

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Fort Calhoun Station, Unit No. 1										DOCKET NUMBER (2) 0 5 0 0 0 2 8 5 1 OF 0 3										PAGE (3) 1 OF 0 3				
TITLE (4) Reactor Coolant Dose Equivalent Iodine Limit Exceeded																								
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 NAMES N					DOCKET NUMBER(S) 0 5 0 0 0										
0	3	0	3	8	4	8	4	0	0	4	0	0	4	0	5	8	4	0	5	0	0	0		
OPERATING MODE (9) 3		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)																						
POWER LEVEL (10) 0 10 10		20.402(b)				20.406(c)				50.73(a)(2)(iv)				73.71(b)										
		20.406(a)(1)(i)				50.36(c)(1)				50.73(a)(2)(v)				73.71(e)										
		20.406(a)(1)(ii)				50.36(c)(2)				50.73(a)(2)(vii)				OTHER (Specify in Abstract below and in Text, NRC Form 366A)										
		X 20.406(a)(1)(iii)				X 50.73(a)(2)(i)				50.73(a)(2)(viii)(A)														
		20.406(a)(1)(iv)				50.73(a)(2)(ii)				50.73(a)(2)(viii)(B)														
		20.406(a)(1)(v)				50.73(a)(2)(iii)				50.73(a)(2)(ix)														
LICENSEE CONTACT FOR THIS LER (12)																								
NAME Alan W. Richard, Supervisor-Technical Fort Calhoun Station										TELEPHONE NUMBER AREA CODE 4 0 2 4 2 6 - 4 0 1 1														
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																								
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC
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 fifteen single-space typewritten lines) (16)																								
<p>Technical Specification 2.1.3(5) requires the following:</p> <p>With the radioactivity of the reactor coolant <math>&gt;1.0 \mu\text{Ci/gm}</math> DOSE EQUIVALENT I-131, perform the sampling and analysis requirements of items 1.(a)(2)(ii) and 1.(b)(2)(i) of Table 3-4 until the radioactivity of the reactor coolant is restored to within its limits. A REPORTABLE OCCURRENCE, pursuant to Specification 5.9.2, shall be submitted to the Commission.</p> <p>During a normal plant shutdown for refueling, it was discovered during a routine reactor coolant sample analysis that the reactor coolant radioactivity was in excess of <math>1.0 \mu\text{Ci/gm}</math> DOSE EQUIVALENT I-131. The sampling schedule, once every eight hours whenever the radioactivity exceeds <math>1.0 \mu\text{Ci/gm}</math> DOSE EQUIVALENT I-131, of Table 3-4 was initiated. The DOSE EQUIVALENT I-131 returned to below the limit at 0830 on 3/4/84 at which time the every eight hour sampling was terminated.</p>																								
8404100240 840303 PDR ADOCK 05000285 S PDR																								

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Fort Calhoun Station, Unit No. 1	DOCKET NUMBER (2)  0 5 0 0 0 2 8 5 8 4 - 0 0 4 - 0 0 0 2 OF 0 3	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			

TEXT (If more space is required, use additional NRC Form 365A's) (17)

Technical Specification 2.1.3(1) and (5) require the following:

(1) The radioactivity of the reactor coolant shall be limited to:

- a.  $\leq 1.0 \mu\text{Ci/gm}$  DOSE EQUIVALENT I-131, and
- b.  $\leq 100/\bar{E} \mu\text{Ci/gm}$

(5) With the radioactivity of the reactor coolant  $> 1.0 \mu\text{Ci/gm}$  DOSE EQUIVALENT I-131, perform the sampling and analysis requirements of items 1.(a)(2)(ii) and 1.(b)(2)(i) of Table 3-4 until the radioactivity of the reactor coolant is restored to within its limits. A REPORTABLE OCCURRENCE, pursuant to Specification 5.9.2, shall be submitted to the Commission. This report shall contain the results of the radioactivity analyses together with the following information:

- a. Reactor power history starting 48 hours prior to the first sample in which the limit was exceeded.
- b. Purification System flow history starting 48 hours prior to the first sample in which the limit was exceeded.
- c. The time duration when the radioactivity of the reactor coolant exceeded  $1.0 \mu\text{Ci/gm}$  DOSE EQUIVALENT I-131.

During a normal plant shutdown for refueling, it was discovered during a routine reactor coolant sample analysis that the reactor coolant radioactivity was in excess of  $1.0 \mu\text{Ci/gm}$  DOSE EQUIVALENT I-131. The sampling schedule, once every eight hours whenever the radioactivity exceeds  $1.0 \mu\text{Ci/gm}$  DOSE EQUIVALENT I-131, of Table 3-4 was initiated.

The results of the reactor coolant radioactivity analyses are as follows:

<u>DATE</u>	<u>TIME</u>	<u>I-131 DOSE EQUIVALENT (<math>\mu\text{Ci/gm}</math>)</u>
3/3/84	0215	1.40
3/3/84	0934	1.87
3/3/84	1400	1.95
3/3/84	1624	1.60
3/4/84	0214	1.01
3/4/84	0840	0.81

The reactor power history during the 48 hours prior to the first sample in which the limit was exceeded is at follows:

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		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		84	— 0   0   4	— 0   0	0   3	OF	0   3

TEXT (If more space is required, use additional NRC Form 365A's) (17)

<u>DATE</u>	<u>TIME</u>	<u>MW<sub>T</sub></u>
2/29/84	2318	1268.9
3/01/84	0730	1263.6
3/01/84	1530	1129.9
3/01/84	2315	932.8
3/02/84	0717	885.9
3/02/84	1530	898.0
3/02/84	2315	602.2
3/03/84	0215	0.0

The purification system flow was at approximately 35 gpm during the entire 48 hour period prior to the event and remained in service during the time the DOSE EQUIVALENT I-131 was exceeded. Purification Ion Exchanger CH-8B was in service at the time.

The time duration when the radioactivity of the reactor coolant exceeded 1.0  $\mu\text{Ci/gm}$  DOSE EQUIVALENT I-131 was 30 hours 15 minutes from 0215 hours on 3/3/84 to 0830 hours on 3/4/84.

This occurrence was the result of a normal iodine spike that is expected following a reactor power change. All the provisions of Technical Specification 2.1.3 when reactor coolant radioactivity exceeds 1.0  $\mu\text{Ci/gm}$  DOSE EQUIVALENT I-131 were met; therefore, there were no safety consequences or implications. No corrective action is warranted or planned.

Iodine spikes have occurred during similar operating evolutions in the past. This is the first occurrence of this type since this Technical Specification was amended and the new requirement has been in effect.

This 30 day LER is being submitted 3 days late due to a misinterpretation regarding the assignment of responsibility for the preparation of the report.

Omaha Public Power District  
1623 Harney Omaha, Nebraska 68102  
402/536-4000

April 5, 1984  
FC-175-84  
LIC-84-105

U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, D.C. 20555

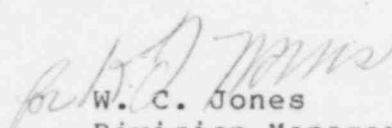
Reference: Docket No. 50-285

Gentlemen:

Licensee Event Report for  
the Fort Calhoun Station

Please find attached Licensee Event Report 84-004 dated April 5, 1984. This report is being submitted per requirements of 10 CFR 50.73.

Sincerely,

  
W. C. Jones  
Division Manager  
Production Operations

WCJ/JCB:jmm

Attachment

cc: Mr. Richard P. Denise, Director  
Division of Resident, Reactor Project  
& Engineering Programs  
U. S. Nuclear Regulatory Commission  
Region IV  
611 Ryan Plaza Drive, Suite 1000  
Arlington, Texas 76011

INPO Records Center  
Mr. E. G. Tourigny, Project Manager

SARC Chairman  
PRC Chairman  
Mr. L. A. Yandell, Senior Resident  
Inspector  
Fort Calhoun File (2)

Encl  
LTR  
ADD:  
AECB/NE  
IE/DGMB/SMO  
NMSS  
NMSS ALC  
RES  
RM/DDMB/MS  
IE22  
1/1