



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

Region III
2443 Warrenville Road, Suite 210
Lisle IL 60532-4352

March 26, 2013

EA-12-273

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

SUBJECT: FINAL SIGNIFICANCE DETERMINATION OF A WHITE FINDING WITH ASSESSMENT FOLLOWUP AND NOTICE OF VIOLATION; NRC INSPECTION REPORT NO. 05000282/2013503; PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1

Dear Mr. Lynch:

This letter provides you the final significance determination of the preliminary White finding discussed in our previous communication dated January 24, 2013, which included U.S. Nuclear Regulatory Commission (NRC) Inspection Report No. 05000282/2012504. The finding involved the loss of the 1R-50 shield building high range vent gas radiation detector from July 24, 2011, to May 18, 2012, which degraded Prairie Island Nuclear Generating Plant's (Prairie Island's) ability on Unit 1 to classify and declare general emergencies (emergency action level RG1.1) or site area emergencies (emergency action level RS1.1).

At your request, a Regulatory Conference was held on February 25, 2013, to discuss your views on this issue. A copy of your presentation was previously placed in the NRC's Agencywide Documents Access and Management System (ADAMS) at accession number ML13056A026. During the meeting you and your staff described your assessment of the significance of the finding and the corrective actions taken to resolve it, including the root cause evaluation of the finding. You attributed the root cause of the failure to a mindset which did not recognize that the 1R-50 shield building high range vent gas radiation detector was a single piece of equipment necessary for emergency preparedness action levels and did not recognize its importance to the emergency preparedness program. A partial list of attendees at this meeting is included in Enclosure 1.

During the meeting, you stated that you agreed that there was a performance deficiency, but that you disagreed with the significance of the issue. You also stated that you believed that the associated violation should be cited against Title 10 of the Code of Federal Regulations (10 CFR) Section 50.47(b)(8) instead of 10 CFR 50.47(b)(4) as the NRC proposed in Inspection Report No. 05000282/2012504.

Specifically, your staff stated that, because the 1R-50 sample pump continued to work, the classification could be done within 15 minutes using local measurements performed by on-shift personnel. Your staff stated that a shift manager would be able to make an appropriate emergency declaration based on that dose rate measurement, even if the emergency response organization was not activated. To support your staff's position, on February 28, 2013, your staff performed a time validation scenario. The results of the time validation scenario were

provided to the NRC on March 4, 2013, and are available in ADAMS at accession number ML13067A229.

After considering the information developed during the inspection, the information you provided at the regulatory conference on February 25, and the results of the time validation study that you provided on March 4, 2013, the NRC has concluded that the finding is appropriately characterized as White, a finding with low to moderate safety significance that may require additional NRC inspections. Our conclusion was primarily based on the results of the time validation study, which did not consistently demonstrate that your staff could classify a Site Area Emergency, RS1.1, or a General Emergency, RG1.1 in a timely manner without the 1R-50 shield building high range vent gas radiation detector being available. Specifically, your study did not sufficiently demonstrate or simulate all of the activities necessary to classify an event with the loss of the 1R-50 radiation detector. The study was limited to the infield time necessary for a technician to obtain a measurement and to report that measurement to the control room operator; however, you did not simulate other actions that would have needed to occur, including the control room operator's recognition of the issue, identification of the compensatory action, and communication and briefing of the technician. While we recognize that you have an established procedure and training for the task, the time study did not provide assurance that the necessary actions could be completed without delaying the emergency classification. Consequently, the NRC concluded that you did not demonstrate that a timely classification of RS1.1 or RG1.1 could be made with a non-functional 1R-50 radiation detector, and we concluded that your ability to classify these events was degraded.

The NRC agreed with your position at the conference that there was an alternative emergency action level such that an accurate declaration of the initiating condition would have been made. The NRC had taken this information into account and had determined that Prairie Island would have classified a Site Area Emergency or a General Emergency based on other criteria, which is why the NRC declared the planning standard to be degraded rather than lost.

The NRC also considered the information that you presented during the conference that another plant was cited for a violation of 10 CFR 50.47(b)(8) and that the violation appeared to be for a case similar to Prairie Island's where a radiation detector was out-of-service for an extended period of time. The NRC evaluated this specific case and determined that this specific licensee also received two White findings, one against 10 CFR 50.47(b)(4) and the other against 10 CFR 50.47(b)(9), along with a SL III violation of 10 CFR 50.72(b)(3)(xiii). When the NRC looked at the issue regarding the radiation detector, the NRC recognized that the risk significant planning standard (10 CFR 50.47(b)(4)) had already been degraded, which was cited as a stand-alone violation, and determined that the radiation detector issue was a separate equipment issue. Therefore, the NRC determined that a separate violation of 10 CFR 50.47(b)(8) was appropriate. In Prairie Island's case, as you pointed out, there was an equipment issue, as well as an emergency classification standards issue involved in the finding. Therefore, it would be appropriate for the NRC to cite both 10 CFR 50.47(b)(4) and 10 CFR 50.47(b)(8). After consultation with the Director of the Office of Enforcement, we have incorporated both requirements into the violation.

You have 30 calendar days from the date of this letter to appeal the staff's determination of significance for the identified White finding. An appeal must be sent in writing to the Regional Administrator, Region III, 2443 Warrenville Road, Lisle, IL 60532-4352, and must address the criteria in NRC Inspection Manual Chapter 0609, Attachment 2, "Process for Appealing NRC Characterization of Inspection Findings (SDP Appeal Process)."

The NRC has also determined that a violation was associated with the finding, as cited in the Notice of Violation (Notice) provided in the enclosure. The circumstances surrounding the violation were described in detail in NRC Inspection Report No. 05000282/2012504. In accordance with the NRC Enforcement Policy, the Notice is considered escalated enforcement action because it is associated with a White finding.

The NRC has concluded that information regarding the reasons for the violation, the corrective actions taken and planned to be taken to correct the violation, and the date when full compliance was achieved, is already adequately addressed on the docket in NRC Inspection Report No. 05000282/2012504. Therefore, you are not required to respond to this letter unless the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice.

As a result of our review of Prairie Island's performance, including this White finding, we have assessed the plant to be in the Regulatory Response column of the NRC's Action Matrix, effective the 4th quarter of 2012. Therefore, we plan to conduct a supplemental inspection using Inspection Procedure 95001, "Inspection for One or Two White Inputs in a Strategic Performance Area," when your staff has notified us of your readiness for this inspection. This inspection procedure is conducted to provide assurance that the root cause and contributing causes of risk significant performance issues are understood, the extent of condition and the extent of cause are identified, and the corrective actions are sufficient to prevent recurrence.

For administrative purposes, this letter is issued as NRC Inspection Report 05000282/2013503. Additionally, apparent violation (AV) 05000282/2012504-01 is now considered to be violation (VIO) 05000282/2012504-01.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room or from ADAMS, which is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent

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possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction. The NRC also includes significant enforcement actions on its Web site at <http://www.nrc.gov/reading-rm/doc-collections/enforcement/actions>.

Sincerely,

/RA by C. Pederson for/

Charles A. Casto
Regional Administrator

Docket No. 50-282
License No. DPR-42

Enclosures:

1. Regulatory Conference List of Attendees
2. Notice of Violation

cc: Distribution via ListServ

REGULATORY CONFERENCE
LIST OF ATTENDEES

Xcel Energy

James Lynch, Prairie Island Site Vice President
Kevin Davison, Prairie Island Director Site Operations
Aldo Capristo, Acting Vice President – Operations Support
Kerrie DeFusco, Prairie Island Emergency Preparedness Manager
Jon Anderson, Prairie Island Regulatory Affairs Manager
Steven Ingalls, Prairie Island Senior Reactor Operator
Edward Weinkam, Director Emergency Preparedness
John Callahan, Emergency Preparedness Manager
Kevin Holmstrom, System Engineer
Thomas Hoen, Media Relations (via phone)
Jody Nemcek, Emergency Preparedness Coordinator (via phone)

U.S. Nuclear Regulatory Commission

Cynthia Pederson, Deputy Regional Administrator, Region III
Patrick Loudon, Deputy Director, Division of Reactor Safety (DRS)
Donald Funk, Acting Branch Chief, Plant Support Branch, DRS
Robert Kahler, Chief, Inspection and Regulatory Improvement Branch, Office of Nuclear Security and Incident Response (NSIR)
Robert Jickling, Senior Emergency Preparedness Inspector, Plant Support Branch, DRS
Steven Orth, Enforcement Officer
Mark Rubic, Acting Regional Counsel
James Beavers, Emergency Preparedness Inspector, Plant Support Branch, DRS (via phone)
Robert Orlikowski, Acting Chief, Branch 1, Division of Reactor Projects (DRP)
Nirodh Shah, Project Engineer, Branch 2, DRP
Karla Stoedter, Senior Resident Inspector, Prairie Island, DRP (via phone)
Joseph Mancuso, Reactor Engineer, Branch 2, DRP
Michael Ziolkowski, Reactor Engineer, Branch 2, DRP
Allan Barker, Government Liaison
Harral Logaras, Government Liaison
Prema Chandrathil, Public Affairs Officer
Stephen LaVie, Senior Emergency Preparedness Specialist, NSIR (via phone)
Eric Schrader, Emergency Preparedness Specialist NSIR (via phone)
Jonathan Fiske, Emergency Preparedness Specialist NSIR (via phone)
Thomas Wengert, Project Manager, Office of Nuclear Reactor Regulation (via phone)
Kevin Barclay, Resident Inspector, Kewaunee, DRP (via phone)
Patricia Loughheed, Senior Enforcement Coordinator
Joseph Maynen, Senior Security Inspector, Plant Support Branch, DRS
Elba Sanchez Santiago, Reactor Engineer, DRS
Navid Tehrani, Materials Inspector, Division of Nuclear Materials Safety

Public

Kathryn Campbell, Wisconsin Emergency Management
Stephen Dieringer, Martin Brower
Sherrie Flaherty, Minnesota Dept of Health
Ron Johnson, Prairie Island Indian Community
Jeff Kitsemel, Public Service Commission of Wisconsin
Douglas Renier, State of Minnesota Department of Commerce
Diane Richter-Biwer, Goodhue County Emergency Management
David Shaffer, Star Tribune Newspaper

NOTICE OF VIOLATION

Northern States Power Company, Minnesota
Prairie Island Nuclear Generating Plant, Unit 1

Docket No. 50-282
License No. DPR-42
EA-12-273

During a U.S. Nuclear Regulatory Commission (NRC) inspection conducted from December 10 to 18, 2012, a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

Title 10 of the Code of Federal Regulations (10 CFR) 50.54(q)(2) requires that a holder of a nuclear power reactor operating license follow and maintain the effectiveness of an emergency plan that meets the requirements in Part 50, Appendix E and the planning standards of 10 CFR 50.47(b).

10 CFR 50.47(b)(4) states "A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and State and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures."

10 CFR 50.47(b)(8) states "Adequate emergency facilities and equipment to support the emergency response are provided and maintained."

Contrary to the above, from July 24, 2011, until May 18, 2012, Prairie Island Nuclear Generating Plant (PINGP) Unit 1 failed to follow and maintain in effect an emergency plan that uses a standard emergency classification and action level scheme because adequate emergency equipment to support the emergency response was not maintained. Specifically, PINGP Unit 1 did not take timely corrective actions to restore the failed 1R-50 Shield Building High Range Vent Gas Radiation Detector instrument and did not implement a compensatory measure which addressed the parameters identified in emergency action levels RG1.1, General Emergency, and RS1.1, Site Area Emergency.

This violation is associated with a White Significance Determination Process finding.

The NRC has concluded that information regarding the reasons for the violation, the corrective actions taken and planned to be taken to correct the violation, and the date when full compliance was achieved, is already adequately addressed on the docket in NRC Inspection Report No. 05000282/2012504. However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201, if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation, EA-12-273" and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Regional Administrator, Region III, 2443 Warrenville Road, Suite 210, Lisle, IL 60532-4352, and a copy to the NRC Resident Inspector at the Prairie Island Nuclear Generating Plant, within 30 days of the date of the letter transmitting this Notice of Violation (Notice).

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

If you choose to respond, your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. Therefore, to the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction. In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days of receipt.

Dated this 26th day of March 2013

J. Lynch

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possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction. The NRC also includes significant enforcement actions on its Web site at <http://www.nrc.gov/reading-rm/doc-collections/enforcement/actions>.

Sincerely,

/RA by C. Pederson for/

Charles A. Casto
Regional Administrator

Docket No. 50-282
License No. DPR-42

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1. Regulatory Conference List of Attendees
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cc: Distribution via ListServ

SEE PREVIOUS CONCURRENCE

FILE NAME: G:\ORAI\IEICS\ENFORCEMENT\Cases\Enforcement Cases 2012\EA-12-273 Prairie Island EPIEA-12-273 Prairie Island Final Significance Determination - FINAL.docx

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DATE	03/08/13	03/08/13	03/11/13	03/20/13	03/21/13	03/22/13

OFFICIAL RECORD COPY

1 OE concurrence received via e-mail from R.Carpenter on March 20, 2013.

Letter to Jim Lynch from Charles A. Casto dated March 26, 2013

SUBJECT: FINAL SIGNIFICANCE DETERMINATION OF A WHITE FINDING WITH ASSESSMENT FOLLOWUP AND NOTICE OF VIOLATION; NRC INSPECTION REPORT NO. 05000282/2013503; PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1

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