 CREF subsystem inoperable.	A.1 Restore CREF subsystem to OPERABLE status.	7 days
B. Required Action and associated Completion Time of Condition A not met in MODE 1, 2, or 3.	A.1 Be in MODE 3.	12 hours
	A.2 Be in MODE 4.	36 hours

(continued)

B. Two CREF subsystems inoperable due to inoperable control room boundary in MODE 1, 2, or 3.

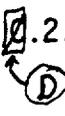
B.1 Restore control room boundary to OPERABLE status *24 hours*

Insert

LCO Note (LCO 3.7.3. CREF System)

-----NOTE-----
The 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 recently irradiated fuel assemblies in the secondary containment or during OPDRVs. </p>	<p> -----NOTE----- LCO 3.0.3 is not applicable. ----- </p> <p>  1.1 Place OPERABLE CREF subsystem in recirculation mode. </p> <p> <u>OR</u> </p> <p>  1.2.1 Initiate action to suspend OPDRVs. </p> <p> <u>AND</u> </p> <p> -----NOTE----- Not required for a CREF System or subsystem inoperable for performance of SR 3.7.3.6 due to failure to provide the required filtration efficiency, or due to replacement of charcoal filtration media. ----- </p> <p>  1.2.2 Suspend movement of recently irradiated fuel assemblies in the secondary containment. </p>	<p>Immediately</p> <p>Immediately</p> <p>Immediately</p>

(continued)

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p><i>E</i> → <input checked="" type="checkbox"/>. Two CREF subsystems or a non-redundant component or portion of the CREF System inoperable in MODE 1, 2, or 3. <i>for reasons other than Condition B</i></p>	<p><input checked="" type="checkbox"/>.1 <i>E</i> Enter LCO 3.0.3.</p>	<p>Immediately</p>
<p><i>F</i> → <input checked="" type="checkbox"/>. Two CREF subsystems or a non-redundant component or portion of the CREF System inoperable during movement of recently irradiated fuel assemblies in the secondary containment or during OPDRVs.</p>	<p>-----NOTE----- LCO 3.0.3 is not applicable. -----</p> <p><input checked="" type="checkbox"/>.1 <i>F</i> AND Initiate action to suspend OPDRVs.</p> <p>-----NOTE----- Not required for a CREF System or subsystem inoperable for performance of SR 3.7.3.6 due to failure to provide the required filtration efficiency, or due to replacement of charcoal filtration media. -----</p> <p><input checked="" type="checkbox"/>.2 <i>F</i> Suspend movement of recently irradiated fuel assemblies in the secondary containment.</p>	<p>Immediately</p> <p>Immediately</p>

BASES

LCO

The non-redundant passive components and both divisions of the redundant active components of the CREF System must be OPERABLE to ensure that the system safety function can be performed assuming any active single failure. Total system failure could result in exceeding a dose of 5 rem whole-body (or its equivalent to any part of the body) to the control room operators in the event of a DBA.

Redundant components, of which both divisions must be OPERABLE, include:

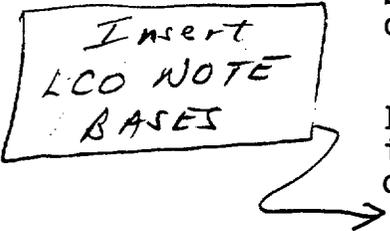
- a. Emergency inlet air heater;
- b. Emergency recirculation fans;
- c. Return fans;
- d. Supply fans;
- e. Emergency air intakes; and
- f. Air handling dampers needed to support the system operation.

Non-redundant components required to be OPERABLE include:

- a. Emergency recirculation air filter train;
- b. Emergency makeup air filter train; and
- c. Ductwork and other system structures needed to form the necessary air flow paths.

In addition, the control room boundary must be maintained, including the integrity of the walls, floors, ceilings, ductwork, and access doors.

Insert
LCO NOTE
BASES



APPLICABILITY

In MODES 1, 2, and 3, the CREF 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 CREF 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 potential for draining the reactor vessel (OPDRVs); and

Insert

LCO Note Bases 3.7.3 CREF System

The LCO is modified by a note allowing the 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 control room. This individual will have a method to rapidly close the opening when a need for control room isolation is indicated.

BASES

APPLICABILITY (Continued)

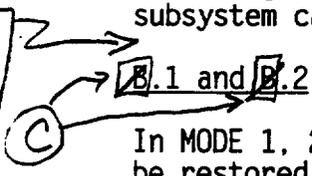
- b. During movement of recently irradiated fuel assemblies in the secondary containment. Due to radioactive decay, the CREF System is only required to be OPERABLE during fuel handling involving handling recently irradiated fuel. "Recently irradiated fuel" is fuel that has occupied part of a critical reactor core within the previous four days, provided that it is verified that the limits in Footnote 11 of Regulatory Guide 1.183 are not exceeded. Otherwise, "recently irradiated fuel" is fuel that has occupied part of a critical reactor core within the previous 34 days. Handling new (non-irradiated) fuel bundles over the open reactor core or the spent fuel pool is subject to the same requirements of handling recently irradiated fuel, as long as any fuel in the core or fuel pool is recently irradiated.

ACTIONS

A.1

With one CREF subsystem inoperable, the inoperable CREF subsystem must be restored to OPERABLE status within 7 days. With the unit in this condition, the remaining OPERABLE CREF 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 CREF 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.

Insert
ACTION B.1
BASES



or control room boundary

In MODE 1, 2, or 3, if the inoperable CREF 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.

Insert

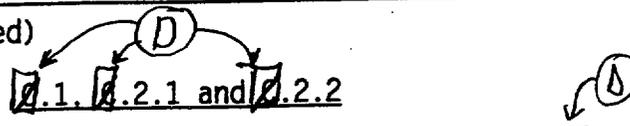
ACTION B.1 BASES - 3.7.3, CREF SYSTEM

B.1

If the control room boundary is inoperable in MODE 1, 2, or 3, the CREF system cannot perform its intended function. Actions must be taken to restore an OPERABLE control room boundary within 24 hours. During the period that the control room boundary is inoperable, appropriate compensatory measures (consistent with the intent of GDC 19) should be utilized to protect control room operators from potential hazards such as radioactive contamination, toxic chemicals, smoke, temperature and relative humidity, and physical security. 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 control room boundary.

BASES

ACTIONS (continued)



The Required Actions of Condition A 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 the inoperable CREF subsystem cannot be restored to OPERABLE status within the required Completion Time, the OPERABLE CREF subsystem may be placed in the recirculation mode. This action ensures that this remaining subsystem is OPERABLE, that no failures that would prevent automatic actuation will occur, and that any active failure will be readily detected.

An alternative to Required Action A.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 the subsequent potential for fission product release. Actions must continue until the OPDRVs are suspended.

A Note is applied to Required Action A.2.2. This Note allows these Required Actions to not be required when the inoperability is due to CREF system duct work testing required by SR 3.7.3.6 or when the system charcoal filter train filter media cannot provide the required efficiency or is being replaced. Dose calculations have shown that the CREF system is not needed during the activities that would otherwise be suspended by these Required Actions.

BASES

ACTIONS (continued)

A.1

If both CREF subsystems or a non-redundant component or portion of the CREF System are inoperable in MODE 1, 2, or 3, the CREF 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.

A.1 and A.2

The Required Actions of Condition A 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, with two CREF subsystems or a non-redundant component or portion of the CREF System 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, 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. 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.

A Note is applied to Required Action A.2. This Note allows these Required Actions to not be required when the inoperability is due to CREF system duct work testing required by SR 3.7.3.6 or when the system charcoal filter train filter media cannot provide the required efficiency or is being replaced. Dose calculations have shown that the CREF system is not needed during the activities that would otherwise be suspended by these Required Actions.

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

**Attachment 2 – Part 2 to
NRC-02-0044**

**PROPOSED TECHNICAL SPECIFICATION
REVISED PAGES**

INCLUDED PAGE(S):

3.7.6
3.7.7
3.7.8
B3.7.3-3
B3.7.3-4
B3.7.3-5
B3.7.3-6
B3.7.3-6a

3.7 PLANT SYSTEMS

3.7.3 Control Room Emergency Filtration (CREF) System

LCO 3.7.3 The CREF System shall be OPERABLE.

-----NOTE-----
The control room boundary may be opened intermittently under administrative control.

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 CREF subsystem inoperable.	A.1 Restore CREF subsystem to OPERABLE status.	7 days
B. Two CREF 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> 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 recently irradiated fuel assemblies in the secondary containment, or during OPDRVs.</p>	<p>-----NOTE----- LCO 3.0.3 is not applicable. -----</p>	
	<p>D.1 Place OPERABLE CREF subsystem in recirculation mode.</p>	<p>Immediately</p>
	<p><u>OR</u></p> <p>D.2.1 Initiate action to suspend OPDRVs.</p> <p><u>AND</u></p>	<p>Immediately</p>
	<p>-----NOTE----- Not required for a CREF System or subsystem inoperable for performance of SR 3.7.3.6 due to failure to provide the required filtration efficiency, or due to replacement of charcoal filtration media. -----</p> <p>D.2.2 Suspend movement of recently irradiated fuel assemblies in the secondary containment.</p>	<p>Immediately</p>

(continued)

BASES

LCO

The non-redundant passive components and both divisions of the redundant active components of the CREF System must be OPERABLE to ensure that the system safety function can be performed assuming any active single failure. Total system failure could result in exceeding a dose of 5 rem whole-body (or its equivalent to any part of the body) to the control room operators in the event of a DBA.

Redundant components, of which both divisions must be OPERABLE, include:

- a. Emergency inlet air heater;
- b. Emergency recirculation fans;
- c. Return fans;
- d. Supply fans;
- e. Emergency air intakes; and
- f. Air handling dampers needed to support the system operation.

Non-redundant components required to be OPERABLE include:

- a. Emergency recirculation air filter train;
- b. Emergency makeup air filter train; and
- c. Ductwork and other system structures needed to form the necessary air flow paths.

In addition, the control room boundary must be maintained, including the integrity of the walls, floors, ceilings, ductwork, and access doors.

The LCO is modified by a note allowing the 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 control room. This individual will have a method to rapidly close the opening when a need for control room isolation is indicated.

APPLICABILITY

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

BASES

APPLICABILITY (Continued)

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 CREF 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 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 CREF System is only required to be OPERABLE during fuel handling involving handling recently irradiated fuel. "Recently irradiated fuel" is fuel that has occupied part of a critical reactor core within the previous four days, provided that it is verified that the limits in Footnote 11 of Regulatory Guide 1.183 are not exceeded. Otherwise, "recently irradiated fuel" is fuel that has occupied part of a critical reactor core within the previous 34 days. Handling new (non-irradiated) fuel bundles over the open reactor core or the spent fuel pool is subject to the same requirements of handling recently irradiated fuel, as long as any fuel in the core or fuel pool is recently irradiated.

ACTIONS

A.1

With one CREF subsystem inoperable, the inoperable CREF subsystem must be restored to OPERABLE status within 7 days. With the unit in this condition, the remaining OPERABLE CREF 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 CREF 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.

BASES

ACTIONS (Continued)

B.1

If the control room boundary is inoperable in MODE 1, 2, or 3, the CREF system cannot perform its intended function. Actions must be taken to restore an OPERABLE control room boundary within 24 hours. During the period that the control room boundary is inoperable, appropriate compensatory measures (consistent with the intent of GDC 19) should be utilized to protect control room operators from potential hazards such as radioactive contamination, toxic chemicals, smoke, temperature and relative humidity, and physical security. 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 control room boundary.

C.1 and C.2

In MODE 1, 2, or 3, if the inoperable CREF 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 and D.2.2

The Required Actions of Condition D 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.

BASES

ACTIONS (continued)

During movement of recently irradiated fuel assemblies in the secondary containment or during OPDRVs, if the inoperable CREF subsystem cannot be restored to OPERABLE status within the required Completion Time, the OPERABLE CREF subsystem may be placed in the recirculation mode. This action ensures that this remaining subsystem is OPERABLE, that no failures that would prevent automatic actuation will occur, 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, 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 the subsequent potential for fission product release. Actions must continue until the OPDRVs are suspended.

A Note is applied to Required Action D.2.2. This Note allows these Required Actions to not be required when the inoperability is due to CREF system duct work testing required by SR 3.7.3.6 or when the system charcoal filter train filter media cannot provide the required efficiency or is being replaced. Dose calculations have shown that the CREF system is not needed during the activities that would otherwise be suspended by these Required Actions.

E.1

If both CREF subsystems or a non-redundant component or portion of the CREF System are inoperable in MODE 1, 2, or 3 for reasons other than an inoperable control room boundary (i.e., Condition B), the CREF 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.

BASES

ACTIONS (continued)

F.1 and F.2

The Required Actions of Condition F 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, with two CREF subsystems or a non-redundant component or portion of the CREF System 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, 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. 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.

A Note is applied to Required Action F.2. This Note allows these Required Actions to not be required when the inoperability is due to CREF system duct work testing required by SR 3.7.3.6 or when the system charcoal filter train filter media cannot provide the required efficiency or is being replaced. Dose calculations have shown that the CREF system is not needed during the activities that would otherwise be suspended by these Required Actions.