NRC FORM 366
(7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

CONTROL BLOCK: ☐☐☐☐☐☐ ① (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1 | N E F C S 1 ② LICENSEE CODE | 0 0 - 0 0 0 0 0 - 0 0 ③ LICENSE NUMBER | 4 1 1 1 1 ④ LICENSE TYPE | CAT ⑤

CON'T

0 1 | REPORT SOURCE L ⑥ | 0 5 0 0 0 2 8 5 ⑦ DOCKET NUMBER | 0 4 1 1 8 2 ⑧ EVENT DATE | 0 4 2 7 8 2 ⑨ REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES ⑩

0 2 During normal power operation, in the process of exchanging component cooling water
0 3 heat exchangers, the associated outlet valves HCV-490B, HCV-491B and HCV-492B did not
0 4 open. (HCV-491B opened partially.) The consequence of this event was that only one
0 5 component cooling water heat exchanger was operational. Tech. Spec. 2.3(1)g. requires
0 6 three of four CCW heat exchangers to be operable which may be modified to two of four
0 7 component cooling heat exchangers operable for not more than 24 hours under Tech.
0 8 Spec. 2.3(2)c.

0 9 | SYSTEM CODE W B ⑪ | CAUSE CODE E ⑫ | CAUSE SUBCODE B ⑬ | COMPONENT CODE V A L V E X ⑭ | COMP. SUBCODE B ⑮ | VALVE SUBCODE D ⑯

⑰ LER/RO REPORT NUMBER | EVENT YEAR 8 2 | — | SEQUENTIAL REPORT NO. 0 0 9 | / | OCCURRENCE CODE 0 3 | REPORT TYPE L | — | REVISION NO. 0

ACTION TAKEN F ⑱ | FUTURE ACTION Z ⑲ | EFFECT ON PLANT Z ⑳ | SHUTDOWN METHOD Z ㉑ | HOURS ㉒ 0 0 0 0 | ATTACHMENT SUBMITTED Y ㉓ | NPRD-4 FORM SUB. N ㉔ | PRIME COMP. SUPPLIER A ㉕ | COMPONENT MANUFACTURER F 1 2 5 ㉖

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS ㉗

1 0 An operator was dispatched to the 3 subject valves and he manually tapped on the actuator parts to all 3 valves. Valves HCV-490B and HCV-492B opened after the
1 1 operator tapped on the actuator parts. However, HCV-491B opened only slightly. Subsequently, HCV-491B, a Fisher Continental Model 7622 ten inch butterfly valve,
1 2 was disassembled. No apparent problem was found with HCV-491B and it was re-assembled, the packing loosened, and the valve tested for operation. All valves
1 3 were cycled several times and operated successfully.
1 4

1 5 | FACILITY STATUS E ㉘ | % POWER 1 0 0 ㉙ | OTHER STATUS ㉚ NA | METHOD OF DISCOVERY A ㉛ | DISCOVERY DESCRIPTION ㉜ Operator Observation

1 6 | ACTIVITY RELEASED Z ㉝ | CONTENT OF RELEASE Z ㉞ | AMOUNT OF ACTIVITY ㉟ NA | LOCATION OF RELEASE ㊱ NA

PERSONNEL EXPOSURES

1 7 | NUMBER 0 0 0 ㊲ | TYPE Z ㊳ | DESCRIPTION ㊴ NA

PERSONNEL INJURIES

1 8 | NUMBER 0 0 0 ㊵ | DESCRIPTION ㊶ NA

LOSS OF OR DAMAGE TO FACILITY ㊸

1 9 | TYPE Z ㊷ | DESCRIPTION NA

PUBLICITY

2 0 | ISSUED N ㊹ | DESCRIPTION ㊺ NA | NRC USE ONLY ☐☐☐☐☐☐☐☐☐☐☐☐

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PDR ADOCK 05000285
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LER No. 82-009
Omaha Public Power District
Fort Calhoun Station Unit No. 1
Docket No. 05000285

Attachment No. 1

Safety Analysis

Technical Specification 2.3 governs the number of heat exchangers that can be inoperable. When that number is exceeded, Technical Specification 2.0.1 applies. At the time of discovery, more than two heat exchangers were inoperable; thus, Technical Specification 2.0.1 was invoked and the plant operators commenced preparations to place the plant in hot shutdown within six hours. However, by immediately dispatching the auxiliary operator to investigate the problem, three of the four heat exchangers were returned to operable status within a few minutes of the incident.

Because the three heat exchangers were inoperable for a short duration, no significant safety problem occurred.

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Attachment No. 2

Corrective Action

Upon discovery by the operator that the three valves HCV-490B, HCV-491B and HCV-492B would not open, the auxiliary operator was immediately dispatched to the valves to investigate the problem. The operator "tapped" on various parts of the valve actuators and HCV-490B and HCV-492B immediately opened. The outlet valves HCV-490B and 492B were then successfully operated and cycled several times. After verifying the operability of HCV-490B and HCV-492B, three component cooling water heat exchangers were then in service. HCV-491B was then disassembled to determine why the valve would not open. After disassembly, there was no apparent damage to the valve and no obvious reason for the valve not to operate. However, the suspected cause was due to binding between the valve stem and packing; therefore, the packing was adjusted, the valve reassembled and cycled several times successfully.

The two other valves (HCV-490B and 492B) were subsequently checked and packing was also adjusted. These valves were then cycled several additional times to ensure operability.

All of these valves are normally cycled two to three times each week. The valves will continue to be cycled as a normal plant operation when cycling component cooling water heat exchangers; thus, this will allow us to monitor these valves for future problems.

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Attachment No. 3

Failure Data

This is the first instance, at the Fort Calhoun Station, of having three simultaneously inoperable component cooling water heat exchangers. Additionally, the three valves that failed to open have not exhibited a history of similar failures.