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Monticello Nuclear Generating Plant
2807 West County Road 75
Monticello, MN 55362-9637

Operated by Nuclear Management Company LLC

March 23, 2001

US Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

MONTICELLO NUCLEAR GENERATING PLANT
Docket No. 50-263 License No. DPR-22

LER 2001- 001, Revision 1
Deficient Procedures Fail to Require Independent Verification Following Return to Service of Individual Channels During Instrument Surveillance

A revision to Licensee Event Report (LER) 2001-001 is attached. This revision corrects a misleading statement in the original LER and makes several clarifications. This revised LER contains no new NRC commitments.

Please contact David Musolf at (763) 295-1201 if you require further information.

Byron Day
Plant Manager
Monticello Nuclear Generating Plant

c: Regional Administrator - III NRC
NRR Project Manager, NRC
Sr Resident Inspector, NRC
Minnesota Department of Commerce

Attachment

IE22

NRC FORM 366 (6-1998) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104 EXPIRES 06/30/2001

Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to the industry. Forward comments regarding burden estimate to the Records Management Branch (T-6 F33), U.S. Nuclear Regulatory Commission, Washington, DC 205555-0001, and to the Paperwork Reduction Project (3150-0104), Office of Management and Budget, Washington, DC 20503. If 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.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

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TITLE (4) Deficient Procedures Fail to Require Independent Verification Following Return to Service of Individual Channels During Instrument Surveillance

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER 05000
01	10	2001	2001	001	01	03	23	2001	FACILITY NAME	DOCKET NUMBER 05000

		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
OPERATING MODE (9)	N		20.2201(b)		20.2203(a)(2)(v)	X	50.73(a)(2)(i)		50.73(a)(2)(viii)
POWER LEVEL (10)	100		20.2203(a)(1)		20.2203(a)(3)(l)		50.73(a)(2)(ii)		50.73(a)(2)(x)
			20.2203(a)(2)(i)		20.2203(a)(3)(ii)		50.73(a)(2)(iii)		73.71
			20.2203(a)(2)(ii)		20.2203(a)(4)		50.73(a)(2)(iv)		OTHER
			20.2203(a)(2)(iii)		50.36(c)(1)		50.73(a)(2)(v)		Specify in Abstract below or in NRC Form 366A
			20.2203(a)(2)(iv)		50.36(c)(2)		50.73(a)(2)(vii)		

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
David Musolf	763-295-1201

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

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

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
	YES (If yes, complete EXPECTED SUBMISSION DATE).	X	NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On January 10, 2001, while following up on questions from the Monticello Senior NRC Resident Inspector, it was discovered the Technical Specification requirements for minimum number of operable channels per trip system and number of trip systems were violated due to deficiencies in instrument test and calibration procedures. Independent verification of the return to service of instrument channels following test and calibration was in some cases not performed until the last step in the procedure. Following calibration, each instrument channel should be independently verified to have been properly restored to operability prior to removing the next channel from service. Instrument test and calibration procedures that are potentially affected have been placed on hold. They will be revised prior to their next use to require independent verification of operability following return to service of each individual channel.

Description

On January 10, 2001, while following up on questions from the Monticello Senior NRC Resident Inspector, it was discovered that several instrument and control procedures did not specify the proper way to perform independent verification following the return to service of instrument channels being tested.

Reactor and plant protection system[1] instrument channels[2] are tested and calibrated individually. Following confirmation of trip settings and proper operation of associated relays and annunciators, each channel is returned to service. An independent verification that the instrument channel was properly returned to operable status should be made prior to removing the next channel from service It was determined that several instrument and control procedures are deficient in the way in which the independent verification is performed. In several cases independent verification was not specified until the last step in the procedure following testing of all channels.

Event Analysis

Analysis of Reportability

This Licensee Event Report is being submitted pursuant to the pre-January 23, 2001, version of 10 CFR 50.73(a)(2)(i). The deficient procedures did not require independent verification of each instrument channel prior to removing the next channel from service. Therefore more than the allowed number of instrument channels and trip systems were considered inoperable and the condition violated the Monticello Technical Specifications, including Tables 3.1.1, 3.2.1, and 3.2.2.

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[1]EIIS System Code: JE
[2]Component Function Identifier: CHA

Safety Significance

If an error was made in restoring an instrument channel to service, more than one channel could be disabled until independent verification was performed at the last step of the procedure. The probability of making an error was low because restoration was performed per a procedural step. Because the probability was low, and because the duration to complete the procedure was short, the safety significance of these procedural deficiencies was small and the health and safety of the public was not affected. The discovered procedural deficiencies represent, however, a failure to comply with the plant's licensing bases with respect to equipment operability determination.

Cause

The apparent cause of this event is an initial lack of understanding of the role of independent verification in demonstrating operability. Monticello is committed to perform independent verification of activities in accordance with Item I.C.6 of NUREG-0737, "NUREG-0737, "Clarification of TMI Action Plan Requirements," October 31, 1980. When Monticello initiated the requirements for independent verification, actions were taken to upgrade all plant procedures, including instrument and control test and calibration procedures, to implement independent verification practices where required. A determination was made at the time that completion of the independent verification steps was not required prior to considering a component operable. This determination has now been found to be incorrect.

On June 26, 1984, the NRC issued IE Information Notice 84-51, "Independent Verification." At this time all plant work groups were instructed to review their procedures and processes to ensure that independent verification activities were implemented where necessary. Also, at this time, plant administrative directives were revised to emphasize the importance of independent verification to ensure equipment operability. Due to the ambiguity of guidance contained in the plant administrative directives, instrument test and calibration procedures were considered at the time to be acceptable.

The root causes of this event are being pursued under the Monticello corrective action program.

Corrective Action

Following discovery of this deficiency, a hold was placed on affected Monticello Instrument and Control Group Technical Specification procedures. Procedures found to deficient will be revised prior to their next use.

Plant administrative directives will be clarified to emphasize the requirements of independent verification completion prior to considering the affected component operable.

Training will be provided to appropriate members of the plant staff following clarification of the administrative directives to assure full and complete understanding of the purpose and correct implementation of independent verification.

Other plant work groups have been informed of this deficiency in the independent verification process in instrument and control procedures and of plant management's expectation that independent verification will be properly conducted on return to service of safety related components.

A review of other categories of plant procedures will be conducted to verify compliance with the intent of plant directives regarding independent verification.

A case study of the event will be presented to affected supervisors. The study will focus on "cultural issues" and how these issues affect each supervisor's area.

Failed Component Identification

Not applicable.

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TEXT *(If more space is required, use additional copies of NRC Form 366A)* **(17)**

Similar Events

LER 85-010, "Reactor SCRAM During MSL Low Pressure Surveillance Test," describes a reactor scram which occurred during an instrument surveillance due to a valving error. Although LER 85-010 describes a physical plant event rather than failure to comply with the plant's licensing bases with respect to equipment operability determination, it did present an opportunity to identify earlier the condition described in LER 2001-001, Rev. 1. The event investigation had focused on procedural compliance and not on independent verification issues.