



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

March 4, 2013

Mr. Jim Lynch
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 05000282/2012001 AND
05000306/2012001)**

Dear Mr. Lynch:

On February 12, 2013, the 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, 2012 through December 31, 2012. 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 of 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.

Although plant performance was within the Licensee Response Column for Unit 1, the NRC has not yet finalized the significance of apparent violation 05000282/2012504-01, "Degraded Emergency Action Level Scheme." The final safety significance determination may affect the NRC's assessment of plant performance and the enclosed inspection plan.

The NRC determined the performance of 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. Therefore, in addition to the ROP baseline inspection, the NRC plans to conduct a supplemental inspection to address the performance issues associated with this PI. The inspection will be conducted in accordance with Inspection Procedure 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area."

In the mid-cycle assessment letter dated September 4, 2012 (ML12249A425), the NRC opened a substantive cross-cutting issue (SCCI) associated with the aspect of Conservative Assumptions (H.1 (b)). This assessment letter stated that the SCCI will remain open until the number of findings with a cross-cutting aspect of H.1 (b) 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 the cross-cutting aspect H.1(b) have been reduced to less than four. 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 December 31, 2014. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last twelve 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.

We also plan on conducting Inspection Procedure 71003, "Post-Approval Site Inspection for License Renewal" at your facility.

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

J. Lynch

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

Sincerely,

/RA/

Gary L. Shear, Acting Director
Division of Reactor Projects

Docket Nos. 50-282, 50-306 and 72-010
License Nos. DPR-42, DPR-60 and SNM-2506

Enclosure: Prairie Island Nuclear Generating Plant Inspection/Activity Plan

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J. Lynch

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Prairie Island
Inspection / Activity Plan
03/01/2013 - 12/31/2014

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			BI CDBI - COMPONENT DESIGN BASIS INSPECTION		6
1, 2	03/18/2013	04/19/2013	IP 7111121	Component Design Bases Inspection	
			ISFSI - ISFSI INSPECTION - SCHEDULE DEPENDENT		1
1	03/04/2013	05/03/2013	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
			TI 182 - TI 182 BURIED PIPING PHASE 2		1
1, 2	02/25/2013	03/01/2013	IP 2515/182	Review of the Implementation of the Industry Initiative to Control Degradation of Underground Piping	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		2
1	02/25/2013	03/01/2013	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	05/06/2013	05/10/2013	IP 71124.07	Radiological Environmental Monitoring Program	
			RENEWAL - LICENSE RENEWAL INSPECTION 71003-PHASE 2		2
1	05/20/2013	06/14/2013	IP 71003	Post-Approval Site Inspection for License Renewal	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	06/10/2013	06/14/2013	IP 71124.05	Radiation Monitoring Instrumentation	
			BI EPR - EP ROUTINE INSPECTION / PI VERIFICATION		2
1	07/29/2013	08/02/2013	IP 7111402	Alert and Notification System Testing	
1	07/29/2013	08/02/2013	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1	07/29/2013	08/02/2013	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1	07/29/2013	08/02/2013	IP 71151	Performance Indicator Verification	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	07/22/2013	07/26/2013	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	07/22/2013	07/26/2013	IP 71124.04	Occupational Dose Assessment	
			BI OLRQ - BIENNIAL REQUAL PROGRAM INSPECTION		2
1, 2	09/09/2013	09/13/2013	IP 7111111B	Licensed Operator Requalification Program	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	09/16/2013	09/20/2013	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
			BI RP - RADIATION PROTECTION BASELINE INSPECTION		1
1	09/16/2013	09/20/2013	IP 71151-BI01	Reactor Coolant System Activity	
1	09/16/2013	09/20/2013	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1	09/16/2013	09/20/2013	IP 71151-PR01	RETS/ODCM Radiological Effluent	
			RENEWAL - LICENSE RENEWAL UNIT 2- 71003-PHASE 2		1
2	09/23/2013	10/18/2013	IP 71003	Post-Approval Site Inspection for License Renewal	

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

Prairie Island
Inspection / Activity Plan
03/01/2013 - 12/31/2014

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
1	10/07/2013	10/11/2013	BI RP IP 71124.01	- RADIATION PROTECTION BASELINE INSPECTION Radiological Hazard Assessment and Exposure Controls	1
2	10/28/2013	11/29/2013	BI ISI IP 7111108P	- INSERVICE INSPECTION UNIT 2 Inservice Inspection Activities - PWR	1
1	11/04/2013	11/08/2013	BI RP IP 71124.02	- RADIATION PROTECTION BASELINE INSPECTION Occupational ALARA Planning and Controls	1
1	03/03/2014	03/07/2014	BI RP IP 71124.03	- RADIATION PROTECTION BASELINE INSPECTION In-Plant Airborne Radioactivity Control and Mitigation	1
1	03/03/2014	03/07/2014	IP 71124.04	Occupational Dose Assessment	
1	03/03/2014	03/07/2014	IP 71151	Performance Indicator Verification	
1, 2	04/14/2014	05/02/2014	BI MODS IP 7111117T	- MODIFICATION/50.59 INSPECTION Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	3
1	04/21/2014	04/25/2014	BI RP IP 71124.05	- RADIATION PROTECTION BASELINE INSPECTION Radiation Monitoring Instrumentation	1
1	07/28/2014	08/01/2014	BI EPX IP 71151	- EP EXERCISE INSPECTION / PI VERIFICATION Performance Indicator Verification	2
1	05/19/2014	05/23/2014	BI RP IP 71124.02	- RADIATION PROTECTION BASELINE INSPECTION Occupational ALARA Planning and Controls	1
1	06/09/2014	06/27/2014	BI ENG IP 71152B	- BIENNIAL PI&R INSPECTION Problem Identification and Resolution	4
1	07/07/2014	07/11/2014	OL PREP W90310	- INITIAL EXAM FOR 08/2014 OL - INITIAL EXAM - 2014 MAY-JAN - PRAI	3
1, 2	07/14/2014	08/01/2014	RENEWAL IP 71003	- LICENSE RENEWAL INSPECTION U2 Post-Approval Site Inspection for License Renewal	9
1	08/04/2014	08/15/2014	OL EXAM W90310	- PRAIRIE ISLAND INITIAL EXAM - 08/2014 OL - INITIAL EXAM - 2014 MAY-JAN - PRAI	3
1	08/11/2014	08/15/2014	BI RP IP 71124.08	- RADIATION PROTECTION BASELINE INSPECTION Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	1
1	09/15/2014	09/19/2014	BI RP IP 71124.01	- RADIATION PROTECTION BASELINE INSPECTION Radiological Hazard Assessment and Exposure Controls	1
2	09/15/2014	11/01/2014	BI ISI IP 7111108P	- INSERVICE INSPECTION UNIT 1 Inservice Inspection Activities - PWR	1

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This report shows only on-site and announced inspection procedures.