

<< 10 CFR 50.54(q) Initiating Condition (IC) and Emergency Action Level (EAL) and EAL Bases Validation and Verification (V&V) Form >>

Screening or Evaluation Number: MNS Emergency Plan Section D – EAL Bases – Revision 19-1

Part I. Identification of ICs and EALs Affected by Proposed Change and the applicable NEI Generic ICs and EALs:

Document and Revision - Emergency Plan Section D 19-01 (REG 02279019).

Change bases are –

- Change s1, 3 through 8, 14 through 16, 18, 20 through 22, 24 through 34, 36, 47 (period added at end of EAL), 54, and 56 through 58 -
 - Editorial changes correcting typos and formatting throughout.
- Change 51 -
 - Deleted 'Operations' before Shift Manager to reflect correct position title in Section D Attachment 1, EAL Bases, EAL: HU7.1, HA7.1, HS7.1, HG7.1 – Basis second sentence. Editorial.
- Changes 2, 9 through 13, 17, 35, 37 through 46, 47 (non-editorial), 48 through 50, 52, 53 and 55 -
 - The changes reflect that the EOF Director no longer maintains the function of Emergency Classification. Procedure SR/0/A/2000/003 (Activation of the Emergency Operations Facility Revision 010 implemented this change in the EOF for McGuire and was evaluated as meeting licensing and regulatory bases per REG 02056256. Emergency Classification functions continue to be maintained by the Control Room Emergency Coordinator and the TSC Emergency Coordinator. Changes 39, 42 and 45 also pluralized 'Emergency Coordinator' for grammatical correctness.
- Change 23 -
 - This change added "Failure to isolate the leak within 15 minutes, or if known that the leak cannot be isolated within 15 minutes from the start of the leak, requires immediate classification." as part of the Bases for EAL SU5.1. This addition provides additional clarifying guidance to assure that classifications are made within 15 minutes of indication that an EAL was or will be exceeded. This change is an enhancement to the EAL SU5.1 Bases.

Change #	Plan Section	Current Revision	Proposed Revision	Reason
1	Section D	Table of Contents Rev 18-3	Table of Contents Rev 19-1	Update page numbers for Rev 19-1. Editorial
2	Section D Section 1.0	This information may assist the Emergency Coordinator/EOF Director in making classifications, particularly those involving judgment or multiple events.	This information may assist the Emergency Coordinator in making classifications, particularly those involving judgment or multiple events.	Removed 'EOF Director' as he/she no longer has responsibility for classification.
3	Section D Section 2.3	<u>Alert:</u> Any loss or any potential loss of either Fuel Clad or NCS barrier <u>Site</u>	<u>Alert:</u> Any loss or any potential loss of either Fuel Clad or NCS barrier	Added carriage return between 'barrier' and 'Site'. Editorial

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		<u>Area Emergency:</u>	<u>Site Area Emergency:</u>	
4	Section D Section 2.4	EALs applicable under <u>all</u> plant operating modes –	EALs applicable under <u>all</u> plant operating modes –	Removed underline after 'all' and before 'plant'. Editorial
5	Section D Section 2.4	EALs applicable only under <u>hot</u> operating modes –	EALs applicable only under <u>hot</u> operating modes –	Removed underline after 'hot' and before 'operating'. Editorial
6	Section D Section 2.4	EALs applicable only under <u>cold</u> operating modes –	EALs applicable only under <u>cold</u> operating modes –	Removed underline after 'cold' and before 'operating'. Editorial
7	Section D Section 2.4	The MNS EAL categories are aligned to and represent the NEI 99- 01"Recognition Categories."	The MNS EAL categories are aligned to and represent the NEI 99- 01 "Recognition Categories."	Added space between '99- 01' and "'Recognition'. Editorial
8	Section D Section 3.2.7, 1 st paragraph, 2 nd sentence	This situation can occur when personnel discover that an event or condition existed which met an EAL, but no emergency was declared, and the event or condition no longer exists at the time of discovery	This situation can occur when personnel discover that an event or condition existed which met an EAL, but no emergency was declared, and the event or condition no longer exists at the time of discovery	Added space between 'or' and 'condition'. Editorial
9	Section D Section 3.3.1	When making an emergency classification, the Emergency Coordinator/EOF Director must consider all information having a bearing on the proper assessment of an Initiating Condition (IC).	When making an emergency classification, the Emergency Coordinator must consider all information having a bearing on the proper assessment of an Initiating Condition (IC).	Removed 'EOF Director' as he/she no longer has responsibility for classification.
10	Section D Section 3.3.1.3	For ICs and EALs that have a stipulated time duration (e.g., 15 minutes, 30 minutes, etc.), the Emergency Coordinator/EOF Director should not wait until the applicable time has elapsed, but should declare the event as soon as it is determined that the condition has exceeded, or will likely	For ICs and EALs that have a stipulated time duration (e.g., 15 minutes, 30 minutes, etc.), the Emergency Coordinator should not wait until the applicable time has elapsed, but should declare the event as soon as it is determined that the condition has exceeded, or will likely	Removed 'EOF Director' as he/she no longer has responsibility for classification.

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		exceed, the applicable time.	exceed, the applicable time.	
11	Section D Section 3.3.1.6	The NEI 99-01 EAL scheme provides the Emergency Coordinator/EOF Director with the ability to classify events and conditions based upon judgment using EALs that are consistent with the Emergency Classification Level (ECL) definitions (refer to Category H). The Emergency Coordinator/EOF Director will need to determine if the effects or consequences of the event or condition reasonably meet or exceed a particular ECL definition.	The NEI 99-01 EAL scheme provides the Emergency Coordinator with the ability to classify events and conditions based upon judgment using EALs that are consistent with the Emergency Classification Level (ECL) definitions (refer to Category H). The Emergency Coordinator will need to determine if the effects or consequences of the event or condition reasonably meet or exceed a particular ECL definition.	Removed 'EOF Director' as he/she no longer has responsibility for classification.
12	Section D Section 3.2.3	Although EALs provide specific thresholds, the Emergency Coordinator/EOF Director must remain alert to events or conditions that could lead to meeting or exceeding an EAL within a relatively short period of time (i.e., a change in the ECL is IMMEDIATE). If, in the judgment of the Emergency Coordinator/EOF Director, meeting an EAL is IMMEDIATE, the emergency classification should be made as if the EAL has been met.	Although EALs provide specific thresholds, the Emergency Coordinator must remain alert to events or conditions that could lead to meeting or exceeding an EAL within a relatively short period of time (i.e., a change in the ECL is IMMEDIATE). If, in the judgment of the Emergency Coordinator, meeting an EAL is IMMEDIATE, the emergency classification should be made as if the EAL has been met.	Removed 'EOF Director' as he/she no longer has responsibility for classification.
13	Section D Section 3.2.6	The provision discussed above addresses only those	The provision discussed above addresses only those	Removed 'EOF Director' as he/she no longer has

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ATTACHMENT 6

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		rapidly evolving situations when an operator is able to take a successful corrective action prior to the Emergency Coordinator/EOF Director completing the review and steps necessary to make the emergency declaration.	rapidly evolving situations when an operator is able to take a successful corrective action prior to the Emergency Coordinator completing the review and steps necessary to make the emergency declaration.	responsibility for classification.
14	Section D Section 5.2 Abbreviations /Acronyms	NA	NA	Removed and added spaces/periods for alignment. Editorial
15	Section D Section 6.0 Table	NA	NA	Centered text in columns. Editorial
16	Section D – 5.1 Definitions, Explosion, 1 st sentence; CA6.1, Definitions, Explosion, 1 st sentence; SA9.1, Definitions, Explosion, 1 st sentence;	Overpressurization	Over pressurization	Added space between 'over' and 'pressurization'. Editorial
17	Section D Attachment 1 EAL Bases: RU1.1, RU1.2, RA1.1, RA1.3, RA1.4, RS1.1, RS1.3, RG1.1, RG1.3, RG2.1, CU1.1, CA1.2, CS1.1, CG1.1, CU2.1, CA2.1, CU3.2, CA3.1, CU4.1, HU4.1, HU4.2, HU4.3, HS6.1, SU1.1, SA1.1, SS1.1, SG1.1, SG1.2, SS2.1, SU3.1, SA3.1, SU5.1, SU8.1; Attachment 2: Barrier: Containment, Category: D. CMT Integrity or Bypass, Degradation Threat: Potential Loss, Threshold: 3	Note 1: The Emergency Coordinator/EOF Director should declare the event promptly upon determining that time limit has been exceeded, or will likely be exceeded.	Note 1: The Emergency Coordinator should declare the event promptly upon determining that time limit has been exceeded, or will likely be exceeded.	Removed 'EOF Director' as he/she no longer has responsibility for classification.

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18	Section D Attachment 1, EAL Bases, CA1.1, 1 st paragraph of Basis,	5.1 in. above hotleg centerline (reounded to 5 in.) NCS level indication is the lowest level to assure adequate net positive suction head and prevent ND pump cavitation and air entrainment for all flow rates (ref. 1).	5.1 in. above hotleg centerline (rounded to 5 in.) NCS level indication is the lowest level to assure adequate net positive suction head and prevent ND pump cavitation and air entrainment for all flow rates (ref. 1).	Corrected spelling of 'rounded'. Editorial
19	Section D Attachment 1, EAL Bases, CA2.1	NA	Definition(s): None	Added text to be consistent with other EALs.
20	Section D Attachment 1, EAL Bases, CG1.1, 14 th paragraph of Basis, last sentence	Sump and/or tank level changes must be evaluated against other potential sources of water flow to ensure they are indicative of leakage from theNCS.	Sump and/or tank level changes must be evaluated against other potential sources of water flow to ensure they are indicative of leakage from the NCS.	Added space between 'the' and 'NCS'. Editorial
21	Section D Attachment 1, EAL Bases, CU3.1, 3 rd paragraph of Basis	This IC addresses an UNPLANNED increase in NCS temperature above the Technical Specification cold shutdown temperature limitand represents a potential degradation of the level of safety of the plant.	This IC addresses an UNPLANNED increase in NCS temperature above the Technical Specification cold shutdown temperature limit and represents a potential degradation of the level of safety of the plant.	Added space between 'limit' and 'and'. Editorial
22	Section D Attachment 1, EAL Bases, SU1.1	Definition(s): None Basis:	Definition(s): None Basis:	Removed extra 'Basis.' Editorial
23	Section D Attachment 1, EAL Bases, SU5.1	NA	Failure to isolate the leak within 15 minutes, or if known that the leak cannot be isolated within 15 minutes from the start of the leak, requires immediate classification.	Added paragraph per NTM 02187203 based on Operating Experience from Catawba. This will assure classification within 15 minutes of indication that an EAL was or will be exceeded.
24	Section D Attachment 1, EAL Bases, SU6.1	Mode Applicability: 1 1- Power Operations	Mode Applicability: 1- Power Operations	Removed extra '1' Editorial
25	Section D Attachment 1, EAL Bases, SU6.1, 8 th paragraph of Bases	Following the failure on an automatic reactor trip, operators will	Following the failure on an automatic reactor trip, operators will	Added space between 'shut' and 'down' and removed

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		promptly initiate manual actions at the reactor control consoles to shutdown the reactor (e.g., initiate a manual reactor trip).	promptly initiate manual actions at the reactor control consoles to shut down the reactor (e.g., initiate a manual reactor trip).	space between 'trip' and ')'. Editorial
26	Section D Attachment 1, EAL Bases, SU6.1, 9 th paragraph of Bases	If an initial manual reactor trip is unsuccessful, operators will promptly take manual action at another location(s) on the reactor control consoles to shutdown the reactor (e.g., initiate a manual reactor trip using a different switch).	If an initial manual reactor trip is unsuccessful, operators will promptly take manual action at another location(s) on the reactor control consoles to shut down the reactor (e.g., initiate a manual reactor trip using a different switch).	Added space between 'shut' and 'down'. Editorial
27	Section D Attachment 1, EAL Bases, SU6.1, Last paragraph of Bases, 2 nd bullet	and the RPS fails to automatically shutdown the reactor, then this IC and the EALs are applicable, and should be evaluated.	and the RPS fails to automatically shut down the reactor, then this IC and the EALs are applicable, and should be evaluated.	Added space between 'shut' and 'down'. Editorial
28	Section D Attachment 1, EAL Bases, SU6.2, 6 th paragraph of Bases	Following the failure on an automatic reactor trip, operators will promptly initiate manual actions at the reactor control consoles to shutdown the reactor (e.g., initiate a manual reactor trip).	Following the failure on an automatic reactor trip, operators will promptly initiate manual actions at the reactor control consoles to shut down the reactor (e.g., initiate a manual reactor trip).	Added space between 'shut' and 'down'. Editorial
29	Section D Attachment 1, EAL Bases, SU6.2, 6 th paragraph of Bases	If an initial manual reactor trip is unsuccessful, operators will promptly take manual action at another location(s) on the reactor control consoles to shutdown the reactor (e.g., initiate a manual reactor trip using a different switch).	If an initial manual reactor trip is unsuccessful, operators will promptly take manual action at another location(s) on the reactor control consoles to shut down the reactor (e.g., initiate a manual reactor trip using a different switch).	Added space between 'shut' and 'down'. Editorial
30	Section D Attachment 1, EAL Bases, SU6.1, Last paragraph of Bases, 1 st bullet	If the signal causes a plant transient that should have included an automatic reactor	If the signal causes a plant transient that should have included an automatic reactor	Added space between 'shut' and 'down'. Editorial

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		trip and the RTS fails to automatically shutdown the reactor, then this IC and the EALs are applicable, and should be evaluated.	trip and the RTS fails to automatically shut down the reactor, then this IC and the EALs are applicable, and should be evaluated.	
31	Section D Attachment 1, EAL Bases, SA6.1, 5th paragraph of Bases	This IC addresses a failure of the RPS to initiate or complete an automatic or manual reactor trip that results in a reactor shutdown, and subsequent operator manual actions taken at the reactor control consoles to shutdown the reactor are also unsuccessful.	This IC addresses a failure of the RPS to initiate or complete an automatic or manual reactor trip that results in a reactor shutdown, and subsequent operator manual actions taken at the reactor control consoles to shut down the reactor are also unsuccessful.	Added space between 'shut' and 'down'. Editorial
32	Section D Attachment 1, EAL Bases, SA6.1, 6th paragraph of Bases, last sentence	Actions taken at backpanels or other locations within the Control Room, or any location outside the Control Room, are not considered to be "at the reactor control console".	Actions taken at back panels or other locations within the Control Room, or any location outside the Control Room, are not considered to be "at the reactor control console".	Added space between 'back' and 'panels'. Editorial
33	Section D Attachment 1, EAL Bases, SS6.1, 7th paragraph of Bases	5% rated power is a minimum reading on the power range scale that indicates continued power production. It also approximates the decay heat which the shutdown systems were designed to remove and is indicative of a condition requiring immediate response to prevent subsequent core damage. Below 5%, plant response will be similar to that observed during a normal shutdown. Nuclear instrumentation can be used to determine if	5% rated power is a minimum reading on the power range scale that indicates continued power production. It also approximates the decay heat which the shutdown systems were designed to remove and is indicative of a condition requiring immediate response to prevent subsequent core damage. Below 5%, plant response will be similar to that observed during a normal shutdown. Nuclear instrumentation can be used to determine if	Removed extra spaces between 'designed' and 'to' and 'a' and 'normal'. Editorial

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		reactor power is greater than 5% power (ref. 1, 4).	reactor power is greater than 5% power (ref. 1, 4).	
34	Section D Attachment 1, EAL Bases, SS6.1, 10 th paragraph of Bases	The inclusion of this IC and EAL ensures the timely declaration of a Site Area Emergency in response to prolonged failure to shutdown the reactor.	The inclusion of this IC and EAL ensures the timely declaration of a Site Area Emergency in response to prolonged failure to shut down the reactor.	Added space between 'shut' and 'down'. Editorial
35	Section D Attachment 1 EAL Bases, Category H, 7. Emergency Coordinator Judgment	The EALs of this category provide the Emergency Coordinator/EOF Director the latitude to classify emergency conditions consistent with the established classification criteria based upon Emergency Coordinator/EOF Director judgment.	The EALs of this category provide the Emergency Coordinator the latitude to classify emergency conditions consistent with the established classification criteria based upon Emergency Coordinator judgment.	Removed 'EOF Director' as he/she no longer has responsibility for classification.
36	Section D Attachment 1 EAL Bases, HU1.1, 5 th paragraph of Basis	This threshold references the Security Shift Supervision because these are the individuals trained to confirm that a security event is occurring or has occurred.	This threshold references the Security Shift Supervision because these are the individuals trained to confirm that a security event is occurring or has occurred.	Corrected spelling of 'Supervision'. Editorial
37	Section D Attachment 1 EAL Bases, Category H, HU7.1 Initiating Condition	Other conditions exist that in the judgment of the Emergency Coordinator/EOF Director warrant declaration of an Alert	Other conditions existing that in the judgment of the Emergency Coordinator warrant declaration of a UE	Removed 'EOF Director' as he/she no longer has responsibility for classification
38	Section D Attachment 1 EAL Bases, Category H, HU7.1 EAL	Other conditions exist which in the judgment of the Emergency Coordinator/EOF Director indicate that events are in progress or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility	Other conditions exist which in the judgment of the Emergency Coordinator indicate that events are in progress or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection has been	Removed 'EOF Director' as he/she no longer has responsibility for classification

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		protection has been initiated. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of SAFETY SYSTEMS occurs.	initiated. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of SAFETY SYSTEMS occurs.	
39	Section D Attachment 1 EAL Bases, Category H, HU7.1 Basis	The Emergency Coordinator/EOF Director are the designated onsite individuals having the responsibility and authority for implementing the MNS Emergency Response Plan. The Operations Shift Manager (SM) initially acts in the capacity of the Emergency Coordinator/EOF Director and takes actions as outlined in the Emergency Plan implementing procedures. If required by the emergency classification or if deemed appropriate by the Emergency Coordinator/EOF Director, emergency response personnel are notified and instructed to report to their emergency response locations. In this manner, the individual usually in charge of activities in the Control Room is responsible for initiating the necessary emergency response, but Plant Management is expected to manage the emergency response as soon as	The Emergency Coordinators are the designated onsite individuals having the responsibility and authority for implementing the MNS Emergency Response Plan. The Operations Shift Manager (SM) initially acts in the capacity of the Emergency Coordinator and takes actions as outlined in the Emergency Plan implementing procedures. If required by the emergency classification or if deemed appropriate by the Emergency Coordinator, emergency response personnel are notified and instructed to report to their emergency response locations. In this manner, the individual usually in charge of activities in the Control Room is responsible for initiating the necessary emergency response, but Plant Management is expected to manage the emergency response as soon as	Changed 'The Emergency Coordinator/EOF Director are the designated ...' to 'The Emergency Coordinators are the designated ...'. Pluralized 'Emergency Coordinator' for grammatical correctness. Removed 'EOF Director' as he/she no longer has responsibility for classification.

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		<p>available to do so in anticipation of the possible wide-ranging responsibilities associated with managing a major emergency (ref. 1).</p> <p>This IC addresses unanticipated conditions not addressed explicitly elsewhere but that warrant declaration of an emergency because conditions exist which are believed by the Emergency Coordinator/EOF Director to fall under the emergency classification level description for an Unusual Event.</p>	<p>possible wide-ranging responsibilities associated with managing a major emergency (ref. 1).</p> <p>This IC addresses unanticipated conditions not addressed explicitly elsewhere but that warrant declaration of an emergency because conditions exist which are believed by the Emergency Coordinator to fall under the emergency classification level description for an Unusual Event.</p>	
40	Section D Attachment 1 EAL Bases, Category H, HA7.1 Initiating Condition	Other conditions exist that in the judgment of the Emergency Coordinator/EOF Director warrant declaration of an Alert	Other conditions exist that in the judgment of the Emergency Coordinator warrant declaration of an Alert	Removed 'EOF Director' as he/she no longer has responsibility for classification.
41	Section D Attachment 1 EAL Bases, Category H, HA7.1 EAL	Other conditions exist which, in the judgment of the Emergency Coordinator/EOF Director, indicate that events are in progress or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable life threatening risk to site personnel or damage to site equipment because of HOSTILE ACTION. Any releases are expected	Other conditions exist which, in the judgment of the Emergency Coordinator, indicate that events are in progress or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable life threatening risk to site personnel or damage to site equipment because of HOSTILE ACTION. Any releases are expected to be limited	Removed 'EOF Director' as he/she no longer has responsibility for classification.

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		to be limited to small fractions of the EPA Protective Action Guideline exposure levels.	to small fractions of the EPA Protective Action Guideline exposure levels.	
42	Section D Attachment 1 EAL Bases, Category H, HA7.1 Basis	The Emergency Coordinator/EOF Director are the designated onsite individuals having the responsibility and authority for implementing the MNS Emergency Response Plan. The Operations Shift Manager (SM) initially acts in the capacity of the Emergency Coordinator and takes actions as outlined in the Emergency Plan implementing procedures. If required by the emergency classification or if deemed appropriate by the Emergency Coordinator, emergency response personnel are notified and instructed to report to their emergency response locations. In this manner, the individual usually in charge of activities in the Control Room is responsible for initiating the necessary emergency response, but Plant Management is expected to manage the emergency response as soon as available to do so in anticipation of the possible wide-ranging responsibilities associated with	The Emergency Coordinators are the designated onsite individuals having the responsibility and authority for implementing the MNS Emergency Response Plan. The Operations Shift Manager (SM) initially acts in the capacity of the Emergency Coordinator and takes actions as outlined in the Emergency Plan implementing procedures. If required by the emergency classification or if deemed appropriate by the Emergency Coordinator, emergency response personnel are notified and instructed to report to their emergency response locations. In this manner, the individual usually in charge of activities in the Control Room is responsible for initiating the necessary emergency response, but Plant Management is expected to manage the emergency response as soon as available to do so in anticipation of the possible wide-ranging responsibilities associated with managing a major	Changed 'The Emergency Coordinator/EOF Director are the designated ...' to 'The Emergency Coordinators are the designated ...'. Pluralized 'Emergency Coordinator' for grammatical correctness. Removed 'EOF Director' as he/she no longer has responsibility for classification.

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		<p>managing a major emergency (ref.1).</p> <p>This IC addresses unanticipated conditions not addressed explicitly elsewhere but that warrant declaration of an emergency because conditions exist which are believed by the Emergency Coordinator/EOF Director to fall under the emergency classification level description for an Alert.</p>	<p>emergency (ref.1).</p> <p>This IC addresses unanticipated conditions not addressed explicitly elsewhere but that warrant declaration of an emergency because conditions exist which are believed by the Emergency Coordinator to fall under the emergency classification level description for an Alert.</p>	
43	Section D Attachment 1 EAL Bases, Category H, HS7.1 Initiating Condition	Other conditions existing that in the judgment of the Emergency Coordinator/EOF Director warrant declaration of a Site Area Emergency	Other conditions existing that in the judgment of the Emergency Coordinator warrant declaration of a Site Area Emergency	Removed 'EOF Director' as he/she no longer has responsibility for classification
44	Section D Attachment 1 EAL Bases, Category H, HS7.1 EAL	Other conditions exist which in the judgment of the Emergency Coordinator/EOF Director indicate that events are in progress or have occurred which involve actual or likely major failures of plant functions needed for protection of the public or HOSTILE ACTION that results in intentional damage or malicious acts, (1) toward site personnel or equipment that could lead to the likely failure of or, (2) that prevent effective access to equipment needed	Other conditions exist which in the judgment of the Emergency Coordinator indicate that events are in progress or have occurred which involve actual or likely major failures of plant functions needed for protection of the public or HOSTILE ACTION that results in intentional damage or malicious acts, (1) toward site personnel or equipment that could lead to the likely failure of or, (2) that prevent effective access to equipment needed for the protection of the	Removed 'EOF Director' as he/she no longer has responsibility for classification

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		for the protection of the public. Any releases are not expected to result in exposure levels which exceed EPA Protective Action Guideline exposure levels beyond the SITE BOUNDARY.	public. Any releases are not expected to result in exposure levels which exceed EPA Protective Action Guideline exposure levels beyond the SITE BOUNDARY.	
45	Section D Attachment 1 EAL Bases, Category H, HS7.1 Basis	The Emergency Coordinator/EOF Director are the designated onsite individuals having the responsibility and authority for implementing the MNS Emergency Response Plan. The Operations Shift Manager (SM) initially acts in the capacity of the Emergency Coordinator and takes actions as outlined in the Emergency Plan implementing procedures. If required by the emergency classification or if deemed appropriate by the Emergency Coordinator, emergency response personnel are notified and instructed to report to their emergency response locations. In this manner, the individual usually in charge of activities in the Control Room is responsible for initiating the necessary emergency response, but Plant Management is expected to manage the emergency response as soon as	The Emergency Coordinators are the designated onsite individuals having the responsibility and authority for implementing the MNS Emergency Response Plan. The Operations Shift Manager (SM) initially acts in the capacity of the Emergency Coordinator and takes actions as outlined in the Emergency Plan implementing procedures. If required by the emergency classification or if deemed appropriate by the Emergency Coordinator, emergency response personnel are notified and instructed to report to their emergency response locations. In this manner, the individual usually in charge of activities in the Control Room is responsible for initiating the necessary emergency response, but Plant Management is expected to manage the emergency response as soon as available to do so in	Changed 'The Emergency Coordinator/EOF Director are the designated ...' to 'The Emergency Coordinators are the designated ...'. Pluralized 'Emergency Coordinator' for grammatical correctness. Removed 'EOF Director' as he/she no longer has responsibility for classification.

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		<p>available to do so in anticipation of the possible wide-ranging responsibilities associated with managing a major emergency (ref. 1).</p> <p>This IC addresses unanticipated conditions not addressed explicitly elsewhere but that warrant declaration of an emergency because conditions exist which are believed by the Emergency Coordinator/EOF Director to fall under the emergency classification level description for a Site Area Emergency.</p>	<p>anticipation of the possible wide-ranging responsibilities associated with managing a major emergency (ref. 1).</p> <p>This IC addresses unanticipated conditions not addressed explicitly elsewhere but that warrant declaration of an emergency because conditions exist which are believed by the Emergency Coordinator to fall under the emergency classification level description for a Site Area Emergency.</p>	
46	Section D Attachment 1 EAL Bases, Category H, HG7.1 Initiating Condition	Other conditions exist which in the judgment of the Emergency Coordinator/EOF Director warrant declaration of a General Emergency	Other conditions exist which in the judgment of the Emergency Coordinator warrant declaration of a General Emergency	Removed 'EOF Director' as he/she no longer has responsibility for classification
47	Section D Attachment 1 EAL Bases, Category H, HG7.1 EAL	Other conditions exist which in the judgment of the Emergency Coordinator/EOF Director indicate that events are in progress or have occurred which involve actual or IMMEDIATE substantial core degradation or melting with potential for loss of containment integrity or HOSTILE ACTION that results in an actual loss of physical control of the facility. Releases can be reasonably expected to exceed	Other conditions exist which in the judgment of the Emergency Coordinator indicate that events are in progress or have occurred which involve actual or IMMEDIATE substantial core degradation or melting with potential for loss of containment integrity or HOSTILE ACTION that results in an actual loss of physical control of the facility. Releases can be reasonably expected to exceed EPA Protective Action	Removed 'EOF Director' as he/she no longer has responsibility for classification. Added period at end of EAL – editorial.

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		EPA Protective Action Guideline exposure levels offsite for more than the immediate site area	Guideline exposure levels offsite for more than the immediate site area.	
48	Section D Attachment 1 EAL Bases, Category H, HG7.1 Basis	The Emergency Coordinator/EOF Director are the designated onsite individuals having the responsibility and authority for implementing the MNS Emergency Response Plan. The Operations Shift Manager(SM) initially acts in the capacity of the Emergency Coordinator and takes actions as outlined in the Emergency Plan implementing procedures. If required by the emergency classification or if deemed appropriate by the Emergency Coordinator, emergency response personnel are notified and instructed to report to their emergency response locations. In this manner, the individual usually in charge of activities in the Control Room is responsible for initiating the necessary emergency response, but Plant Management is expected to manage the emergency response as soon as available to do so in anticipation of the possible wide-ranging responsibilities associated with	The Emergency Coordinator are the designated onsite individuals having the responsibility and authority for implementing the MNS Emergency Response Plan. The Operations Shift Manager(SM) initially acts in the capacity of the Emergency Coordinator and takes actions as outlined in the Emergency Plan implementing procedures. If required by the emergency classification or if deemed appropriate by the Emergency Coordinator, emergency response personnel are notified and instructed to report to their emergency response locations. In this manner, the individual usually in charge of activities in the Control Room is responsible for initiating the necessary emergency response, but Plant Management is expected to manage the emergency response as soon as available to do so in anticipation of the possible wide-ranging responsibilities associated with managing a major	Removed 'EOF Director' as he/she no longer has responsibility for classification

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		<p>managing a major emergency (ref. 1).</p> <p>Releases can reasonably be expected to exceed EPA PAG plume exposure levels outside the Site Boundary.</p> <p>This IC addresses unanticipated conditions not addressed explicitly elsewhere but that warrant declaration of an emergency because conditions exist which are believed by the Emergency Coordinator/EOF Director to fall under the emergency classification level description for a General Emergency.</p>	<p>emergency (ref. 1).</p> <p>Releases can reasonably be expected to exceed EPA PAG plume exposure levels outside the Site Boundary.</p> <p>This IC addresses unanticipated conditions not addressed explicitly elsewhere but that warrant declaration of an emergency because conditions exist which are believed by the Emergency Coordinator to fall under the emergency classification level description for a General Emergency.</p>	
49	Section D Attachment 1 EAL Bases, Category F– Fission Product Barrier Degradation, last paragraph/bullet	Alternatively, if both the Fuel Clad and NCS fission product barriers were potentially lost, the Emergency Coordinator/EOF Director would have more assurance that there was no immediate need to escalate to a General Emergency.	Alternatively, if both the Fuel Clad and NCS fission product barriers were potentially lost, the Emergency Coordinator would have more assurance that there was no immediate need to escalate to a General Emergency.	Removed 'EOF Director' as he/she no longer has responsibility for classification
50	Section D Attachment 1 EAL Bases, FS1.1 Basis	Alternatively, if both Fuel Clad and NCS potential loss thresholds existed, the Emergency Coordinator/EOF Director would have greater assurance that escalation to a General Emergency is less imminent.	Alternatively, if both Fuel Clad and NCS potential loss thresholds existed, the Emergency Coordinator would have greater assurance that escalation to a General Emergency is less imminent.	Removed 'EOF Director' as he/she no longer has responsibility for classification
51	Section D Attachment	The Operations Shift	The Shift Manager(SM)	Deleted 'Operations'

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	1, EAL Bases, EAL: HU7.1, HA7.1, HS7.1, HG7.1 – Basis second sentence	Manager (SM) initially acts in the capacity of the Emergency Coordinator and takes actions as outlined in the Emergency Plan implementing procedures	initially acts in the capacity of the Emergency Coordinator and takes actions as outlined in the Emergency Plan implementing procedures	before Shift Manager to reflect correct position title. Editorial
52	Section D Attachment 1, Attachment 2, Fission Product Barrier Loss/Potential Loss Matrix and Bases: Barrier: Fuel Clad, Category: E. Emergency Coordinator Judgment, Degradation Threat: Loss, Threshold: 1; Barrier: Fuel Clad, Category: E. Emergency Coordinator Judgment, Degradation Threat: Potential Loss, Threshold: 1; Barrier: Reactor Coolant System, Category: E. Emergency Coordinator Judgment, Degradation Threat: Loss, Threshold: 1; Barrier: Reactor Coolant System, Category: E. Emergency Coordinator Judgment, Degradation Threat: Potential Loss, Threshold: 1; Barrier: Containment, Category: F. Emergency Coordinator Judgment, Degradation Threat: Loss, Threshold: 1;	... Emergency Coordinator/EOF Director Emergency Coordinator ...	Removed 'EOF Director' as he/she no longer has responsibility for classification

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	Barrier: Containment, Category: F. Emergency Coordinator Judgment, Degradation Threat: Potential Loss, Threshold: 1;			
53	Section D Attachment 2 Fission Product Barrier Loss/Potential Loss Matrix and Bases Table	... Emergency Coordinator/EOF Director Emergency Coordinator ...	Removed 'EOF Director' as he/she no longer has responsibility for classification
54	Section D Attachment 2 Fission Product Barrier Loss/Potential Loss Matrix and Bases Table	NA	NA	Added bottom border to table. Editorial
55	Section D Attachment 2 Fission Product Barrier Loss/Potential Loss Matrix and Bases, Barrier: Fuel Clad, Category: E. Emergency Coordinator Judgment, Degradation Threat: Loss, Basis, 3 rd bullet	<u>Dominant accident sequences</u> lead to degradation of all fission product barriers and likely entry to the EOPs. The Emergency Coordinator/EOF Director should be mindful of the Loss of AC power (Station Blackout) and ATWS EALs to assure timely emergency classification declarations.	<u>Dominant accident sequences</u> lead to degradation of all fission product barriers and likely entry to the EOPs. The Emergency Coordinator should be mindful of the Loss of AC power (Station Blackout) and ATWS EALs to assure timely emergency classification declarations.	Removed 'EOF Director' as he/she no longer has responsibility for classification
56	Section D Attachment 2 Fission Product Barrier Loss/Potential Loss Matrix and Bases Table, Barrier: Fuel Clad, Category: B. Inadequate Heat Removal, 1 st paragraph of Basis	Critical Safety Function Status Tree (CSFST) Core Cooling-ORANGE path indicates subcooling has been lost and that some fuel clad damage may potentially occur.	Critical Safety Function Status Tree (CSFST) Core Cooling-ORANGE path indicates subcooling has been lost and that some fuel clad damage may potentially occur.	Removed second 'indicates'. Editorial
57	Section D Throughout	NA	NA	Added/removed spaces and carriage returns and corrected capitalization and indentions. Editorial
58	Section D	Footer - Rev. 18-1 January, 2018	Footer - Rev. 19-1 July, 2019	Editorial

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Part II. Determination of Validation Method by Site EP Manager:			
In-Plant Walkdown	<input type="checkbox"/>	Tabletop	<input type="checkbox"/>
Training	<input type="checkbox"/>	Other (Specify) <u>Read and Review</u>	<input checked="" type="checkbox"/>
Simulator	<input type="checkbox"/>	NA	<input type="checkbox"/>
EP Manager Name (Print): David Thompson	EP Manager Signature: See CAS		Date: See CAS

Part III. Validation. (Answers marked No require resolution)				
Validation Question	Yes	No	NA	Resolution and Comments
Readouts, alarms, indications. etc., available in the Control Room?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Monitor, gauge, etc., designations are correct?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are correct units of measure displayed on the monitor, gauge, etc.?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
All values are within instrumentation display range?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is instrument display finite enough to distinguish between values?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
No miscellaneous issues were identified during walkdown correct?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Part IV. Verification (Answers marked No require resolution)				
Validation Question	Yes	No	NA	Resolution and Comments
Is the IC/EAL change easy to use and does it flow well? Is sequencing logical and correct? Is it written to appropriate level of detail and unambiguous?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the IC/EAL Matrix legible and easy to use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are correct units of measure displayed on the monitor, gauge, etc.?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

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Part IV. Verification (cont.) (No answers require resolution))				
Validation Question	Yes	No	NA	Resolution and Comments
Instrumentation; Plant Computer System (PCS); and/or Plant Process Computer System (PPCS) points specified? <ul style="list-style-type: none"> • Correct instrument? • Correct units • Adequate instrument range? • Display unit readable? • Proper significant digits? • Instrument number and noun name provided? 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<ul style="list-style-type: none"> • Consistent with operations procedures? 				
References specified in EAL Technical Basis current and updated and source documents for inputs have been identified and verified to be appropriate for use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Does the change avoid human performance challenges, latent weaknesses, and human performance traps? <ul style="list-style-type: none"> • No vague or missing critical detail(s). • Decisions are not over-reliant on knowledge for successful performance 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Modifications, Emergency Plan, EAL Technical Basis, reference manual and procedure revisions, setpoint changes, software changes, training, etc. are appropriately scheduled to correspond to the EAL revision?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are alarm setpoints equal to or below EAL thresholds?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Do radiation monitor setpoints account for background?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Part V. Comments: If an EAL change requires a License Amendment Request, then document the gap analysis review of the site specific EAL versus NEI generic guidance in this section. Not required.				

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Part VI. Completion Review and Approval Signatures		
Validation and Verification (Print Names) [Note1]: Scott Fortin (Fleet Ops CFAM Organization and previous MNS Senior License Holder)	Validation and Verification Signatures: See CAS	Date: See CAS
Site EP Manager Review (Print Name): David Thompson	EP Manager Signature: See CAS	Date: See CAS
Senior Operations License Holder (Print Name): Ryan Severns	Senior Operations License Holder Signature: See CAS	Date: See CAS
Qualified Emergency Coordinator (Print Name): Pete Schuerger	Qualified Emergency Coordinator Signature: See CAS	Date: See CAS
Engineering Review (Print Name) [Note2]: Not required per David Thompson as no EAL initiating conditions changing	Engineering Signature: N/A	Date: N/A
PSA Review (Print Name) [Note3]: Not required per David Thompson as no EAL initiating conditions changing	PSA Signature: N/A	Date: N/A
Radiation Protection Review [Note 4]: Not required per David Thompson as no EAL initiating conditions changing	Radiation Protection Signature: N/A	Date: N/A
EP CFAM Review (Print Name): David Thompson	EP CFAM Signature: See CAS	Date: See CAS
Notes: <ol style="list-style-type: none"> Validation and Verification can be performed by the same individual but must be: <ul style="list-style-type: none"> Qualified in the subject matter Separate from the author of change A cross-discipline reviewer System specific Engineering Review is required for EAL changes related to process equipment such as radiological instruments and environmental monitoring. PSA review is required for EAL changes to ensure any potential or actual impact to PSA calculations or assumptions are adequately addressed (not applicable to CR3). Radiation Protection is required for radiological EAL changes. 		

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