



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION III  
2443 WARRENVILLE RD. SUITE 210  
LISLE, IL 60532-4352

March 2, 2016

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 05000282/2015006 AND  
05000306/2015006)

Dear Mr. Davison:

On February 10, 2016, the U.S. Nuclear Regulatory Commission (NRC) completed its end-of-cycle performance review of Prairie Island 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, 2015, through December 31, 2015. 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 Performance Indicators (PIs) indicated that your performance was within the nominal, expected range (i.e., Green). Therefore, the NRC plans to conduct ROP baseline inspections at your facility.

The NRC determined the performance at Prairie Island Unit 2 during the 4<sup>th</sup> quarter of 2015 was within the Regulatory Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because of one low-to-moderate (White) PI for Unplanned Scrams per 7000 critical hours. Therefore, in addition to ROP baseline inspections, the NRC plans to conduct a supplemental inspection in accordance with Inspection Procedure 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area," following your notification to the NRC that you are ready. The purpose of the inspection is to provide assurance that: (1) the root causes and contributing causes of risk-significant performance issues are understood; (2) the extent of condition and extent of cause of risk-significant performance issues are identified; and (3) your corrective actions for risk-significant performance issues are sufficient to address the root and contributing causes and prevent recurrence.

The enclosed inspection plan lists the inspections scheduled through December 31, 2017. Routine inspections performed by resident inspectors are not included in the inspection plan. The NRC inspection schedule includes a biennial inspection conducted in accordance with Inspection Procedure 71152, "Problem Identification and Resolution." The inspections listed during the last 9 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.

In response to the accident at Fukushima, the Commission issued Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events." This Order requires licensees to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities following a beyond-design-basis external event. Additionally, the Commission issued Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation." This Order requires licensees to have a reliable means of remotely monitoring wide-range Spent Fuel Pool levels to support effective prioritization of event mitigation and recovery actions in the event of a beyond-design-basis external event. The NRC is conducting audits of licensee efforts towards compliance with these Orders. The audit was completed for Prairie Island Units 1 and 2, and the information gathered will aid staff in development of the Safety Evaluation for the site. After the NRC staff receives the Final Compliance letter for the site, the Final Safety Evaluation will be issued. Then, the NRC staff will confirm through inspections the full implementation of the orders mentioned above by performing Temporary Instruction 191, "Inspection of the Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communication/Staffing/Multi-Unit Dose Assessment Plans."

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

K. Davison

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

Sincerely,

*/RA/*

Patrick L. Loudon, Director  
Division of Reactor Projects

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

Enclosure:  
Inspection Plan

cc: Distribution via LISTSERV®

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Inspection Plan

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<b>OFFICE</b>	RIII	RIII		
<b>NAME</b>	NShah for KRiemer:bw	PLoudon		
<b>DATE</b>	02/25/16	02/26/16		

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**Prairie Island**  
**Inspection / Activity Plan**  
**03/01/2016 - 12/31/2017**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	03/28/2016	04/01/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	03/28/2016	04/01/2016	IP 71124.04	Occupational Dose Assessment	
			<b>PIR - BIENNIAL PI&amp;R INSPECTION</b>		<b>4</b>
1	06/06/2016	06/24/2016	IP 71152B	Problem Identification and Resolution	
			<b>OL PREP - INIT PREP/MAY 2016</b>		<b>3</b>
1	05/02/2016	05/06/2016	W90349	OL - INITIAL EXAM - 2016 MAY-JUN - PR. ISLAND	
			<b>OL EXAM - INIT EXAM/MAY-JUNE 2016</b>		<b>3</b>
1	05/30/2016	06/10/2016	W90349	OL - INITIAL EXAM - 2016 MAY-JUN - PR. ISLAND	
			<b>BI EP - EP EXERCISE INSPECTION/ PI VERIFICATION</b>		<b>5</b>
1, 2	06/27/2016	07/01/2016	IP 7111401	Exercise Evaluation	
1, 2	06/27/2016	07/01/2016	IP 7111406	Drill Evaluation	
1, 2	06/27/2016	07/01/2016	IP 7111408	Exercise Evaluation – Scenario Review	
1, 2	06/27/2016	07/01/2016	IP 71151	Performance Indicator Verification	
			<b>ISFSI - ISFSI OPERATION AT A SITE INSPECTION</b>		<b>2</b>
1	07/01/2016	07/29/2016	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	08/15/2016	08/19/2016	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1	08/15/2016	08/19/2016	IP 71151	Performance Indicator Verification	
			<b>ISI - INSERVICE INSPECTION ON UNIT 1</b>		<b>2</b>
1	10/17/2016	11/17/2016	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	10/31/2016	11/04/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	10/31/2016	11/04/2016	IP 71124.02	Occupational ALARA Planning and Controls	
			<b>BI HS - TRIENNIAL HEAT SINK INSPECTION</b>		<b>2</b>
1, 2	11/14/2016	11/18/2016	IP 7111107T	Heat Sink Performance	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	11/28/2016	12/02/2016	IP 71124.05	Radiation Monitoring Instrumentation	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	03/13/2017	03/17/2017	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	07/24/2017	07/28/2017	IP 71124.07	Radiological Environmental Monitoring Program	
1	07/24/2017	07/28/2017	IP 71151	Performance Indicator Verification	

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

**Prairie Island**  
**Inspection / Activity Plan**  
**03/01/2016 - 12/31/2017**

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			<b>TI-191 - FLEX/MITIGATING STRATEGIES/SFPI</b>		<b>4</b>
1, 2	08/07/2017	08/11/2017	IP 2515/191	Inspection of Licensee's Responses to Order EA-12-049, EA-12-051 & EP Info Request March 12, 2012	
			<b>BI MODS - TRIENNIAL MODIFICATIONS/50.59 INSPECTION</b>		<b>3</b>
1, 2	08/07/2017	08/25/2017	IP 7111117T	Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	
			<b>BI EP - EP BASELINE INSPECTION / PI VERIFICATION</b>		<b>1</b>
1, 2	09/11/2017	09/15/2017	IP 7111402	Alert and Notification System Testing	
1, 2	09/11/2017	09/15/2017	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1, 2	09/11/2017	09/15/2017	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1, 2	09/11/2017	09/15/2017	IP 71151	Performance Indicator Verification	
			<b>OL-RQ - BIENNIAL REQUAL PROGRAM INSPECTION</b>		<b>2</b>
1, 2	09/11/2017	09/15/2017	IP 7111111B	Licensed Operator Requalification Program	
			<b>ISI - INSERVICE INSPECTION UNIT 2</b>		<b>1</b>
2	09/29/2017	10/29/2017	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>BI RP - RADIATION PROTECTION BASELINE INSPECTION</b>		<b>1</b>
1	10/16/2017	10/20/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	

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