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DTE Energy



10 CFR 50.90

January 26, 2007
NRC-07-0001

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

Reference: Fermi 2
Docket No. 50-341
License No. NPF-43

Subject: Application for Technical Specification Change (TSTF-427)
to Add LCO 3.0.9 Regarding the Unavailability of Barriers
Using the Consolidated Line Item Improvement Process

In accordance with the provisions of Section 50.90 of Title 10 of the Code of Federal Regulations (10 CFR), Detroit Edison is submitting a request for an amendment to the Technical Specifications (TS) for Fermi 2.

The proposed amendment would revise TS requirements for unavailable barriers by adding LCO 3.0.9. This LCO establishes conditions under which TS systems would remain operable when required physical barriers are not capable of providing their related support function. Additionally, editorial changes are proposed to LCO 3.0.8 to be consistent with the terminology proposed in LCO 3.0.9.

Attachment 1 provides a description of the proposed change, the requested confirmation of applicability, and plant-specific verifications. Attachment 2 provides the existing TS pages marked up to show the proposed change. Attachment 3 provides revised (clean) TS pages. Attachment 4 provides a summary of the regulatory commitments made in this submittal and Attachment 5 provides the existing TS Bases pages marked up to show the corresponding change (for information only).

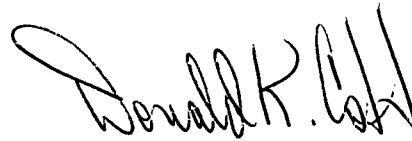
A001

Detroit Edison requests approval of the proposed License Amendment by July 13, 2007, with the amendment being implemented within 60 days thereafter.

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

If you have any questions or require additional information, please contact Mr. Ronald W. Gaston, Nuclear Licensing Manager, at (734) 586-5197.

Sincerely,

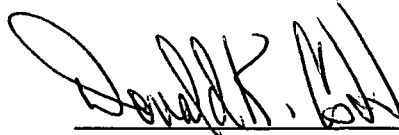
A handwritten signature in black ink, appearing to read "Donald K. Gaston". The signature is written in a cursive, somewhat stylized font.

Attachments:

1. Description and Assessment
2. Proposed Technical Specification Change
3. Revised Technical Specification Pages
4. Regulatory Commitments
5. Proposed Technical Specification Bases Change (for information only)

cc: NRC Project Manager
NRC Resident Office
Reactor Projects Chief, Branch 4, Region III
Regional Administrator, Region III
Supervisor, Electric Operators,
Michigan Public Service Commission

I, Donald K. Cobb, 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.



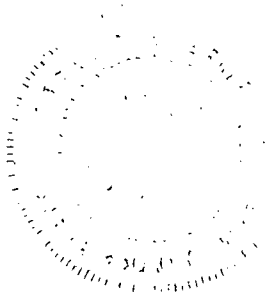
DONALD K. COBB
Assistant Vice President – Nuclear Generation

On this 26th day of January, 2007 before me personally appeared Donald K. Cobb, being first duly sworn and says that he executed the foregoing as his free act and deed.



Rosalie Armetta
Notary Public

ROSALIE ARMETTA
NOTARY PUBLIC MONROE CO., MI
MY COMMISSION EXPIRES Oct 11, 2007



**ATTACHMENT 1 TO
NRC-07-0001**

DESCRIPTION AND ASSESSMENT

1.0 DESCRIPTION

The proposed amendment would modify Technical Specifications (TS) requirements for unavailable barriers by adding LCO 3.0.9.

The changes are consistent with Nuclear Regulatory Commission (NRC) approved Industry/Technical Specification Task Force (TSTF) STS change TSTF-427 Revision 2. The availability of this TS improvement was published in the Federal Register on October 3, 2006 (71 FR 58444) as part of the Consolidated Line Item Improvement Process (CLIIP).

2.0 ASSESSMENT

2.1 Applicability of Published Safety Evaluation

Detroit Edison has reviewed the safety evaluation dated October 3, 2006 (71 FR 58444) as part of the CLIIP. This review included a review of the NRC staff's evaluation, as well as the supporting information provided to support TSTF-427. Detroit Edison has concluded that the justifications presented in the TSTF proposal and the safety evaluation prepared by the NRC staff are applicable to Fermi 2 and justify this amendment for the incorporation of the changes to the Fermi 2 TS.

2.2 Optional Changes and Variations

Detroit Edison is not proposing any technical variations or deviations from the TS changes described in the TSTF-427 Revision 2 or the NRC staff's model safety evaluation dated October 3, 2006 (71 FR 58444). However, one editorial variation incorporated in the proposed TS change replaces all occurrences of the term "train" in the proposed LCO 3.0.9 in TSTF-427 Revision 2, with the term "division" to be consistent with the Fermi 2 TS definition of "OPERABLE – OPERABILITY" and the terminology used in Section 1.3, "Completion Times," of the Fermi 2 TS.

In addition, a similar change to replace the term "train" with the term "division" is proposed for LCO 3.0.8. LCO 3.0.8 was added to the Fermi 2 TS per License Amendment 172 approved on March 16, 2006.

3.0 REGULATORY ANALYSIS

3.1 No Significant Hazards Consideration Determination

Detroit Edison has reviewed the proposed No Significant Hazards Consideration Determination (NSHCD) published in the Federal Register as part of the CLIIP. Detroit Edison has concluded

that the proposed NSHCD presented in the Federal Register notice is applicable to Fermi 2 and is hereby incorporated by reference to satisfy the requirements of 10 CFR 50.91(a).

3.2 Verification and Commitments

As discussed in the notice of availability published in the Federal Register on October 3, 2006 (71 FR 58444) for this TS improvement, plant-specific verifications were performed as follows:

1. Detroit Edison commits to the guidance of NUMARC 93-01 Section 11, which provides guidance and details on the assessment and management of risk during maintenance.
2. Detroit Edison will revise procedures to ensure that the risk assessment and management process described in NEI 04-08 is used whenever a barrier is considered unavailable and the requirements of LCO 3.0.9 are to be applied, in accordance with an overall Configuration Risk Management Program (CRMP) to ensure that potentially risk significant configurations resulting from maintenance and other operational activities are identified and avoided.

4.0 ENVIRONMENTAL EVALUATION

Detroit Edison has reviewed the environmental evaluation included in the model safety evaluation dated October 3, 2006 (71 FR 58444) as part of the CLIP. Detroit Edison has concluded that the staff's findings presented in that evaluation are applicable to Fermi 2 and the evaluation is hereby incorporated by reference for this application.

**ATTACHMENT 2 TO
NRC-07-0001**

PROPOSED TECHNICAL SPECIFICATION CHANGES (MARK-UP)

**Pages 3.0-1 and 3.0-3
(plus Insert 1, 1 page)**

3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

LCO 3.0.1 LCOs shall be met during the MODES or other specified conditions in the Applicability, except as provided in LCO 3.0.2, LCO 3.0.7, and LCO 3.0.8, and LCO 3.0.9.

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

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

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

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

Exceptions to this Specification are stated in the individual Specifications.

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

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

(continued)

3.0 LCO APPLICABILITY

LCO 3.0.6
(continued) When a support system's Required Action directs a supported system to be declared inoperable or directs entry into Conditions and Required Actions for a supported system, the applicable Conditions and Required Actions shall be entered in accordance with LCO 3.0.2.

LCO 3.0.7 Special Operations LCOs in Section 3.10 allow specified Technical Specifications (TS) requirements to be changed to permit performance of special tests and operations. Unless otherwise specified, all other TS requirements remain unchanged. Compliance with Special Operations LCOs is optional. When a Special Operations LCO is desired to be met but is not met, the ACTIONS of the Special Operations LCO shall be met. When a Special Operations LCO is not desired to be met, entry into a MODE or other specified condition in the Applicability shall only be made in accordance with the other applicable Specifications.

LCO 3.0.8 When one or more required snubbers are unable to perform their associated support function(s), any affected supported LCO(s) are not required to be declared not met solely for this reason if risk is assessed and managed, and:

- a. the snubbers not able to perform their associated support function(s) are associated with only one train or subsystem of a multiple train or subsystem supported system or are associated with a single train or subsystem supported system and are able to perform their associated support function within 72 hours; or
 - b. the snubbers not able to perform their associated support function(s) are associated with more than one train or subsystem of a multiple train or subsystem supported system and are able to perform their associated support function within 12 hours.
- Handwritten annotations: "division" with arrows pointing to "train" in both items a and b.*

At the end of the specified period, the required snubbers must be able to perform their associated support function(s), or the affected supported system LCO(s) shall be declared not met.

→
INSERT 1

INSERT 1

LCO 3.0.9

When one or more required barriers are unable to perform their related support function(s), any supported system LCO(s) are not required to be declared not met solely for this reason for up to 30 days provided that at least one division or subsystem of the supported system is OPERABLE and supported by barriers capable of providing their related support function(s), and risk is assessed and managed. This specification may be concurrently applied to more than one division or subsystem of a multiple division or subsystem supported system provided at least one division or subsystem of the supported system is OPERABLE and the barriers supporting each of these divisions or subsystems provide their related support function(s) for different categories of initiating events.

For the purposes of this specification, the High Pressure Coolant Injection (HPCI) system, the Reactor Core Isolation Cooling (RCIC) system, and the Automatic Depressurization System (ADS) are considered independent subsystems of a single system.

If the required OPERABLE division or subsystem becomes inoperable while this specification is in use, it must be restored to OPERABLE status within 24 hours or the provisions of this specification cannot be applied to the divisions or subsystems supported by the barriers that cannot perform their related support function(s).

At the end of the specified period, the required barriers must be able to perform their related support function(s) or the supported system LCO(s) shall be declared not met.

**ATTACHMENT 3 TO
NRC-07-0001**

PROPOSED TECHNICAL SPECIFICATIONS PAGES

Pages 3.0-1, 3.0-3 and 3.0-3a

3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

LCO 3.0.1 LCOs shall be met during the MODES or other specified conditions in the Applicability, except as provided in LCO 3.0.2, LCO 3.0.7, LCO 3.0.8, and LCO 3.0.9.

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

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

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

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

Exceptions to this Specification are stated in the individual Specifications.

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

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

(continued)

3.0 LCO APPLICABILITY

LCO 3.0.6
(continued) When a support system's Required Action directs a supported system to be declared inoperable or directs entry into Conditions and Required Actions for a supported system, the applicable Conditions and Required Actions shall be entered in accordance with LCO 3.0.2.

LCO 3.0.7 Special Operations LCOs in Section 3.10 allow specified Technical Specifications (TS) requirements to be changed to permit performance of special tests and operations. Unless otherwise specified, all other TS requirements remain unchanged. Compliance with Special Operations LCOs is optional. When a Special Operations LCO is desired to be met but is not met, the ACTIONS of the Special Operations LCO shall be met. When a Special Operations LCO is not desired to be met, entry into a MODE or other specified condition in the Applicability shall only be made in accordance with the other applicable Specifications.

LCO 3.0.8 When one or more required snubbers are unable to perform their associated support function(s), any affected supported LCO(s) are not required to be declared not met solely for this reason if risk is assessed and managed, and:

- a. the snubbers not able to perform their associated support function(s) are associated with only one division or subsystem of a multiple division or subsystem supported system or are associated with a single division or subsystem supported system and are able to perform their associated support function within 72 hours; or
- b. the snubbers not able to perform their associated support function(s) are associated with more than one division or subsystem of a multiple division or subsystem supported system and are able to perform their associated support function within 12 hours.

At the end of the specified period, the required snubbers must be able to perform their associated support function(s), or the affected supported system LCO(s) shall be declared not met.

(continued)

3.0 LCO APPLICABILITY

LCO 3.0.9 When one or more required barriers are unable to perform their related support function(s), any supported system LCO(s) are not required to be declared not met solely for this reason for up to 30 days provided that at least one division or subsystem of the supported system is OPERABLE and supported by barriers capable of providing their related support function(s), and risk is assessed and managed. This specification may be concurrently applied to more than one division or subsystem of a multiple division or subsystem supported system provided at least one division or subsystem of the supported system is OPERABLE and the barriers supporting each of these divisions or subsystems provide their related support function(s) for different categories of initiating events.

For the purposes of this specification, the High Pressure Coolant Injection (HPCI) system, the Reactor Core Isolation Cooling (RCIC) system, and the Automatic Depressurization System (ADS) are considered independent subsystems of a single system.

If the required OPERABLE division or subsystem becomes inoperable while this specification is in use, it must be restored to OPERABLE status within 24 hours or the provisions of this specification cannot be applied to the divisions or subsystems supported by the barriers that cannot perform their related support function(s).

At the end of the specified period, the required barriers must be able to perform their related support function(s) or the supported system LCO(s) shall be declared not met.

**ATTACHMENT 4 TO
NRC-07-0001**

LIST OF REGULATORY COMMITMENTS

LIST OF REGULATORY COMMITMENTS

The following table identifies those actions committed to by Detroit Edison in this document. Any other statements in this submittal are provided for information purpose and are not considered to be regulatory commitments. Please direct questions regarding these commitments to Ronald W. Gaston, Manager, Nuclear Licensing at (734) 586-5197.

REGULATORY COMMITMENTS	DUE DATE / EVENT
1. Detroit Edison commits to the guidance of NUMARC 93- 01, Revision 2, Section 11, which provides guidance and details on the assessment and management of risk during maintenance.	To be implemented concurrently with implementation of the associated Approved License Amendment.
2. Detroit Edison commits to the guidance of NEI 04-08, "Allowance for Non Technical Specification Barrier Degradation on Supported System OPERABILITY (TSTF-427) Industry Implementation Guidance," March 2006.	To be implemented concurrently with implementation of the associated Approved License Amendment.

Note: Detroit Edison already has a TS Bases Control Program consistent with the standard TS (STS) for General Electric (GE) Boiling Water Reactor (BWR) 4, as described in Section 5.5.10 of the Fermi 2 Technical Specifications.

**ATTACHMENT 5 TO
NRC-07-0001**

PROPOSED CHANGES TO TECHNICAL SPECIFICATION BASES PAGES

**Pages B 3.0-1, B 3.0-10 and 3.0-10a
(plus Insert 2, 3 pages)**

B 3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

BASES

LCOs LCO 3.0.1 through LCO 3.0.8 establish the general requirements applicable to all Specifications and apply at all times, unless otherwise stated.

LCO 3.0.1 LCO 3.0.1 establishes the Applicability statement within each individual Specification as the requirement for when the LCO is required to be met (i.e., when the unit is in the MODES or other specified conditions of the Applicability statement of each Specification).

LCO 3.0.2 LCO 3.0.2 establishes that upon discovery of a failure to meet an LCO, the associated ACTIONS shall be met. The Completion Time of each Required Action for an ACTIONS Condition is applicable from the point in time that an ACTIONS Condition is entered. The Required Actions establish those remedial measures that must be taken within specified Completion Times when the requirements of an LCO are not met. This Specification establishes that:

- a. Completion of the Required Actions within the specified Completion Times constitutes compliance with a Specification; and
- b. Completion of the Required Actions is not required when an LCO is met within the specified Completion Time, unless otherwise specified.

There are two basic types of Required Actions. The first type of Required Action specifies a time limit in which the LCO must be met. This time limit is the Completion Time to restore an inoperable system or component to OPERABLE status or to restore variables to within specified limits. If this type of Required Action is not completed within the specified Completion Time, a shutdown may be required to place the unit in a MODE or condition in which the Specification is not applicable. (Whether stated as a Required Action or not, correction of the entered Condition is an action that may always be considered upon entering ACTIONS.) The second type of Required Action specifies the

BASES

LCO 3.0.7 (continued)

Applicability (i.e., should the requirements of this other LCO not be met, the ACTIONS of the Special Operations LCO apply, not the ACTIONS of the other LCO). However, there are instances where the Special Operations LCO ACTIONS may direct the other LCOs' ACTIONS be met. The Surveillances of the other LCO are not required to be met, unless specified in the Special Operations LCO. If conditions exist such that the Applicability of any other LCO is met, all the other LCO's requirements (ACTIONS and SRs) are required to be met concurrent with the requirements of the Special Operations LCO.

LCO 3.0.8

LCO 3.0.8 establishes conditions under which systems are considered to remain capable of performing their intended safety function when associated snubbers are not capable of providing their associated support function(s). This LCO states that the supported system is not considered to be inoperable solely due to one or more snubbers not capable of performing their associated support function(s). This is appropriate because a limited length of time is allowed for maintenance, testing, or repair of one or more snubbers not capable of performing their associated support function(s) and appropriate compensatory measures are specified in the snubber requirements, which are located outside of the Technical Specifications (TS) under licensee control. The snubber requirements do not meet the criteria in 10 CFR 50.36(c)(2)(ii), and, as such, are appropriate for control by the licensee.

If the allowed time expires and the snubber(s) are unable to perform their associated support function(s), the affected supported system's LCO(s) must be declared not met and the Conditions and Required Actions entered in accordance with LCO 3.0.2.

LCO 3.0.8.a applies when one or more snubbers are not capable of providing their associated support function(s) to a single train or subsystem of a multiple train or subsystem supported system or to a single train or subsystem supported system. LCO 3.0.8.a allows 72 hours to restore the snubber(s) before declaring the supported system inoperable. The 72 hour Completion Time is reasonable based on the low probability of a seismic event concurrent with an event that would require operation of the supported system occurring

division

train

train

BASES

LCO 3.0.8 (continued)

while the snubber(s) are not capable of performing their associated support function and due to the availability of the redundant train of the supported system.

LCO 3.0.8.b applies when one or more snubbers are not capable of providing their associated support function(s) to more than one train or subsystem of a multiple train or subsystem supported system. LCO 3.0.8.b allows 12 hours to restore the snubber(s) before declaring the supported system inoperable. The 12 hour Completion Time is reasonable based on the low probability of a seismic event concurrent with an event that would require operation of the supported system occurring while the snubber(s) are not capable of performing their associated support function.

LCO 3.0.8 requires that risk be assessed and managed. Industry and NRC guidance on the implementation of 10 CFR 50.65(a)(4) (the Maintenance Rule) does not address seismic risk. However, use of LCO 3.0.8 should be considered with respect to other plant maintenance activities, and integrated into the existing Maintenance Rule process to the extent possible so that maintenance on any unaffected train or subsystem is properly controlled, and emergent issues are properly addressed. The risk assessment need not be quantified, but may be a qualitative awareness of the vulnerability of systems and components when one or more snubbers are not able to perform their associated support function.

division

INSERT 2

INSERT 2

LCO 3.0.9

LCO 3.0.9 establishes conditions under which systems described in the Technical Specifications are considered to remain OPERABLE when required barriers are not capable of providing their related support function(s).

Barriers are doors, walls, floor plugs, curbs, hatches, installed structures or components, or other devices, not explicitly described in Technical Specifications, that support the performance of the safety function of systems described in the Technical Specifications. This LCO states that the supported system is not considered to be inoperable solely due to required barriers not capable of performing their related support function(s) under the described conditions. LCO 3.0.9 allows 30 days before declaring the supported system(s) inoperable and the LCO(s) associated with the supported system(s) not met. A maximum time is placed on each use of this allowance to ensure that as required barriers are found or are otherwise made unavailable, they are restored. However, the allowable duration may be less than the specified maximum time based on the risk assessment.

If the allowed time expires and the barriers are unable to perform their related support function(s), the supported system's LCO(s) must be declared not met and the Conditions and Required Actions entered in accordance with LCO 3.0.2.

This provision does not apply to barriers which support ventilation systems or to fire barriers. The Technical Specifications for ventilation systems provide specific Conditions for inoperable barriers. Fire barriers are addressed by other regulatory requirements and associated plant programs. This provision does not apply to barriers which are not required to support system OPERABILITY (see NRC Regulatory Issue Summary 2001-09, "Control of Hazard Barriers," dated April 2, 2001).

The provisions of LCO 3.0.9 are justified because of the low risk associated with required barriers not being capable of performing their related support function. This provision is based on consideration of the following initiating event categories:

- Loss of coolant accidents;
- High energy line breaks;
- Feedwater line breaks;
- Internal flooding;
- External flooding;

- Turbine missile ejection; and
- Tornado or high wind.

The risk impact of the barriers which cannot perform their related support function(s) must be addressed pursuant to the risk assessment and management provision of the Maintenance Rule, 10 CFR 50.65 (a)(4), and the associated implementation guidance, Regulatory Guide 1.182, "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants." Regulatory Guide 1.182 endorses the guidance in Section 11 of NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." This guidance provides for the consideration of dynamic plant configuration issues, emergent conditions, and other aspects pertinent to plant operation with the barriers unable to perform their related support function(s). These considerations may result in risk management and other compensatory actions being required during the period that barriers are unable to perform their related support function(s).

LCO 3.0.9 may be applied to one or more divisions or subsystems of a system supported by barriers that cannot provide their related support function(s), provided that risk is assessed and managed (including consideration of the effects on Large Early Release and from external events). If applied concurrently to more than one division or subsystem of a multiple division or subsystem supported system, the barriers supporting each of these divisions or subsystems must provide their related support function(s) for different categories of initiating events. For example, LCO 3.0.9 may be applied for up to 30 days for more than one division of a multiple division supported system if the affected barrier for one division protects against internal flooding and the affected barrier for the other division protects against tornado missiles. In this example, the affected barrier may be the same physical barrier but serve different protection functions for each division.

The High Pressure Coolant Injection (HPCI) and Reactor Core Isolation Cooling (RCIC) systems are single division systems for injecting makeup water into the reactor during an accident or transient event. The RCIC system is not a safety system, nor required to operate during a transient, therefore, it does not have to meet the single failure criterion. The HPCI system provides backup in case of a RCIC system failure. The Automatic Depressurization System (ADS) and low pressure Emergency Core Cooling System (ECCS) coolant

injection provide the core cooling function in the event of failure of the HPCI system during an accident. Thus, for the purposes of LCO 3.0.9, the HPCI system, the RCIC system, and the ADS are considered independent subsystems of a single system and LCO 3.0.9 can be used on these single division systems in a manner similar to multiple division or subsystem systems.

If during the time that LCO 3.0.9 is being used, the required OPERABLE division or subsystem becomes inoperable, it must be restored to OPERABLE status within 24 hours. Otherwise, the division(s) or subsystem(s) supported by barriers that cannot perform their related support function(s) must be declared inoperable and the associated LCOs declared not met. This 24 hour period provides time to respond to emergent conditions that would otherwise likely lead to entry into LCO 3.0.3 and a rapid plant shutdown, which is not justified given the low probability of an initiating event which would require the barrier(s) not capable of performing their related support function(s). During this 24 hour period, the plant risk associated with the existing conditions is assessed and managed in accordance with 10 CFR 50.65(a)(4).