



Prairie Island Nuclear Generating Plant
1717 Wakonade Drive East
Welch, MN 55089

OCT 10 2016

L-PI-16-077
10 CFR 50.73

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Prairie Island Nuclear Generating Plant, Unit 1
Docket No. 50-282
Renewed Facility Operating License No. DPR-42

Licensee Event Report 50-282/2015-005-01, Condition Prohibited by Technical Specifications

References: 1) Letter from Northern States Power Company, a Minnesota corporation (NSPM), d/b/a Xcel Energy to Document Control Desk, "LER 50-282/2015-005-00, Possible Misapplication of C18.1, Engineered Safeguards Equipment Support Systems". (ADAMS Accession ML15313A480)

Northern States Power Company, a Minnesota corporation, doing business as Xcel Energy (hereafter "NSPM"), encloses a revised Licensee Event Report (LER) 50-282/2015-005-01, Condition Prohibited by Technical Specifications. This revision is a complete rewrite to Reference 1, which was submitted on November 9, 2015. The main emphasis of this rewrite is to clarify the cause and the safety significance of this occurrence.

If there is any question or if any additional information is needed, please contact Frank Sienczak, at 651-267-1740.

Summary of Commitments

This letter contains no new commitments and no changes to existing commitments

Scott Northard
Site Vice President, Prairie Island Nuclear Generating Plant
Northern States Power Company – Minnesota

Enclosures:

cc: Regional Administrator, Region III, USNRC
Project Manager, Prairie Island Nuclear Generating Plant, USNRC
Resident Inspector, Prairie Island Nuclear Generating Plant, USNRC
Department of Commerce, State of Minnesota

ENCLOSURE 1

LICENSEE EVENT REPORT 50-282/2015-005-01

4 Pages Follow

**LICENSEE EVENT REPORT (LER)**(See Page 2 for required number of
digits/characters for each block)

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

1. FACILITY NAME

Prairie Island Nuclear Generating Plant Unit 1

2. DOCKET NUMBER

05000- 282

3. PAGE

1 OF 4

4. TITLE

Condition Prohibited by Technical Specifications

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
9	11	2015	2015	- 005	- 01	10	10	2016	FACILITY NAME	DOCKET NUMBER
9. OPERATING MODE			11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)							
Mode 1			<input type="checkbox"/> 20.2201(b)			<input type="checkbox"/> 20.2203(a)(3)(i)			<input type="checkbox"/> 50.73(a)(2)(ii)(A)	
			<input type="checkbox"/> 20.2201(d)			<input type="checkbox"/> 20.2203(a)(3)(ii)			<input type="checkbox"/> 50.73(a)(2)(ii)(B)	
			<input type="checkbox"/> 20.2203(a)(1)			<input type="checkbox"/> 20.2203(a)(4)			<input type="checkbox"/> 50.73(a)(2)(iii)	
			<input type="checkbox"/> 20.2203(a)(2)(i)			<input type="checkbox"/> 50.36(c)(1)(i)(A)			<input type="checkbox"/> 50.73(a)(2)(iv)(A)	
10. POWER LEVEL			<input type="checkbox"/> 20.2203(a)(2)(ii)			<input type="checkbox"/> 50.36(c)(1)(ii)(A)			<input type="checkbox"/> 50.73(a)(2)(v)(A)	
			<input type="checkbox"/> 20.2203(a)(2)(iii)			<input type="checkbox"/> 50.36(c)(2)			<input type="checkbox"/> 50.73(a)(2)(v)(B)	
			<input type="checkbox"/> 20.2203(a)(2)(iv)			<input type="checkbox"/> 50.46(a)(3)(ii)			<input type="checkbox"/> 50.73(a)(2)(v)(C)	
			<input type="checkbox"/> 20.2203(a)(2)(v)			<input type="checkbox"/> 50.73(a)(2)(i)(A)			<input type="checkbox"/> 50.73(a)(2)(v)(D)	
			<input type="checkbox"/> 20.2203(a)(2)(vi)			<input checked="" type="checkbox"/> 50.73(a)(2)(i)(B)			<input type="checkbox"/> 50.73(a)(2)(vii)	
			<input type="checkbox"/> 50.73(a)(2)(i)(C)			<input type="checkbox"/> OTHER			Specify in Abstract below or in NRC Form 366A	

12. LICENSEE CONTACT FOR THIS LER

LICENSEE CONTACT

Stephen Sollom, Licensing Engineer

TELEPHONE NUMBER (Include Area Code)

763-295-1611

13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

14. SUPPLEMENTAL REPORT EXPECTED☐ YES (If yes, complete 15. EXPECTED SUBMISSION DATE)☒ NO**15. EXPECTED SUBMISSION DATE**

MONTH DAY YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On September 11, 2015, Prairie Island Nuclear Generating Plant (PINGP) staff recognized a possible misapplication of its plant procedure C18.1, Engineered Safeguards Equipment Support Systems. When a train of Safeguards Chilled Water System (SCWS) was removed from service, C18.1 Rev 40 required entry into Technical Specification (TS) 3.8.9. It was determined during the past three (3) years there were five (5) separate occasions between the two (2) trains of SCWS where C18.1 directed entry into TS 3.8.9. On each of these dates TS 3.8.9 was not entered and the required actions were not taken to restore to an operable status within the completion time. However, an equally correct application of TS would be to enter TS 3.7.11, and then apply TS 3.0.6. TS 3.0.6 allows for supported systems LCO not met solely to support system LCO not met, only support system LCO are required. The Safety Function Determination Program (SFDP) evaluation was performed and determined that there was no loss of safety function. This is a reportable event under 10 CFR 50.73(a)(2)(i)(b), Operation or Condition Prohibited by Tech Spec with the discovery date of inoperability.

The causal evaluation determined C18.1 was not accurate and usable in part, due to inadequate review of changes to the procedure.

The corrective actions revised C18.1 to invoke TS 3.0.6 as applicable for the Bus is Load Sequencer when SCWS is out of service.

**LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET**

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

1. FACILITY NAME	2. DOCKET NUMBER	3. LER NUMBER		
		YEAR	SEQUENTIAL NUMBER	REV NO.
Prairie Island Nuclear Generating Plant Unit 1	05000- 282	2015	- 005	- 01

NARRATIVE

On September 11, 2015, Prairie Island Nuclear Generating Plant (PINGP) staff recognized a possible misapplication of its plant procedure C18.1, Engineered Safeguards Equipment Support Systems.

When a train of Safeguards Chilled Water System (SCWS)¹ was removed from service, C18.1 Rev 40 required entry into Technical Specification (TS) 3.8.9 for Distribution Systems-Operating. An evaluation determined during the past three (3) years there were five (5) separate occasions between the two (2) trains of SCWS where C18.1 directed entry into TS 3.8.9. On each of these dates TS 3.8.9 was not entered and the required actions were not taken to restore to an operable status within 8 hours or to enter MODE 3 in 6 hours and MODE 5 in 36 hours.

The chart below shows that at no time both busses were inoperable at the same time. When train A Bus 15 is out of service train A Busses 111 and 112 are also out of service and when train B Bus 16 is out of service train B Busses 121 and 122 are out of service.

Bus 15	Bus 16
Busses 111 and 112	Busses 121 and 122
	1/28/2013 – 2/2/2013 (5 days 21 hours 0 minutes) Work Order (WO) 498616
	6/12/2013 – 6/28/2013 (16 days 6 hours 34 minutes) WO 448108
3/3/2014 – 3/18/2014 (14 days 16 hours 40 minutes) WO 466701	
	3/19/2014 – 4/5/2014 (17 days 10 hours 47 minutes) WO 469474
1/4/2015 – 1/11/2015 (6 days 18 hours 49 minutes) WO 488927	
	2/16/2015 – 2/22/2015 (6 days 18 hours 31 minutes) WO 498616
	5/18/2015 – 5/24/2015 (6 days 12 hours 10 minutes) WO 498616

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EVENT ANALYSIS

The function of the Safeguards Chilled Water System circulates chilled water to provide ambient air cooling to essential areas. These areas include the control room, safeguards switchgear (Unit 1 4160 VAC (4kV)² and 480 VAC³ bus) rooms, the residual heat removal (RHR) pump pits, the relay room, including the old P-250 computer room, and the event monitoring (EM) equipment room. The system functions during both normal plant operations and accident conditions. Function of the system is to remove heat generated by safety related equipment and any accident condition. The system provides sufficient ventilation and cooling to maintain equipment operability. It does this by controlling temperatures within design ratings of the installed safety related systems. The system performs a safeguard function in that it cools critical equipment. It is Design Class III and QA Type I due to its support function of safety-related equipment.

With C18.1, Rev 40, the action for loss of a train of SCWS was changed to require entry into TS 3.8.9 in addition to TS 3.7.11 for SCWS. However, an equally correct application of TS would be to enter TS 3.7.11 and then apply TS 3.0.6. TS 3.0.6 allows that when the supported systems LCO is not met solely due to a support system LCO not being met, only the support system LCO are required. A requirement of TS 3.0.6 is that an evaluation be performed in accordance with Specification 5.5.13, Safety Function Determination Program (SFDP). The SFDP evaluation determined that there was no loss of safety function when entering only TS 3.7.11 with a train of SCWS out of service.

This event is reportable to the NRC under 10 CFR 50.73(a)(2)(i)(B) Operation or Condition Prohibited by Technical Specifications.

SAFETY SIGNIFICANCE

There were no Industrial, Environmental or Radiological consequences from this event. While TS 3.8.9 was not entered and the required shutdown actions were not taken, had C18.1 allowed application of TS 3.0.6, actions would have been essentially the same as those that were taken. i.e., entry into TS 3.7.11 Condition A, which has a completion time of 30 days, without entry into supported system conditions. The only difference would be that entry into TS 3.0.6 requires application of SFDP, which was subsequently completed and found not to preclude TS 3.0.6 entry in the case of a train of SCWS being out of service.

CAUSE

Cause evaluation determined C18.1 was not accurate and usable in part, due to inadequate review of changes to the procedure.

¹ EIIS System Code – BI

² EIIS System Code – EA

³ EIIS System Code – EC

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CORRECTIVE ACTION COMPLETED

C18.1 has been revised to invoke TS 3.0.6 as applicable for the Bus is Load Sequencer when SCWS is out of service.

PREVIOUS SIMILAR OCCURRENCES

A review of the past three (3) years of LER's found no previous similar events.