

SUMMARY OF CHANGES

Change (#) 1
<p>Description: Changes resulting from the annual review and update of the Emergency Plan. The changes include the following:</p> <ul style="list-style-type: none">a. Changed reference from 4 AWI-08.01.01 (FIRE PREVENTION PRACTICES) to the document that superseded it, FIREPREVENT (FIRE PREVENTION PRACTICES).b. Updated OSC description to remove the non-emergency alternate use of the Operations Support Center (OSC) as an Outage Control Center (OCC) to reflect relocation of the OCC function out of the OSC area.c. Corrected a mathematical symbol to align with the symbol noted for the system in the Operations Manual source document.d. Updated the Meteorological Monitoring system description to better align with the most recent update noted for the system in the Operations Manual source document.
<p>Doc ID or (Procedure Number) / Revision Number: E-Plan revision 55, Sections 5.1.2.2, 7.1.2, 7.3.1.2.1, 7.3.1.2.2, Table 1, and Figure 13.7.</p>
<p>Document Title: Emergency Plan</p>
<p>PCR Number: 602000019704</p>
<p>Editorial Basis (applies to E-Plan changes only)</p> <p>See description section for discussion of editorial type changes.</p>

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Licensing/Basis Affected

Section 8.2.2 of the MNGP E-plan identifies the following:

The Monticello Emergency Plan SHALL be reviewed and certified to be current on an annual basis in accordance with the Off-site Nuclear Emergency Plan. Other reviews of the Emergency Plan and Implementing Procedures will be performed as required by Technical Specifications. Annual revisions to the Emergency Plan are conducted in accordance with Surveillance Procedure 1406 and may be based on the following:

- 8.2.2.1 Lessons learned during drills and exercises and industry lessons learned.
- 8.2.2.2 Changes in the normal plant or Emergency Response Organization structures.
- 8.2.2.3 Modifications to plant systems, components or instrumentation.
- 8.2.2.4 Changes in the functions or responsibilities of supporting agencies and organizations.
- 8.2.2.5 Lessons learned from real emergency plan activations.
- 8.2.2.6 Changes in State or Federal regulations.

Evaluation Determination:

Regulatory Compliance Basis

The changes are clarifications, administrative, and/or editorial in nature and update the Emergency Plan as follows:

- a. Section 5.1.2.2 & Table 1 - Changed reference from 4 AWI-08.01.01 (FIRE PREVENTION PRACTICES) to the document that superseded it FIREPREVENT (FIRE PREVENTION PRACTICES).
- b. Section 7.1.2 & Figure 13.7 - Updated OSC description to remove the non-emergency alternate use of the Operations Support Center (OSC) as an Outage Control Center (OCC) to reflect relocation of OCC function out of the OSC area.
- c. Section 7.3.1.2.1 Corrected mathematical symbol to align with the symbol noted for the system in the Operations Manual source document.
- d. Section 7.3.1.2.2 Updated system description to better align with the most recent update noted for the system in the Operations Manual source document.

Following is assessment of each change:

- a. In 2020, the Monticello Nuclear Generating Plant (MNGP) site eliminated the use of site Administrative Work Instruction (AWI) documents and relocated their contents to a combination of fleet documents and/or new site documents. This change updates the E-Plan to reference the current site document FIREPREVENT (FIRE PREVENTION PRACTICES) which superseded the previous document referenced, 4 AWI-08.01.01 (FIRE PREVENTION PRACTICES) as result of the noted site initiative. This change is administrative in nature to reference the current document containing the information captured in the previous referenced document.

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- b. The MNGP site is relocating the Outage Control Center (OCC) function (a non-emergency use of the Operations Support Center (OSC)) to a new location onsite. The change does not impact the emergency equipment and supplies maintained in the OSC nor does it impact the area's capabilities to continue to function as the OSC for emergency conditions. As a result, the changes to Section 7.1.2 and Figure 13.7 are considered administrative in nature to eliminate reference to this non-emergency use of the OSC area.
- c. Comparison of the E-Plan description for the stations seismic monitoring system to the Operations Manual system description contained in B.05.14-01, Revision 1 (Seismic Monitoring) noted that the symbols in the E-Plan for the annunciator OPERATIONAL BASIS EARTHQUAKE (6-C-13), OBE alarm and for the annunciator DESIGN BASIS EARTHQUAKE (6-C-18), DBE alarm did not match the symbols in the operations manual which is the source document for the system description contained in the E-Plan (> versus ≥). The change in Section 7.3.1.2.1 is a correction to the E-Plan symbol noted to align it with the source document. It does not result in a change to the noted alarm setpoints or any other actions taken in response to the alarms for the instruments. It is considered editorial in nature to correct the E-Plan symbol to align with the source document.
- d. Comparison of the E-Plan description for the stations meteorological monitoring system to the Operations Manual system description contained in B.05.16-02, Revision 8 (Meteorological Monitoring) noted several minor description differences and inconsistencies between the E-Plan description and B.05.16-02 which is the source document for the system description. The changes in Section 7.3.1.2.2 provide clarifications and minor corrections that better align the Emergency Plan equipment descriptions with that of the equipment technical basis documents for those systems. The changes are transparent to the end user of the equipment for emergency assessment and response purposes and do not change or impact the capabilities of the ERO to carry out their emergency response activities associated with use of the equipment. The changes in this section of the E-Plan are of an administrative nature to better align the plan description with the current technical basis document describing the equipment.

Emergency Plan Effectiveness Basis

The changes are administrative, clarifications and/or editorial in nature and made in accordance with section 8.2.2 of the Emergency Plan, which requires that the plan be reviewed and updated on an annual basis. The changes align the E-plan with the documents that provide the regulatory basis and governance for the items being changed. The changes do not impact implementation of the Emergency Plan requirements. The changes do not result in a reduction of effectiveness of the Emergency Plan.

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Change (#) 2	
Description:	Section 12, Annex A (MNGP EMERGENCY ACTION LEVELS AND APPLICABLE DEFINITIONS), captured updates to the Minimum Steam Cooling RPV Water Level identified in EALs SG1.1 and SS5.1 per Engineering Change Request (ECR) 601000001792.
Doc ID or (Procedure Number) / Revision Number:	E-Plan revision 55, Section 12 Annex A.
Document Title:	Emergency Plan
PCR Number:	602000019704
Editorial Basis (applies to E-Plan changes only)	Change 2 is more than editorial.
Licensing/Basis Affected	License Amendment No. 197, Renewed Facility Operating License No. DPR-22 as set forth in the licensee's application dated March 31, 2017, supplemented by letter dated September 25, 2017 and evaluated in the NRC staff's safety evaluation dated March 6, 2018 provides the current licensing basis for MNGP's EALs and classification scheme based on NEI-99-01 Rev 6.
Evaluation Determination:	
Regulatory Compliance Basis	<p>MNGP's current EALs SG1.1 and SS5.1 are based on the NRC-endorsed guidance of the NEI 99-01, Revision 6 EAL scheme and basis. MNGP's license application request for implementation of NEI 99-01 Revision EALs and Classification Scheme included the following NEI 99-01 Rev 6 wording for the affected EAL thresholds, the site-specific wording, and MNGP's site-specific wording justification for each EAL as follows:</p> <p>SG1.1 b. NEI 99-01 basis EAL wording:</p> <ul style="list-style-type: none">- (Site-specific indication of an inability to adequately remove heat from the core) <p>SG1.1 b. MNGP Site-specific wording and justification:</p>

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- Reactor vessel water level cannot be restored and maintained above – 149”
(Minimum
Steam Cooling RPV Water Level)

Cooling Justification: EOP C.5.1-1100, Part J, provides the basis for Minimum Steam RPV Water Level (-149”).

SS5.1 c. NEI 99-01 basis EAL wording:

- (Site-specific indication of an inability to adequately remove heat from the core)

SS5.1 c. MNGP EAL Site-specific wording and justification:

- Reactor vessel water level cannot be restored and maintained above -149”
(Minimum
Steam Cooling RPV Water Level)

Justification: Reactor vessel level of -149” is indicative of a water level that is unable to adequately remove heat from the core (EOP C.5.1-1100, Part J).

As noted in the justifications provided above, MNGP's license application request for implementation of NEI 99-01 Revision 6 EALs and Classification Scheme included identification of the station EOPs, specifically EOP C.5.1-1100, as the source for the level of -149 inches for the MSCWL captured in EALs SG1.1 and SS5.1.

The MNGP Emergency Operating Procedures (EOPs), SAMGs, and associated support procedures have been revised to the most recent version of the Boiling Water Reactor Owner's Group (BWROG) guidance (revision 4). In support of this EOP change, calculations are required to produce the plant specific curves and variables needed to implement the revised EPG/SAGs at Monticello. The required EPG/SAG calculation methods were developed by the BWROG. MNGP's calculation supporting implementation of Rev. 4 of the EPG/SAGs is 15-032, Rev. 2, Cycle Specific EOP Calculation. This calculation determined that the minimum steam cooling reactor pressure vessel water level (MSCRWL) identified in the EOPs would change from -149 inches to -150 inches with the station's implementation of the latest revision (rev. 4) of the BWROG EPG/SAGs.

Regulatory Guidance Review

Regulatory Guidance (Regulatory Guide 1.219)

Regulatory Guide (RG) 1.219, "Guidance on Making Changes to Emergency Plans for Nuclear Power Reactors," describes methods that the NRC considers acceptable to change Emergency Plans. RG 1.219, Section 4.4.e.3, provides the guidance related to changes to the Emergency Plan, and more specifically the EALs. The guidance states:

“A change could require prior NRC approval if it would result in an EAL that is inconsistent with the meaning or intent of the approved EAL bases such that the classification of the event would be different from that approved by the NRC in a site

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specific application or from an endorsed industry EAL scheme that had been approved for licensee use.”

The change to EALs SG1.1 and SS5.1 conforms to a change to the minimum steam cooling reactor pressure vessel water level (MSCRWL) from -149 inches to -150 inches established by calculation 15-032, Rev. 2, Cycle Specific EOP Calculation which was completed to support the station's implementation of the latest revision (rev. 4) of the BWROG EPG/SAGs. The revised EALs will continue to support timely classification and align with the EOP changes implemented at the station which are the basis for the MSCRWL identified in the EALs. The revised EALs will continue to be consistent with the meaning and intent of MNGP's EAL basis for them which is the EOPs.

RG 1.219, Section 4.4.f, includes examples (excerpt below) of EAL changes which could be performed without prior NRC approval. Per RG 1.219, the following examples would generally not require prior NRC approval:

- (1) A change to an EAL numeric threshold to reflect an approved change in a technical specification, provided that the basis of the approved EAL is unchanged (e.g., an EAL basis refers to a particular technical specification but not a limiting condition for operation value), and
- (2) A change to an EAL numeric threshold to reflect a change in a plant design parameter, instrument response characteristics, or design calculation, provided that the meaning or intent of the basis of the approved EAL is unchanged.
- (3) A change that differs in wording but agrees in meaning and intent of the NRC-approved EAL and its bases such that the classification of an event would remain the same.

The change to EALs SG1.1 and SS5.1 MSCRWL thresholds is based on a revised design calculation in support of the station implementing revised EOPs which are the basis for the threshold which is changing. Prior NRC approval is not required.

Emergency Plan Effectiveness Basis

This change conforms with 15-032, Rev. 2, Cycle Specific EOP Calculation which changes the minimum steam cooling reactor pressure vessel water level (MSCRWL) identified in the EOPs from -149 inches to -150 inches with the station's implementation of the latest revision (rev. 4) of the BWROG EPG/SAGs. The revised EALs continues to comply with the approved SER and

NEI 99-01 basis guidance. The effectiveness of the MNGP E-Plan is maintained by updating the thresholds with the MSCRWL implemented with site's implementation of the revised EPG/SAGs.

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Change (#) 3	
Description: Updated EAL Matrix Table C-1 document referenced to align with document revisions resulting from EPG/SAG Revision 4 implementation.	
Doc ID or (Procedure Number) / Revision Number: E-Plan revision 55, Section 12 Annex A.	
Document Title: Emergency Plan	
PCR Number: 602000019704	
Editorial Basis (applies to E-Plan changes only) See description section for discussion of editorial type changes.	
Licensing/Basis Affected License Amendment No. 197, Renewed Facility Operating License No. DPR-22 as set forth in the licensee's application dated March 31, 2017, supplemented by letter dated September 25, 2017 and evaluated in the NRC staff's safety evaluation dated March 6, 2018 provides the current licensing basis for MNGP's EALs and classification scheme based on NEI-99-01 Rev 6.	
Evaluation Determination:	
Regulatory Compliance Basis	

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MNGP's current EOPs including their structure and layout that are referenced in the E-Plan, EAL Matrix Table C1 are based on BWROG EPG/SAG Revision 3. The new and revised EOPs including their structure and layout are based on BWROG EPG/SAG Revision 4.

In June 2018, the Boiling Water Reactor Owners' Group (BWROG) issued Revision 4 of the Emergency Procedure and Severe Accident Guidelines (EPG/SAG). EPG/SAG Revision 4 contains procedural enhancements that address shutdown and refueling modes, insights from the March 2011 accident at Fukushima, better integration with other event mitigation procedures (FLEX and B.5.b), post-Fukushima regulatory requirements, and lessons learned from previous changes (e.g., training and implementation feedback). The EPG/SAG revision was developed by subject matter experts with backgrounds in BWR operations, engineering, training, risk assessment, severe accident analysis, human factors, emergency operating procedures (EOPs) and licensing.

Regulatory Guidance Review

RG 1.219, Section 4.4.f, includes examples (excerpt below) of EAL changes which could be performed without prior NRC approval. Per RG 1.219, the following examples would generally not require prior NRC approval:

- (1) A change to an EAL numeric threshold to reflect an approved change in a technical specification, provided that the basis of the approved EAL is unchanged (e.g., an EAL basis refers to a particular technical specification but not a limiting condition for operation value), and
- (2) A change to an EAL numeric threshold to reflect a change in a plant design parameter, instrument response characteristics, or design calculation, provided that the meaning or intent of the basis of the approved EAL is unchanged.
- (3) A change that differs in wording but agrees in meaning and intent of the NRC-approved EAL and its bases such that the classification of an event would remain the same.

The reference changes to the E-Plan and EAL Matrix Table C1 align with the document changes resulting from the station's implementation of the revised EOPs based on (rev. 4) of the BWROG EPG/SAGs. Although the document titles and numbering reference have

changed from those referenced in the SER approved documents, they agree in meaning and intent of the NRC-approved EALs and its bases such that the classification of events remain the same.

Emergency Plan Effectiveness Basis

This change conforms with the station's implementation of the latest revision (rev. 4) of the BWROG EPG/SAGs. The change is administrative in nature to reference the current documents containing the information captured by the previous referenced document. The revised references continue to comply with the approved SER and NEI 99-01 basis guidance. The effectiveness of the MNGP E-Plan is maintained by updating the references with the new references that capture the supporting information of the previous identified references with site's implementation of BWROG EPG/SAG Revision 4.