



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

March 31, 2023

Mr. Christopher P. Domingos
Site Vice President
Northern States Power Company - Minnesota
Monticello Nuclear Generating Plant and
Prairie Island Nuclear Generating Plant
1717 Wakonade Drive East
Welch, MN 55089

SUBJECT: MONTICELLO NUCLEAR GENERATING PLANT AND PRAIRIE ISLAND
NUCLEAR GENERATING PLANT, UNITS 1 AND 2 - ISSUANCE OF
AMENDMENTS RE: STANDARD EMERGENCY PLAN AND CONSOLIDATED
EMERGENCY OPERATIONS FACILITY (EPID L-2021-LLA-0210)

Dear Mr. Domingos:

The U.S. Nuclear Regulatory Commission (NRC, the Commission) has issued the enclosed Amendment No. 211 to Renewed Facility Operating License No. DPR-22, for the Monticello Nuclear Generating Plant (Monticello), Amendment No. 242 to Renewed Facility Operating License No. DPR-42 Prairie Island Nuclear Generating Plant (Prairie Island), Unit 1, and Amendment No. 230 to Renewed Facility Operating License No. DPR-60 for the Prairie Island, Unit 2. The amendments consist of changes to the emergency plans in response to your application dated November 15, 2021, as supplemented by the letter dated June 10, 2022.

The amendments change the Monticello and Prairie Island, Units 1 and 2, emergency plans, which includes a Corporate Offsite Emergency Plan, to create a new Xcel Energy Standard Emergency Pan. In addition, the amendments approve a consolidated Emergency Operations Facility (EOF) replacing the existing Monticello and Prairie Island, Units 1 and 2, EOF and their common back-up EOF.

A copy of our related safety evaluation is also enclosed. The Notice of Issuance will be included in the Commission's monthly *Federal Register* notice.

Sincerely,

/RA/

Robert Kuntz, Senior Project Manager
Plant Licensing Branch III
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-263, 50-282, and 50-306

Enclosures:

1. Amendment No. 211 to DPR-22
2. Amendment No. 242 to DPR-42
3. Amendment No. 230 to DPR-60
4. Safety Evaluation

cc: Listserv

SUBJECT: MONTICELLO NUCLEAR GENERATING PLANT AND PRAIRIE ISLAND
 NUCLEAR GENERATING PLANT, UNITS 1 AND 2 - ISSUANCE OF
 AMENDMENTS RE: STANDARD EMERGENCY PLAN AND CONSOLIDATED
 EMERGENCY OPERATIONS FACILITY (EPID L-2021-LLA-0210) DATED
 MARCH 31, 2023

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

NORTHERN STATES POWER COMPANY

DOCKET NO. 50-263

MONTICELLO NUCLEAR GENERATING PLANT

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 211
Renewed License No. DPR-22

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Northern States Power Company (NSPM, the licensee) dated November 15, 2021, as supplemented by letter dated July 10, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in Title 10 of the *Code of Federal Regulations* (10 CFR) Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, by Amendment No. 211, Renewed License No. DPR-22 is hereby amended to authorize revision to the Monticello Nuclear Generating Plant Emergency Plan as set forth in the NSPM application dated November 15, 2021, as supplemented by letter dated June 10, 2022, and evaluated in the NRC staff's safety evaluation March 31, 2023. The license amendment is effective as of its date of issuance and shall be implemented within 180 days.

FOR THE NUCLEAR REGULATORY COMMISSION



King, Michael signing on behalf
of Veil, Andrea
on 03/31/23

Andrea D. Veil, Director
Office of Nuclear Reactor Regulation

Date of Issuance: March 31, 2023



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

NORTHERN STATES POWER COMPANY

DOCKET NO. 50-282

PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 242
Renewed License No. DPR-42

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Northern States Power Company (NSPM, the licensee), dated November 15, 2021, as supplemented by letter dated July 10, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in Title 10 of the *Code of Federal Regulations* (10 CFR) Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, by Amendment No. 242, Renewed License No. DPR-42 is hereby amended to authorize revision to the Prairie Island Nuclear Generating Plant Emergency Plan as set forth in the NSPM application dated November 15, 2021, as supplemented by letter dated June 10, 2022, and evaluated in the NRC staff's safety evaluation dated March 31, 2023. The license amendment is effective as of its date of issuance and shall be implemented within 180 days.

FOR THE NUCLEAR REGULATORY COMMISSION



King, Michael signing on behalf
of Veil, Andrea
on 03/31/23

Andrea D. Veil, Director
Office of Nuclear Reactor Regulation

Date of Issuance: March 31, 2023



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

NORTHERN STATES POWER COMPANY

DOCKET NO. 50-306

PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 230
Renewed License No. DPR-60

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Northern States Power Company (NSPM, the licensee), dated November 15, 2021, as supplemented by letter dated July 10, 2022, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in Title 10 of *the Code of Federal Regulations* (10 CFR) Chapter I ;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, by Amendment No. 230, Renewed License No. DPR-60 is hereby amended to authorize revision to the Prairie Island Nuclear Generating Plant Emergency Plan as set forth in the NSPM application dated November 15, 2021, as supplemented by letter dated June 10, 2022, and evaluated in the NRC staff's safety evaluation dated March 31, 2023. The license amendment is effective as of its date of issuance and shall be implemented within 180 days.

FOR THE NUCLEAR REGULATORY COMMISSION



King, Michael signing on behalf
of Veil, Andrea
on 03/31/23

Andrea D. Veil, Director
Office of Nuclear Reactor Regulation

Date of Issuance: March 31, 2023



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 211 TO
RENEWED OPERATING LICENSE NO. DPR-22,
AMENDMENT NO. 242 TO RENEWED OPERATING LICENSE NO. DPR-42,
AND AMENDMENT NO. 230 TO RENEWED OPERATING LICENSE NO. DPR-60
NORTHERN STATES POWER COMPANY
MONTICELLO NUCLEAR GENERATING PLANT AND
PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNITS 1 AND 2
DOCKET NOS. 50-263, 50-282, AND 50-306

1.0 INTRODUCTION

By letter dated November 15, 2021 (Agencywide Documents Access and Management System Accession No. ML21320A226), as supplemented by letter dated June 10, 2022 (ML22161A915), Northern States Power Company, a Minnesota corporation doing business as Xcel Energy (the licensee, Xcel Energy), requested changes to the Monticello Nuclear Generating Plant (Monticello) and the Prairie Island Nuclear Generating Plant, Units 1 and 2 (Prairie Island) Emergency Plans which includes a new consolidated Corporate Offsite Emergency Plan for U.S. Nuclear Regulatory Commission (NRC) review and prior approval pursuant to Section 50.54(q) of Title 10 of the *Code of Federal Regulations* (10 CFR). Specifically, a new Xcel Energy Standard Emergency Plan that includes site-specific annexes is proposed. Xcel Energy stated that the proposed Xcel Energy Standard Emergency Plan with site-specific annexes was developed utilizing the guidance in NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Revision 2, (NUREG-0654 refers to Revision 2 in this safety evaluation unless otherwise noted) dated December 2019 (ML19347D139) and establishes an updated licensing basis for Xcel Energy operating plants.

Additionally, Xcel Energy proposes to replace the existing Monticello and Prairie Island Emergency Operations Facilities (EOFs), and their common backup EOF (BUEOF) with a consolidated EOF located in the Xcel Energy headquarters. Prior NRC Commission approval is needed before locating an EOF greater than 25 miles from a nuclear power reactor site pursuant to 10 CFR 50, Appendix E, Section IV.E.8.b. In SECY-22-0106, "Xcel Energy Request for Emergency Operations Facility Relocation and Consolidation" (ML22192A190), the NRC staff recommended approval of Xcel Energy's request to relocate and consolidated the EOF. In

staff requirements memorandum (SRM) for SECY-22-0106 the Commission approved the Xcel Energy's proposal to relocate and consolidate the EOF (ML23040A252).

The supplemental letter dated June 10, 2022, provided additional information that clarified the application but did not expand the scope of the application as originally noticed and, did not change the NRC staffs proposed no significant hazards consideration determination as published in the *Federal Register* (FR) on January 25, 2022 (87 FR 3844).

2.0 REGULATORY EVALUATION

The regulatory requirements and guidance, on which the NRC staff based this review, are provided below.

2.1 Regulations

The planning standards, as set forth in 10 CFR 50.47(b), establish the requirements that the onsite and offsite emergency response plans must meet in order for the NRC staff to find that there is reasonable assurance that the licensee will take adequate protective measures in the event of a radiological emergency.

In addition, Appendix E to 10 CFR Part 50, "Emergency Planning and Preparedness for Production and Utilization Facilities," Section IV.1, states, in part, that "...the emergency response plans submitted by an applicant for a nuclear power reactor operating license under this part, or for an early site permit (as applicable) or combined license under 10 CFR part 52, shall contain information needed to demonstrate compliance with the standards described in § 50.47(b), and they will be evaluated against those standards."

The requirements for making changes to emergency plans, as set forth in 10 CFR 50.54(q)(4), which states, in part, that "[t]he changes to a license's emergency plan that reduce the effectiveness of the plan as described in paragraph (q)(1)(iv) of this section may not be implemented without prior approval by the NRC."

2.2 Guidance

The NRC staff used the following applicable guidance documents to conduct its review:

- NUREG-0654 provides specific acceptance criteria that the NRC has determined as an acceptable means of complying with the standards in 10 CFR 50.47. These criteria provide a basis for NRC licensees (and applicants), and State and local governments to develop acceptable radiological emergency preparedness plans.
- Office of Nuclear Security and Incident Response (NSIR)/Division of Preparedness (DPR) Interim Staff Guidance (ISG) document, NSIR/DPR-ISG_01, "Interim Staff Guidance, Emergency Planning for Nuclear Power Plants" (ML113010523), provides updated guidance for addressing emergency planning requirements for nuclear power plants, based on changes to emergency preparedness regulations in 10 CFR 50.47 and Appendix E to 10 CFR Part 50, which were published on November 23, 2011 (76 FR 72560).

- NUREG-0696, “Functional Criteria for Emergency Response Facilities,” dated February 1981 (ML051390358), describes the facilities and systems to be used by nuclear power plant licensees to improve responses to emergencies.
- NUREG-0737, Supplement 1, “Clarification of TMI [Three Mile Island] Action Plan Requirements – Requirements for Emergency Response Capability,” January 1983 (ML102560009).

3.0 TECHNICAL EVALUATION

The NRC staff has reviewed the licensee’s regulatory and technical analyses in support of its proposed Xcel Energy Standard Emergency Plan with site-specific annexes, as described in its application. The proposed Xcel Energy Standard Emergency Plan with site-specific annexes is structured to follow the general format of NUREG-0654. The following NRC staff technical evaluation of the license amendment request (LAR) is structured to reflect the 16 planning standards in Section II, “Planning Standards and Evaluation Criteria,” of NUREG-0654 and addresses the requirements in 10 CFR 50.47(b), including any applicable requirements in Appendix E to 10 CFR Part 50.

3.1 Background

As stated in its application, the proposed Xcel Energy Standard Emergency Plan with site-specific annexes was developed based upon the updated NRC guidance contained in NUREG-0654. In the supplemental letter dated June 10, 2022, Xcel Energy stated, in part, “the changes being pursued under 10 CFR 50.90 represent a wholistic change to the structure of the emergency plans associated with Northern States Power Company – Minnesota (doing business as Xcel Energy).” Xcel Energy further stated that, “this wholistic change is viewed as a reduction in effectiveness based on the current guidance associated with 10 CFR 50.54(q).” Xcel Energy provided the following as examples of specific changes that could be considered as a reduction in effectiveness:

- reduction in the number of Emergency Response Organization (ERO) positions,
- reduction in the number of on-shift staff,
- changes to the minimum staff positions for facility activation at the Technical Support Center (TSC), the Operations Support Center (OSC), and the EOF, and
- elimination of the Backup OSC at Monticello.

The LAR includes enclosures which describes the licensee’s evaluation of the effectiveness of combining then Monticello Emergency Plan, the Prairie Island Emergency Plan, and the Corporate Offsite Emergency Plan, into a combined Standard Emergency Plan. A Justification Matrix for each plant identifies the wording in the current Xcel Energy emergency plans and a justification for changes in emergency plan wording. Tables are provided that compare the current ERO assigned to each emergency response facility with the proposed ERO assignments with a justification for each change.

Enclosure 4 of the LAR, “Consolidation of Emergency Operations Facilities,” describes the licensee’s evaluation of the replacement of the existing Monticello and Prairie Island EOFs and their common BUEOF with a consolidated, centrally located EOF. Xcel Energy requested

Commission approval for locating an EOF greater than 25 miles from a nuclear power reactor pursuant to 10 CFR 50, Appendix E, Section IV.E.8.b.

Finally, as summarized in Enclosure 5 of the LAR, "Offsite Response Organization Letters," the licensee has provided copies of its Xcel Energy Standard Emergency Plan with site-specific annexes to State and local governmental agencies with emergency planning and preparedness responsibilities for the affected sites; each of the State and local governmental agencies confirmed that they do not object to the licensee's adoption of the Xcel Energy Standard Emergency Plan with site-specific annexes.

3.2 Evaluation

Section II, "Planning Standards and Evaluation Criteria," of NUREG-0654 contains evaluation criteria for each planning standard of 10 CFR 50.47(b). The following discussion provides the results of NRC staff's review of the proposed Xcel Energy Standard Emergency Plan with site-specific annexes and the staff's finding that all 16 Planning Standards and Evaluation Criteria of NUREG-0654 are met:

- A. Assignment of Responsibility,
- B. Emergency Response Organization,
- C. Emergency Response Support and Resources,
- D. Emergency Classification System,
- E. Notification Methods and Procedures,
- F. Emergency Communications,
- G. Public Education and Information,
- H. Emergency Facilities and Equipment,
- I. Accident Assessment,
- J. Protective Response,
- K. Radiological Exposure Control,
- L. Medical and Public Health Support,
- M. Recovery, Reentry, and Post Accident Operations,
- N. Exercises and Drills,
- O. Radiological Emergency Response Training, and
- P. Responsibility for the Planning Effort: Development, Periodic Review, and Distribution of Emergency Plans.

3.2.1 Criterion II.A, "Assignment of Responsibility"

NUREG-0654, Evaluation Criterion II.A, addresses planning standard 10 CFR 50.47(b)(1), which states:

Primary responsibilities for emergency response by the nuclear facility licensee and by State and local organizations within the Emergency Planning Zones have been assigned, the emergency responsibilities of the various supporting organizations have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis.

Section IV.A of Appendix E to 10 CFR Part 50, requires, in part, that the organization for coping with radiological emergencies be described, including definition of authorities, responsibilities,

and duties of individuals assigned to the licensee's emergency organization and the means for notification of such individuals in the event of an emergency.

The requirements of 10 CFR 50.47(b)(1) and the applicable requirements of Section IV.A of Appendix E to 10 CFR Part 50 are addressed in Section A, "Assignment of Responsibility," of the proposed Xcel Energy Standard Emergency Plan and site-specific annexes.

3.2.1.1 *Standard Emergency Plan*

The proposed Xcel Energy Standard Emergency Plan describes the assignment of responsibility to Xcel Energy, and State and county organizations within the Emergency Planning Zones (EPZs) for the Xcel Energy sites. NUREG-0654, Evaluation Criteria A.1 through A.5, provide the primary responsibilities for emergency response by Xcel Energy and by State and county organizations within the EPZs. The interrelationships between Xcel Energy, State, and county offsite response organizations (OROs) and local services support (e.g., fire, medical and law enforcement) is illustrated in a block diagram in element B.4. of the proposed Xcel Energy Standard Emergency Plan.

The proposed Xcel Energy Standard Emergency Plan identifies the individuals who will be in charge of the emergency response. It further identifies the responsibilities of key individuals responsible for command and control, alerting and notification, communications, public information, accident assessment, protective response (including the authority to request Federal assistance and to initiate other protective actions), and radiological exposure control.

The proposed Xcel Energy Standard Emergency Plan relies on Federal, State, and local organizations to provide emergency response assistance. Xcel Energy states that assistance will be provided by Federal, State, and county agencies that are mandated by charter, regulation, or law to protect public health and safety. Xcel Energy and entities that are expected to provide emergency response support have developed memoranda of understanding (MOUs) and/or letters of agreement (LOA). MOUs and LOAs are referenced by organization and title in the site-specific annexes to the Xcel Energy Standard Emergency Plan, with the actual MOUs and LOAs maintained on file at the applicable location. A contract/purchase order with a private contractor is considered acceptable in lieu of a MOU or LOA for the specified duration of the contract.

The proposed Xcel Energy Standard Emergency Plan states that Xcel Energy maintains an ERO that is capable of providing continuous operation for an extended period of time. The Emergency Director is the individual responsible for assuring continuity of resources (technical, administrative, and material).

3.2.1.2 *Emergency Plan Annexes*

The proposed Xcel Energy Standard Emergency Plan site-specific annexes have a listing of the county organizations with an emergency response role, as well as figures identifying the respective site's 10 mile EPZ and 50 mile Ingestion Pathway Zone. Each site-specific annex has a list of LOAs/MOUs that are maintained by each site with the listed organizations.

3.2.1.3 *Proposed Changes to Site-Specific Emergency Plans*

The licensee stated that there are no proposed changes to the facilities' site-specific emergency plans that involve a reduction in effectiveness under this Evaluation Criterion.

3.2.1.4 *Criterion II.A Evaluation Conclusion*

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff concludes that Xcel Energy has identified the primary responsibilities for emergency response by Xcel Energy, and State and local organizations within the EPZs, the emergency responsibilities of the various supporting organizations have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis. Therefore, the NRC staff has determined that the planning standard of 10 CFR 50.47(b)(1) and applicable requirements of Appendix E to 10 CFR Part 50 have been adequately addressed.

3.2.2 *Criterion II.B, "Emergency Response Organization"*

NUREG-0654, Evaluation Criterion II.B, addresses planning standard 10 CFR 50.47(b)(2), which states:

On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available, and the interfaces among various onsite response activities and offsite support and response activities are specified.

As noted above, Section IV.A of Appendix E to 10 CFR Part 50 requires, in part, that the organization for coping with radiological emergencies shall be described, including definition of authorities, responsibilities, and duties of individuals assigned to the licensee's emergency organization and the means for notification of such individuals in the event of an emergency.

The requirements of 10 CFR 50.47(b)(2) and applicable requirements of Section IV.A of Appendix E to 10 CFR Part 50 are addressed in portions of Section B, "Emergency Response Organization (ERO)," of the proposed Xcel Energy Standard Emergency Plan and site-specific annexes.

3.2.2.1 *Standard Emergency Plan*

The proposed Xcel Energy Standard Emergency Plan describes the primary responsibilities of the ERO. The NRC staff verified that the proposed Xcel Energy Standard Emergency Plan describes ERO staffing that is based on the guidance in NUREG-0654. This description includes ERO facility staffing and primary emergency planning and preparedness (EP) responsibilities.

In conjunction with this LAR, the licensee performed and documented an on-shift staffing analysis per 10 CFR Part 50, Appendix E, Section IV.A.9 at each site. The site-specific on-shift staffing analysis is maintained as described in the site-specific annexes to the proposed Xcel Energy Standard Emergency Plan.

The proposed Xcel Energy Standard Emergency Plan states that a Shift Manager/Emergency Director (SM/ED) is in direct charge of shift plant operations and is responsible for the actions of the on-shift crew. In an emergency, the SM/ED assumes the responsibility of overall ERO command and control and takes necessary actions to identify and respond to the emergency until relieved. The SM/ED, until relieved, has the responsibility and authority to immediately and unilaterally initiate emergency actions, including providing protective action recommendations

(PARs). The proposed Xcel Energy Standard Emergency Plan defines non-delegable responsibilities as: event classification; PARs for the general public; notification of offsite authorities, and emergency exposure controls. The responsibility for event classification, NRC notifications, and emergency exposure control is transferred to the TSC Emergency Director; PARs for the general public, and notification of State and county offsite authorities are transferred to the EOF Emergency Manager. Although both the TSC and EOF are activated simultaneously upon the declaration of an Alert or higher emergency classification level (ECL), the TSC currently has an augmentation time of 60 minutes and the EOF currently has an augmentation time of 90 minutes. Xcel Energy is not proposing to change either the TSC or EOF augmentation times.

The proposed Xcel Energy Standard Emergency Plan includes a block diagram that illustrates the interfaces between and among the licensee, Federal, State and county offsite response organizations, and local services support. The proposed Xcel Energy Standard Emergency Plan also described the interface between an Incident Command Post (ICP) and Xcel Energy for events where the establishment of an ICP would be appropriate.

3.2.2.2 *Emergency Plan Annexes*

The site-specific annexes identify the on-shift staffing analyses and a listing of the external organizations that may be called on to provide technical assistance.

3.2.2.3 *Proposed Changes to Site-Specific Annexes*

The proposed changes to the Xcel Energy Standard Emergency Plan are discussed in the following sections that include a section common to all Xcel Energy sites with site-specific exceptions as noted. The following evaluation first addresses alignment of the proposed Xcel Energy Standard Emergency Plan staffing with the EP functions as provided by NUREG-0654 and then evaluates any remaining changes to the site-specific emergency plans.

Command and Control

The proposed staffing for Command and Control is consistent with NUREG-0654, Table B-1, "Emergency Response Organization (ERO) Staffing and Augmentation Plan," with one difference. The Xcel Energy Standard Emergency Plan provides augmentation of the Command and Control function by the TSC Emergency Director within 60 minutes of the declaration of an Alert or higher ECL with further augmentation by the EOF at the EOF within 90 minutes of the declaration of an Alert or higher ECL. NUREG-0654, Table B-1 provides for TSC Command and Control augmentation within 60 minutes of an Alert ECL with additional augmentation within 60 minutes of a Site Area Emergency or higher ECL.

Although different from the guidance of NUREG-0654, Table B-1, Xcel Energy did not propose a change to the currently approved Command and Control ERO staffing. The proposed Xcel Energy Standard Emergency Plan will retain a SM/ED until relieved by the TSC Emergency Director within 60 minutes of an Alert or higher ECL. Xcel Energy will continue to staff the EOF Emergency Manager within 90 minutes of the declaration of an Alert or higher ECL which is consistent with the current Xcel Energy emergency plans.

Communications

NUREG-0654, Table B-1 recommends that following the declaration of an Alert or higher ECL, the TSC be staffed with two communicators within 60 minutes and an additional communicator, as needed, within 90 minutes. In addition, NUREG-0654, Table B-1 recommends the staffing of one communicator in the EOF within 60 minutes of declaring a Site Area Emergency or greater ECL.

Xcel Energy currently provides one on shift individual to perform the Shift Communicator function. Xcel Energy proposed to add an on shift Communications (Federal) position to provide communications with the NRC. The proposed Xcel Energy Standard Emergency Plan includes a Communications (Federal) position that is consistent with the current Xcel Energy practice of providing the initial Emergency Notification System (ENS) communications. ENS communications would be performed by a licensed operator that may be filling another position. Because Xcel Energy would continue to provide a dedicated Shift Communicator and formalized the current practice of using an on shift licensed operator to perform ENS communications, the NRC staff has determined that the proposed change is an enhancement.

Xcel Energy currently provides two augmenting communicators at the TSC within 60 minutes of an Alert or greater ECL classification with two additional communicators within 90 minutes of an Alert or higher ECL. Xcel Energy will continue to provide two augmenting communicators to the TSC within 60 minutes of an Alert or greater ECL and one offsite communicator within 90 minutes of an Alert or greater ECL. The proposed Xcel Energy Standard Emergency Plan will retain ENS communication responsibility at the TSC. Because Xcel Energy will continue to provide two augmenting communicators to the TSC within 60 minutes of an Alert ECL, an additional offsite augmenting Offsite Communicator within 90 minutes of an Alert or greater ECL and retain ENS communication responsibility at the TSC, the NRC staff determined that the proposed communications changes to the Xcel Energy Standard Emergency Plan are acceptable.

The NRC staff reviewed the licensee's proposed changes to the communications function and found them acceptable based on the information discussed above. The licensee provided adequate justification for the proposed differences from NUREG-0654, Table B-1. Therefore, NUREG-0654, Evaluation Criterion B.1.a continues to be met and these changes are acceptable.

Radiation Protection

NUREG-0654, Table B-1 recommends one reactor protection (RP) Technician per unit for a multi-unit site and three additional RP Technicians within 60 minutes and three additional RP Technicians within 90 minutes of an Alert or higher ECL.

The purpose of the RP Function is to: (1) provide qualified RP coverage for responders accessing potentially unknown radiological environments during emergency conditions; (2) provide in-plant surveys, and (3) control dosimetry and Radiologically Controlled Area access. Xcel Energy provided its analysis of the RP Function in enclosures 2, "License Amendment Request Xcel Energy Standard Emergency Plan Monticello Annex – Technical Analysis," and 3, "License Amendment Request Xcel Energy Standard Emergency Plan Prairie Island Annex – Technical Analysis," of the LAR.

Xcel Energy proposed to align the Xcel Energy Standard Emergency Plan on-shift staffing and ERO augmentation staffing levels with that provided by NUREG-0654 Table B-1 in a table titled, "Table B-1: Minimum On-Shift and Augmenting ERO Staffing Plan," in the proposed Xcel Energy Standard Emergency Plan. Xcel Energy did not propose to change RP augmentation time from that currently approved for each Xcel Energy site.

The proposed Xcel Energy Standard Emergency Plan would change the designations of the RP personnel at Monticello and RP Specialists at Prairie Island to the common Xcel Energy Standard Emergency Plan designation of RP Technicians. Because Xcel Energy is only changing the designations of the RP individuals and is not changing the timing of their response, the NRC staff finds the Xcel Energy change in RP personnel designation to RP Technicians acceptable.

The NRC staff reviewed the licensee's proposed changes to the RP function and found them acceptable based on the information discussed above. Therefore, NUREG-0654 Evaluation Criterion B.1.a continues to be met and these changes are acceptable.

Supervision of RP Staff and Site RP

The purpose of the supervision of RP staff and site RP functions is to: (1) evaluate and assess plant and offsite radiological data in the development of onsite protective actions and offsite PARs, until relieved; (2) recommend onsite and offsite PARs to the applicable decision-maker, until relieved; (3) direct all RP activities, including radiological field monitoring team (FMT) activities, until relieved, and (4) provide relevant information to applicable communicators who are communicating offsite PARs to OROs, until relieved. Xcel Energy provided its analysis of the supervision of the RP function in enclosures 2 and 3 of the LAR.

NUREG-0654 Table B-1 recommends that the supervision of RP function be augmented by a Site RP Coordinator in the TSC within 60 minutes of the declaration of an Alert or higher ECL, and by a RP Manager in the EOF within 60 minutes of the declaration of a Site Area Emergency or General Emergency ECL. Currently, Xcel Energy staffs a TSC Radiological Emergency Coordinator within 60 minutes of an Alert ECL and a EOF RP Support Supervisor within 90 minutes of an Alert or higher ECL. The proposed Xcel Energy Standard Emergency Plan would change the titles of the TSC Radiological Emergency Coordinator and the EOF RP Support Supervisor to the Rad Assessment Coordinator. The Rad Assessment Coordinator will be responsible for RP oversight. Because the Xcel Energy will continue to provide RP oversight at the TSC within 60 minutes of an Alert or higher ECL and at the EOF within 90 minutes of an Alert or higher ECL, the NRC staff finds the proposed title change acceptable.

The NRC staff reviewed the licensee's proposed changes to the supervision of RP function and found them acceptable based on the information discussed above. Therefore, NUREG-0654 Evaluation Criterion B.1.a continues to be met and these changes are acceptable.

Dose Assessments / Projections

The purpose of this function is to perform dose assessments and projections, and provide input to the Emergency Director, until relieved.

NUREG-0654 Table B-1 identifies the dose assessment/projection function as an on-shift position and clarifies that, "[o]ther personnel may be assigned this function if no collateral duties

are assigned to an individual that are beyond the capability of that individual to perform at any given time.”

The current Xcel Energy emergency plans identifies an on-shift chemistry technician to provide dose assessment capability. Xcel Energy states that offsite dose assessment is currently augmented at the TSC within 60 minutes of an Alert or greater ECL and at the EOF within 90 minutes of an Alert or greater ECL.

The proposed Xcel Energy Standard Emergency Plan re-assigns the offsite dose assessment task to an on-shift RP Technician as a collateral duty. Xcel Energy states that the adequacy of the proposed change in assignment of on-shift dose assessment to an RP Technician was verified through a 10 CFR 50, Appendix E, Section IV.A.9 analysis that demonstrated that the change does not result in conflicts in on-shift responsibilities. The proposed Xcel Energy Standard Emergency Plan will continue to provide augmentation for dose assessment at the TSC within 60 minutes of an Alert or greater ECL and at the EOF within 90 minutes of an Alert or greater ECL. Because Xcel Energy would continue to provide an individual to perform on-shift dose assessment and will continue to provide augmentation for dose assessment at the TSC within 60 minutes of an Alert or greater ECL and at the EOF within 90 minutes of an Alert, the NRC staff finds the proposed changes for the dose assessment function acceptable.

The NRC staff reviewed the licensee’s proposed changes to the dose assessments/projection’s function and found them acceptable based on the information discussed above. The licensee provided adequate justification for proposed changes which differed from NUREG-0654 Table B-1. Therefore, NUREG-0654 Evaluation Criterion B.1.a continues to be met and this change is acceptable.

Emergency Classifications

The purpose of the emergency classification function is to evaluate plant conditions and recommend emergency classification, until relieved. Xcel Energy provided its analysis of the emergency classification function in section 3.2.6, “Key Function: Emergency Classifications,” of the LAR site-specific enclosures.

NUREG-0654 Table B-1 recommends that an Emergency Classification Advisor perform this function on-shift and clarifies that: “[o]ther personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time.” Currently, the Xcel Energy emergency plans do not specify a separate emergency classification function for the on-shift or augmenting minimum staff. The licensee proposed to identify the Senior Reactor Operator (SRO)/Shift Technical Advisor (STA) as the individual to recommend EAL classifications and the SM/ED as the individual responsible for approving EAL classifications.

NUREG-0654 Table B-1 recommends that the on-shift Emergency Classification Advisor be augmented by a second Emergency Classification Advisor in the TSC within 60 minutes of the declaration of an Alert or higher classification level. Xcel Energy proposed to assign the TSC Emergency Classification Advisor function to a TSC Operations Coordinator within 60 minutes of an Alert or higher ECL, with the TSC Emergency Director continuing to have the non-delegable command and control responsibility for emergency classification decisions. Because the proposed Xcel Energy Standard Emergency Plan clearly identifies who will recommend EALs and who is responsible for approving EALs with augmentation provided within

60 minutes of an Alert or higher ECL, the NRC staff determined that the proposed Xcel Energy Standard Emergency Plan changes related to classification are acceptable.

The NRC staff reviewed the licensee's proposed changes to the emergency classification function and found them acceptable based on the information discussed above. With the proposed changes, the licensee's emergency plan will provide a designated individual to recommend emergency classifications and an individual who will be responsible to approve emergency classifications. Therefore, NUREG-0654 Evaluation Criterion B.1.a continues to be met and this change is acceptable.

Engineering

The purpose of the engineering function is to provide engineering coverage related to core/thermal hydraulics, electrical/instrumentation and control (I&C) systems and equipment, and mechanical systems and equipment, until relieved. Xcel Energy provided its analysis of the engineering function in enclosures 2 and 3 of the LAR.

NUREG-0654 Table B-1 recommends a Core/Thermal Hydraulics Engineer to evaluate reactor conditions for the on-shift engineering function and clarifies that: "[o]ther personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time." Currently, Xcel Energy has the STA satisfy the on-shift responsibilities for the plant system engineering, repair, and corrective actions function, which is re-categorized as the engineering function in NUREG-0654 Table B-1. Consistent with the re-categorization of this function in NUREG-0654 Table B-1, Xcel Energy would re-categorize the plant system engineering, repair, and corrective actions function to the engineering function. Xcel Energy did not propose a change to on-shift staffing for the engineering function. The NRC staff finds this proposed change acceptable because it is consistent with NUREG-0654 Table B-1.

NUREG-0654 Table B-1 recommends the TSC minimum staff for the engineering function consist of one Core/Thermal Hydraulics Engineer to support the evaluation of reactor conditions, one Mechanical Engineer for coverage of ERO-related mechanical equipment, and one Electrical/I&C Engineer for coverage of ERO-related electrical and I&C equipment. Currently, the Xcel Energy site emergency plans identify one Reactor Engineer, one Mechanical Engineer, and one Electrical Engineer as minimum augmented staff for the engineering function. Xcel Energy proposed to retain the Reactor Engineer, the Mechanical Engineer, and the Electrical Engineer as the minimum staff for the engineering function. The Xcel augmenting engineers will continue to respond to the TSC within 60 minutes of an Alert or higher ECL.

The NRC staff reviewed the licensee's proposed changes to the engineering function and found them acceptable based on the information discussed above. Therefore, NUREG-0654 Evaluation Criterion B.1.a continues to be met and this change is acceptable.

Security

NUREG-0654 Table B-1 recommends the on-shift security function to be provided by security staffing per the Site Security Plan. Table B-1 does not include on-shift staffing for security.

Xcel Energy provided its analysis of site access control and personnel accountability in enclosures 2 and 3 of the LAR. The current Monticello Table 1, "Minimum Staffing and Capability for Additions for Nuclear Power Plant Emergencies," and Prairie Island Table 1,

“Guidance for Augmentation of Plant Emergency Organization,” indicate that the on-shift Security Force will provide ERO security support per the site-specific security plans. Additionally, the current Xcel Energy site-specific emergency plans do not include ERO minimum staff augmentation positions for security.

The proposed Xcel Energy Standard Emergency Plan Table B-1 would not include security per the site-specific emergency plans and would change the title of the Security Group Leader to Security Coordinator. Because Xcel Energy would continue to provide security staffing controlled by site-specific technical specifications or other licensing documents, the NRC staff finds the proposed removal of the security staffing per the security plan from Xcel Energy Standard Emergency Plan Table B-1 and the title change acceptable.

The NRC staff reviewed the licensee’s proposed changes to the security Function and found them acceptable based on the information discussed above. Therefore, NUREG-0654 Evaluation Criterion B.1.a continues to be met and this change is acceptable.

Repair Team Activities

NUREG-0654 Table B-1 indicates that the following maintenance personnel should respond to the OSC to support repair team activities:

- One electrician and one mechanic within 60 minutes of the declaration of an Alert or higher ECL to provide support for emergency core cooling system equipment, event mitigation, and equipment repair.
- One I&C Technician within 90 minutes of the declaration of an Alert or higher ECL to aid with logic manipulation, support for event mitigation and equipment repair, and support of digital I&C, if applicable.

Xcel Energy provided its analysis of the repair team function in enclosures 2 and 3 of the LAR. The current Xcel Energy emergency plans identify one electrician and one mechanic who respond within 60 minutes of an Alert or higher ECL and one I&C Technician who responds within 90 minutes of an Alert or higher ECL.

The proposed Xcel Energy Standard Emergency Plan continues to maintain one electrician and one mechanic responding within 60 minutes of an Alert or higher ECL and one I&C Technician responding within 90 minutes of an Alert or higher ECL.

Supervision of Repair Team Activities

Xcel Energy provided its analysis of the supervision of Repair Team Activities in enclosures 2 and 3 of the LAR.

NUREG-0654 Table B-1 recommends a lead OSC Supervisor to staff the OSC within 60 minutes with a mechanical supervisor, a RP supervisor, an electrical supervisor, and an I&C supervisor (who may be combined with the electrical supervisor) to respond within 90 minutes of an Alert or higher ECL.

The current Xcel Energy emergency plans identified one mechanical maintenance coordinator, one electrical maintenance coordinator that would respond to the OSC within 60 minutes of an Alert or higher ECL and one I&C coordinator that would respond to the OSC within 90 minutes of an Alert or higher ECL. The maintenance coordinators were not identified as minimum

response personnel in the current Xcel Energy emergency plans. The current Xcel Energy emergency plans identified an RP coordinator and an OSC Coordinator who are designated as OSC minimum staff augmentation positions with a 60-minute response time from an Alert or higher ECL.

The proposed Xcel Energy Standard Emergency Plan continues to identify one OSC Coordinator as a minimum staff position that would respond to the OSC within 60 minutes of an Alert or higher ECL. The proposed Xcel Energy Standard Emergency Plan continues to identify one RP Coordinator as a minimum staff position and changes the response time from 60 minutes to 90 minutes after an Alert or higher ECL. The proposed Xcel Energy Standard Emergency Plan would reclassify the mechanical maintenance coordinator, electrical maintenance coordinator, and the I&C coordinator as minimum staff positions that would respond to the OSC within 90 minutes of an Alert or higher ECL. Because Xcel Energy will continue to have an OSC coordinator and a Rad Assessment Coordinator, who provides RP oversight, respond within 60 minutes of an Alert or greater ECL and the proposed Xcel Energy Standard Emergency Plan would be aligned with NUREG-0654 the NRC staff finds the proposed changes acceptable.

The NRC staff reviewed the licensee's proposed changes to the supervision of repair team activities function and found them acceptable based on the information discussed above. The licensee provided adequate justification for proposed changes which differed from NUREG-0654 Table B-1. Therefore, NUREG-0654 Evaluation Criterion B.1.a continues to be met and this change is acceptable.

Field Monitoring Teams

The licensee provided its analysis of the FMT function in enclosures 2 and 3 of the LAR.

NUREG-0654 Table B-1 recommends one onsite FMT and two offsite FMTs as minimum staff. Each FMT would consist of a driver and one qualified individual (i.e., a field monitor) to assess the area for radiation and contamination. The field monitors for the offsite FMTs would also provide radioactive plume tracking. The onsite FMT and one offsite FMT are recommended to be staffed within 60 minutes of an Alert or higher ECL, and the second offsite FMT is recommended to be staffed within 90 minutes from the declaration of Alert or higher ECL.

Currently, Xcel Energy performs onsite field monitoring with one RP individual responding within 60 minutes of an Alert or higher ECL and a second RP individual responding within 90 minutes of an Alert or higher ECL. Xcel Energy currently performs offsite field monitoring with FMTs that consist of one RP individual and one support individual. The Xcel Energy emergency plans currently provide one offsite FMT that would respond within 60 minutes of an Alert or higher ECL and a second FMT that would respond within 90 minutes of an Alert or higher ECL.

The proposed Xcel Energy Standard Emergency Plan would continue to provide onsite field monitoring with one RP individual responding within 60 minutes of an Alert or higher ECL and a second RP individual responding within 90 minutes of an Alert or higher ECL. One offsite FMT would respond within 60 minutes of an Alert or higher ECL and a second FMT would respond within 90 minutes of an Alert or higher ECL. The proposed Xcel Energy Standard Emergency Plan would continue to provide one offsite FMT that would respond within 60 minutes of an Alert or higher ECL and a second FMT that would respond within 90 minutes of an Alert or higher ECL. The proposed Xcel Energy Standard Emergency Plan adds a FMT Monitor at the TSC to provide oversight for the FMTs responding within 60 minutes of an Alert or higher classification.

Because Xcel Energy will continue to provide onsite and offsite field monitoring that is consistent with the current Xcel Energy emergency plans and with NUREG-0654 guidance, the NRC staff finds the addition of a FMT Monitor at the TSC acceptable.

The NRC staff reviewed the licensee's proposed changes to the FMT function and found them acceptable based on the information discussed above. The licensee provided adequate justification for proposed changes which differed from NUREG-0654 Table B-1. Therefore, NUREG-0654 Evaluation Criterion B.1.a continues to be met and these changes are acceptable.

Media Information

The purpose of the media information function is to manage, and coordinate media information related to the event. The licensee provided its analysis of the Media Information Function in enclosures 2 and 3 of the LAR.

NUREG-0654 Table B-1 recommends that Joint Information System (JIS)/Joint Information Center (JIC) staff address media inquiries within 60 minutes of the declaration of an Alert or higher ECL but notes that this function does not need to be performed at the TSC or OSC. NUREG-0654 Table B-1 further recommends additional staff to perform JIC functions within 60 minutes of the declaration of a Site Area Emergency or General Emergency ECL. For the JIC/JIS, NUREG-0654 Table B-1 notes: "[e]mergency response facility (ERF) activation timing is not the concern; it is whether the facility staff is performing the stated function(s) within the time specified." NUREG-0654 does not specify an on-shift capability and does not identify specific staff positions for the minimum staff for the JIC/JIS.

Xcel Energy Corporate Communications personnel currently provides JIC media support within 90 minutes of an Alert or higher ECL. The current Monticello Emergency Plan Figure 13.2, "Interface Between Functional Areas of Emergency Activity," indicates that Northern States Power Company – Minnesota (NSPM) will provide support to the Emergency Manager at the EOF and the Prairie Island Emergency Plan Figure 2, "Prairie Island EOF Organization," indicates that a Technical Corporate Communicator (EOF-JIC) will provide media input to the Technical Support Supervisor at the EOF. The State of Minnesota currently maintains a combined JIC/Emergency Operations Center (EOC) for use by Xcel Energy and the State of Wisconsin. The JIC is staffed by Xcel Energy Corporate Communications personnel to ensure coordination with affected agencies and provide information to the media and the public.

The proposed Xcel Energy Standard Emergency Plan does not change the staffing or augmentation response timing of the JIC/EOC. The proposed includes an expanded description of the JIC and Figure B-4, "JIC Organization," that is augmented within 90 minutes of an Alert or greater ECL. Because Xcel Energy would continue to provide a JIC organization within 90 minutes of an Alert or higher ECL, the NRC staff finds the proposed JIC Organization acceptable.

The NRC staff reviewed the licensee's proposed changes to the Media Information function and found them acceptable based on the information discussed above. The licensee provided adequate justification for proposed changes which differed from NUREG-0654 Table B-1. Therefore, NUREG-0654 Evaluation Criterion B.1.a continues to be met and these changes are acceptable.

Information Technology

The purpose of the Information Technology (IT) function is to provide support for computer-based equipment if relied upon to perform emergency plan functions.

NUREG-0654 Table B-1 states that IT staffing is only required to be described in the emergency plan if critical digital assets are identified per 10 CFR 73.54, "Protection of digital computer and communications systems and networks."

The current Xcel Energy emergency plans do not provide information technology support. The proposed Xcel Energy Standard Emergency Plan states that redundant systems are provided to ensure continuous communications with at least one on-site and one offsite system that has an alternate power supply to ensure continuous availability. A plant computer system provides a display of plant parameters that can be used to assess plant conditions in the main control room, OSC, TSC, and the EOF. Primary and secondary power sources are supplied to the plant computer system.

Consistent with the current Xcel Energy emergency plans, the Xcel Energy Standard Emergency Plan does not include information technology support. Because Xcel Energy does not currently provide support for information technology and has reliable emergency response equipment as indicated in the current Xcel Energy emergency plans, the NRC staff finds this acceptable.

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff finds that the IT function is not required. Therefore, NUREG-0654 Evaluation Criterion B.1.a continues to be met.

Radiological Assessment (Chemistry/Radiochemistry Task)

The chemistry/radiochemistry task was included under the radiological assessment function in NUREG-0654, Revision 1 (ML040420012) which is the previous revision of NUREG-0654, but is not included in NUREG-0654. Xcel Energy provided its analysis of the chemistry/radiochemistry task in enclosures 2 and 3 of the LAR.

The proposed Xcel Energy Standard Emergency Plan would remove the chemistry/radiochemistry task, and chemistry technicians from the proposed Xcel Energy Standard Emergency Plan and site-specific annexes. Xcel Energy states that chemistry functions are maintained in accordance with site technical specifications governed by licensing processed outside of the emergency plan. Additionally, Xcel Energy states that on-shift responsibility for dose assessment is reassigned to an RP Technician in the proposed Xcel Energy Standard Emergency Plan.

Because the chemistry positions are not included in NUREG-0654 and the Xcel Energy chemistry positions are not assigned emergency plan implementation functions, the NRC staff finds the proposed changes to the chemistry/radiochemistry task acceptable. Therefore, NUREG-0654 Evaluation Criterion B.1.a continues to be met and these changes are acceptable.

Firefighting/Rescue Operations and First Aid

The firefighting/rescue operations and first aid functions were included in NUREG-0654, Revision 1, but are not included in NUREG-0654. Xcel Energy provided its analysis of the firefighting/rescue operations and first aid functions in enclosures 2 and 3 of the LAR.

NUREG-0654 Table B-1 states that the operations staff, security force staff or fire brigade staff on-shift is controlled by the site-specific technical specifications or other licensing documents. The proposed Xcel Energy Standard Emergency Plan would remove the firefighting/rescue operations and first aid functions from the proposed Xcel Energy Standard Emergency Plan and site-specific annexes. Xcel Energy will continue to maintain qualified fire brigade, rescue, and first aid personnel on-shift controlled by applicable programs.

Because Xcel Energy would continue to provide firefighting, rescue operations, and first aid in accordance with applicable programs and its proposal is consistent with NUREG-0654 guidance, the NRC staff finds the proposed removal of the firefighting/rescue operations and first aid functions acceptable. Therefore, NUREG-0654 Evaluation Criterion B.1.a continues to be met and these changes are acceptable.

Plant Operations and Assessment of Operational Aspects

The plant operations and assessment of operational aspects function was included in NUREG-0654, Revision 1, but is not included in NUREG-0654. NUREG-0654 Table B-1 states that the operations staff, security force staff, and fire brigade staff is controlled by the site-specific technical specifications or other licensing documents.

Xcel Energy proposed to remove the plant operations and assessment of operational aspects function and associated operators from the proposed Xcel Energy Standard Emergency Plan and site-specific annexes.

Because Xcel Energy would continue to provide operations staffing controlled by site-specific technical specifications or other licensing documents, and its proposal is consistent with NUREG-0654 guidance, the NRC staff finds the proposed removal of the plant operations and assessment of operational aspects acceptable. Therefore, NUREG-0654 Evaluation Criterion B.1.a continues to be met and these changes are acceptable.

Non-Minimum Augmenting ERO

NUREG-0654 Table B-1, Note iii states:

The minimum ERO staffing plan is that which is required to effectively implement the site-specific emergency plan (i.e., the emergency plan cannot be effectively implemented without this staff). The emergency plan should describe the minimum ERO staffing plan, while supporting implementing procedures can describe any other staff response desired by the licensee as long as this staff is not critical to effective emergency plan implementation. The augmentation times listed are intended to provide a model for applicants and licensees to consider in the development of their site-specific emergency plan.

The current Xcel Energy emergency plans contain trained and qualified non-minimum ERO positions that provide support for a radiological emergency. Attachment 4, “[site-specific] ERO

Change Summary,” of enclosures 2 and 3, respectively, of the LAR proposed changes that would remove ERO positions from the Monticello and Prairie Island Emergency Plans. Xcel Energy stated that the positions removed from Monticello or Prairie Island Emergency Plans do not perform any emergency preparedness functions. In the Xcel Energy response to an NRC staff request for additional information (RAI) dated June 10, 2022, Xcel Energy provided Attachments 4, “Xcel Energy Proposed Emergency Response Organization (ERO) Position Analysis Response to RAI-5,” and 5, “Xcel Energy Proposed Emergency Response Organization (ERO) Position Analysis Response to RAI-6,” which provided an ERO task disposition and assessment for positions removed from the current Xcel Energy emergency plans. This assessment included the assigned tasks, task dispositions, a justification supporting elimination of the positions proposed for removal, and an analysis for positions removed from the current Xcel Energy emergency plans.

In Attachment 4 of enclosures 2 and 3 of the LAR, Xcel Energy proposed several title changes to ERO positions. Because the proposed title changes do not affect the capability or timing of the response to radiological events at Xcel Energy facilities, the NRC staff has determined that the proposed title changes are acceptable.

The following tables provides the specific ERO positions removed from the Xcel Energy emergency plans:

Xcel Energy ERO Positions Removed from Monticello Emergency Plan	
TSC	EOF
Chemistry Section Leader	Assistant Radiation Protection Support Supervisor (RPSS)
Monitoring Section Leader	Field Team Coordinator
Assistant Operations Group Leader (Coordinator)	Radiation Protection (RP) Status Board
Safety Parameter Display System (SPDS) Operator	EOF Radiation Protection Technician (RPT)
Trending	Sample Courier
Support Group Leader (TSC)	Count Room Chemistry Technician
Support Group (TSC)	Technical Support Supervisor
	Technical Support Staff
	ENS Communicator
	SPDS Operator
OSC	Trending
Chemistry Coordinator	Support Group
Chemistry Technicians	

Xcel Energy ERO Positions Removed from Prairie Island Emergency Plan	
TSC	EOF
Assembly Point Coordinator	Recovery Manager
Operations Group Leader Assistant	RPSS Assistant State Liaison
REC Assistant	RPSS Assistant Field Team and Dose Assessment
TSC Coordinator Assistant	Rad Status Board Keeper
Logistic Support Leader	Count Room Chemistry Technician
Status Board Keeper	EOF Radiation Monitoring RP Specialist or Chemistry Technician
Emergency Response Computer System (ERCS) Operator	Sample Couriers
Record Log Keeper	EOF Coordinator Assistant
Switchboard Operator	Administrative Support Lead
	Administrative Support Staff
	Technical Support Supervisor
OSC	
Chemistry Technicians	Engineering Support Team Lead
OPS Advisor	Lead Electrical Engineer
Rad Status Communicator	Lead Mechanical Engineer
Status Board Keeper	Status Board Keeper
	Trending Team Leader
	ERCS Operator
	Event Status Board Keeper
	Technical Corporate Communicator (EOF-JIC)
	ENS Communicator
	EOF Narrative Log Keeper

Xcel Energy states that the Xcel Energy Standard Emergency Plan does not include chemistry personnel to perform emergency preparedness functions. Therefore, based on a review of Attachments 4 and 5 of the RAI response, the NRC staff concluded that the following chemistry-related positions are not required:

- Chemistry Section Leader (TSC, Monticello)
- Chemistry Coordinator (OSC, Monticello)
- Chemistry Technicians (OSC, Monticello)
- Chemistry Technicians (OSC, Prairie Island)

Xcel Energy states that the current Xcel Energy emergency plans included logistical and administrative ERO positions that do not perform emergency preparedness functions. Therefore, based on a review of Attachments 4 and 5 of the RAI response, the NRC staff concluded that the following positions are logistical or administrative and are not required:

- SPDS Operator (TSC, Monticello)
- Trending (TSC, Monticello)
- Support Group Leader (TSC, Monticello)
- Assembly Point Coordinator (TSC, Prairie Island)
- TSC Coordinator Assistant (TSC, Prairie Island)
- Logistic Support Leader (TSC, Prairie Island)

- Status Board Keeper (TSC, Prairie Island)
- Emergency Response Computer System (ERCS) Operator (TSC, Prairie Island)
- Record Log Keeper (TSC, Prairie Island)
- Switchboard Operator (TSC, Prairie Island)
- Status Board Keeper (OSC, Prairie Island)
- Radiation Protection (RP) Status Board (EOF, Monticello)
- SPDS Operator (EOF, Monticello)
- Trending (EOF, Monticello)
- Support Group (EOF, Monticello)
- Rad Status Board Keeper (EOF, Prairie Island)
- EOF Coordinator Assistant (EOF, Prairie Island)
- Administrative Support Lead (EOF, Prairie Island)
- Administrative Support Staff (EOF, Prairie Island)
- Status Board Keeper (EOF, Prairie Island)
- Trending Team Leader (EOF, Prairie Island)
- ERCS Operator (EOF, Prairie Island)
- Event Status Board Keeper (EOF, Prairie Island)
- EOF Narrative Log Keeper (EOF, Prairie Island)

Xcel Energy states that the proposed Xcel Energy Standard Emergency Plan would use a new EOF that would be greater than 25 miles from the sites and transfers responsibility for field monitoring, ENS Communications, and technical support to the site TSCs. Therefore, based on the proposed EOF change and a review of Attachments 4 and 5 of the RAI response, the NRC staff concluded that the following positions are not required.

- Assistant Radiation Protection Support Supervisor (EOF, Monticello)
- Field Team Coordinator (EOF, Monticello)
- EOF Radiation Protection Technician (RPT) (EOF, Monticello)
- Sample Courier (EOF, Monticello)
- Count Room Chemistry Technician (EOF, Monticello)
- Technical Support Supervisor (EOF, Monticello)
- Technical Support Staff (EOF, Monticello)
- ENS Communicator (EOF, Monticello)
- RPSS Assistant Field Team and Dose Assessment (EOF, Prairie Island)
- Count Room Chemistry Technician (EOF, Prairie Island)
- EOF Radiation Monitoring RP Specialist or Chemistry Technician (EOF, Prairie Island)
- Sample Couriers (EOF, Prairie Island)
- Technical Support Supervisor (EOF, Prairie Island)
- Engineering Support Team Lead (EOF, Prairie Island)
- Lead Electrical Engineer (EOF, Prairie Island)
- Lead Mechanical Engineer (EOF, Prairie Island)
- Technical Corporate Communicator (EOF, Prairie Island)
- ENS Communicator (EOF, Prairie Island)

Xcel Energy states that the proposed Xcel Energy Standard Emergency Plan does not require oversight of activities related to the Fire Protection program and that the Operations Group Leader Assistant (TSC, Prairie Island) is not required.

Xcel Energy states that the proposed Xcel Energy Standard Emergency Plan includes title changes, and clarification of responsibilities. Xcel Energy proposed changes to ERO staffing that were either not required or were performed by other individuals as discussed in enclosures 2 and 3 of the LAR. None of the ERO positions proposed for removal are included as an ERO position in NUREG-0654. Because Xcel Energy provided a justification that clearly identified how ERO tasks would continue to be performed by the proposed ERO, the NRC staff has determined that the following positions do not need to be included in the proposed Xcel Energy Standard Emergency Plan:

- Monitoring Section Leader (TSC, Monticello)
- Assistant Operations Group Leader (Coordinator) (TSC, Monticello)
- Operations Group Leader Assistant (TSC, Prairie Island)
- REC Assistant (TSC, Prairie Island)
- OPS Advisor (OSC, Prairie Island)
- Rad Status Communicator (OSC, Prairie Island)
- RPSS Assistant State Liaison (EOF, Prairie Island)

The Xcel Energy Standard Emergency Plan will not include a Recovery Manager. Because the Xcel Energy emergency response implementing procedures are related to termination of emergency response, the Recovery Manager is not a required ERO response position. NUREG-0654 does not have a recovery manager as a minimum response ERO position.

The interfaces between and among the onsite functional areas of emergency activity and local services support, and State and county government response organizations are represented in a figure, "Primary Interfaces Between License, State, Local and Tribal Organizations," in Section B.4-1 of the proposed Xcel Energy Standard Emergency Plan. Contractor and private organizations are also referenced in the proposed Xcel Energy Standard Emergency Plan and site-specific annexes. Local emergency support organizations are included in the proposed Xcel Energy Standard Emergency Plan and site-specific annexes.

Based on a review of the site-specific on-shift ERO task disposition and assessment for positions removed from the Xcel Energy Emergency Plans and the above evaluations for each EP Function, the NRC staff determined that the proposed Xcel Energy Standard Emergency Plan ERO will continue to provide the capability to perform EP Functions listed in NUREG-0654 Table B-1. Therefore, NUREG-0654 Evaluation Criterion B.1.a continues to be met and these changes are acceptable.

3.2.2.4 *Criterion II.B Evaluation Conclusion*

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff concludes that Xcel Energy has defined on-shift responsibilities, provides adequate staffing to always maintain initial accident response in key functional areas, includes timely augmentation of response capabilities, and specifies the interfaces among various onsite and offsite response activities and support. Therefore, the NRC staff has determined that the planning standard of 10 CFR 50.47(b)(2) and applicable requirements of Appendix E to 10 CFR Part 50 have been adequately addressed.

3.2.3 Criterion II.C, "Emergency Response Support and Resources"

NUREG-0654 Evaluation Criterion II.C, addresses the planning standard 10 CFR 50.47(b)(3), which states:

Arrangements for requesting and effectively using assistance resources have been made, arrangements to accommodate State and local staff at the licensee's Emergency Operations Facility have been made, and other organizations capable of augmenting the planned response have been identified.

Section IV.A.7 of Appendix E to 10 CFR Part 50 requires the identification of, and a description of the assistance expected from, appropriate Federal, State, and local agencies with responsibilities for coping with emergencies, including hostile action at the site.

The requirements of 10 CFR 50.47(b)(3) and applicable requirements of Section IV.A.7 of Appendix E to 10 CFR Part 50 are addressed in portions of Section C, "Emergency Response Support and Resources," of the proposed Xcel Energy Standard Emergency Plan.

3.2.3.1 *Standard Emergency Plan*

The proposed Xcel Energy EOF contains dedicated work areas and resources for NRC response personnel and provides access to plant data and radiological information.

The proposed Xcel Energy Standard Emergency Plan states that agreements with State and county response organizations have been established through the integrated development of their respective emergency plans and that agreements with other entities have been formally developed and documented through MOUs, contracts, and/or LOAs.

The proposed Xcel Energy Standard Emergency Plan states that the Security organization controls site access at all times in accordance with the Security Plan. The TSC Security Coordinator is identified as being responsible to coordinate with on-shift personnel when site access is needed for non-badged offsite agency and support personnel.

The proposed Xcel Energy Standard Emergency Plan states that, in addition to coordination between individuals in Command and Control of each organization, Xcel Energy personnel liaisons are typically dispatched to State or county emergency operation centers.

Xcel Energy has a laboratory/counting room at each site that can provide analysis of samples from process systems and perform environmental monitoring sample analysis. Additional facilities for counting and analyzing samples are available at unaffected Xcel Energy nuclear sites or State and Federal laboratory services.

The proposed Xcel Energy Standard Emergency Plan states that Xcel Energy personnel will activate and confirm activation of the Emergency Response Data System (ERDS) operation as soon as possible but no later than 1 hour of the declaration of an Alert or higher ECL.

The proposed Xcel Energy Standard Emergency Plan states that the ERO is staffed to provide the capability of maintaining continuous communications with the NRC with knowledgeable personnel.

3.2.3.2 *Emergency Plan Annexes*

A complete description of Xcel Energy's emergency response support and resource Evaluation Criterion is provided in the proposed Xcel Energy Standard Emergency Plan and is not addressed in the site-specific annexes.

3.2.3.3 *Proposed Changes to Site-Specific Emergency Plans*

Xcel Energy states that the proposed Xcel Energy Standard Emergency Plan and site-specific annexes standardize and align the wording between the three existing plans without changing past practices or intent.

3.2.3.4 *Criterion II.C Evaluation Conclusion*

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff concludes that the proposed Xcel Energy Standard Emergency Plan would continue to identify the arrangements for requesting and effectively using assistance resources, provide arrangements to accommodate State and local staff at the licensee's EOF, and identify other organizations capable of augmenting the planned response. Therefore, the NRC staff has determined that the planning standard of 10 CFR 50.47(b)(3) and applicable requirements of Appendix E to 10 CFR Part 50 have been adequately addressed.

3.2.4 *Criterion II.D, "Emergency Classification System"*

NUREG-0654, Evaluation Criterion II.D, addresses planning standard 10 CFR 50.47(b)(4), which states:

A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and State and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures.

Section IV.B.1 of Appendix E to 10 CFR Part 50 requires that the means to be used for determining the magnitude of, and for continually assessing the impact of, the release of radioactive materials shall be described, including emergency action levels that are to be used as criteria for determining the need for notification and participation of county and State agencies, the Commission, and other Federal agencies, and the emergency action levels that are to be used for determining when and what type of protective measures should be considered within and outside the site boundary to protect health and safety.

Section IV.C.2 of Appendix E to 10 CFR Part 50 requires that power reactor licensees shall establish and maintain the capability to assess, classify, and declare an emergency condition within 15 minutes after the availability of indications to plant operators that an emergency action level has been exceeded and shall promptly declare the emergency condition as soon as possible following identification of the appropriate ECL.

The requirements of 10 CFR 50.47(b)(4) and applicable requirements of Sections IV.B.1 and C.2 of Appendix E to 10 CFR Part 50, are addressed in Section D, "Emergency Classification System," of the proposed Xcel Energy Standard Emergency Plan and site-specific annexes.

3.2.4.1 *Standard Emergency Plan*

The proposed Xcel Energy Standard Emergency Plan provides an overall discussion regarding classification of emergencies and the basis for emergency classification. The emergency action levels (EALs) for each site were developed in accordance with the Nuclear Energy Institute (NEI) document, NEI 99-01, Revision 6, "Development of Emergency Action Levels for Non-Passive Reactors," November 2012 (ML12326A805), which was endorsed by the NRC in a letter dated March 28, 2013 (ML12346A463), as acceptable generic EAL scheme development guidance. The EALs for each respective site are documented in an EAL Technical Basis Document that is specific to each site. The EAL scheme for each site was agreed upon by State and county governmental authorities and is reviewed by State and county government authorities on an annual basis.

The proposed Xcel Energy Standard Emergency Plan states that Xcel Energy has and maintains the capability to assess, classify, and declare an emergency condition within 15 minutes after the availability of indications to plant operators that an EAL threshold has been met or exceeded.

3.2.4.2 *Emergency Plan Annexes*

The site-specific annexes identify the EAL scheme document for each site.

3.2.4.3 *Proposed Changes to Xcel Energy Standard Emergency Plan and Site-Specific Emergency Annexes*

Xcel Energy states that the proposed Xcel Energy Standard Emergency Plan and site-specific annexes standardize and align the wording between the three existing plans without changing past practices or intent.

3.2.4.4 *Criterion II.D Evaluation Conclusion*

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff concludes that the proposed Xcel Energy Standard Emergency Plan would continue to identify a standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters. Therefore, the NRC staff has determined that the planning standard of 10 CFR 50.47(b)(4) and applicable requirements of Appendix E to 10 CFR Part 50 have been adequately addressed.

3.2.5 *Criterion II.E, "Notification Methods and Procedures"*

NUREG-0654, Evaluation Criterion II.E, addresses planning standard 10 CFR 50.47(b)(5), which states:

Procedures have been established for notification, by the licensee, of State and local response organizations and for notification of emergency personnel by all organizations; the content of initial and follow-up messages to response organizations and the public has been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone have been established.

Section IV.D.1 of Appendix E to 10 CFR Part 50, requires administrative and physical means for notifying local, State, and Federal officials and agencies, and that agreements reached with these officials and agencies for the prompt notification of the public and for public evacuation or other protective measures, should they become necessary, shall be described.

Section IV.D.3 of Appendix E to 10 CFR Part 50 requires that a licensee shall have the capability to notify responsible State and local governmental agencies within 15 minutes after declaring an emergency.

Section IV.D.3 further requires that the design objective of the prompt public alert and notification system shall be to have the capability to essentially complete the initial alerting and initiate notification of the public within the plume exposure pathway EPZ within about 15 minutes.

The requirements of 10 CFR 50.47(b)(5) and applicable requirements of Section IV.D of Appendix E to 10 CFR Part 50, are addressed in Section E, "Notification Methods and Procedures," of the proposed Xcel Energy Standard Emergency Plan and site-specific annexes.

3.2.5.1 *Standard Emergency Plan*

The proposed Xcel Energy Standard Emergency Plan describes the notification methods and procedures to ensure prompt notification to State and local response organizations and all appropriate emergency personnel. Xcel Energy, in coordination with State and county authorities, has developed methods and procedures for notification of offsite response organizations consistent with the emergency classification and EAL scheme at each site. When an emergency is declared or upgraded, or changes are made to shelter and/or evacuation PARs, a notification will be made within 15 minutes. The first notification is made to designated offsite agencies listed in the site annexes. If the states and counties choose to staff their EOC, notification messages could be received at those facilities. Receipt location of the notification messages is dependent on the applicable state and county procedures.

The State and county notification process is completed using a combination of electronic document transmittal and calls using commercial phone lines. The initial notification to the NRC is made using the ENS. If the ENS is inoperative, the required notification will be made using a backup means, such as an alternate commercial line, cell or satellite phone.

Xcel Energy nuclear sites utilize a siren system for its alert and notification system that are described in the site-specific annexes.

In conjunction with State and county authorities, Xcel Energy nuclear sites have established the content of the initial notification message, as well as the follow-up notification message to be used during an emergency.

3.2.5.2 *Emergency Plan Annexes*

The site-specific annexes identify the site-specific State and county entities to be notified of a declared emergency. The annexes also provide a description of the alert and notification system, responsibilities for activation of the alert and notification system and the FEMA design report for each site.

3.2.5.3 *Proposed Changes to Xcel Energy Standard Emergency Plan and Site-Specific Emergency Annexes*

Xcel Energy states that the proposed Xcel Energy Standard Emergency Plan and site-specific annexes standardize and align the wording between the three existing plans without changing past practices or intent.

3.2.5.4 *Criterion II.E Evaluation Conclusion*

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff concludes that Xcel Energy has established:

- 1) provisions for notification of State and local response organizations and of licensee emergency personnel, and
- 2) the content of initial and follow-up messages to response organizations and means to provide early notification and clear instruction to the populace within the plume exposure pathway EPZ at each site.

Therefore, the NRC staff has determined that the planning standard of 10 CFR 50.47(b)(5) and applicable requirements of Appendix E to 10 CFR Part 50 have been adequately addressed.

3.2.6 Criterion II.F, "Emergency Communications"

NUREG-0654, Evaluation Criterion II.F, addresses planning standard 10 CFR 50.47(b)(6) which states:

Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.

Section IV.E of Appendix E to 10 CFR Part 50 requires that a licensee describe provisions for prompt communications among principal response organizations to emergency personnel and to the public.

Section IV.E.9.a of Appendix E to 10 CFR Part 50 requires provision for communications with contiguous State/local governments within the plume exposure pathway EPZ. Such communications shall be tested monthly.

Section IV.E.9.d of Appendix E to 10 CFR Part 50 requires provisions for communications by the licensee with NRC Headquarters and the appropriate NRC Regional Office Operations Center from the nuclear power reactor control room, the onsite technical support center, and the Emergency Operations Facility. Such communications shall be tested monthly.

The requirements of 10 CFR 50.47(b)(6) and applicable requirements of Section IV.E of Appendix E to 10 CFR Part 50 are addressed in Section F, "Emergency Communications," of the proposed Xcel Energy Standard Emergency Plan.

3.2.6.1 *Standard Emergency Plan*

The proposed Xcel Energy Standard Emergency Plan states that the Xcel Energy nuclear sites maintain the capability to perform emergency communications, notifying NRC and OROs, and activating the ERO. Communication systems are designed to facilitate normal and emergency

communications within the plant, between the plant and emergency facilities, and between the plant and NRC and OROs. Redundant systems are provided to ensure continuous communications between entities and personnel. At least one system used for on-site communications and one system used for offsite communications is maintained with an alternate power source to ensure continuous availability. Provisions exist for communications with state, county and tribal governments, NRC, and FMTs within the EPZs.

Telephones are designated for the following NRC communications:

- NRC ENS,
- NRC Health Physics Network,
- NRC Reactor Safety Counterpart Link,
- Protective Measures Counterpart Link, and
- Management Counterpart Link.

The proposed Xcel Energy Standard Emergency Plan states, in part, that systems used to communicate with State and county governments within the plume exposure pathway EPZ will be tested monthly. Systems used to communicate from the control room, TSC, and EOF to NRC Headquarters and NRC Regional Office Operations Center will be tested monthly. The communications with State and county government EOCs will be tested annually along with the systems used to communicate with Xcel Energy ERFs, and from the applicable ERF to the field assessment teams. The proposed Xcel Energy Standard Emergency Plan also states that each of the systems utilized to communicate with Federal EROs will be tested annually, and ERDS will be verified to be connected and transmitting data on a quarterly basis.

3.2.6.2 *Emergency Plan Annexes*

The site-specific annexes list the available onsite and offsite emergency communication systems available at each site. Additionally, frequencies for testing the alert and notification system and emergency communication systems are described.

3.2.6.3 *Proposed Changes to Xcel Energy Standard Emergency Plan and Site-Specific Emergency Annexes*

Xcel Energy states that the proposed Xcel Energy Standard Emergency Plan and site-specific annexes standardize and align the wording between the three existing plans without changing past practices or intent.

3.2.6.4 *Criterion II.F Evaluation Conclusion*

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff concludes that Xcel Energy has established provisions for prompt communications among principal response organizations to emergency personnel and to the public. Therefore, the NRC staff has determined that the planning standard of 10 CFR 50.47(b)(6) and applicable requirements of Appendix E to 10 CFR Part 50 have been adequately addressed.

3.2.7 Criterion II.G, "Public Education and Information"

NUREG-0654, Evaluation Criterion II.G, addresses planning standard 10 CFR 50.47(b)(7) which states:

Information is made available to the public on a periodic basis on how they will be notified and what their initial actions should be in an emergency (e.g., listening to a local broadcast station and remaining indoors), the principal points of contact with the news media for dissemination of information during an emergency (including the physical location or locations) are established in advance, and procedures for coordinated dissemination of information to the public are established.

Section IV.D.2 of Appendix E to 10 CFR Part 50 requires a description of provisions for yearly dissemination to the public within the plume exposure pathway EPZ of basic emergency planning information, such as the methods and times required for public notification and the protective actions planned if an accident occurs, general information as to the nature and effects of radiation, and a listing of local broadcast stations that will be used for dissemination of information during an emergency. Signs or other measures shall also be used to disseminate to any transient population within the plume exposure pathway EPZ appropriate information that would be helpful if an accident occurs.

The requirements of 10 CFR 50.47(b)(7) and applicable requirements of Section IV.D.2 of Appendix E to 10 CFR Part 50 are addressed in Section G, "Public Education and Information," of the proposed Xcel Energy Standard Emergency Plan and site-specific annexes.

3.2.7.1 *Standard Emergency Plan*

The proposed Xcel Energy Standard Emergency Plan states that Xcel Energy, in coordination with State and county emergency response personnel, updates and distributes site related emergency planning information annually to residents living within the plume exposure pathway EPZ. The information contains educational information on emergency preparedness, sheltering, sirens and radiation, and includes telephone numbers of agencies to contact for more information. In addition, qualified personnel are available to address civic, religious, social, and occupational organizations, and news material is also distributed to the media. Information is offered each calendar year to acquaint news media outlets with the overall EP at Xcel Energy sites and the methods for obtaining information during an emergency. The material includes information about the site, radiation effects, emergency response activities, points of contact, etc.

The State of Minnesota maintains a combined JIC/EOC for use by Xcel Energy and the State of Wisconsin. The JIC/EOC has sufficient space to allow interaction with the media. The JIC is staffed at an Alert or higher classification by Xcel Energy Corporate Communications personnel to ensure coordination with affected agencies and provide public information to the media and the public. The JIC provides the necessary structure and mechanism for organizing, developing, integrating, and delivering coordinated interagency messages via established plans, procedures, and strategies.

Corporate Communications personnel may provide public information at the Unusual Event declaration using social media in accordance with JIS precepts. Interactions with the media may occur at various locations and with various agencies depending on the extent of the response.

During the initial stages of an emergency, responses to media questions relative to plant status are typically provided by the corporate communications team. When the EOF is not activated, the normal Xcel Energy media interaction and news release process is followed. When the EOF is activated, event response procedures are implemented for gathering and disseminating information. For scheduled news conferences and media briefings, the Executive Spokesperson will provide plant and event status and company information.

3.2.7.2 *Emergency Plan Annexes*

A complete description of Xcel Energy's public education and information program is provided in the proposed Xcel Energy Standard Emergency Plan and is not addressed in the site-specific annexes.

3.2.7.3 *Proposed Changes to Xcel Energy Standard Emergency Plan and Site-Specific Emergency Annexes*

Xcel Energy states that the proposed Xcel Energy Standard Emergency Plan and site-specific annexes standardize and align the wording between the three existing plans without changing past practices or intent.

3.2.7.4 *Criterion II.G Evaluation Conclusion*

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff concludes that Xcel Energy has established provisions for adequate public education and information to support the emergency response. Therefore, the NRC staff has determined that the planning standard of 10 CFR 50.47(b)(7) and applicable requirements of Appendix E to 10 CFR Part 50 have been adequately addressed.

3.2.8 Criterion II.H, "Emergency Facilities and Equipment"

NUREG-0654, Evaluation Criterion II.H, addresses planning standard 10 CFR 50.47(b)(8), which states:

Adequate emergency facilities and equipment to support the emergency response are provided and maintained.

Section IV.E.8.a of Appendix E to 10 CFR Part 50, requires that adequate provisions be made and described for emergency facilities and equipment, including a licensee's onsite TSC and an EOF from which effective direction can be given and effective control can be exercised during an emergency, and for a licensee's onsite OSC.

Section IV.E.8.b of Appendix E to 10 CFR Part 50 addresses various requirements associated with an EOF located more than 25 miles from a nuclear power reactor site which include:

- (1) Space for members of an NRC site team and Federal, State, and local responders;
- (2) Additional space for conducting briefings with emergency response personnel;
- (3) Communication with other licensee and offsite emergency response facilities;

(4) Access to plant data and radiological information; and

(5) Access to copying equipment and office supplies;

Section IV.E.8.c of Appendix E to 10 CFR Part 50 requires EOF capabilities, which include supporting response to multiple reactors/sites and simultaneous event, if applicable.

Section IV.E.8.d of Appendix E to 10 CFR Part 50 requires an alternative facility (for use when onsite emergency facilities cannot be safely accessed during hostile actions) that would be accessible and could function as a staging area for augmentation of emergency response staff.

Section IV.G of Appendix E to 10 CFR Part 50 requires a description of provisions to be employed to ensure that the emergency plan, its implementing procedures, and emergency equipment and supplies are maintained up to date.

The NRC staff evaluated the Xcel Energy Standard Emergency Plan and site-specific annexes against the guidance in NUREG 0654, Section II, Planning Standard H, which provides the detailed evaluation criteria that the NRC staff should consider when determining whether the emergency plan meets the applicable regulatory requirements in 10 CFR 50.47(b)(8). The NRC staff also considered the applicable guidance in NUREG-0696 and NUREG-0737, Supplement 1.

The requirements of 10 CFR 50.47(b)(8) and applicable requirements of Sections IV.E.8 and IV.G of Appendix E to 10 CFR Part 50, are addressed in Section H, "Emergency Facilities and Equipment," of the proposed Xcel Energy Standard Emergency Plan and site-specific annexes.

3.2.8.1 *Standard Emergency Plan*

The proposed Xcel Energy EP describes the emergency facilities, including the TSC, OSC, EOF, alternative emergency facility (AEF), and various systems, equipment and capabilities supporting emergency response. The JIC and JIS concept is described previously in Section 3.2.1.7 of this safety evaluation, which addresses public education and information associated with emergency response.

The proposed Xcel Energy Standard Emergency Plan describes various plant and environmental information sources, monitoring systems, analysis equipment and supplies, and field monitoring capabilities that are available at each site to support emergency response and are required by the applicable guidance.

3.2.8.2 *Emergency Plan Annexes*

The site-specific annexes state that adequate emergency facilities and equipment to support the emergency response are provided and maintained. In addition, the TSC, OSC, AEF, and near-site NRC and offsite responders' locations, including locations, emergency response systems and capabilities, are described.

The site-specific annexes also describe specific meteorological, hydrologic, seismic, and process monitoring systems and capabilities.

3.2.8.3 *Proposed Changes to Xcel Energy Standard Emergency Plan and Site-Specific Emergency Annexes*

Monticello

Xcel Energy proposes to eliminate of the backup OSC at Monticello.

Section 3.2, "Habitably," NUREG-0696 states,

If the OSC habitability is not comparable to that of the control room, the licensee's emergency plan shall include procedures for evacuation of OSC personnel in the event of a large radioactive release. These procedures also shall include provisions for the performance of the OSC functions by essential support personnel from other onsite locations.

Section 7.1.2, "Operations Support Center," of the current Monticello Emergency Plan states,

The Back-up OSC is located within the TSC shell structure in the east end of the TSC. The Back-up OSC is located within the EVS [Emergency Ventilation System] controlled ventilation boundary. The Back-up OSC is activated if the primary OSC becomes uninhabitable or as other circumstances dictate.

Section H.2 of the proposed Monticello and Prairie Island site-specific annexes state that if the OSC is determined to be uninhabitable, the OSC will be moved to the Alternative Facility or to another location as deemed appropriate by the OSC Manager.

The NRC staff finds that the proposed change in location of the Monticello backup OSC meets the applicable regulations in 10 CFR 50.47 and appendix E of 10 CFR Part 50, and the criteria set forth in applicable guidance and therefore is acceptable.

EOF Consolidation

Xcel Energy proposes to replace the existing Monticello and Prairie Island EOFs (located 1.0 miles and 0.5 miles, respectively from the Monticello and Prairie Island sites), and their common BUEOF (located 45 miles and 55 miles, respectively, from the Monticello and Prairie Island sites) with a proposed consolidated EOF centrally located in the Xcel Energy's Corporate Offices at 414 Nicollet Mall, Minneapolis, Minnesota. The existing common BUEOF is located at the Headquarters Emergency Center in downtown Minneapolis, Minnesota. The distance from the proposed EOF to the Monticello technical support center (TSC) is approximately 37 miles, and the distance to the Prairie Island TSC is approximately 40 miles.

The NRC staff has reviewed the licensee's regulatory and technical analyses in support of the proposed changes to the Xcel Energy Standard Emergency Plan and site-specific annexes, as described in the application dated November 15, 2021, and supplemented by letter dated June 10, 2022. The NRC staff's technical evaluation for the relocation of the proposed consolidated EOF for the Monticello and Prairie Island sites is detailed below.

Functions

The new consolidated EOF will provide a facility for Xcel Energy's management of offsite emergency response, coordination of radiological assessment, and management of initial recovery operations, including notification of events, and protective action recommendations as

assigned in the proposed Xcel Energy Standard Emergency Plan. Section H.3 of the proposed Xcel Energy Standard Emergency Plan states that the EOF provides:

- Overall management of emergency response;
- Coordination of emergency response activities with Federal, State, and local agencies;
- Coordination of offsite radiological and environmental assessments;
- Determination of recommended public protective actions;
- Notification of State/local offsite agencies;
- Management of recovery actions, and
- Response and coordination of response for events occurring simultaneously at both Monticello and Prairie Island.

In section 3.1.1, "Functions," to enclosure 4, "Consolidation of Emergency Operations Facilities," to Xcel Energy's letter dated November 15, 2021, Xcel Energy stated that operation of the proposed consolidated EOF will not significantly alter the overall approach to emergency response at Monticello and Prairie Island. The licensee did, however, identify some differences with the current EOF responsibilities for emergency response for each site. First, these differences involve changes in the responsibility for making the required NRC notifications using the ENS and the responsibility for the direct control of FMTs, both of which will be transferred from the current EOFs to the respective TSCs.

With regard to making NRC notifications, Xcel Energy states that the proposed change removes the ENS Communicator position in the EOF and performs ENS communications with the NRC in the TSC, with the position being staffed within 60 minutes of an event requiring activation of the ERO. Xcel Energy further states that maintaining communications from the TSC is appropriate since the facility is on-site and the TSC ENS Communicator has direct access to plant status information which is being provided to the NRC.

With regard to control of FMTs, Xcel Energy states that the proposed change removes the position of Field Team Coordinator in the EOF with the function being assumed by the Field Team Monitor in the TSC. The proposed organizational change for the EOF supports the primary EOF function of offsite agency coordination of emergency response actions enabling the EOF to focus on off-site notifications, dose assessment and PAR development. Implementation of a common Xcel Energy EOF, staffed by corporate resources, also minimizes the impact to site resources. FMT coordination is performed in the TSC, thereby not requiring site resources to travel to the common Xcel Energy EOF facilitating the more efficient use of Xcel Energy resources to support site response actions. FMT information will be provided as needed by the existing FMT Communicator.

The proposed Xcel Energy Standard Emergency Plan states that the EOF contains dedicated work areas and resources for Federal personnel, consistent with the criteria in section II.H.2 of NUREG-0654 and section 4.1 of NUREG-0696. Enclosure 4 of the application provides details of resources and capabilities of the proposed Xcel Energy consolidated EOF. Section 3.1.1, "Functions," to enclosure 4 of the Xcel Energy submittal states: "If the proposed EOF is unavailable, the affected site(s) have the capability to determine PARs for the public, notify offsite agencies, and perform offsite dose assessments."

Section 4.1 of NUREG-0696 suggests that a licensee should use normal industrial security for the EOF. Access to the proposed consolidated EOF will be controlled using electronic card

readers to allow entry only to authorized personnel, and access to the Xcel Energy's Corporate Offices will be provided via industrial security, which is consistent with section 4.1 of NUREG-0696.

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff has determined that these facility functions and responsibilities are consistent with those currently described in Monticello and Prairie Island emergency plans, and the differences in responsibility discussed above are acceptable. As such, the NRC staff did not identify any concerns with the licensee's changes to these existing EOF functions, or responsibilities, with the proposed changes described above. In addition to the working space provided for representatives from Federal agencies, the new consolidated EOF will also provide a dedicated conference room for NRC personnel in the EOF. Similar to the current Monticello and Prairie Island EOFs, local agencies are not expected to respond to the new consolidated EOF.

Section IV.1 of NSIR/DPR-ISG-01, which supplements the guidance in section 4.1 of NUREG-0696, states, in part, that the EOF will have facilities and capabilities for: "effectively responding to and coordinating response efforts for events occurring simultaneously at more than one site for a co-located or consolidated EOF." In section 2.1 to enclosure 4 of its letter dated November 15, 2021, Xcel Energy stated the following:

Xcel Energy plans to conduct a proof-of-concept demonstration involving response to concurrent events requiring EOF activation with both MNGP [Monticello] and PINGP [Prairie Island] prior to implementation.

Xcel Energy further states:

This proof-of-concept demonstration may be observed by NRC staff and representatives of the FEMA. Offsite response agencies will be invited to participate or observe.

While not required by regulation, the NRC staff and representatives from FEMA intend to observe the two-site simultaneous demonstration drill to further verify the ability of the Xcel Energy EOF to perform the functions designated in the Xcel Energy Standard Emergency Plan.

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff finds that the new consolidated EOF does not negatively alter the functions of the existing EOFs as currently described in the Monticello and Prairie Island emergency plans, respectively. The NRC staff used section 4.1 of NUREG-0696, as supplemented by NSIR/DPR-ISG-01, to evaluate the functions of the proposed Xcel Energy consolidated EOF and found it acceptable. Therefore, the NRC staff has concluded that the proposed Xcel Energy consolidated EOF meets the standards of 10 CFR 50.47(b) and requirements of paragraph IV.E.8 of Appendix E to 10 CFR Part 50.

Location, Structure, and Habitability

Location

Section 4.2 of NUREG-0696, as supplemented by section IV.I of NSIR/DPR-ISG-01, provides guidance on considerations of EOFs at a single location. Specifically, footnote 1 to Table 2, "Relation of EOF Location to Habitability Criteria," in section IV.I of NSIR/DPR-ISG-01 states, in

part, "Specific Commission approval is required for EOF locations beyond 25 miles of the TSC." The proposed Xcel Energy consolidated EOF is located in Xcel Energy's Corporate Offices at 414 Nicollet Mall, Minneapolis, Minnesota. Xcel Energy states that the structure was constructed in 1964. The distances from this location to the Monticello TSC and the Prairie Island TSC are approximately 37 miles and 40 miles, respectively.

Xcel Energy states that the proposed consolidation is expected to have the following positive effects on the affected stations' emergency response capability:

- Increased pool of site emergency response organization (ERO) members available for assignment to other positions in the TSC and the Operational Support Center (OSC);
- Implementation of a common Xcel Energy EOF, staffed by corporate resources, also minimizes the impact to site resources;
- Increased efficiency using common practices and procedures in a single facility, and
- Enhanced availability for emergency response by relocating the EOF away from a reactor site that could be affected by a large-scale external event, hostile action, or radioactivity release.

Xcel Energy states that the greater distance of the proposed EOF from Monticello and Prairie Island will not impede implementation of EOF functions by Monticello and Prairie Island EROs, or the NRC. ORO emergency plans provide for EOF interface from their respective EOCs, primarily the Minnesota State EOC/JIC, although a representative may be sent to the proposed EOF. The Xcel Energy Executive Spokesperson represents Xcel Energy and interfaces with State officials at the Minnesota State EOC/JIC, and the State Liaison at the Minnesota State EOC/JIC serves as an interface between Xcel Energy and the states of Minnesota and Wisconsin. The EOF Offsite Agency Liaison coordinates ERO and ORO activities. Xcel Energy FMT activities are coordinated with the State Planning Chief at the Minnesota State EOC. In addition, County Liaisons serve as an interface between County and Xcel Energy personnel. The Minnesota State EOC is located at 445 Minnesota St, St Paul, Minnesota (11 miles from location of the proposed common Xcel Energy EOF), thus the location of the proposed EOF does not impede ORO mobilization. Likewise, due to the relative proximity to the Minneapolis-Saint Paul International Airport, the time it would take for the NRC Region III Incident Response Site Team to arrive at the proposed EOF should be less than that needed to travel to the existing Monticello EOF or Prairie Island EOF. Additionally, the proposed consolidated EOF will obviate the need for NRC Site Teams to staff both the Monticello EOF and the Prairie Island EOF for concurrent events.

As discussed previously the Commission found the existing common BUEOF located at the Headquarters Emergency Center in downtown Minneapolis, Minnesota acceptable. However, per section IV.E.8.b to Appendix E of 10 CFR Part 50, a BUEOF is only required when the primary EOF is located within 10 miles of the nuclear power reactor site. As such, a BUEOF would no longer be required for the Monticello and Prairie Island sites upon approval of the proposed Xcel Energy consolidated EOF.

The NRC staff finds that relocation of the Monticello and Prairie Island EOFs to Xcel Energy's Corporate Offices will continue to fulfill the necessary emergency response functions and will effectively support Xcel Energy's emergency response at both sites. This determination is based, in part, on the NRC staff's determinations (below) regarding the proposed EOF's

capability to fulfill its required emergency response functions for Monticello and Prairie Island; the facility's location and size; the anticipated staffing and training of licensee emergency response personnel at the facility; the transfer of responsibilities from the EOF to the TSC, thereby not requiring site resources to travel to the common Xcel Energy EOF; the facility's communications capabilities and data systems; the facility's capacity for accommodating a multi-site event; and the facility's ability to accommodate personnel from the NRC and/or State and local response organizations. Further, the NRC staff considered the views expressed by FEMA on the proposed EOF relocation and consolidation, discussed in section 3.2.1.1 below. The NRC staff also considered prior Commission statements regarding other consolidated EOF approvals, and Xcel Energy's provision of an acceptable near-site location for NRC and other responders at all of its reactor sites that are more than 25 miles from the proposed EOF. The NRC staff therefore finds the EOF location change to greater than 25 miles from the Monticello and Prairie Island sites acceptable.

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above and the Commission's approval of Xcel Energy's proposal to relocate and consolidate the EOF in the SRM for SECY-22-0106 the NRC staff finds that the physical location of the new consolidated EOF meets the requirements of paragraph IV.E.8 of Appendix E to 10 CFR Part 50.

Offsite Agreement

Planning standard 10 CFR 50.47(b)(3) requires that arrangements be made to accommodate State and local staff at the licensee's EOF. State and local agencies do not currently respond to the existing EOFs for Monticello and Prairie Island. In section 2.2, "Reason for the Proposed Changes," to enclosure 4 of its letter dated November 15, 2021, Xcel Energy stated that ORO plans provide for interface from their respective EOCs, mainly the Minnesota State EOC/JIC, although a representative may be sent to the proposed Xcel Energy consolidated EOF. The State of Minnesota maintains a combined JIC/EOC for use by Xcel Energy and the State of Wisconsin. Xcel Energy staff who mobilize at the Minnesota State EOC/JIC provide interface between Xcel Energy and the states of Minnesota and Wisconsin. Further, Xcel Energy states that JIC operations are unaffected by the proposed consolidation of the Xcel Energy EOFs. In its June 10, 2022, response to the NRC staff's questions, Xcel Energy stated that neither the States nor local agencies requested any changes to their coordination with Xcel Energy for emergency response activities.

Section 4.2 to NUREG-0696, as supplemented by section IV.1 of NSIR DPR-ISG-01, states that "It is strongly recommended that the EOF location be coordinated with State and local authorities to improve the relationship between the licensee and offsite organizations." In enclosure 5, "ORO Letters," to Xcel Energy's letter dated November 15, 2021, signed letters of concurrence were provided from the following offsite response agencies:

- Minnesota Department of Public Safety, and
- The State of Wisconsin.

Per the "Memorandum of Understanding Between the Department of Homeland Security/Federal Emergency Management Agency and Nuclear Regulatory Commission Regarding Radiological Response, Planning and Preparedness," dated December 7, 2015 (ML15344A371), the NRC requested that FEMA evaluate the impact of the proposed consolidation of the Xcel Energy existing EOFs on offsite radiological emergency plans and

preparedness and provide its findings to the NRC. By letter dated June 1, 2022 (ML22154A125), FEMA stated:

FEMA Region 5 personnel visited the proposed facility to review its capabilities. FEMA concurs that, with the retention of near-site facilities for NRC and Federal responders in proximity to each plant as stated in the utility's application, the location of the site beyond 25 miles from each plant does not adversely affect its ability to provide the needed functions. Based upon offsite response organization concurrence from the states of Minnesota and Wisconsin, and review of the memorandum of understanding between FEMA and the NRC, FEMA concurs that the proposed Xcel Energy EOF relocation does not have an unintended negative impact on offsite radiological emergency preparedness plans. FEMA will monitor the drill at the facility scheduled for August of 2022 and will notify you if the results impact this determination in any way.

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff has determined that the proposed Xcel Energy consolidated EOF meets the requirements of 10 CFR 50.47(b)(3).

Impact on NRC's Incident Response

Monticello and Prairie Island Near-site NRC and Offsite Responder Locations

Paragraph IV.E.8.b of Appendix E to 10 CFR Part 50 requires that, for an EOF located more than 25 miles from a nuclear reactor site, provisions be made for locating NRC and offsite responders closer to the reactor site to facilitate face-to-face interaction with emergency personnel entering and leaving the site. Section IV.I of NSIR/DPR-ISG-01 states, in part, that the EOF will have facilities and capabilities for "Locating NRC and offsite agency staff closer to a site if the EOF is greater than 25 miles from the site," and establishes guidance on minimum provisions at this location.

Xcel Energy's near-site response locations will continue to be at the Monticello training building and the Prairie Island training center. Xcel Energy states that each near-site response location will provide provisions consistent with the guidance in section IV.I to NSIR/DPR-ISG-01, which includes space for an NRC site team and Federal responders (ORO plans provide for interface from their respective EOCs, primarily the Minnesota State EOC/JIC), conference areas and presentation boards for conducting briefings with emergency response personnel, communication capability with other licensee and offsite emergency response facilities, computer access to plant data and radiological information, radiation monitoring capability, and access to copying equipment and office supplies.

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff finds that Xcel Energy has provided near-site response locations for locating NRC and offsite responders closer to the reactor site. The NRC staff used section 4.1 of NUREG-0696, as supplemented by NSIR/DPR-ISG-01, to evaluate the establishment of near-site response locations and found it acceptable. Therefore, the NRC staff finds that the physical location of the proposed Xcel Energy consolidated EOF and the near-site response locations meet the requirements of paragraph IV.E.8.b of Appendix E to 10 CFR Part 50.

Monticello and Prairie Island Alternate Emergency Response Facilities (ERFs)

Paragraph IV.E.8.d of Appendix E to 10 CFR Part 50, requires licensees to provide “. . . an alternative facility (or facilities) that would be accessible even if the site is under threat of or experiencing hostile action, to function as a staging area for augmentation of emergency response staff. . . .” In addition, guidance in NUREG-0654 Element H.4. states: “An alternative facility (or facilities) is established, using currently provided and/or endorsed guidance, which would be accessible even if the nuclear power plant (NPP) site is under threat of or experiencing hostile action.” Hostile action events warrant the timely activation of the ERO, supporting a rapid response to mitigate site damage as soon as the site is secured. To accomplish this, licensees must identify an alternative facility (or multiple facilities) to support response functions when ERFs are not accessible because of a hostile action. In addition, during a hostile action event, ERO members would likely not have access to the site, but these events still warrant timely ERO augmentation.

Xcel Energy’s alternative ERFs are currently designated as the Monticello training building and the Red Wing Service Center for Prairie Island. These facilities are accessible in the event of an onsite Hostile Action and provide the ability to perform the following functions:

- Communication with the Control Room and onsite Security Forces;
- Notification of offsite Emergency Response Organizations, and
- Engineering Assessment Activities including damage control team preparation and planning.

Xcel Energy is not proposing any changes to the alternative ERFs. The NRC staff finds this to be acceptable.

Based on the NRC staff’s review and evaluation of the information in Xcel Energy’s application as described above, the NRC staff finds that the Monticello and Prairie Island alternate ERFs, as identified in current site-specific emergency plans and the proposed Site Annexes to the Xcel Energy Common Emergency Plan, meet the requirements of 10 CFR 50.47(b)(8) and paragraph IV.E.8.d of Appendix E to 10 CFR Part 50.

Structure

Section 4.2 of NUREG-0696, as supplemented by Table 2 to Section IV.1 of NSIR/DPR-ISG-01, provides guidance that, for an EOF located at or beyond 10 miles from a nuclear power reactor site, the structure be “Well engineered for design life of plant,” and provides the “Uniformed Building Code” as an example building code. In addition, the structure must be able to withstand adverse conditions of high winds (other than tornadoes) and floods. The guidance further provides that winds and floods with a 100-yr recurrence frequency are acceptable for a design basis. It should be noted that the Uniform Building Code was replaced by the International Building Code in 2000.

In section 3.1.2, “Locations, structure, and habitability,” to enclosure 4 of its November 15, 2021, letter, Xcel Energy stated that the proposed consolidated EOF meets the intent of the guidance in NUREG-0696 that the building be “well engineered for the design life of plant.” Xcel Energy states that the structure was constructed in 1964 and designed for a live wind load of 30 pounds per square foot (greater than 100 miles per hour).

The structure was built prior to the establishment of building codes in the State of Minnesota. The Minnesota Building Codes were initially approved in 1972. In 2008, legislation established that the State Building Code is the applicable statewide standard for the construction and remodeling of buildings. The current 2020 Minnesota State building code describes criteria for determining wind loads based on a recurrence frequency of 50 years. Additionally, the designed live wind load of 30 pounds per square foot (greater than 100 miles per hour) for the structure exceeds the current 2020 Minnesota State building code's minimum requirements.

Although the guidance in NUREG-0696 describes criteria for determining wind loads based on a recurrence frequency of 100 years, both the current 2020 Minnesota Building Code and International Building Code use a recurrence frequency of 50 years, which are events with a higher probability of occurring than a 100-year event. In addition, the NRC staff has approved the use of a 50-year wind design for other facilities, such as the Duke Energy consolidated EOF as set forth in 2017, by letter dated August 21, 2017 (ML17188A387). In this regard, Duke Energy had stated in its application dated April 29, 2016 (ML16120A076),

Phase 2 of the Energy Center is capable of withstanding wind loads and live loads equal to or greater than those specified in the current 2012 North Carolina State Building Code (which is based on the 2009 International Building Code).

Section 1609.3, "Basic wind speed" of the 2009 International Building Code states,

In non[-]hurricane-prone regions, when the basic wind speed is estimated from regional climatic data, the basic wind speed shall be not less than the wind speed associated with an annual probability of 0.02 (50-year mean recurrence interval). . . .

Additional precedence includes the NRC's letter to Southern Nuclear Operating Company (SNC), dated July 26, 2018 (ML18183A073), approving the relocation of the SNC Common EOF. SNC stated in its application dated August 30, 2017 (ML17243A202),

The new EOF is built to withstand wind loads and live loads of the 2009 International Building Code as adopted by the State of Alabama.

As discussed above, the 2009 International Building Code uses a recurrence frequency of 50 years.

The NRC staff finds the Xcel Energy proposed consolidated EOF structure's design to withstand adverse conditions of high winds (other than tornadoes) acceptable, because 1) the design exceeds the current 2020 Minnesota Building Code, and 2) the design is consistent with other EOF structures' wind load design that the NRC has approved in the past. Additionally, in section 3.1.2, "Locations, structure, and habitability," to enclosure 4 of its letter of November 15, 2021, Xcel Energy stated the proposed consolidated EOF structure is located in a minimal flood hazard zone, which is outside the 0.2 percent annual chance (500-year) flood plain.

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff finds that the proposed consolidated EOF meets the intent of the guidance in NUREG-0696 that the building be "well-engineered for the design life of the plant," and be able to withstand adverse conditions of high winds (other than tornadoes) and

floods. The NRC staff used section 4.2 of NUREG-0696, as supplemented by NSIR/DPR-ISG-01, to evaluate the structure of the proposed consolidated EOF and found it acceptable. Therefore, the NRC staff finds that the physical structure of the proposed consolidated EOF meets the requirements of 10 CFR 50.47(b)(8).

Habitability

Section 4.2 to NUREG-0696, as supplemented by Table 2 of NSIR/DPR-ISG-01 provides guidance that would ensure radiological protection for EOF personnel by providing an adequate ventilation system and radiological protection factor in the EOF. Similar to the existing Xcel Energy BUEOF, the proposed consolidated EOF will be located beyond 10 miles from any of the Monticello and Prairie Island sites, or other nuclear power plant sites. EOF functions are unlikely to be impacted by a radiological release from any Xcel Energy or other site due to the distance of the EOF from each respective site. Since the EOF is located at or beyond 10 miles from the TSC from each respective site, Table 2 of NSIR/DPR-ISG-01 states that no specialized ventilation system or protection factor is needed. Therefore, measures to assure the habitability for the proposed consolidated EOF, as described in NUREG-0696 and NSIR/DPR ISG 01, are not needed, and the proposed consolidated EOF meets the requirements of 10 CFR 50.47(b)(8).

Staffing and Training

Section 4.3 of NUREG-0696, as supplemented by section IV.1 of NSIR/DPR-ISG-01, provides guidance on EOF staffing and training to provide for the overall management of licensee resources, and the continuous evaluation and coordination of licensee activities during and after an accident. In addition, section 4.3 to NUREG-0696 provides guidance on the conduct of periodic EOF activation drills in accordance with the licensee's emergency plan.

Xcel Energy states that the proposed Xcel Energy consolidated EOF is located in Xcel Energy's Corporate Offices, and thereby allows for prompt response by corporate support and management personnel with expertise from various disciplines. The proposed consolidated EOF is required to be activated within 90 minutes following the declaration of an alert or higher classification. This time frame is the same as that of the Monticello EOF and Prairie Island EOF under provisions of their current site-specific emergency plans and in the proposed Xcel Energy Standard Emergency Plan.

Xcel Energy further stated that training for key ERO members supporting Monticello and Prairie Island will include station-specific differences related to their roles (e.g., technical data display systems, plume exposure pathway risk jurisdictions, release pathways, station ingress and egress routes, offsite geopolitical subareas, and evacuation time estimates). Training will be evaluated in accordance with the principles of the systematic approach to training practices to ensure effectiveness and to identify areas that need improvement or correction.

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff finds that the proposed Xcel Energy consolidated EOF staffing and training provide for the overall management of licensee resources, and the continuous evaluation and coordination of licensee activities during and after an accident.

The NRC staff used section 4.3 to NUREG-0696, as supplemented by section IV.1 to NSIR/DPR-ISG-01 to evaluate the staffing and training of the proposed Xcel Energy consolidated EOF and found it acceptable. Therefore, the NRC staff concludes that the staffing

and training for the proposed Xcel Energy consolidated EOF meets the requirements of 10 CFR 50.47(b)(8).

Size

Section 4.4 to NUREG-0696, as supplemented by section IV.1 to NSIR/DPR-ISG-01, provides guidance that the EOF building will be large enough to provide adequate workspace for personnel assigned to the EOF as specified in the licensee's emergency plan, at the maximum level of occupancy without crowding, as well as provide separate office space to accommodate NRC staff and other Federal personnel.

Attachment 1, "Consolidated Emergency Operations Facility Images," to enclosure 4 of Xcel Energy's letter dated November 15, 2021, provides the layout for the proposed Xcel Energy EOF, illustrating the different areas in the proposed Xcel Energy consolidated EOF, such as: the command center, dose assessment area, technical assessment area, communications area, NRC conference room and lower bay conference room areas. Xcel Energy also provided images of the proposed EOF facility.

Xcel Energy's submittal also stated that the total usable space and working space of the proposed EOF is approximately 2,849 square feet. Xcel Energy further states that based on the 75 square-foot per-person guidance of NUREG-0696, the proposed Xcel Energy EOF provides adequate working space for the number of ERO staff at the projected maximum level of occupancy without crowding.

As part of its evaluation, the NRC staff verified that the proposed Xcel Energy consolidated EOF provides for sufficient workspace, which will enhance Xcel Energy's ability to effectively support simultaneous events at multiple nuclear power reactor sites, while providing dedicated workspace for NRC site team and State representatives responding to the facility.

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff finds that the proposed Xcel Energy consolidated EOF will be of sufficient size to accommodate and support Federal, State, and licensee ERO personnel, equipment, and documentation in the EOF. The NRC staff used section 4.4 of NUREG-0696, as supplemented by NSIR/DPR-ISG-01, to evaluate the size of the proposed Xcel Energy consolidated EOF and found it acceptable. Therefore, the NRC staff concludes that the size of the proposed Xcel Energy consolidated EOF meets the requirements of 10 CFR 50.47(b)(8) and paragraph IV.E.8.c to Appendix of 10 CFR Part 50.

Radiological Monitoring

The guidance in section 4.5 to NUREG-0696 specifies that to ensure adequate radiological protection of EOF personnel, radiation monitoring systems are to be provided in the EOF. The proposed Xcel Energy consolidated EOF will be located beyond 10 miles from the Monticello and the Prairie Island plants. No other NRC-license nuclear power reactor site is located within 10 miles of the proposed Xcel Energy consolidated EOF. The staff finds that based on the physical location of the proposed Xcel Energy consolidated EOF, EOF personnel are unlikely to be impacted by a radiological release from any nuclear power plant site. Therefore, radiological monitoring capabilities for EOF personnel, as described in NUREG-0696, as supplemented by NSIR/DPR-ISG-01, are not needed, and the Xcel Energy consolidated EOF meets the requirements of 10 CFR 50.47(b)(8).

Communications

Section 4.6 of NUREG-0696 provides guidance to ensure that the EOF has reliable voice communications facilities for communication with the respective site's TSC and control room, the NRC, and State and local EOCs, and describes the primary functions of the EOF voice communications facilities.

In section 3.1.6, "Communications," to enclosure 4 of its letter dated November 15, 2021, Xcel Energy provides the communications systems available in the proposed EOF. These include reliable voice communications to each site's main control room, TSC, OSC, and State and County EOCs. Also, provisions exist for communications with FMTs within the emergency planning zones. Xcel Energy states that access to the ENS, Health Physics Network (HPN), NRC counterpart links, and the Security Bridge from the proposed consolidated EOF is provided via the commercial telephone network which is separate from Monticello and Prairie Island local telephone switches. Where applicable, site facilities continue to use direct access lines to access ENS, HPN, and NRC counterpart links via the Federal Government's long-distance network. In addition, three telephone lines will be available for NRC use when the proposed consolidated EOF is activated.

The NRC staff confirmed that the description of the EOF facilities and equipment related to communications for the proposed consolidated EOF remains consistent with that which is currently described in section 7.0, "Emergency Facilities and Equipment," of the current Monticello and Prairie Island Emergency Plans, as well as sections F, "Emergency Communications," of the proposed Monticello and Prairie Island Annexes, and is equivalent to the existing facility.

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff finds that the proposed Xcel Energy consolidated EOF has sufficient internal and external telecommunications capabilities to support EOF functions for simultaneous events at Monticello and Prairie Island. The NRC staff used section 4.6 of NUREG-0696 to evaluate the communications of the proposed Xcel Energy consolidated EOF and found it acceptable. Therefore, the NRC staff has concluded that the proposed Xcel Energy consolidated EOF will provide for reliable EOF voice and data communications, and information collection and therefore, it meets the requirements of 10 CFR 50.47(b)(8).

Instrumentation, Data System Equipment, and Power Supplies

Section 4.7 of NUREG-0696 provides guidance on equipment to gather, store, and display data needed in the EOF to analyze and exchange information on plant conditions, as well as criteria to perform these functions.

In section 3.1.7, "Instrumentation, data system equipment, and power supplies," to enclosure 4 of its letter dated November 15, 2021, Xcel Energy stated:

Instrumentation used to continuously monitor vital plant parameters in the MCR [main Control Room] is described in the site Updated Safety Analysis Report (USARs). Essential plant data monitoring capability is available in the emergency facilities through facility computer and display systems. Xcel Energy uses site-specific versions of the Unified RASCAL [Radiological Assessment System for Consequence Analysis] Interface (URI) off site dose projection computer model.

Xcel Energy's submittal further states that the normal power to the proposed consolidated EOF is from reliable offsite sources and that backup power for the proposed consolidated EOF is supplied by onsite diesel generation. Xcel Energy also stated that essential equipment is backed up by the diesel generation system; therefore, a loss of primary commercial power would not cause loss of any stored data vital to EOF functions. Xcel Energy states that historical data from the site will be accessible from a historical database.

In its letter dated June 10, 2022, Xcel Energy further states that the proposed consolidated EOF will provide sufficient redundancy in power, data network, and communications capabilities to ensure that the EOF operational availability goals are met.

Based on its review of the licensee's submittal, the NRC staff finds that the proposed Xcel Energy consolidated EOF provides for reliable EOF instrumentation, data system equipment, and power supplies. The NRC staff used section 4.7 of NUREG-0696 to evaluate the instrumentation, data system equipment, and power supplies of the proposed Xcel Energy consolidated EOF and found it acceptable. Therefore, the NRC staff concludes that the proposed Xcel Energy consolidated EOF will provide for reliable equipment to gather, store, and display data needed in the EOF to analyze and exchange information on plant conditions and that it meets the requirements of 10 CFR 50.47(b)(8)-(9) and paragraph IV.E.8.c of Appendix E to 10 CFR Part 50.

Technical Data and Data Systems

Section 4.8 of NUREG-0696 provides guidance on the technical data system needed to receive, store, process, and display information sufficient to perform assessments of the actual and potential onsite and offsite environmental consequences of an emergency condition.

In section 3.1.8, "Technical data and data systems," to enclosure 4 of its letter dated November 15, 2021, Xcel Energy stated that the proposed consolidated EOF has the capability to display vital plant data and radiological information for each site and unit, in near real-time.

Xcel Energy further states that the Monticello safety parameter display system (SPDS) is an integrated function of the plant process computer system (PPCS) and displays critical plant variables. The displays are based on emergency operating procedures and General Electric generic Emergency Response Information System (ERIS), including meteorological data, are available in the proposed consolidated EOF.

Xcel Energy states that the Prairie Island emergency response computer system (ERCS) collects and processes data for display in the proposed consolidated EOF. Xcel Energy also states that requirements for an SPDS are met by a system of displays provided by the ERCS and display of this data is also available through the business computer network.

Xcel Energy states that the URI model is used to provide offsite radiological dose and dose rate estimates based on near real-time or hypothetical inputs. The dose projection results are given for various locations from the applicable site boundary to 10 miles. URI can provide dose assessment results for multiple release points from each site.

Based on its review of the licensee's submittal, the NRC staff finds that the proposed Xcel Energy consolidated EOF provides for reliable EOF technical data and data systems. The NRC staff used section 4.8 of NUREG-0696 to evaluate the technical data and data systems of the

proposed Xcel Energy consolidated EOF and found it acceptable. Therefore, the NRC staff concludes that the proposed Xcel Energy consolidated EOF will provide for the sufficient receipt, storage, processing, and display of information to perform assessments of the actual and potential onsite and offsite environmental consequences of an emergency condition and that it meets the requirements of 10 CFR 50.47(b)(8)-(9) and paragraph IV.E.8.c of Appendix E to 10 CFR Part 50.

Records Availability and Management

Section 4.9 of NUREG-0696 provides guidance on ready access to up-to-date plant records, procedures, and emergency plans, etc., needed to exercise overall management of licensee emergency response resources. In section 3.1.9, "Records availability and management," to enclosure 4 of its letter dated November 15, 2021, Xcel Energy stated that the proposed consolidated EOF has access to site reference materials that may be needed for supporting emergency response, including:

- plant technical specifications,
- plant operating procedures,
- emergency operating procedures,
- updated safety analysis reports,
- standard emergency plan and its annexes, and state emergency plans,
- offsite population distribution data,
- evacuation plans, and
- selected plant drawings, diagrams, and other design information.

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff finds that the proposed Xcel Energy consolidated EOF provides for adequate records availability and management. The NRC staff used section 4.9 of NUREG-0696 to evaluate the records availability and management of the proposed Xcel Energy consolidated EOF and found it acceptable. Therefore, the NRC staff finds that the proposed Xcel Energy consolidated EOF provides for records availability and management and meets the requirements of 10 CFR 50.47(b)(8).

On the basis of its evaluation, the staff concludes that the Xcel Energy proposal to replace the existing Monticello and Prairie Island EOFs, and their common BUEOF with a consolidated EOF centrally located in the Xcel Energy's Corporate Offices would fulfill necessary emergency response functions, meet applicable regulations in 10 CFR 50.47 and appendix E of 10 CFR Part 50, and the criteria set forth in applicable guidance. Given the technological capabilities of the new Xcel Energy consolidated EOF, its capacity to address multi-site events, and the staffing of emergency response organizations comprised of experienced and diverse personnel from the Xcel Energy corporate offices, the replacement of the existing Monticello and Prairie Island EOFs, and their common BUEOF with a consolidated EOF would not adversely impact the ability of the EOF to continue to effectively support Xcel Energy's emergency response at Monticello and Prairie Island. Moreover, the staff concluded that the provisions made for locating NRC and offsite responders closer to the nuclear power reactor site so that they can interact face-to-face with emergency response personnel entering and leaving the reactor site are acceptable. As such, the NRC would have reasonable assurance that adequate protective measures can and will be implemented in the event of a radiological emergency at the reactor sites that the Xcel Energy consolidated EOF serves.

3.2.8.4 *Criterion II.H Evaluation Conclusion*

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff concludes that Xcel Energy has established provisions for adequate emergency facilities and equipment to support the emergency response. Therefore, the NRC staff has determined that the planning standard of 10 CFR 50.47(b)(8) and applicable requirements of Appendix E to 10 CFR Part 50 have been adequately addressed.

3.2.9 Criterion II.I, "Accident Assessment"

NUREG-0654, Evaluation Criterion II.I, addresses planning standard 10 CFR 50.47(b)(9), which states:

Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.

Section IV.B.1 of Appendix E to 10 CFR Part 50, requires a description of the means to be used for determining the magnitude of, and for continually assessing the impact of, the release of radioactive materials.

Section IV.E.2 of Appendix E to 10 CFR Part 50 requires a description of the equipment used for determining the magnitude of and for continually assessing the impact of the release of radioactive materials to the environment.

The requirements of 10 CFR 50.47(b)(9) and applicable requirements of Sections IV.B.1 and IV.E.2 of Appendix E to 10 CFR Part 50 are addressed in Section I, "Accident Assessment," of the proposed Xcel Energy Standard Emergency Plan and site-specific annexes.

3.2.9.1 *Standard Emergency Plan*

The proposed Xcel Energy Standard Emergency Plan states that isotopic composition of a release of radioactive material to the environment may be determined by (1) specialized gaseous monitors that distinguish between gasses, iodine, and particulate, (2) survey and sample analysis, or (3) source term estimates based on core damage and release pathway assumptions. The magnitude of a release of radioactive material to the environment is primarily identified directly by effluent monitors. Dose assessment modeling methods are capable of estimating source term and magnitude of gaseous releases from effluent monitors or plant parameter data and release rate projections.

Xcel Energy uses site-specific versions of the URI offsite dose projection computer model. The URI dose projection results and field monitoring readings are used in assessing radiological EALs and PARs. The URI dose projection results are given for various locations from the site boundary out to 10 miles, and the model is capable of providing dose assessment results for multiple release points from the site. The URI model is able to provide offsite radiological dose and dose rate estimates based on near real time or hypothetical inputs.

The FMTs are provided vehicles and equipment for environmental surveys. FMTs are directed to track a radioactive plume by monitoring radiation levels and by obtaining and analyzing air samples. Field monitoring surveys and sampling may be performed at pre-identified locations or at other geographic locations within the EPZ as determined during the event.

Xcel Energy FMTs will track the plume from a radiological release by monitoring radiation levels as indicated on radiological measuring instruments and by obtaining and analyzing air samples. FMT environmental survey and air sample results are compared with dose assessment results to validate or adjust projections. These results can be input into the Xcel Energy URI dose assessment model to develop projections at different locations.

3.2.9.2 *Emergency Plan Annexes*

A description of contingency arrangements to obtain and analyze highly radioactive samples from the reactor coolant system, containment atmosphere and sump, and spent fuel pool storage area are described in the site-specific annexes.

3.2.9.3 *Proposed Changes to Xcel Energy Standard Emergency Plan and Site-Specific Emergency Annexes*

Xcel Energy states that the proposed Xcel Energy Standard Emergency Plan and site-specific annexes standardize and align the wording between the three existing plans without changing past practices or intent.

3.2.9.4 *Criterion II.I Evaluation Conclusion*

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff concludes that Xcel Energy has established provisions for adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition. Therefore, the NRC staff has determined that the planning standard of 10 CFR 50.47(b)(9) and applicable requirements of Appendix E to 10 CFR Part 50 have been adequately addressed.

3.2.10 Criterion II.J, "Protective Response"

NUREG-0654, Section II.J, addresses planning standard 10 CFR 50.47(b)(10), which states,

A range of protective actions has been developed for the plume exposure pathway EPZ for emergency workers and the public. In developing this range of actions, consideration has been given to evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide (KI), as appropriate. Evacuation time estimates [ETEs] have been developed by applicants and licensees. Licensees shall update the evacuation time estimates on a periodic basis. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.

Sections IV.2 and IV.3 of Appendix E to 10 CFR Part 50 requires nuclear power reactor licensees to use NRC-approved ETEs and updates to the ETEs in the formulation of PARs, and to provide the ETEs and ETE updates to State and local governmental authorities for use in developing offsite protective action strategies.

Section IV B.1 of Appendix E to 10 CFR Part 50 requires a description of the EALs that are to be used for determining when and what type of protective measures should be considered within and outside the site boundary to protect health and safety.

Section IV.I of Appendix E to 10 CFR Part 50 requires a range of protective actions to protect onsite personnel during hostile action to be developed to ensure the continued ability of the licensee to safely shut down the reactor and perform the functions of the licensee's emergency plan.

The requirements of 10 CFR 50.47(b)(10) and applicable requirements of Sections IV.2, IV.3, IV.B.1, and IV.I of Appendix E to 10 CFR Part 50 are addressed Section J, "Protective Response," of the proposed Xcel Energy Standard Emergency Plan and site-specific annexes.

3.2.10.1 Standard Emergency Plan

The proposed Xcel Energy Standard Emergency Plan describes the means and time required to alert, notify, and provide protective actions for onsite individuals and individuals who may be in areas controlled by the licensee (including members of the public) during a radiological incident. The site assembly alarm and the PA system will be used to alert and notify onsite personnel of an emergency condition. Notification of persons who are in the public access areas, on or passing through the site, or within the owner-controlled area (OCA), will be performed by site Security. All personnel within the Protected Area will be accounted for within 30 minutes of a Site Area Emergency or General Emergency ECL. Any missing person(s) will be identified by Security, and search procedures will be implemented to locate unaccounted for persons. Accountability may be delayed during a security event if the Emergency Coordinator, in consultation with Security, determines that performing accountability could be detrimental to the safety of plant personnel.

The proposed Xcel Energy Standard Emergency Plan states that during a Site Area or General Emergency ECL, a site evacuation of all non-essential personnel inside the OCA is conducted unless delayed due to safety issues. Non-essential personnel will then be directed to exit the site.

Xcel Energy, in coordination with the site-specific OROs, developed site-specific protective action strategies, informed by the site-specific ETEs and based on Federal guidance. The proposed Xcel Energy Standard Emergency Plan states that applicable plume exposure pathway EPZ PARs to evacuate, shelter, and take potassium iodide are developed at the General Emergency ECL and provided to the ORO personnel responsible for making protective action decisions.

3.2.10.2 Emergency Plan Annexes

Each site-specific annex contains a description of the evacuation processes and identifies the site-specific ETE report.

3.2.10.3 Proposed Changes to Xcel Energy Standard Emergency Plan and Site-Specific Emergency Annexes

Xcel Energy states that the proposed Xcel Energy Standard Emergency Plan and site-specific annexes standardize and align the wording between the three existing plans without changing past practices or intent.

3.2.10.4 *Criterion II.J Evaluation Conclusion*

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff concludes that Xcel Energy has developed a range of protective actions for the plume exposure pathway EPZ for emergency workers and the public. Therefore, the NRC staff has determined that the planning standard of 10 CFR 50.47(b)(10) and applicable requirements of Appendix E to 10 CFR Part 50 have been adequately addressed.

3.2.11 Criterion II.K Evaluation, "Radiological Exposure Control"

NUREG-0654, Evaluation Criterion II.K, addresses planning standard 10 CFR 50.47(b)(11), which states:

Means for controlling radiological exposures, in an emergency, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides.

Sections IV.E.1 and IV.E.3 of Appendix E to 10 CFR Part 50 require equipment at the site for personnel monitoring, and facilities and supplies for decontamination of onsite individuals.

The requirements of 10 CFR 50.47(b)(11) and applicable requirements of Sections IV.E.1 and IV.E.3 of Appendix E to 10 CFR Part 50 are addressed Section K, "Radiological Exposure Control," of the proposed Xcel Energy Standard Emergency Plan.

3.2.11.1 *Standard Emergency Plan*

The proposed Xcel Energy Standard Emergency Plan states that the onsite exposure guidelines for emergency workers are consistent with the U.S. Environmental Protection Agency, "EPA-400-R-92-001, 'Manual of Protective Action Guides and Protective Actions for Nuclear Incidents'" May 1992, Table 2-2, "Guidance on Dose Limits for Workers Performing Emergency Services."

During onsite emergency incidents at the time of exposure when direct measurement is not feasible, the proposed Xcel Energy Standard Emergency Plan states that if direct measurement of airborne concentrations is not available at time of exposure, workers will be provided respirator protection. The TEDE exposures will be calculated using follow-up survey data and whole-body counting equipment. Radiation doses received by emergency workers for the duration of the incident are monitored with radiation equipment, such as thermoluminescent dosimeters, wrist dosimetry, and/or finger dosimetry. In addition, other radiation detection devices (such as pocket ion chambers, electronic dosimeters, self-reading dosimeters, and pocket high radiation alarms) are available for use by emergency workers to allow real time measurement of exposure. Personnel dose records will be documented and managed using an electronic dose tracking system. If the electronic dose tracking system is not available, dose tracking will be maintained manually.

The proposed Xcel Energy Standard Emergency Plan states that emergency teams that must enter areas where they might be expected to receive higher than normal doses will be briefed on the task assigned and the planned route to destination, allowed dose and dose rates, stay time, protective clothing and/or equipment as applicable. The team members will be instructed not to deviate from the planned route unless required by unanticipated conditions such as

rescue or performance of an operation that would minimize the emergency condition. Offsite FMTs will be briefed on their duties and actions and what they are to do while in the field. If emergency workers are expected to receive an exposure in excess of normal occupational limits, then dose extensions are determined and approved on a task basis. Approval is required before emergency workers are allowed to exceed normal occupational radiation dose limits. The Shift Manager or Emergency Coordinator would be responsible for authorizing exposures to radiation in excess of 10 CFR Part 20 limits. These types of authorizations are documented as part of the emergency exposure controls process.

The proposed Xcel Energy Standard Emergency Plan states that non-Xcel Energy emergency workers supporting onsite activities will be issued dosimetry and/or be monitored by RP personnel when responding to areas where a dose to radiation may be received. Dosimeters are available and will be provided to offsite agency responders for events that could result in exposure or entry into any radiologically controlled areas. This dosimetry issuance process and site access will be implemented by ERO RP and site security personnel.

Personnel leaving the contaminated areas are monitored to ensure that they and their clothing are not radioactively contaminated. Contamination on personnel will be removed in accordance with established RP procedures. Contaminated clothing or personal articles will be decontaminated or replaced. Radiation safety controls are established 24 hours per day to contain the spread of loose surface radioactive contamination.

3.2.11.2 *Emergency Plan Annexes*

A complete description of Xcel Energy's radiological exposure control is provided in the proposed Xcel Energy Standard Emergency Plan and is not addressed in the site-specific annexes.

3.2.11.3 *Proposed Changes to Xcel Energy Standard Emergency Plan and Site-Specific Emergency Annexes*

Xcel Energy states that the proposed Xcel Energy Standard Emergency Plan and site-specific annexes standardize and align the wording between the three existing plans without changing past practices or intent.

3.2.11.4 *Criterion II.K Evaluation Conclusion*

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff concludes that Xcel Energy has established appropriate means for controlling radiological exposures for emergency workers in an emergency. Therefore, the NRC staff has determined that the planning standard of 10 CFR 50.47(b)(11) and applicable requirements of Section IV.E of Appendix E to 10 CFR Part 50 have been adequately addressed.

3.2.12 Criterion II.L Evaluation, "Medical and Public Health Support"

NUREG-0654, Evaluation Criterion II.L, addresses planning standard 10 CFR 50.47(b)(12), which states:

Arrangements are made for medical services for contaminated injured individuals.

Sections IV.E.4 and E.5 of Appendix E to 10 CFR Part 50, require provisions for facilities and medical supplies at the site for appropriate emergency first aid treatment, and arrangements for medical service providers qualified to handle radiation emergencies onsite.

Sections IV.E.6 of Appendix E to 10 CFR Part 50, requires that arrangements are made for transportation of contaminated injured individuals from the site to specifically identified treatment facilities outside the site boundary.

The requirements of 10 CFR 50.47(b)(12) and applicable requirements of Sections IV.E.4, E.5, and E.6 of Appendix E to 10 CFR Part 50 are addressed in portions of Section L, "Medical and Public Health Support," of the proposed Xcel Energy Standard Emergency Plan and site-specific annexes.

3.2.12.1 *Standard Emergency Plan*

The proposed Xcel Energy Standard Emergency Plan describes medical and public health support. Xcel Energy nuclear sites maintain first aid capabilities as part of the site's administrative procedures. Arrangements have been made with local hospitals for the medical treatment of contaminated injured personnel, and injured personnel are evaluated for radiological contamination prior to transport to a medical facility in accordance with radiation protection procedures. Primary and backup offsite medical facilities to treat contaminated injured personnel are described in the site-specific annexes to the proposed Xcel Energy Standard Emergency Plan. The Radiation Emergency Assistance Center Training Site (REAC/TS), located at Oak Ridge, Tennessee, is maintained per a letter of agreement.

Xcel Energy personnel are available to assist medical personnel with decontamination, radiation exposure and contamination control. Hospitals are equipped, and hospital personnel are trained, to address contaminated injured individuals. Training of medical support personnel at agreement hospitals includes basic training on the nature of radiological emergencies. Radiological controls capability, including the isolation of contamination, assessment of contamination levels, radiation exposure monitoring for medical facility staff, collection of contaminated waste, and decontamination of treatment areas are described in licensee radiation protection department and hospital procedures.

Radiation monitoring services are provided by Xcel Energy personnel whenever it becomes necessary to use an ambulance service for the transportation of contaminated persons. Injured personnel are evaluated for radiological contamination using contamination control practices to transport to a medical facility per radiation protection procedures. Xcel Energy personnel will assist with decontamination of transport vehicles, if necessary. Ambulance services are described in the site-specific annexes.

3.2.12.2 *Emergency Plan Annexes*

Each site-specific annex identifies the primary and backup offsite medical facilities to treat contaminated injured personnel, including arrangements for transportation of radiologically contaminated casualties, as follows:

Monticello

Primary – CentraCare Health-Monticello in Monticello, Minnesota
Backup – CentraCare St. Cloud Hospital in St. Cloud, Minnesota
CentraCare Health-Monticello Ambulance Service in Monticello, Minnesota

Prairie Island

Primary – Mayo Clinic Health System in Red Wing, Minnesota
Backup – Regions Hospital in St. Paul, Minnesota
Red Wing Ambulance Service in Red Wing, Minnesota

3.2.12.3 *Proposed Changes to Xcel Energy Standard Emergency Plan and Site-Specific Emergency Annexes*

Xcel Energy states that the proposed Xcel Energy Standard Emergency Plan and site-specific annexes standardize and align the wording between the three existing plans without changing past practices or intent.

3.2.12.4 *Criterion II.L Evaluation Conclusion*

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff concludes that Xcel Energy has established arrangements for medical services for contaminated injured individuals. Therefore, the NRC staff has determined that the planning standard of 10 CFR 50.47(b)(12) and applicable requirements of Appendix E to 10 CFR Part 50 have been adequately addressed.

3.2.13 Criterion II.M Evaluation, "Recovery, Reentry Planning and Post-Accident Operations"

NUREG-0654, Evaluation Criterion II.M, addresses planning standard 10 CFR 50.47(b)(13), which states:

General plans for recovery and reentry are developed.

Section IV.H of Appendix E to 10 CFR Part 50 requires a description of the criteria to be used to determine when, following an accident, reentry of the facility would be appropriate or when operation could be resumed.

The requirements of 10 CFR 50.47(b)(13) and applicable requirements of Section IV.H of Appendix E to 10 CFR Part 50 are addressed in portions of Section M, "Recovery and Reentry Planning and Post-Accident Operations," of the proposed Xcel Energy Standard Emergency Plan.

3.2.13.1 *Standard Emergency Plan*

The proposed Xcel Energy Standard Emergency Plan addresses general principles that serve as guides for developing a recovery plan. Guidance for determining the transition from an emergency to a recovery organization is provided in the Xcel Energy implementing procedures. Site reentry criteria and actions are established by recovery procedures. Figure M.2-1, "Typical Long Term Recovery Organization," illustrates the Recovery Organization structure. Recovery activities are required for the transition from a Site Area Emergency with long-term plant

damage or General Emergency classification to an outage organization. The primary positions in the Recovery Organization are Recovery Manager, Operations Manager, RP Manager, Engineering Manager, Maintenance Manager, and Communications/Public Affairs.

Implementing procedures provide guidance to directly terminate from an Unusual Event, Alert or Site Area Emergency with no long-term plant damage classifications when a normal outage organization is able to address any plant issues or to transition to a recovery organization. The Emergency Director, in consultation with the Emergency Manager, determines when conditions warranting an emergency declaration have passed and steps will be taken to terminate directly from the event or transition to a recovery organization. Recovery from an emergency situation is guided by the following principles:

- The protection of the public health and safety is the foremost consideration in formulating recovery plans.
- Public officials would be kept informed of recovery plans so that they can properly carry out their responsibilities to the public.
- Periodic information would be provided to the news media so that they can provide information to the public regarding recovery plans and progress made.
- Periodic status reports would be given to company employees at other locations and to government and industry representatives.

The Emergency Manager will inform members of the EOF, site organization, and off-site agencies that recovery operations are being initiated and that activities associated with bringing the plant to a safe shutdown condition are completed. The Emergency Manager will also develop a brief message as to the time and date of recovery operations initiation as well as any necessary organizational realignments. Finally, the recovery organization will coordinate Xcel Energy environmental activities with the state agencies.

3.2.13.2 *Emergency Plan Annexes*

A complete description of Xcel Energy's recovery, reentry, and post-accident operations is provided in the proposed Xcel Energy Standard Emergency Plan and is not addressed in the site-specific annexes.

3.2.13.3 *Proposed Changes to Xcel Energy Standard Emergency Plan and Site-Specific Emergency Annexes*

Xcel Energy states that the proposed Xcel Energy Standard Emergency Plan and site-specific annexes standardize and align the wording between the three existing plans without changing past practices or intent.

3.2.13.4 *Criterion II.M Evaluation Conclusion*

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff concludes that Xcel Energy has developed general plans for recovery and reentry. Therefore, the NRC staff has determined that the planning standard of 10 CFR 50.47(b)(13) and applicable requirements of Appendix E to 10 CFR Part 50 have been adequately addressed.

3.2.14 *Criterion II.N Evaluation, "Exercises and Drills"*

NUREG-0654, Evaluation Criterion II.N, addresses planning standard 10 CFR 50.47(b)(14), which states:

Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are (will be) corrected.

Section IV.F of Appendix E to 10 CFR Part 50, requires a description of the program to provide for: (a) the training of employees and exercising, by periodic drills, of emergency plans to ensure that employees of the licensee are familiar with their specific emergency response duties, and (b) the participation in the training and drills by other persons whose assistance may be needed in the event of a radiological emergency.

The requirements of 10 CFR 50.47(b)(14) and applicable requirements of Section IV.F of Appendix E to 10 CFR Part 50 are addressed in portions of Section N, "Exercises and Drills," of the proposed Xcel Energy Standard Emergency Plan.

3.2.14.1 *Standard Emergency Plan*

The proposed Xcel Energy Standard Emergency Plan states that an exercise tests the integrated capability and a major portion of the elements of the emergency plans and organizations. Over the period of the exercise cycle, exercises will test the adequacy of timing and content of implementing procedures and methods, test emergency equipment and communications networks, test the public alert and notification system, and ensure that emergency organization personnel are familiar with their duties.

The proposed Xcel Energy Standard Emergency Plan further states that following exercises and drills, a critique is conducted to evaluate areas and identify issues with performance, response procedures, and facility and equipment adequacy. It enables Federal, State, and county representatives to observe and participate in drill and exercise critiques.

The proposed Xcel Energy Standard Emergency Plan states the licensee will conduct a plume exposure pathway exercise biennially. Specifically, the plume exposure pathway exercise is developed to provide the ERO with the opportunity to demonstrate proficiency in key skills necessary to implement the principal functional areas of emergency response (those which test the adequacy of timing and content of implementing procedures, test equipment and communications networks, and ensure that the ERO personnel are familiar with their duties). State, county and tribal authorities are invited to participate in PEP exercises.

Additionally, the proposed Xcel Energy Standard Emergency Plan provides a description of the types of exercises and drills, as well as a description of the various required scenario elements to be conducted within the 8-year exercise cycle.

3.2.14.2 *Emergency Plan Annexes*

A complete description of Xcel Energy's exercises and drills program is provided in the proposed Xcel Energy Standard Emergency Plan except for the following site-specific drill in the Prairie Island annex.

Post-accident sampling drills are conducted annually. These drills address capabilities including analysis of liquid and containment atmosphere samples with simulated elevated radiation levels.

3.2.14.3 *Proposed Changes to Xcel Energy Standard Emergency Plan and Site-Specific Emergency Annexes*

Xcel Energy states that the commitments in the proposed Standard Emergency Plan related to exercises and drills include the removal of requirements for performance of the Health Physics and post-accident sampling system drills, fire drills and the annual performance review for the alert and notification system, and the addition of the requirement for performance of a drill to demonstrate the use of equipment procedure and strategies for Mitigation of Beyond Design Basis Events.

Xcel Energy states that these changes to the proposed Xcel Energy Standard Emergency Plan standardizes and aligns the wording between the three existing Plans without change in practice or intent. Additionally, these changes align with the guidance in NUREG-0654.

3.2.14.4 *Criterion II.N Evaluation Conclusion*

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff concludes that Xcel Energy will conduct periodic exercises to evaluate major portions of emergency response capabilities, conduct periodic drills to develop and maintain key skills, and adequately correct deficiencies identified as a result of exercises or drills. Therefore, the NRC staff has determined that the planning standard of 10 CFR 50.47(b)(14) and applicable requirements of Appendix E to 10 CFR Part 50 have been adequately addressed.

3.2.15 Criterion II.O, "Radiological Emergency Response Training"

NUREG-0654, Evaluation Criterion II.O, addresses planning standard 10 CFR 50.47(b)(15), which states:

Radiological emergency response training is provided to those who may be called on to assist in an emergency.

Section IV.F of Appendix E to 10 CFR Part 50 requires a description of the program to provide for: (a) the training of employees and exercising, by periodic drills, of emergency plans to ensure that employees of the licensee are familiar with their specific emergency response duties, and (b) the participation in the training and drills by other persons whose assistance may be needed in the event of a radiological emergency.

The requirements of 10 CFR 50.47(b)(15) and applicable requirements of Section IV.F of Appendix E to 10 CFR Part 50 are addressed in portions of Section O, "Radiological Emergency Response Training," of the proposed Xcel Energy Standard Emergency Plan.

3.2.15.1 *Standard Emergency Plan*

The proposed Xcel Energy Standard Emergency Plan states that initial training and annual retraining will be conducted for members of the ERO and offered to those offsite organizations

that may be called upon to assist the site in the event of an emergency. Details on the content and conduct of ERO training are maintained in the Xcel Energy EP Training Program Description. Training of State and county offsite response organizations is described in their respective radiological emergency plans. However, they are invited to attend training applicable to the Xcel Energy nuclear site or sites where they could provide assistance.

The EP Training Program Description identifies the training requirements for initial qualification, continuing training, and requalification of the ERO. Training will be evaluated in accordance with the principles of the Systematic Approach to Training practices to ensure effectiveness and in order to identify areas that need improvement or correction.

Revisions to the training program are identified with feedback from trainees in training and critique items during drills. EP training is also reviewed during EP assessments at the Xcel Energy nuclear sites. During assessments, ERO and EP staff performance is reviewed and appropriate revisions to the training program are made. Training sessions providing performance enhancing opportunities for key positions are evaluated in order to identify weak or deficient areas that need correction for the key skills demonstrated.

3.2.15.2 *Emergency Plan Annexes*

A complete description of Xcel Energy's radiological emergency response training is provided in the proposed Xcel Energy Standard Emergency Plan and is not addressed in the site-specific annexes.

3.2.15.3 Proposed Changes to Xcel Energy Standard Emergency Plan and Site-Specific Emergency Annexes

Xcel Energy states that the changes to the proposed Xcel Energy Standard Emergency Plan standardizes and aligns the wording between the three existing Plans without change in practice or intent.

3.2.15.4 *Criterion II.O Evaluation Conclusion*

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff concludes that Xcel Energy has established radiological emergency response training for those who may be called on to assist in an emergency. Therefore, the NRC staff has determined that the planning standard of 10 CFR 50.47(b)(15) and applicable requirements of Appendix E to 10 CFR Part 50 have been adequately addressed.

3.2.16 Criterion II.P, "Responsibility for the Planning Effort: Development, Periodic Review and Distribution of Emergency Plans"

NUREG-0654, Evaluation Criterion II.P, addresses planning standard 10 CFR 50.47(b)(16), which states:

Responsibilities for plan development and review and for distribution of emergency plans are established, and planners are properly trained.

Section IV.G of Appendix E to 10 CFR Part 50, requires a description of the provisions to be employed to ensure that the emergency plan, its implementing procedures, and emergency equipment and supplies are maintained up to date.

The requirements of 10 CFR 50.47(b)(16) and applicable requirements of Section IV.G of Appendix E to 10 CFR Part 50 are addressed in Section P, "Responsibility for the Preparedness Effort," of the proposed Xcel Energy Standard Emergency Plan and site-specific annexes.

3.2.16.1 *Standard Emergency Plan*

The proposed Xcel Energy Standard Emergency Plan states that EP staff responsible for planning effort complete initial and continuing training on regulatory requirements, applicable guidance documents and industry operating experience. The Xcel Energy Chief Nuclear Officer has the overall authority and responsibility for Xcel Energy Emergency Plan. The Xcel Energy EP Staff is responsible for the development, maintenance, review, and updating of the emergency plan and site-specific annexes, as well as the coordination of the plan with other response organizations.

The proposed Xcel Energy Standard Emergency Plan, site-specific annexes, and site extension documents are reviewed on an annual basis and updated if necessary. Changes due to regulatory revisions, issues identified by drills and exercises, or other updates will be incorporated. Agreements with supporting organizations will be reviewed and certified to be current on an annual basis and updated, if necessary. Emergency Plan changes will be processed in accordance with 10 CFR 50.54(q) requirements and fleet document control/records management procedures.

A listing of emergency plan extension documents is included in the Introduction of the Standard Emergency Plan. Standard Emergency Plan section A.1.a lists external organizations that support the Standard Emergency Plan and supporting plans for organizations that support individual sites are listed in the site-specific annexes. Appendix C, "NUREG-0654, [Revision] 2, Standard Emergency Plan, Site-Specific Annex and EPIP [emergency plan implementing procedure] Cross Walk," of the Standard Emergency Plan provides a listing by title of the procedures required to maintain and implement the emergency plan and the section(s) of the emergency plan to be implemented by each procedure. The Standard Emergency Plan contains a specific table of contents, and the Standard Emergency Plan and Annexes are numbered corresponding to NUREG-0654 evaluation criteria.

An independent review of the emergency plan will be conducted in accordance with the requirements of 10 CFR 50.54(t)(2), and the review findings will be submitted to the appropriate corporate and site management. The part of the review involving the evaluation of the adequacy of interface with state and county governments will be reported to the appropriate state and county governments. Corporate or site management, as appropriate, will evaluate the findings affecting their area of responsibility and ensure effective corrective actions are taken. The results of the review, along with recommendations for improvements, will be documented, and retained.

The Emergency Preparedness Emergency Telephone Directory contains contact numbers for ORO, ERF, and support organizations identified in the emergency plan and implementing procedures. The directory is reviewed quarterly and updated as needed. EP staff update call out information in the ERO Notification System quarterly. The Xcel Energy corrective action program is used to capture conditions that do not meet program regulations, requirements, or expectations, or are otherwise averse to quality. Changes in plant configuration are evaluated for their impact on the effectiveness of the emergency plan through the Applicability

Determination process specified in plant procedures and, if required, the 10 CFR 50.54(q) process specified in EP procedures.

3.2.16.2 *Emergency Plan Annexes*

Each site-specific annex references Xcel Energy Standard Emergency Plan Appendix C, which lists the procedures required to maintain and implement the emergency plan and provides site-specific procedures, as follows:

Monticello

External emergency plans specific to the support of Monticello include the following:

- Wright County Emergency Response Plan, and
- Sherburne County Emergency Response Plan.

Prairie Island

External emergency plans specific to the support of Prairie Island include the following:

- Goodhue County/Red Wing City Emergency Response Plan for the Prairie Island Nuclear Generating Plant;
- Dakota County Emergency Response Plan for the Prairie Island Nuclear Generating Plant;
- Pierce County Emergency Response Plan for the Prairie Island Nuclear Generating Plant, and
- Prairie Island Indian Community Emergency Response Plan for the Prairie Island Nuclear Generating Plant.

3.2.16.3 *Proposed Changes to Xcel Energy Standard Emergency Plan and Site-Specific Emergency Annexes*

Xcel Energy states that the proposed Xcel Energy Standard Emergency Plan and site-specific annexes standardize and align the wording between the three existing plans without changing past practices or intent.

3.2.16.4 *Criterion II.P Evaluation Conclusion*

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff concludes that Xcel Energy has identified the responsibilities for plan development/review, for distribution of emergency plans, and that planners are properly trained. Therefore, the NRC staff has determined that the planning standard of 10 CFR 50.47(b)(16) and applicable requirements of Appendix E to 10 CFR Part 50 have been adequately addressed.

3.3 Conclusion

3.3.1 EOF Consolidation

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff concludes that the Xcel Energy proposal to replace the existing Monticello and Prairie Island EOFs, and their common BUEOF with a consolidated EOF centrally located in the Xcel Energy's Corporate Offices would fulfill necessary emergency response functions, meet applicable regulations in 10 CFR 50.47 and appendix E of 10 CFR Part 50, and the criteria set forth in applicable guidance. Given the technological capabilities of the new Xcel Energy consolidated EOF, its capacity to address multi-site events, and the staffing of emergency response organizations comprised of experienced and diverse personnel from the Xcel Energy corporate offices, the replacement of the existing Monticello and Prairie Island EOFs, and their common BUEOF with a consolidated EOF would not adversely impact the ability of the EOF to continue to effectively support Xcel Energy's emergency response at Monticello and Prairie Island. Moreover, the staff concluded that the provisions made for locating NRC and offsite responders closer to the nuclear power reactor site so that they can interact face-to-face with emergency response personnel entering and leaving the reactor site are acceptable. As such, the NRC would have reasonable assurance that adequate protective measures can and will be implemented in the event of a radiological emergency at the reactor sites that the Xcel Energy consolidated EOF serves.

3.3.2 Emergency Plan Conclusions

Based on the NRC staff's review and evaluation of the information in Xcel Energy's application as described above, the NRC staff finds that the proposed changes in the Xcel Energy Standard Emergency Plan and site-specific annexes continue to meet the standards in 10 CFR 50.47(b)(1) through (b) (16), and the requirements in Appendix E to 10 CFR Part 50, and that there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency at Monticello and Prairie Island. Therefore, the NRC staff concludes that the licensee's proposed Xcel Energy Standard Emergency Plan and site-specific annexes contained in its application dated November 15, 2021, as supplemented by letter dated June 10, 2022, are acceptable.

4.0 STATE AND TRIBAL CONSULTATION

In accordance with the Commission's regulations, the Minnesota State official was notified of the proposed issuance of the amendments on December 19, 2022. The State official had no comments.

In accordance with the Commission direction given in the SRM approving the relocation of the EOF and BUEOF, the NRR staff discussed the amendment with the Prairie Island Indian Community. The Prairie Island Indian Community had the following comments:

- 1) *Prairie Island Indian Community Comment:* Who would staff the EOF? Will the EOF be staff by people currently assigned to the Monticello and/or Prairie Island EOFs?

NRC Staff response: The EOF will continue to be staffed by Xcel Energy employees trained and qualified to perform the EOF functions. The only change in responsibilities of the EOF will be the coordination of the Radiological Field Monitoring Teams which will be transferred from the EOF to the respective sites' onsite Technical Support Center.

The Filed Monitoring Teams conduct radiation surveys in areas at or beyond the site boundary and collect environmental samples for future analysis.

- 2) *Prairie Island Indian Community comment:* As the Prairie Island Indian Community understands, currently the respective EOFs (Prairie Island/Monticello) are staffed by those that work on-site. If the EOFs are consolidated, will staff responding to the EOF in Minneapolis have to respond from Prairie Island or Monticello or will the staff already be at the Minneapolis office?

NRC Staff response: The Emergency Plan does not specify who staffs a position or where they are located. The Emergency Plan requires that positions be filled with qualified staff that can respond in the time prescribed by the plan. The EOF is required to be activated within 90 minutes following the declaration of an Alert or higher classification. An unannounced biennially drill is conducted to ensure that responsible staff can report to the EOF in the time required by the Emergency Plan.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change the site emergency plans, and relate, in part, to changes in recordkeeping, reporting, or administrative procedures or requirements. The amendments also relate, in part, to changed requirements with respect to the installation or use of facility components located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational or public radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, published in the *Federal Register* on January 25, 2022 (87 FR 3844), and there has been no public comment on such finding. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and 51.22(c)(10). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of these amendments.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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Date of Issuance: March 31, 2023