American Electric Power
Cook Nuclear Plant
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Bridgman, MI 49106

AEP
AMERICAN ELECTRIC POWER

August 22, 2002

AEP:NRC:2073

Docket No. 50-315

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Stop O-P1-17
Washington, DC 20555-0001

Donald C. Cook Nuclear Plant Unit 1
TECHNICAL SPECIFICATION 3.3.3.1 REQUIRED SPECIAL REPORT FOR INOPERABLE RADIATION MONITORS

In accordance with the criteria established by 10 CFR 50.73, entitled Licensee Event Report System, and Donald C. Cook Nuclear Plant (CNP) Technical Specifications 3.3.3.1 and 6.9.2, the following special report is being submitted:

LER 315/2002-007-00: "Technical Specification 3.3.3.1 Required Special Report For Inoperable Radiation Monitors."

The following commitments have been identified in this submittal:

- Procedure 12-THP-6010-RPI-803 will be revised. This action will be completed by August 30, 2002.
- CNP technicians will receive training on this event during continuing training. This action will be completed by December 30, 2002.

Should you have any questions regarding this correspondence, please contact Mr. Gordon P. Arent, Manager, Regulatory Affairs, at (269) 697-5553.

Sincerely,

Joseph E. Pollock
Site Vice President

RAM/jen

Attachment

IE22

c: G. P. Arent
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NRC Form 366 (7-2001) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB NO. 3150-0104 EXPIRES 7-31-2004

Estimated burden per response to comply with this mandatory information collection request: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to bjs1@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 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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4. TITLE

Technical Specification 3.3.3 1 Required Special Report For Inoperable Radiation Monitors

5. EVENT DATE			6. LER NUMBER				7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER		REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
06	23	2002	2002	--	007	-- 00	08	22	2002	FACILITY NAME	DOCKET NUMBER

9. OPERATING MODE	1
10. POWER LEVEL	100

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

20 2201(b)	20 2203(a)(3)(ii)	50 73(a)(2)(ii)(B)	50 73(a)(2)(ix)(A)
20 2201(d)	20 2203(a)(4)	50 73(a)(2)(iii)	50 73(a)(2)(x)
20 2203(a)(1)	50 36(c)(1)(i)(A)	50 73(a)(2)(iv)(A)	73 71(a)(4)
20 2203(a)(2)(i)	50 36(c)(1)(ii)(A)	50 73(a)(2)(v)(A)	73 71(a)(5)
20 2203(a)(2)(ii)	50 36(c)(2)	50.73(a)(2)(v)(B)	X OTHER Specify in Abstract below or in NRC Form 366A
20 2203(a)(2)(iii)	50 46(a)(3)(ii)	50 73(a)(2)(v)(C)	
20 2203(a)(2)(iv)	50 73(a)(2)(i)(A)	50 73(a)(2)(v)(D)	
20 2203(a)(2)(v)	50 73(a)(2)(i)(B)	50 73(a)(2)(vii)	
20 2203(a)(2)(vi)	50 73(a)(2)(i)(C)	50 73(a)(2)(viii)(A)	
20 2203(a)(3)(i)	50 73(a)(2)(ii)(A)	50 73(a)(2)(viii)(B)	

12. LICENSEE CONTACT FOR THIS LER

NAME	TELEPHONE NUMBER (Include Area Code)
Richard A. Meister, Regulatory Affairs	(616) 465-5901, 1707

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

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

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

This special report is being issued in accordance with the special reporting requirements specified in the Donald C. Cook Nuclear Plant (CNP), Technical Specification (TS), 3.3.3.1, Actions 22A and 22B. Specifically, radiation monitor 1-VRA-1310, "upper containment high range radiation monitor," was inoperable for a period of 11 days and radiation monitor 1-MRA-1702, "steam generator No. 3 power operated relief valve 1-MRV-233 outlet radiation detector and interface box," for a period of 79 days. Both radiation monitors were immediately returned to operable status. Corrective actions will revision of applicable procedure and training of technicians.

In both cases TS 3.3.3.1 Actions 22A and 22B require a special report within 14-days of the monitors becoming inoperable as required by TS 3.3.3.1, Actions 22A and 22B. CNP's failure to issue the required special reports within the required 14-day time limit is being evaluated in accordance with CNP's corrective action program.

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

Conditions Prior to Event

Unit 1 = MODE 1 - 100% reactor power
Unit 2 = MODE 2 - 100% reactor power

Description of Event

This special report is being issued in accordance with the special reporting requirements specified in the Donald C. Cook Nuclear Plant (CNP), Technical Specification (TS), 3.3.3.1, Actions 22A and 22B. Specifically, radiation monitor 1-VRA-1310, "upper containment high range radiation monitor," was inoperable for a period of 11 days and radiation monitor 1-MRA-1702, "steam generator No. 3 power operated relief valve 1-MRV-233 outlet radiation detector and interface box," for a period of 79 days.

Technical Specification (TS) 3.3.3.1 requires radiation monitors 1-VRA-1310 and 1-MRA-1702 to be operable when the unit is in MODE 1, 2, 3, or 4. Further, Action Statements 22A (for 1-VRA-1310) and 22B (for 1-MRA-1702) require the radiation monitors to be returned to operable status within 7 days of the event or a special report be written and issued within 14 days of the event outlining the actions taken, the cause of the inoperability, and the plans and schedule for restoring operability.

In the case of 1-VRA-1310, the monitor was returned to operable status 12 days after the event. However, CNP failed to issue the special report as required by part 2 of Action 22A. This meets the reporting criteria specified in part 2 of Action 22A of TS 3.3.3.1.

In the case of 1-MRA-1702, the monitor was returned to operable status 79 days after the event and CNP failed to issue a special report within 14 days of the event as required by part 2 of Action 22B. This meets the reporting criteria specified in part 2 of Action 22B of TS 3.3.3.1.

The failure to submit a special report within 14 days of the event is being evaluated in CNP's corrective action program (CR 02199084).

On Tuesday, June 11, 2002, at 2030 hours, the containment lower compartment train "A" noble gas chamber low range beta radiation detector 1-ERS-1300, Channel 5, was declared inoperable. Subsequently, on Wednesday, June 12, 2002, at 1117 hours, CNP personnel began troubleshooting and repair of the inoperable radiation monitor in accordance with procedure 12-THP-6010-RPI-803, "Operation of the Radiation Monitor System." The lower containment gas radiation monitor, 1-ERS-1300, has seven channels that support monitoring airborne radioactivity in the lower containment atmosphere and one spare channel (channel 10). Channel 10 is used by the upper containment high range radiation monitor, 1-VRA-1310, as a communication link to the radiation monitoring system (RMS) in the control room.

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

The troubleshooting effort required the power to 1-ERS-1300 to be turned off, rendering 1-ERS-1300 inoperable. The appropriate technical specification action statements were entered and the appropriate post-maintenance testing and calibration activities were completed prior to returning radiation monitor 1-ERS-1300 to service.

Removal of power to 1-ERS-1300 caused a loss of the communication path for 1-VRA-1310 to the RMS within the control room. The loss of communication caused the RMS logic circuitry to reset to the default values. This action rendered RMS readout for radiation monitor 1-VRA-1310 inoperable. The CNP technicians performing the maintenance activities did not recognize that the removal of power from 1-ERS-1300 would render 1-VRA-1310 inoperable, and further did not identify this impact on 1-VRA-1310 during the conduct of maintenance activities. Once discovered, June 23, 2002, during the conduct of routine readings, immediate actions were taken to return 1-VRA-1310 to operable status.

During the subsequent event investigation, an extent of condition evaluation was conducted and one additional radiation monitor was discovered to be inoperable. Radiation monitor 1-MRA-1702, steam generator No. 3 power operated relief valve 1-MRV-233 outlet radiation detector and interface box, had an incorrect parameter setting due to a number transposition error (event date of April 12, 2002, at approximately 1023 hours). The transposition error caused the alarm setpoint to be non-conservative.

Cause of Event

The cause of 1-VRA-1310 being inoperable was inadequate knowledge and training of CNP personnel involved in the troubleshooting and repair of 1-ERS-1300, Channel 5. The CNP personnel involved in the troubleshooting and repair of 1-ERS-1300 did not understand that removal of power from 1-ERS-1300 would cause 1-VRA-1310 circuitry to reset to its default values and thus render the radiation monitor inoperable. Further, the applicable training materials, vendor manuals, and plant procedures associated with these radiation monitors did not address that removing power to 1-ERS-1300 would effect operability of 1-VRA-1310.

The cause of 1-MRA-1702 being inoperable was human error. The CNP technician transposed numbers during routine testing/calibration. This error has been determined to be a lack of self-checking. Further, the individual performing the second verification also missed the transposition error. The cause of this error was a lack of attention to detail.

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

Corrective Actions

Corrective Actions Taken:

For 1-VRA-1310:

Upon identification that 1-VRA-1310 was inoperable, actions were immediately taken to return 1-VRA-1310 to operable status.

An extent of condition evaluation was conducted. This action was taken to ensure all potentially affected channels were operable. The extent of condition demonstrated that 1-VRA-1310 was the only radiation monitor rendered inoperable and not returned to operable status by the troubleshooting activities associated with 1-ERS-1300. Additionally, the extent of condition identified the transposition error associated with 1-MRA-1702.

For 1-MRA-1702:

Upon identification that 1-MRA-1702 was inoperable, actions were immediately taken to return 1-MRA-1702 to operable status.

The individuals involved in the mis-calibration of 1-MRA-1702 were counseled.

Recent radiation monitoring system upgrades have installed a circuit that will aid in the identification of similar component calibration errors.

Corrective Actions Planned:

For 1-VRA-1310:

Procedure 12-THP-6010-RPI-803 will be revised. This revision will provide additional guidance on when 1-VRA-1310 must be checked/reset. This action will be completed by August 30, 2002.

The CNP technicians will receive training on this event during continuing training. Continuing training will be completed by December 31, 2002. In addition, this training will be included in the initial program.

For 1-MRA-1702:

The immediate corrective actions have been reviewed and are considered adequate to prevent recurrence.