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

Commitment for Implementation of Multi-Unit/Multi-Source Dose Assessment Capability

References:


3. NRC letter to NEI dated February 27, 2013 (ADAMS Accession No. ML13029A632).


The NRC Fukushima Near-Term Task Force (NTTF) Report (Reference 1) dated July 12, 2011, discussed the gap in capability for US commercial nuclear power plants to perform multi-unit dose assessments. In January 2013, NEI provided to the NRC (Reference 2) survey results regarding licensees’ capabilities to perform multi-unit dose assessments, implementation time frames to obtain multi-unit dose assessment capability, and compensatory measures for the interim period. The NRC requested further detailed information (Reference 3) regarding the current and the anticipated
capabilities of sites to perform multi-unit dose assessment. NEI informed the NRC (Reference 4) that the industry had elected to provide the requested details directly to the NRC staff.

Northern States Power Company, a Minnesota corporation, d/b/a Xcel Energy (hereafter "NSPM") is providing the requested details on behalf of the Prairie Island Nuclear Generating Plant (PINGP). The enclosure to this letter includes discussion of the current capability to perform multi-unit/multi-source dose assessments, the interim compensatory measures for this capability, and the final permanent solution. Also included is a milestone implementation schedule with target dates that covers both the implementation of the interim measures and the permanent solution.

Please contact Lynne Gunderson, Licensing Engineer, at 612-396-0173, if additional information or clarification is required.

Summary of Commitments:

This letter makes one new commitment and no revisions to existing commitments:

- NSPM commits to having multi-unit/multi-source dose assessment capability for PINGP no later than December 31, 2014. This commitment date is contingent upon the release of the revised RASCAL dose assessment model by November 30, 2013.

James E. Lynch
Site Vice President, Prairie Island Nuclear Generating Plant
Northern States Power Company - Minnesota

Enclosure

cc: Administrator, Region III, USNRC
    Director of Nuclear Reactor Regulation (NRR), USNRC
    NRR Project Manager, PINGP, USNRC
    Senior Resident Inspector, PINGP, USNRC
    Director, Nuclear Security and Incident Response, USNRC
    Director, Japan Lessons Learned Project Directorate (NRR), USNRC
ENCLOSURE

Prairie Island Nuclear Generating Plant Units 1 and 2

Commitment for Implementation of Multi-Unit/Multi-Source Dose Assessment Capability
1.0 Introduction

The NRC Fukushima Near-Term Task Force (NTTF) Report (Reference 1) dated July 12, 2011, discussed the gap in capability for US commercial nuclear power plants to perform multi-unit dose assessments. In January 2013, the Nuclear Energy Institute (NEI) sent a letter to NRC (Reference 2) that reported survey results regarding licensees' current capabilities to perform multi-unit dose assessments. The NEI letter also discussed licensees' expected implementation time frames and compensatory measures for the interim period. The NRC requested further detailed information (Reference 3) regarding the current and anticipated capabilities of sites to perform multi-unit dose assessments. NEI informed the NRC (Reference 4) that the industry had elected to provide the requested details directly to the NRC staff. The requested details were to include:

- A summary of the current capability to perform multi-unit/multi-source dose assessments.
- The anticipated schedule to establish the capability on an interim and/or permanent basis.
- Due dates associated with each key schedule action or milestone.
- A description of how the implementation schedule will be tracked.

Northern States Power Company, a Minnesota corporation, d/b/a Xcel Energy (hereafter "NSPM") provides the responses below on behalf of the Prairie Island Nuclear Generating Plant (PINGP).

2.0 Summary of Current Multi-Unit/Multi-Source Capability

NSPM currently has the capability to perform a multi-unit/multi-source dose assessment by performing individual dose assessment runs for each release point and manually summing the results to make estimates. These estimates could be used for Emergency Action Level (EAL) and Protective Action Recommendation (PAR) determinations. This capability is in line with the compensatory measures described by NEI in the Reference 2 letter.

NSPM currently uses the NRC dose assessment model RASCAL (Radiological Assessment for Consequence Analysis), Version 4.1, for dose assessment at the PINGP. RASCAL is loaded on multiple computers and there is sufficient depth of trained dose assessment personnel in the Emergency Response Organization (ERO) to perform the multiple dose assessment runs.

NSPM evaluated the current procedural guidance and ERO training for multi-unit/multi-source dose assessment capability at PINGP. Current procedures contain generic statements regarding combining multi-unit/multi-source release rates. However, it was determined that the current procedural guidance and ERO training for performing dose
assessments does not contain the detail necessary to ensure combining the multiple dose assessment runs and generating consistent EAL and PAR decision making for multi-unit/multi-source releases.

3.0 Interim Measures

Based on the evaluation discussed in Section 2.0 above, NSPM will be updating procedures and ERO training to clarify and enhance the multi-unit/multi-source dose assessment capability as an interim measure until the permanent solution is achieved. The procedure enhancements and ERO training for the interim measures are in progress and will be implemented by September 27, 2013.

4.0 Permanent Solution

NSPM’s permanent solution is to implement the next expected revision of NRC’s RASCAL dose assessment model that will be capable of performing the multiple release point modeling. Along with implementation of the revised RASCAL model, the necessary procedure changes will be made and the necessary ERO training will be conducted.

NSPM commits to having multi-unit/multi-source dose assessment capability no later than December 31, 2014. This commitment date is contingent upon the release of the revised RASCAL dose assessment model by November 30, 2013.

5.0 Schedule

The table below contains the schedule milestones for ensuring interim capability and for implementation of the permanent solution. Target dates are provided for each schedule milestone.

NSPM is tracking the schedule milestones below in the PINGP Corrective Action Program (CAP) Action Request No. 01386421.

<table>
<thead>
<tr>
<th>Schedule Milestones</th>
<th>Target Date</th>
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<tbody>
<tr>
<td>Interim Actions</td>
<td></td>
</tr>
<tr>
<td>Complete procedure revisions for enhancing multi-unit/multi-source dose assessment.</td>
<td>September 27, 2013</td>
</tr>
<tr>
<td>Complete ERO training regarding multi-unit/multi-source dose assessment.</td>
<td>September 27, 2013</td>
</tr>
<tr>
<td>Permanent Solution</td>
<td></td>
</tr>
<tr>
<td>Install updated RASCAL software/perform software acceptance.</td>
<td>May 30, 2014</td>
</tr>
<tr>
<td>Complete procedure revisions and initial ERO training.</td>
<td>June 27, 2014</td>
</tr>
<tr>
<td>Implement updated RASCAL dose assessment model.</td>
<td>July 31, 2014</td>
</tr>
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6.0 References


3. NRC letter to NEI dated February 27, 2013 (ADAMS Accession No. ML13029A632).