



Monticello Nuclear Generating Plant  
2807 W County Road 75  
Monticello, MN 55362

April 11, 2014

L-MT-14-034  
10 CFR 50.73

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

Monticello Nuclear Generating Plant  
Docket 50-263  
Renewed Facility Operating License No. DPR-22

LER 2014-004 "Time to Energize Loads Greater than Surveillance Requirement"

A Licensee Event Report (LER) for this occurrence is enclosed.

Summary of Commitments

This letter contains no new commitments and no revisions to existing commitments.

Karen D. Fili  
Site Vice President, Monticello Nuclear Generating Plant  
Northern States Power Company-Minnesota

Enclosure

cc: Regional Administrator, Region III, USNRC  
Project Manager, Monticello Nuclear Generating Plant, USNRC  
Resident Inspector, Monticello Nuclear Generating Plant, USNRC

JESS  
NRR



**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 Infocollections.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.

<b>1. FACILITY NAME</b> Monticello Nuclear Generating Plant	<b>2. DOCKET NUMBER</b> 05000-263	<b>3. PAGE</b> 1 OF 3
--	--------------------------------------	--------------------------

**4. TITLE**  
Time to Energize Loads Greater than Surveillance Requirement

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
2	10	2014	2014	004	00	4	11	2014		05000
									FACILITY NAME	DOCKET NUMBER
										05000

**9. OPERATING MODE** 1

**11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)**

<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input checked="" type="checkbox"/> 50.73(a)(2)(vii)
<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)
<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)
<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)
<b>10. POWER LEVEL</b> 88%	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)
	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input checked="" type="checkbox"/> 50.73(a)(2)(v)(A)
	<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input checked="" type="checkbox"/> 50.73(a)(2)(v)(B)
	<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input checked="" type="checkbox"/> 50.73(a)(2)(v)(C)
	<input type="checkbox"/> 20.2203(a)(2)(vi)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)(B)	<input checked="" type="checkbox"/> 50.73(a)(2)(v)(D)

Specify in Abstract below or in NRC Form 366A

**12. LICENSEE CONTACT FOR THIS LER**

LICENSEE CONTACT Carrie Fosaaen, Licensing Engineer	TELEPHONE NUMBER (Include Area Code) 763-295-1357
--	--

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

<b>14. SUPPLEMENTAL REPORT EXPECTED</b> <input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO	<b>15. EXPECTED SUBMISSION DATE</b> MONTH: _____ DAY: _____ YEAR: _____
--	--

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

On February 10, 2014, Monticello personnel identified that the Emergency Diesel Generators (EDGs) would not energize permanently connected loads until 10.2 or 10.34 seconds for Division I and Division II, respectively, which exceeded the 10 second limitation of Monticello Technical Specification (TS) Surveillance Requirement (SR) 3.8.1.12. As a result, both EDGs were declared inoperable.

The apparent cause of this event is that the description of the EDG TS SR was inadvertently changed during transition from custom TS 4.9.B.3 to improved TS SR 3.8.1.12 due to improper verification and validation practices of the Improved TS preparation team in 2004-2006.

The set-points for the applicable relays have been revised. The time delay set-point change provides a setting to support EDG performance meeting the 10 second acceptance criterion of SR 3.8.1.12. Additionally, the surveillance procedure will be revised as necessary to implement correct testing for SR 3.8.1.12.



**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	6. LER NUMBER			3. PAGE	
Monticello Nuclear Generating Plant	05000-263	YEAR	SEQUENTIAL NUMBER	REV NO.	2	OF 3
		2014	- 004	- 00		

**NARRATIVE**

**EVENT DESCRIPTION**

On February 10, 2014, Monticello Nuclear Generating Plant was in Mode 1 at approximately 88% power.

Plant personnel identified through an extent of condition review that the Emergency Diesel Generators (EDGs) [DG] would not energize permanently connected loads until 10.2 or 10.34 seconds for Division I and Division II, respectively, which exceeded the limitation of Technical Specification (TS) Surveillance Requirement (SR) 3.8.1.12. The surveillance requires that on a simulated or actual loss of off-site power signal, in conjunction with an actual or simulated Emergency Core Cooling System (ECCS) initiation signal, the EDGs auto-start from a standby condition and energize permanently connected loads in  $\leq$  10 seconds. The loss of voltage logic for each division included a 10-second (nominal) time delay relay that must actuate to initiate a load transfer to the respective EDGs whenever the 1AR Transformer [XFMR] secondary voltage is above the secondary voltage relay dropout value. The 1AR Transformer secondary voltage relay is not part of the TS Loss of Power Instrumentation.

As a result, SR 3.8.1.12 was declared not met and both EDGs were declared inoperable at 1650. At 1803, operations isolated the 1AR Transformer which bypassed the time delay relay and declared the EDGs operable.

A review of past surveillances indicates that SR 3.8.1.12 would not have been satisfied since implementation of improved TS in 2006.

**EVENT ANALYSIS**

This event is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B), Operation or Condition Prohibited by Technical Specifications, 10 CFR 50.73(a)(2)(v)(A-D), Event or Condition That Could Have Prevented Fulfillment of a Safety Function, and 10 CFR 50.73(a)(2)(vii), Common Cause Inoperability of Independent Trains or Channels.

An engineering analysis was performed which determined that the increased EDG output circuit breaker automatic closure time delay would not have exceeded the performance credited in the Updated Final Safety Analysis Report ECCS performance, high energy line break (HELB), or alternate source term (AST) analyses. The condition did not impact manual circuit breaker operation, operation of the EDG itself, or the load carrying capability of the machine. As such, the identified condition does not constitute a Safety System Functional Failure as defined by NEI 99-02 Revision 7.

Additionally, since the condition was within the bounds of existing plant analyses the condition does not constitute an unanalyzed condition as reported in Event Notification 49814.

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

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Monticello Nuclear Generating Plant	05000 -263	YEAR	SEQUENTIAL NUMBER	REV NO.	3 OF 3
		2014	- 004	- 00	

**NARRATIVE**

**SAFETY SIGNIFICANCE**

Subsequent evaluation determined that although the EDGs would not meet SR 3.8.1.12 there was no loss of safety function. The principal basis for this conclusion was that for the HELB, AST, and ECCS performance analyses assumed a 15 second delay for the EDGs to connect to the essential buses. The condition identified would not have delayed the EDGs connection to the essential buses beyond 11 seconds, and even at the extreme limit of the testing acceptance criteria, the expected EDG performance remained bounded by the existing analyses.

**CAUSE**

The apparent cause of this event is that the description of the EDG SR was inadvertently changed during transition from custom TS 4.9.B.3 to improved SR 3.8.1.12 due to improper verification and validation practices of the Improved TS preparation team in 2004-2006.

**CORRECTIVE ACTION**

The set-points for applicable relays have been revised. The time delay set-point change provides a setting to support EDG performance meeting the 10 second acceptance criterion of SR 3.8.1.12. Additionally, the surveillance procedure will be revised as necessary to implement correct testing for SR 3.8.1.12.

**PREVIOUS SIMILAR EVENTS**

In 2012, an issue was identified during the NRC's component design basis inspection where the TS did not reflect the total time for the degraded voltage scheme to transfer to the EDGs. The cause of the event was determined to be a legacy issue and no apparent cause could be determined. Improved TS implementation was cited as a possible contributing factor. Actions were implemented to identify cascading logic associated with TS circuits that resulted in time delays not reflected in TS, the issue discussed in this License Event Report was discovered as a result of those actions.