



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION III
2443 WARRENVILLE RD. SUITE 210
LISLE, IL 60532-4352

March 4, 2015

Mr. Kevin Davison
Site Vice President
Prairie Island Nuclear Generating Plant
Northern States Power Company, Minnesota
1717 Wakonade Drive East
Welch, MN 55089

**SUBJECT: ANNUAL ASSESSMENT LETTER FOR PRAIRIE ISLAND NUCLEAR
GENERATING PLANT, UNITS 1 AND 2 (REPORT 05000282/2014001
AND 05000306/2014001)**

Dear Mr. Davison:

On February 11, 2015, the U.S. Nuclear Regulatory Commission (NRC) completed its end-of-cycle performance review of Prairie Island Nuclear Generating Plant Units 1 and 2. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from January 1, 2014 through December 31, 2014. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility.

The NRC determined that overall, Prairie Island Unit 1 operated in a manner that preserved public health and safety and met all cornerstone objectives. The NRC determined the performance at Prairie Island Unit 1 during the most recent quarter was within the Licensee Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because all inspection findings had very low (i.e., green) safety significance, and all PIs indicated that your performance was within the nominal, expected range (i.e., green). Therefore, the NRC plans to conduct ROP baseline inspections for Unit 1 at your facility.

The NRC determined the performance at Prairie Island Unit 2 during the most recent quarter was within the Regulatory Response Column of the NRC's ROP Action Matrix because of one low-to-moderate safety significant (White) PI for Emergency Alternating Current Power Systems in the Mitigating Systems Performance Index. As described in Inspection Report 05000306/2014009 (ML14323A020), the NRC completed the required supplemental inspection and Prairie Island Unit 2 transitioned back to the Licensee Response Column of the ROP Action Matrix on November 18, 2014. With the closure of this White PI, all inspection findings having very low safety significance and all other PI's within the nominal expected range, the NRC will conduct ROP baseline inspections for Unit 2 at your facility.

In the mid-cycle assessment letter dated September 2, 2014 (ML14245A201), the NRC opened a substantive cross-cutting issue (SCCI) associated with the aspect of Documentation (H.7). This assessment letter stated that the SCCI will remain open until the number of findings with a

cross-cutting aspect of H.7 is reduced, the corrective actions taken to mitigate the cross-cutting theme prove effective, and sustained performance improvement is observed in the human performance area. During the current assessment period, the number of findings with H.7 assigned as the cross-cutting aspect has been reduced and no longer meets the definition of cross-cutting theme as described in IMC 0305, "Operating Reactor Assessment Program," dated November 20, 2014. Specifically, a cross-cutting theme exists if there are four or more findings having the same cross-cutting aspect. To address the SCCI, your staff performed a root cause evaluation and developed corrective actions. However, as of the end of the assessment period, not all of the proposed corrective actions were completed and no effectiveness review of those completed corrective actions has been performed. Therefore, the SCCI will remain open until the corrective actions taken to mitigate the cross-cutting theme prove effective and sustained performance improvement is observed in the human performance area. This is the second consecutive assessment letter documenting this SCCI. The NRC will continue to monitor your staff's effort and progress in addressing the SCCI by evaluating your corrective action program, the root cause evaluation for the SCCI, and performance improvement initiatives to adequately assess if positive results are obtained.

The enclosed inspection plan lists the inspections scheduled through June 30, 2016. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last nine months of the inspection plan are tentative and may be revised at the mid-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes. This inspection plan does not include security related inspections, which will be sent via separate, non-publicly available correspondence.

As stated in the inspection plan, from August 3, to September 4, 2015, the NRC plans to perform the Component Design Basis Inspection.

Additionally, an NRC audit of licensee efforts towards compliance with Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," and Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation" is ongoing for various sites. The audit includes an onsite visit for the NRC staff to evaluate mitigating strategies as described in the licensee submittals, and to receive and review information relative to associated open items. This onsite audit will occur prior to the first unit at the site achieving compliance with the Orders and the audit will aid NRC staff in developing a final Safety Evaluation for the site. The audit at your site has been scheduled for the week of May 11, 2015. A site-specific audit plan for the visit will be provided in advance to allow sufficient time for preparations.

K. Davison

-3-

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390, "Public Inspections, Exemptions, Requests for Withholding," of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of the NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please contact Kenneth Riemer at 630-829-9628 with any questions you have regarding this letter.

Sincerely,

/RA/

Anne T. Boland, Director
Division of Reactor Projects

Docket Nos. 50-282; 50-306
License Nos. DPR-42; DPR-60

Enclosure:
Prairie Island Nuclear Generating Plant
Inspection/Activity Plan

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K. Davison

-3-

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|--------|----------|----------|----------|--|
| OFFICE | RIII | RIII | RIII | |
| NAME | NShah:mt | KRiemer | ABoland | |
| DATE | 02/27/15 | 02/27/15 | 03/03/15 | |

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Prairie Island
Inspection / Activity Plan
03/01/2015 - 06/30/2016

| Unit Number | Planned Dates | | Inspection Activity | Title | No. of Staff on Site |
|-------------|---------------|------------|---|---|----------------------|
| | Start | End | | | |
| | | | BI RP - RADIATION PROTECTION BASELINE INSPECTION | | |
| 1 | 04/13/2015 | 04/17/2015 | IP 71124.06 | Radioactive Gaseous and Liquid Effluent Treatment | 1 |
| | | | ISFSI - ISFSI OPERATION AT A SITE INSPECTION | | |
| 1 | 05/01/2015 | 06/30/2015 | IP 60855.1 | Operation of an Independent Spent Fuel Storage Installation at Operating Plants | 2 |
| | | | BI ENG - COMPONENT DESIGN BASES INSPECTION | | |
| 1, 2 | 08/03/2015 | 09/04/2015 | IP 7111121 | Component Design Bases Inspection | 6 |
| | | | BI EPR - EP ROUTINE INSPECTION / PI VERIFICATION | | |
| 1 | 07/13/2015 | 07/17/2015 | IP 7111402 | Alert and Notification System Testing | 2 |
| 1 | 07/13/2015 | 07/17/2015 | IP 7111403 | Emergency Preparedness Organization Staffing and Augmentation System | |
| 1 | 07/13/2015 | 07/17/2015 | IP 7111405 | Correction of Emergency Preparedness Weaknesses and Deficiencies | |
| 1 | 07/13/2015 | 07/17/2015 | IP 71151 | Performance Indicator Verification | |
| | | | BI RP - RADIATION PROTECTION BASELINE INSPECTION | | |
| 1 | 08/31/2015 | 09/04/2015 | IP 71124.07 | Radiological Environmental Monitoring Program | 1 |
| 1 | 08/31/2015 | 09/04/2015 | IP 71151 | Performance Indicator Verification | |
| | | | BI OLRQ - BIENNIAL REQUAL PROGRAM INSPECTION | | |
| 1, 2 | 09/21/2015 | 09/25/2015 | IP 7111111B | Licensed Operator Requalification Program | 2 |
| | | | BI ISI - ISI UNIT 2 INSPECTION | | |
| 2 | 10/02/2015 | 11/06/2015 | IP 7111108P | Inservice Inspection Activities - PWR | 1 |
| | | | BI RP - RADIATION PROTECTION BASELINE INSPECTION | | |
| 1 | 11/02/2015 | 11/06/2015 | IP 71124.01 | Radiological Hazard Assessment and Exposure Controls | 1 |
| 1 | 11/02/2015 | 11/06/2015 | IP 71124.02 | Occupational ALARA Planning and Controls | |
| | | | STRIKE P - STRIKE PREPARATION | | |
| 1, 2 | 12/01/2015 | 12/31/2015 | IP 92709 | Licensee Strike Contingency Plans | 1 |
| | | | ENG BI - TRIENNIAL FIRE PROTECTION INSPECTION | | |
| 1, 2 | 01/11/2016 | 02/12/2016 | IP 7111105T | Fire Protection [Triennial] | 3 |
| | | | BI RP - RADIATION PROTECTION BASELINE INSPECTION | | |
| 1 | 02/01/2016 | 02/05/2016 | IP 71124.05 | Radiation Monitoring Instrumentation | 1 |
| | | | BI RP - RADIATION PROTECTION BASELINE INSPECTION | | |
| 1 | 03/28/2016 | 04/01/2016 | IP 71124.03 | In-Plant Airborne Radioactivity Control and Mitigation | 1 |
| 1 | 03/28/2016 | 04/01/2016 | IP 71124.04 | Occupational Dose Assessment | |
| | | | PIR - BIENNIAL PI&R INSPECTION | | |
| 1 | 06/06/2016 | 06/24/2016 | IP 71152B | Problem Identification and Resolution | 4 |

This report does not include INPO and OUTAGE activities.
This report shows only on-site and announced inspection procedures.