



Prairie Island Nuclear Generating Plant  
1717 Wakonade Drive East  
Welch, MN 55089-9642

May 11, 2012

L-PI-12-037  
10 CFR 50.54(f)

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Prairie Island Nuclear Generating Plant Units 1 and 2  
Docket Nos. 50-282 and 50-306  
Renewed License Nos. DPR-42 and DPR-60

60-Day Response to NRC Letter, Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident, dated March 12, 2012

References:

1. NRC Letter, "Request for Information Pursuant to Title 10 of the *Code of Federal Regulations* 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident" dated March 12, 2012, ADAMs Accession No. ML12056A046.
2. NRC Order, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," dated March 12, 2012, ADAMs Accession No. ML12054A736.

On March 12, 2012, the NRC Staff issued "Request for Information Pursuant to Title 10 of the *Code of Federal Regulations* 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident" ("letter") to all NRC power reactor licensees and holders of construction permits in active or deferred status (Reference 1). Enclosure 5 of the letter contains specific Requested Actions and Requested Information associated with Recommendation 9.3 for Emergency Preparedness (EP) programs. Addressees were requested to respond to this request for information no later than 90 days from the date of issuance of the letter, in accordance with 10 CFR 50.54(f).

The letter states that if an addressee cannot meet the requested response date, the addressee must provide a response within 60 days of the date of this letter and describe the alternative course of action that it proposes to take, including the basis of the

acceptability of the proposed alternative course of action and estimated completion date. Northern States Power Company, a Minnesota corporation, d/b/a Xcel Energy (hereafter "NSPM"), on the behalf of the Prairie Island Nuclear Generating Plant (PINGP), proposes to take an alternative course of actions to the Recommendation 9.3 requests. NSPM's proposed alternative course of actions and the estimated completion dates of the actions are provided in Enclosure 1 of this letter. The basis of acceptability for NSPM's proposed alternative course of actions is provided in Enclosure 2 of this letter.

If there are any questions or if additional information is needed, please contact Ms. Jennie Eckholt, Licensing Engineer, at 612-330-5788.

Summary of Commitments

Unless otherwise specified, PINGP commits to completing the actions described in Enclosures 1 and 2 by the dates provided.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on May 11, 2012



Mark A. Schimmel  
Site Vice President, Prairie Island Nuclear Generating Plant  
Northern States Power Company - Minnesota

Enclosures (2)

cc: Administrator, Region III, USNRC  
Director of Nuclear Reactor Regulation (NRR), USNRC  
NRR Project Manager, PINGP, USNRC  
Senior Resident Inspector, PINGP, USNRC

## ENCLOSURE 1

### PINGP Proposed Alternative Course of Action for Responding to Recommendation 9.3 Information Request

#### EP Communications - Alternative Course of Actions

Information Request #	Estimated Completion Date	Requested Information
1	October 31, 2012	<p>Provide an assessment of the current communications systems and equipment used during an emergency event to identify any enhancements that may be needed to ensure communications are maintained during a large scale natural event meeting the conditions described for Recommendation 9.3. The assessment should:</p> <ul style="list-style-type: none"> <li>• Identify any planned or potential improvements to existing <u>onsite</u> communications systems and their required normal and/or backup power supplies,</li> <li>• Identify any planned or potential improvements to existing <u>offsite</u> communications systems and their required normal and/or backup power supplies,</li> <li>• Provide a description of any new communications system(s) or technologies that will be deployed based upon the assumed conditions described above, and</li> <li>• Provide a description of how the new and/or improved systems and power supplies will be able to provide for communications during a loss of all AC power.</li> </ul>
2	June 11, 2012	Describe any interim actions that have been taken or are planned to be taken to enhance existing communications systems power supplies until the communications assessment and the resulting actions are complete.
3		Provide an implementation schedule of the time needed to conduct and implement the results of the communications assessment.
	September 28, 2012	Conduct the communications assessment.
	October 31, 2012	Provide an implementation schedule of the time needed to implement the results of the communications assessment.

## ENCLOSURE 1

### PINGP Proposed Alternative Course of Action for Responding to Recommendation 9.3 Information Request

#### EP Staffing - Alternative Course of Actions

Information Request #	Estimated Completion Date	Requested Information
1		<p>Provide an assessment of the onsite and augmented staff needed to respond to a large scale natural event meeting the conditions described for Recommendation 9.3. This assessment should include a discussion of the onsite and augmented staff available to implement the strategies as discussed in the emergency plan and/or described in plant operating procedures. The following functions are requested to be assessed:</p> <ul style="list-style-type: none"> <li>• How onsite staff will move back-up equipment (e.g., pumps, generators) from alternate onsite storage facilities to repair locations at each reactor as described in the order regarding the NRC Near-Term Task Force (NTTF) Recommendation 4.2. It is requested that consideration be given to the major functional areas of NUREG-0654, Table B-1, such as plant operations and assessment of operational aspects, emergency direction and control, notification/communication, radiological accident assessment, and support of operational accident assessment, as appropriate.</li> <li>• New staff or functions identified as a result of the assessment.</li> <li>• Collateral duties (personnel not being prevented from timely performance of their assigned functions).</li> </ul>
	April 30, 2013	Provide onsite and augmented staffing assessment considering all requested functions except those related to NTTF Recommendation 4.2. [Phase 1 staffing assessment]
	Four months prior to beginning of PINGP 2R29 refueling outage or December 31, 2016, whichever comes first.	Provide onsite and augmented staffing assessment considering functions related to NTTF Recommendation 4.2. [Phase 2 staffing assessment]

## ENCLOSURE 1

### PINGP Proposed Alternative Course of Action for Responding to Recommendation 9.3 Information Request

Information Request #	Estimated Completion Date	Requested Information
2		Provide an implementation schedule of the time needed to conduct the onsite and augmented staffing assessment. If any modifications are determined to be appropriate, please include in the schedule the time to implement the changes.
	March 29, 2013*	Conduct the onsite and augmented staffing assessment: <ul style="list-style-type: none"> <li>a. The onsite and augmented staffing assessment considering all requested functions except those related to NTTF Recommendation 4.2. [Phase 1 staffing assessment]</li> </ul>
	Five months prior to beginning of PINGP 2R29 refueling outage or December 31, 2016, whichever comes first*	<ul style="list-style-type: none"> <li>b. The onsite and augmented staffing assessment considering functions related to NTTF Recommendation 4.2. [Phase 2 staffing assessment]</li> </ul> <p>* Target dates only. Not commitments.</p>
	April 30, 2013	A schedule of the time needed to implement changes will be provided as follows: <ul style="list-style-type: none"> <li>a. Those associated with the Phase 1 staffing assessment.</li> </ul>
	Four months prior to beginning of PINGP 2R29 refueling outage or December 31, 2016, whichever comes first.	<ul style="list-style-type: none"> <li>b. Those associated with the Phase 2 staffing assessment.</li> </ul>
3	June 11, 2012	Identify how the augmented staff would be notified given degraded communications capabilities.
4	June 11, 2012	Identify the methods of access (e.g., roadways, navigable bodies of water and dockage, airlift, etc.) to the site that are expected to be available after a widespread large scale natural event.
5	June 11, 2012	Identify any interim actions that have been taken or are planned prior to the completion of the staffing assessment.

**ENCLOSURE 1**

**PINGP Proposed Alternative Course of Action for  
Responding to Recommendation 9.3 Information Request**

<b>Information Request #</b>	<b>Estimated Completion Date</b>	<b>Requested Information</b>
6		Identify changes that have been made or will be made to your emergency plan regarding the on-shift or augmented staffing changes necessary to respond to a loss of all AC power, multi-unit event, including any new or revised agreements with offsite resource providers (e.g., staffing, equipment, transportation, etc.).  Changes will be identified as follows:
	April 30, 2013	Those associated with the Phase 1 staffing assessment.
	Four months prior to beginning of PINGP 2R29 refueling outage or December 31, 2016, whichever comes first.	Those associated with the Phase 2 staffing assessment.

## ENCLOSURE 2

### PINGP Basis for Proposed Alternative Course of Action for Responding to EP Requested Information

#### EP Communications

There are two separate responses to the information requests related to communications. The alternative course of actions and completion dates proposed in Enclosure 1 of this letter for Information Requests #1 and #3 reflects the higher priority placed by the NRC Staff, and approved by the Commission in SRM-SECY-12-0025, on the completion of licensee actions necessary to comply with the Final Emergency Preparedness (EP) Rule issued on November 23, 2011 (Fed. Reg. 72,560). The proposed alternative completion dates are warranted as many of the resources at PINGP necessary for performing the communications assessment for Reference 1 are the same resources involved in implementing the new EP Rule requirements, responding to Institute of Nuclear Power Operations (INPO) initiatives related to enhancing communications capabilities, and maintaining existing EP communications equipment.

In addition, the estimated completion date assigned to Information Request #3 will promote alignment between the out-year budgeting/funding of future enhancements, and the development of an accurate and complete enhancement implementation schedule.

#### EP Staffing

As presented in Enclosure 1 of this letter, a 2-phase approach will be used to respond to the Information Requests associated with Recommendation 9.3, EP Staffing in Reference 1. The table below summarizes this 2-phase approach.

<b>Plant Type</b>	<b>Phase 1 Staffing Assessment</b> (for functions except those related to NTTF Recommendation 4.2)	<b>Phase 2 Staffing Assessment</b> (for functions related to NTTF Recommendation 4.2)
Multi-unit plants	<ul style="list-style-type: none"><li>• Perform staffing assessment and implement actions as required by recent EP Rule using NRC Interim Staff Guidance (ISG) and NEI 10-05.</li><li>• Perform staffing assessment as requested by Reference 1 using the guidance in NEI 12-01 and material from NEI 10-05; provide results per Enclosure 1 of this letter.</li></ul>	Perform staffing assessment as requested by Reference 1 using the guidance in NEI 12-01; provide results per Enclosure 1 of this letter.

The basis for this 2-phase approach is discussed below.

- For multi-unit plants, the Phase 1 staffing assessment will be performed by March 29, 2013, and provided by April 30, 2013. This assessment will consider all requested functions except those related to Fukushima Near-Term Task Force

## ENCLOSURE 2

### PINGP Basis for Proposed Alternative Course of Action for Responding to EP Requested Information

(NTTF) Recommendation 4.2. An assessment considering these functions will be performed in Phase 2.

The timing of the Phase 1 staffing assessment reflects the higher priority placed by the NRC Staff, and approved by the Commission in SRM-SECY-12-0025, upon the completion of licensee actions necessary to comply with the Final EP Rule issued on November 23, 2011 (Fed. Reg. 72,560). In particular, Section IV.A.9 of 10 CFR 50, Appendix E, requires that licensees complete a detailed analysis demonstrating that on-shift personnel assigned emergency plan implementation functions are not assigned responsibilities that would prevent the timely performance of their assigned functions as specified in the emergency plan. As stated in Section IV.A.9 of 10 CFR 50, Appendix E, this analysis must be completed by December 24, 2012.

Following completion of the EP Rule staffing analysis, the staffing assessment associated with Reference 1 will be performed. Based on staffing analysis experience to date, it is anticipated that a multi-unit staffing analysis will require approximately three months to complete and validate. One additional month is allotted for processing of an assessment submittal package.

As requested, an implementation schedule for any modifications that are determined to be appropriate will be included with the Phase 1 staffing assessment.

- The Phase 2 staffing assessment will be provided four months prior to beginning of the 2R29 refueling outage for PINGP Unit 2. This assessment will consider the requested functions related to Fukushima NTTF Recommendation 4.2, described in Reference 2.

The industry will be implementing multiple regulatory requirements contained in the Fukushima NTTF Report, as modified in related Commission Papers and Staff Requirements Memoranda. One specific NRC Order, titled "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," (Reference 2) has the potential to impact emergency response staffing levels. A summary of this Order is provided below.

This Order requires a three-phase approach for mitigating beyond-design-basis external events. The initial phase requires the use of installed equipment and resources to maintain or restore core cooling, containment and spent fuel pool (SFP) cooling. The transition phase requires providing sufficient, portable, onsite equipment and consumables to maintain or restore these functions until they can be accomplished with resources brought from off site. The final phase requires obtaining sufficient offsite resources to sustain those functions indefinitely.

Additional details on an acceptable approach for complying with this Order will be contained in final ISG scheduled to be issued by the NRC in August 2012.



## ENCLOSURE 2

### PINGP Basis for Proposed Alternative Course of Action for Responding to EP Requested Information

In response to Reference 2, each licensee must develop new strategies for mitigating beyond-design-basis external events. To ensure accurate results, the staffing assessment for response functions related to NTTF Recommendation 4.2 must be based on the actions delineated in procedures and guidelines developed in response to Reference 2. Once the site-specific actions associated with the new response strategies are defined (e.g., down to the procedure or guideline step level), the staffing needed to perform these actions can be assessed with the necessary level of accuracy.

Based on a review of the planned actions necessary to comply with the Order, an assessment of the staffing for the functions related to NTTF Recommendation 4.2 will be provided by 4 months prior to the first occurrence of a second refueling outage (i.e., the first "second refueling outage") as used within the context of NRC Order EA-12-049.

As requested, an implementation schedule for any modifications that are determined to be appropriate will be included with the Phase 2 staffing assessment.

The Phase 2 staffing assessment is one component of an overall licensee work plan necessary to implement the requirements of the Order. PINGP, as stated in the Order, "...shall complete full implementation no later than two (2) refueling cycles after submittal of the overall integrated plan, as required in Condition C.1.a, or December 31, 2016, whichever comes first." Full implementation shall include staffing changes, issuance of new or revised procedures or guidelines, and training and acquisition, staging, or installing of equipment needed for the strategies."