Omaha Public Power District
444 South 16th Street Mall
Omaha, NE 68102-2247

10 CFR 50.73

LIC-14-0123
November 12, 2014

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

Fort Calhoun Station, Unit No. 1
Renewed Facility Operating License No. DPR-40
NRC Docket No. 50-285

Subject: Licensee Event Report 2014-006, Revision 0, for the Fort Calhoun Station

Please find attached Licensee Event Report 2014-006, Revision 0. This report is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B). There are no new commitments being made in this letter.

If you should have any questions, please contact Terrence W. Simpkin, Manager, Site Regulatory Assurance, at (402) 533-6263.

Sincerely,

Louis P. Cortopassi
Site Vice President and CNO

LPC/epm

Attachment
c: M. L. Dapas, NRC Regional Administrator, Region IV
C. F. Lyon, NRC Senior Project Manager
S.M. Schneider, NRC Senior Resident Inspector

NRC FORM 366 (02-2014) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 01/31/2017

LICENSEE EVENT REPORT (LER)

(See Page 2 for required number of digits/characters for each block)

1. FACILITY NAME	2. DOCKET NUMBER	3. PAGE
Fort Calhoun Station	05000285	1 OF 3

Inoperability of Radiation Monitors Due to an Error in 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
										05000
9	16	2014	2014	006 -	00	11	12	2014	FACILITY NAME	DOCKET NUMBER 05000

9. OPERATING MODE	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: *(Check all that apply)*			
1	☐ 20.2201(b)	☐ 20.2203(a)(3)(i)	☐ 50.73(a)(2)(i)(C)	☐ 50.73(a)(2)(vii)
	☐ 20.2201(d)	☐ 20.2203(a)(3)(ii)	☐ 50.73(a)(2)(ii)(A)	☐ 50.73(a)(2)(viii)(A)
	☐ 20.2203(a)(1)	☐ 20.2203(a)(4)	☐ 50.73(a)(2)(ii)(B)	☐ 50.73(a)(2)(viii)(B)
	☐ 20.2203(a)(2)(i)	☐ 50.36(c)(1)(i)(A)	☐ 50.73(a)(2)(iii)	☐ 50.73(a)(2)(ix)(A)
10. POWER LEVEL	☐ 20.2203(a)(2)(ii)	☐ 50.36(c)(1)(ii)(A)	☐ 50.73(a)(2)(iv)(A)	☐ 50.73(a)(2)(x)
	☐ 20.2203(a)(2)(iii)	☐ 50.36(c)(2)	☐ 50.73(a)(2)(v)(A)	☐ 73.71(a)(4)
100	☐ 20.2203(a)(2)(iv)	☐ 50.46(a)(3)(ii)	☐ 50.73(a)(2)(v)(B)	☐ 73.71(a)(5)
	☐ 20.2203(a)(2)(v)	☐ 50.73(a)(2)(i)(A)	☐ 50.73(a)(2)(v)(C)	☐ OTHER
	☐ 20.2203(a)(2)(vi)	☒ 50.73(a)(2)(i)(B)	☐ 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

LICENSEE CONTACT	TELEPHONE NUMBER *(Include Area Code)*
Erick Matzke	402-533-6855

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	15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
☐ YES *(If yes, complete 15. EXPECTED SUBMISSION DATE)* ☒ NO				

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

During an NRC inspection on September 16, 2014, it was discovered that the calibration procedure for Radiation Monitor (RM) - 091A/B uses a source that is above 1 Roentgen per hour (R/hr). This does not meet the technical specification requirement for calibration at least one decade below 1 R/hr. 1 R/hr is the lower limit of detection of the high range detector for the RM-091 instruments. Calibration at least one decade below 1 R/hr is not possible.

The most likely cause of the event is that a typographical error was introduced into license amendment request (LAR) during review process in 1993 and was not corrected prior to submittal to NRC.

A LAR (LIC-14-0122) was submitted to the NRC to correct the technical specification error.

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NARRATIVE

BACKGROUND

Fort Calhoun Station (FCS) is a two-loop reactor coolant system of Combustion Engineering design.

The Containment Wide Range Radiation Monitors (RM) are RM-091A & B.

Technical Specification (TS) 2.21, Post-Accident Monitoring Instrumentation, requires that for RM-091 A/B inoperability Table 2-10, Post-Accident Monitoring Instrumentation Operating Limits,

1. Containment Wide Range Radiation Monitors (RM-091A & B) minimum operating channels is 2

   and

   With the number of OPERABLE channels less than required by the minimum channels operable requirements, initiate the pre-planned alternate method of monitoring the appropriate parameter(s) within 72 hours, and

   1. either restore the inoperable channel(s) to OPERABLE status within 7 days of the event, or
   2. prepare and submit a special report to the Commission pursuant to specification 5.9.3 within 14 days following the event outlining the action taken, the cause of the inoperability, and the plans and schedules for restoring the system to OPERABLE status.

TS Table 3-3, Minimum Frequencies for Checks, Calibrations and Testing of Miscellaneous Instrumentation and Controls, for Area and Post-Accident Radiation Monitors states:

"Secondary and Electronic calibration performed at refueling frequency. Primary calibration with exposure to radioactive sources only when required by the secondary and electronic calibration. RM-091 A/B - Calibration by electronic signal substitution is acceptable for all range decades above 10 R/hr. Calibration for at least one decade below 1-R/hr shall be by means of calibrated radiation source."

R/hr (Roentgen per hour)

EVENT DESCRIPTION

During an NRC inspection on September 16, 2014, it was discovered that:

The calibration procedure (IC-ST-RM-0048) for RM-091A/B uses a source that is above 1 R/hr. This does not meet the TS requirement for calibration at least one decade below 1 R/hr.

1 R/hr is the lower limit of detection of the high range detector for the RM-091 instruments. Calibration at least one decade below 1R/hr is not possible.

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NARRATIVE

Per TS 2.21 Table 2-10 pre-planned alternate methods (compensatory measures if RM-091A/B fail) of analysis are established per EP-FC-121-AD-F-01, Fort Calhoun Equipment Matrix. Compensatory measures are to perform periodic radiation surveys or use adjacent monitors or portable monitors as needed.

Additionally, it is recognized that RM-091A and RM-091B have been successfully calibrated within their full available operating range, and despite not meeting the requirements of the Technical Specifications as it is currently written, are fully functional and available for use to monitor containment conditions post-accident.

This event is reportable per 10 CFR 50.73(a)(2)(i)(B), Operation or Condition Prohibited by TS.

CONCLUSION

An investigation determined that the most likely cause of the event is that a typographical error was introduced into license amendment request (LAR) during review process for amendment number 152 in 1993 and was not corrected prior to submittal to NRC. The NRC approved the TS as submitted.

CORRECTIVE ACTIONS

A LAR (LIC-14-0122) was submitted to the NRC on November 7, 2014, to correct this error.

SAFETY SIGNIFICANCE

Although the instruments have been declared inoperable due to not meeting the technical specification requirements, the instruments are properly calibrated and fully capable on monitoring radiation levels as intended.

SAFETY SYSTEM FUNCTIONAL FAILURE

This does not represent a safety system functional failure in accordance with NEI 99-02, revision 7.

PREVIOUS EVENTS

None