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MFN 09-088

Docket No. 52-010

February 3, 2009

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

Subject: **Response to Portion of NRC Request for Additional Information Letter No. 269 Related to ESBWR Design Certification Application – Technical Specifications – RAI Number 16.2-174**

Enclosures 1 and 2 contain the GE Hitachi Nuclear Energy (GEH) response to the subject NRC RAI transmitted via the Reference 1 letter.

If you have any questions or require additional information regarding the information provided here, please contact me.

Sincerely,

Richard E. Kingston

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Vice President, ESBWR Licensing

Reference:

1. MFN 08-885, Letter from U.S. Nuclear Regulatory Commission to Robert E. Brown, *Request for Additional Information Letter No. 269 Related to ESBWR Design Certification Application,* October 31, 2008

Enclosures:

1. MFN 09-088 – Response to Portion of NRC Request for Additional Information Letter No. 269 Related to ESBWR Design Certification Application – Technical Specifications – RAI Number 16.2-174
2. MFN 09-088 – DCD Markups for RAI Number 16.2-174

cc:

AE Cubbage	USNRC (with enclosures)
RE Brown	GEH (with enclosures)
DH Hinds	GEH (with enclosures)
eDRF	96-5855

Enclosure 1

MFN 09-088

Response to Portion of NRC Request for

Additional Information Letter No. 269

Related to ESBWR Design Certification Application

- Technical Specifications -

RAI Number 16.2-174

NRC RAI 16.2-174

In ECCS and containment system generic TS, the Actions provide a condition for "one or more ADS valves with DPS actuator inoperable." The completion time for restoring DPS actuator(s) to operable status is "prior to entering Mode 2 or 4 from Mode 5." This completion time could potentially allow a plant to operate 24 months (an entire cycle) with all DPS actuators inoperable for ECCS and containment system valves with DPS actuators. Generic TS 3.3.8.1 specifies a 30-day completion time to restore a DPS Function to operable status. An inoperable DPS Function would affect all ECCS and containment valves with DPS actuators. The staff requests that the applicant explain why there should not be any decrease in the completion time to restore all DPS actuators to operable status as the number of DPS actuators that are inoperable increases. In the Table entitled, "Chapter 16 Changes From Revision 4 to Revision 5," item 233 states "Evaluation completed subsequent to submission of RAI 16.2-32, Supplemental Response, determined that Diverse Protection System actuators for ICS did not meet criteria for high regulatory oversight and DPS actuators are not included in LCO 3.5.4." The staff requests that the applicant specify where this evaluation is documented. In addition, please clarify if the Availability Controls specify the DPS actuators for ICS automatic valves.

GEH Response

GEH will revise DCD Chapters 16 and 16B to include new Actions with more restrictive Completion Times for multiple inoperable DPS actuators on each system with Technical Specification (TS) required DPS actuators. The 30-day Completion Time is consistent with the Completion Time presented in TS 3.3.8.1 for inoperability of the DPS instrumentation and control network segment that is common to all DPS actuators.

Operation in the existing Actions allowing the Completion Time of "prior to entering MODE 2 or 4 from MODE 5" is acceptable because, with the restrictions being added as described below, sufficient DPS actuators remain OPERABLE to mitigate the possibility of digital protection system common mode failures. As such, the remaining DPS actuators will actuate the safety-related functions required to respond to the design basis LOCA concurrent with any additional single failure, including digital protection system common mode failures.

- For ADS, the Specification and associated Bases for TS 3.5.1, Action A, will be revised to limit the number of inoperable DPS actuators to only one ADS valve with the Completion Time of "prior to entering MODE 2 or 4 from MODE 5." Operation in Action A with one DPS actuator inoperable continues to provide the minimum number of DPS actuated ADS valves that are required to mitigate analyzed accidents concurrent with digital protection system common mode failures. A new Action B and associated Bases will be added to address two or more ADS valves with the DPS actuator inoperable. The new Action B will provide a Completion Time of 30 days, consistent with TS 3.3.8.1 for inoperability of the DPS ADS actuation function.

- For GDCS, the Specification and associated Bases for TS 3.5.2, Action A, will be revised to limit the number of inoperable DPS actuators to only one valve per GDCS subsystem (injection and/or equalizing subsystem) with the Completion Time of "prior to entering MODE 2 or 4 from MODE 5." Operation in Action A, with one DPS actuator inoperable on one or both GDCS subsystems, continues to provide the necessary DPS actuated GDCS valves to mitigate analyzed accidents with the possibility of digital protection system common mode failures. A new Action B and associated Bases will be added to address two or more valves per GDCS subsystem with the DPS actuator inoperable. The new Action B will provide a Completion Time of 30 days, consistent with TS 3.3.8.1 for inoperability of the DPS GDCS actuation function.
- For reactor water cleanup/shutdown cooling system (RWCU/SDC) containment isolation valves (CIVs), the Specification and associated Bases for TS 3.6.1.3 Action A will be revised to limit the Completion Time to 30 days. Because the ESBWR design for RWCU/SDC isolation from DPS is currently not sufficiently detailed defining whether one or both RWCU/SDC CIVs will be equipped with DPS actuators, Action A and associated Bases will be revised to conservatively provide a Completion Time of 30 days, consistent with TS 3.3.8.1 for inoperability of the DPS RWCU/SDC actuation function.
- For the Isolation Condenser/Passive Containment Cooling (IC/PCC) expansion pool-to-equipment pool isolation valves, the Specification and associated Bases for TS 3.7.1 Action A, will be revised to address only one inoperable IC/PCC DPS actuator in the equipment pool isolation valves between one or both expansion pools and the equipment pool. Operation in Action A continues to provide one operable DPS actuator in at least one connection line for each expansion pool to mitigate the possibility of digital protection system common mode failures. A new Action B will be added to address one or both IC/PCC expansion pools with both equipment pool isolation valve DPS actuators inoperable. The new Action B will be provided a Completion Time of 30 days, consistent with TS 3.3.8.1 for inoperability of the DPS IC/PCC expansion pool to equipment pool cross-connect actuation function.

The DPS actuators for Isolation Condenser System (ICS) did not meet criteria for high regulatory oversight. The basis for this is found in DCD 19A.8.1 and 19A.8.4, which describe the results of the regulatory oversight evaluation for DPS. While DPS actuators were not included in TS LCO 3.5.4, they are included in Chapter 19, Availability Controls Manual (19ACM), DCD Revision 5 Specification AC 3.3.6, "Diverse Protection System (DPS)."

DCD Impact

DCD Chapters 16 and 16B will be revised in Revision 6 as shown in Enclosure 2.

Enclosure 2

MFN 09-088

DCD Markups for

RAI Number 16.2-174

3.5 Emergency Core Cooling Systems (ECCS)

3.5.1 Automatic Depressurization System (ADS) - Operating

LCO 3.5.1 The ADS function of ten Safety Relief Valves (SRVs) and eight Depressurization Valves (DPVs) shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One ~~or more~~ ADS valve~~s~~ with Diverse Protection System (DPS) actuator inoperable	A.1 Restore DPS actuator~~(s)~~ to OPERABLE status.	Prior to entering MODE 2 or 4 from MODE 5
B. Two or more ADS valves with DPS actuator inoperable.	B.1 Restore DPS actuator(s) to OPERABLE status.	30 days
C~~B~~. One ADS valve inoperable for reasons other than Condition A.	C~~B~~.1 Restore ADS valve to OPERABLE status.	14 days
D~~C~~. Two or more ADS valves inoperable for reasons other than Condition A or B. OR Required Action and associated Completion Time of Condition A, B or C~~B~~ not met.	D~~C~~.1 Be in MODE 3. AND D~~C~~.2 Be in MODE 5.	12 hours 36 hours

3.5 Emergency Core Cooling Systems (ECCS)

3.5.2 Gravity-Driven Cooling System (GDCS) - Operating

LCO 3.5.2 The following GDCS subsystems shall be OPERABLE:

a. Eight branch lines of the injection subsystem; and

b. Four trains of the equalizing subsystem.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more GDCS subsystems with one ~~or more~~ Diverse Protection System (DPS) actuator~~s~~ inoperable.	A.1 Restore DPS actuator~~(s)~~ to OPERABLE status.	Prior to entering MODE 2 or 4 from MODE 5
B. One or more GDCS subsystems with two or more DPS actuators inoperable.	B.1 Restore DPS actuator(s) to OPERABLE status.	30 days
C~~B~~. One branch line of the injection subsystem inoperable for reasons other than Condition A or B.	C~~B~~.1 Restore branch line of the injection subsystem to OPERABLE status.	14 days
D~~C~~. One equalizing train inoperable for reasons other than Condition A or B.	D~~C~~.1 Restore equalizing train to OPERABLE status.	14 days

CONDITION	REQUIRED ACTION		COMPLETION TIME
E~~D~~. Two or more branch lines of the injection subsystem inoperable for reasons other than Condition A or B. OR Two or more equalizing trains inoperable for reasons other than Condition A or B. OR Required Action and associated Completion Time of Condition A, B, C, or D~~C~~ not met.	E~~D~~.1 AND E~~D~~.2	Be in MODE 3. Be in MODE 5.	12 hours 36 hours

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.5.2.1	Verify water level in each GDCS pool is ≥ 6.5 meters (21.3 feet).	12 hours
SR 3.5.2.2	---------- **- NOTE -** Not required to be met for one actuator intermittently disabled under administrative controls. ---------- Verify continuity of DPS actuator and two actuators associated with DC and Uninterruptible AC Electrical Power Distribution Divisions required by LCO 3.8.6, "Distribution Systems - Operating."	31 days

3.6 CONTAINMENT SYSTEMS

3.6.1.3 Containment Isolation Valves (CIVs)

LCO 3.6.1.3 Each CIV shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

- NOTES -

1. Penetration flow paths may be opened intermittently under administrative controls.
2. Separate Condition entry is allowed for each penetration flow path.
3. Enter applicable Conditions and Required Actions for supported systems made inoperable by CIVs.
4. Enter applicable Conditions and Required Actions of LCO 3.6.1.1, " Containment," when CIV leakage results in exceeding overall containment leakage rate acceptance criteria in MODES 1, 2, 3, and 4.

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more reactor water cleanup / shutdown cooling system (RWCU/SDC) penetration flow path(s) ~~CIVs with~~ diverse protection system (DPS) actuator inoperable.	A.1 Restore ~~RWCU/SDC CIV~~ DPS actuator~~(s)~~ to OPERABLE status.	30 days~~Prior to entering MODE 2 or 4 from MODE 5~~

3.7 PLANT SYSTEMS

3.7.1 Isolation Condenser (IC)/Passive Containment Cooling (PCC) Pools

LCO 3.7.1 The IC/PCC pools shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or ~~more~~ both IC/PCC expansion pools with one ~~to~~ equipment pool isolation valve~~s with~~ Diverse Protection System (DPS) actuator inoperable.	A.1 Restore DPS actuator~~(s)~~ to OPERABLE status.	Prior to entering MODE 2 or 4 from MODE 5
B. One or both IC/PCC expansion pools with both equipment pool isolation valve DPS actuators inoperable.	B.1 Restore DPS actuator(s) to OPERABLE status.	30 days
C~~B~~. One or both IC/PCC expansion pools with one ~~to~~ equipment pool connection line ~~on one or more expansion pools~~ inoperable for reasons other than Condition A.	C~~B~~.1 Restore IC/PCC expansion pool-to-equipment pool line(s) to OPERABLE status.	30 days

BASES

ACTIONS

A.1

This Condition applies when one ~~or more~~ ADS valve~~s have~~ has an inoperable DPS actuator. In this Condition, required safety-related actuators will actuate the minimum number of ADS valves assumed in the design basis LOCA analysis in Reference 1 concurrent with any additional single failure, including~~. However, design features intended to mitigate~~ digital protection system common mode failures ~~may not be available~~.

In this Condition, the inoperable DPS actuator~~s~~ must be restored to OPERABLE status the next time the plant is placed in MODE 5 (i.e., prior to entering MODE 2 or MODE 4 from Mode 5). This Completion Time is acceptable because the remaining DPS actuators and the required safety-related actuators will actuate the minimum number of ADS valves required to respond to the design basis LOCA concurrent with any additional single failure.

B.1

This Condition applies when two or more DPS actuators are inoperable. In this Condition, required safety-related actuators will actuate the minimum number of ADS valves assumed in the design basis LOCA analysis in Reference 1 concurrent with any additional single failure. However, design features intended to mitigate the possibility of digital protection system common mode failures are not available.

In this Condition, all but one DPS actuator must be restored to OPERABLE status within 30 days. This Completion Time is acceptable because the required safety-related actuators will actuate the minimum number of ADS valves required to respond to the design basis LOCA concurrent with any additional single failure.

C~~B~~.1

This Condition applies when one ADS valve (i.e., either one DPV or one SRV) is inoperable for reasons other than Condition A. In this Condition, failure of a second ADS valve could result in less than the minimum required ADS capacity during a design basis LOCA.

In this Condition, the inoperable ADS valve must be restored to OPERABLE status within 14 days. This Completion Time is acceptable based on engineering judgment considering the low probability of a failure of an additional DPV or SRV concurrent with a design basis LOCA during this period.

BASES

ACTIONS (continued)

D~~C~~.1

This Condition applies when two or more ADS valves (i.e., any combination of DPVs or SRVs) are inoperable for reasons other than Conditions A or B. This Condition also applies when the Required Actions and Completion Times of Conditions A, B, or C~~B~~ are not met. In this Condition, the plant must be brought to a condition in which the LCO does not apply. To achieve this status, the plant must be brought to at least MODE 3 within 12 hours and to MODE 5 within 36 hours. The allowed Completion Times are reasonable, based on plant design, to reach required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

SURVEILLANCE REQUIREMENTS

SR 3.5.1.1

This SR requires periodic verification that the supply pressure to SRV accumulators (i.e., High Pressure Nitrogen Supply System (HPNSS)) is greater than or equal to the specified limit. An accumulator on each SRV provides pneumatic pressure for ADS valve actuation. The SRV accumulator capacity is sufficient for one actuation at drywell design pressure following a failure of the gas supply to the accumulator.

The 31 day Frequency is acceptable because HPNSS low pressure alarms provide prompt notification of an abnormal pressure in the HPNSS.

SR 3.5.1.2

This SR requires verification every 31 days of the continuity of the DPS actuator and two safety-related actuators associated with DC and Uninterruptible AC Electrical Power Distribution Divisions required by LCO 3.8.6.

The 31 day Frequency is acceptable because either of the two safety-related actuators in each valve is capable of actuating the associated ADS valve. Additionally, an alarm will provide prompt notification of loss of circuit continuity for the required actuators in each ADS valve.

BASES

LCO

This LCO requires the OPERABILITY of the following:

a. Eight branch lines of the injection subsystem (i.e., all four injection trains); and

b. Four trains of the equalizing subsystem.

OPERABILITY of each squib-actuated GDCS valve in the injection subsystem and equalizing subsystem requires OPERABILITY of the DPS actuator and two safety-related actuators associated with DC and Uninterruptible AC Electrical Power Distribution Divisions required by LCO 3.8.6.

OPERABILITY of each GDCS branch line requires that water level in the associated GDCS pool be within the limit specified by SR 3.5.2.1. Additionally, all GDCS RPV block valves, GDCS pool block valves, and suppression pool block valves must be locked open.

APPLICABILITY

GDCS subsystems are required to be OPERABLE during MODES 1, 2, 3, and 4 when there is considerable energy in the reactor core and core cooling may be required to prevent fuel damage following a LOCA. GDCS requirements for MODES 5 and 6 are specified in LCO 3.5.3, “Gravity Driven Cooling System (GDCS) - Shutdown.”

ACTIONS

A.1

This Condition applies when one or more GDCS subsystems have one ~~or more~~ inoperable DPS actuator~~s~~. In this Condition, required safety-related actuators will actuate the minimum number of GDCS valves assumed in the design basis LOCA analysis in Reference 1 concurrent with any additional single failure, including ~~. However, design features intended to mitigate the~~ digital protection system common mode failures ~~may not be available~~.

In this Condition, the inoperable DPS actuators must be restored to OPERABLE status the next time the plant is placed in MODE 5 (i.e., prior to entering MODE 2 or MODE 4 from Mode 5). This Completion Time is acceptable because the remaining DPS actuators and the required safety-related actuators will actuate the minimum number of GDCS valves required to respond to the design basis LOCA concurrent with any additional single failure.

BASES

ACTIONS (continued)

B.1

This Condition applies when one or more GDCS subsystems have two or more inoperable DPS actuators. In this Condition, required safety-related actuators will actuate the minimum number of GDCS subsystem valves assumed in the design basis LOCA analysis in Reference 1 concurrent with any additional single failure. However, design features intended to mitigate the possibility of digital protection system common mode failures are not available.

In this Condition, all but one DPS actuator in each GDCS subsystem must be restored to OPERABLE status within 30 days. This Completion Time is acceptable because the required safety-related actuators will actuate the minimum number of GDCS subsystem valves required to respond to the design basis LOCA concurrent with any additional single failure.

C~~B~~.1

This Condition applies when one GDCS injection subsystem branch line is inoperable for reasons other than Condition A or B. In this Condition, the minimum number of GDCS injection subsystem branch lines required for a design basis LOCA remain OPERABLE. However, failure of a second injection subsystem branch line could result in less than the minimum required GDCS injection capacity assumed in the design basis LOCA analysis in Reference 1.

In this Condition, the inoperable GDCS injection subsystem branch line must be restored to OPERABLE status within 14 days. This Completion Time is acceptable based on engineering judgment considering the low probability of a failure of an additional GDCS injection subsystem branch line concurrent with a design basis LOCA during this period.

D~~C~~.1

This Condition applies when one GDCS equalizing train is inoperable for reasons other than Condition A or B. In this Condition, the minimum number of GDCS equalizing trains required for a design basis LOCA remain OPERABLE. However, failure of a second equalizing train could result in less than the minimum required GDCS injection capacity assumed in the design basis LOCA analysis in Reference 1.

BASES

ACTIONS (continued)

In this Condition, the inoperable GDCS equalizing train must be restored to OPERABLE status within 14 days. This Completion Time is acceptable based on engineering judgment considering the low probability of a failure of an additional GDCS equalizing train concurrent with a design basis LOCA during this period.

E~~D~~.1 and E~~D~~.2

This Condition applies when two or more injection branch lines or two or more equalizing trains are inoperable for reasons other than Condition A or B. In this Condition, the plant may not have sufficient GDCS capability to respond to a design basis LOCA. This Conditions also applies when Required Actions and Completion Time of Conditions A, B, C, or D~~C~~ are not met. In this Condition, the plant must be brought to a condition in which the LCO does not apply. To achieve this status, the plant must be brought to at least MODE 3 within 12 hours and to MODE 5 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

SURVEILLANCE REQUIREMENTS

SR 3.5.2.1

This SR requires verification every 12 hours that the water level in each of the GDCS pools is within the specified limit. The minimum specified level ensures there is a sufficient volume of water in the drywell to ensure the core remains covered following a severe LOCA and support decay heat removal without operator intervention for a minimum of 72 hours.

The 12 hour Frequency is acceptable because GDCS pool low level alarms will provide prompt notification of an abnormal level in any of the GDCS pools.

SR 3.5.2.2

This SR requires verification every 31 days of the continuity of the DPS actuator and two safety-related actuators associated with DC and Uninterruptible AC Electrical Power Distribution Divisions required by LCO 3.8.6 for each squib-actuated GDCS valve.

BASES

ACTIONS (continued)

A.1

This Condition applies when one or more RWCU/SDC penetration flow path(s) ~~CIVs~~ have an inoperable DPS actuator (i.e., solenoid). In this Condition, required SSLC/ESF actuators will actuate the minimum number of CIVs assumed in the design basis analysis concurrent with any additional single failure~~. However,design features intended to mitigate the possibility of digital protection system common mode failures may not be available~~.

In this Condition, the inoperable DPS actuator(s) must be restored to OPERABLE status within 30 days. This Completion Time is acceptable because the required safety-related actuators will actuate the minimum number of CIVs required to respond to the design basis LOCA concurrent with any additional single failure.~~prior to plant startup from MODE 5 (i.e., prior to entering MODE 2 or MODE 4 from MODE 5). This Completion Time is acceptable because the required safety-related actuators will actuate the minimum number of CIVs required to respond to the design basis LOCA concurrent with any additional single failure.~~

B.1 and B.2

If one of the CIVs in one or more penetration flow paths is inoperable for reasons other than Condition A or D, the penetration still has isolation capability but the ability to tolerate a single failure is lost. Therefore, Required Action B.1 requires that the affected penetrations must be isolated within 4 hours for penetrations other than the main steam line ~~or feedwater line,~~ and within 8 hours for main steam lines ~~and feedwater line~~.

For penetrations isolated in accordance with Required Action B.1, the valve or device used to isolate the penetration should be the closest to the containment that is available. The method of isolation must include the use of at least one isolation barrier that cannot be adversely affected by a single active failure. Isolation barriers that meet this criterion are a closed and deactivated automatic valve, a closed manual valve, a check valve with flow through the valve secured, or a blind flange.

The Completion Time of 4 hours to isolate penetrations (other than a main steam line ~~and feedwater line~~) provides sufficient time to complete the action and is acceptable because the penetration still has isolation capability although the ability to tolerate a single failure is lost.

BASES

LCO (continued)

OPERABILITY of the expansion pool-to-equipment pool isolation valves requires OPERABILITY of three channels of the IC/PCC expansion pool level instrumentation in each pool. OPERABILITY of each expansion pool-to-equipment pool squib isolation valve and pneumatic isolation valve requires OPERABILITY of the DPS actuator and two safety-related actuators associated with a DC and Uninterruptible AC Electrical Power Distribution Division required by LCO 3.8.6, "Distribution Systems - Operating."

APPLICABILITY

The IC/PCC pools are required to be OPERABLE in MODES 1, 2, 3, and 4 because the PCCS and ICS could be required to respond to an event that caused pressurization and heat up of containment or the ICS could be required to respond to an RPV isolation.

Requirements for the IC/PCC expansion pools in MODE 5 are determined by the requirements of LCO 3.5.5, Isolation Condenser System (ICS) - Shutdown.

ACTIONS

A.1

This Condition applies when one or ~~more~~ both expansion pools have one ~~to~~ equipment pool isolation valves ~~have an inoperable~~ DPS actuator inoperable. In this Condition, required safety-related actuators will actuate the ~~number of~~ expansion pool-to-equipment pool valves needed to support decay heat removal for 72 hours without operator action concurrent with any additional single failure, including~~. However, design features intended to mitigate~~ digital protection system common mode failures ~~may not be available~~.

In this Condition, the inoperable expansion pool-to-equipment pool DPS actuators must be restored to OPERABLE status the next time the plant is placed in MODE 5 (i.e., prior to entering MODE 2 or MODE 4 from MODE 5). This Completion Time is acceptable because the remaining DPS actuator and the required safety-related actuators will actuate the minimum number of expansion pool-to-equipment pool valves required to support decay heat removal for 72 hours concurrent with any additional single failure.

BASES

ACTIONS (continued)

B.1

This Condition applies when one or one or both expansion pools have one equipment pool isolation valve DPS actuator inoperable. In this Condition, required safety-related actuators will actuate the minimum expansion pool-to-equipment pool valves assumed in the design basis analysis concurrent with any additional single failure. However, design features intended to mitigate the possibility of digital protection system common mode failures are not available.

In this Condition, at least one DPS actuator in each affected expansion pool must be restored to OPERABLE status within 30 days. This Completion Time is acceptable because the required safety-related actuators will actuate the minimum number of expansion pool-to-equipment pool valves required to support decay heat removal for 72 hours without operator action concurrent with any additional single failure.

C~~B~~.1

This Condition applies when one or both IC/PCC expansion pools have one ~~ to~~ equipment pool connection line ~~on one or more expansion pools is~~ inoperable for reasons other than Condition A. In this Condition, failure of an additional expansion pool-to-equipment pool isolation line could result in the need for operator action to re-fill the IC/PCC pool in less than 72 hours following any event that requires either PCCS or ICS for decay heat removal.

In this Condition, the expansion pool-to-equipment pool connection line(s) must be restored to OPERABLE status within 30 days. This Completion Time is acceptable based on engineering judgment considering that substantial decay heat removal capacity would remain available even if an additional expansion pool-to-equipment pool connection line failed and the low probability of a failure of an additional expansion pool-to-equipment pool connection line failure in conjunction with an event that requires either PCCS or ICS for decay heat removal.

~~C.1~~

~~This Condition applies when both IC/PCC expansion pool-to-equipment pool connection lines on one or more expansion pools are inoperable for reasons other than Condition A. This Condition also applies when one or more required safety-related expansion pool level instrument channels~~