LICENSEE EVENT REPORT Unil 2.
CONTROL BLOCK: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
0 1 T N S N P 2 0 0 0 - 0 0 0 0 - 0 0 0 4 1 1 1 1 1 4 57 CAT St
CON'T SOURCE L 6 0 5 10 10 0 3 2 8 7 0 8 2 3 8 3 8 0 9 2 1 8 3 6 0 9 2 1 8 3 9 0 19 2 1 8 13 9 0 19 2 1 1 8 13 9 0 19 12 1 18 13 19 0 19 12 18 18 13 18 18 18 18 18 18 18 18 18 18 18 18 18
0 2 Unit 2 in refueling outage. Surveillance testing of the safety injection system
[0]] [(SIS) and centrifugal charging pumps (CCP) revealed that SIS pump 2A and both CCPs
[0]4 failed to meet the minimum head curve requirements. Also, the CCP boron injection
o 5 L tank (b'T) and the cold leg injection lines could not be properly balanced. There
0 6 was no effect upon public health and safety. Previous occurrences - none.
077
0 8 1
SYSTEM CAUSE CAUSE COMPONENT CODE SUBCODE SUBC
T 8 9 10 11 12 13 18 19 20 SEQUENTIAL OCCUMBENCE REPORT REVISION
TODE TYPE NO. 17 REPORT 8 3
ACTION FUTURE COMPONENT METHOD HOURS 22 ATTACHMENT NORDA PRIME COMPONENT MANUFACTURE FORM SUBJECT OF SUBMITTED FORM SUBJEC
The cause of pump head capacity degradation has been attributed to normal pump
operation. The inability to balance flows has been attributed to the lower head
capacity of the pumps. Westinghouse is presently reevaluating the SIS pump full
flow head curve. The internals of both CCPs were replaced and retesting indicated.
one CCP was still unsatisfactory.
FAILUTY SPOWER OTHER STATUS 30 AMETHOD OF DISCOVERY DESCRIPTION 32
ACTIVITY CONTENT 12 13 44 45 / 46 80 ACTIVITY (35) LOCATION OF RELEASE (36)
1 6 Z (33) Z (36) NA
PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION (30) 1 7 0 0 0 (37) Z (38) NA
PERSONNEL INJURIES NUMBER DESCRIPTION (1) NA NA
LOSS OF OR DAMAGE TO FACILITY (1) B310030240 B30721 TYPE DESCRIPTION PDR ADDCK 05000328 PDR ADDCK 05000328 PDR PDR
155UED DESCRIPTION (45) 15SUED DESCRIPTION (45) NAC USE ONL 7
Name of Propagator, G. B. irk /M. R. Harding Phone; (615) 870-6422

Sequoyah Nuclear Plant

LER SUPPLEMENTAL INFORMATION

SQRO-50-328/83114 Technical Specification Involved: 3.5.2

Reported Under Technical Specification: 6.9.1.13.b

Date of Occurrence: 08/23/83 Time of Occurrence: 1200 CST

Identification and Description of Occurrence:

Performance of surveillance instruction (SI) 260, "SIS/BIT/RHR Injection Flow Balance, Pump Performance, and Check Valve Test," revealed the following:

- Safety injection system (SIS) pump 2A failed to meet the minimum head curve requirements.
- Both centrifugal charging pumps (CCP) failed to meet the minimum head curve requirements.
- Inability to balance flow in either CCP boron injection tank (BIT) injection lines.
- 4. Cold leg SIS orifice flows out of adjustment.
- 5. CCP cold leg injection flows out of tolerance.

Conditions Prior to Occurrence:

Unit 2 in refueling outage with fuel unloaded from the core.

Apparent Cause of Occurrence:

The cause of degradation of head capacity of the pumps has been attributed to normal pump operation. The inability to balance CCP flow in BIT injection lines has been attributed to the lower head capacity of the pumps. The out-of-tolerance flow in the SIS pump injection lines was caused by valve maintenance concurrent with the test. The CCP cold leg injection lines flow out of tolerance has been attributed to the lower head capacity of the pumps and valve maintenance concurrent with the test.

Analysis of Occurrence:

This event was discovered during surveillance testing in a nonapplicable mode, but may have existed in a mode in which the equipment was required.

Corrective Action:

The SIS full flow head curve is presently undergoing a review by Westinghouse. The internals of both CCPs were replaced and pumps retested. One CCP passed and one CCP failed this retest. Discussions with Westinghouse are presently underway to resolve problems with the CCPs. The CCP injection lines will be properly balanced after resolution and correction of pump problems. The SIS injection line flow has been properly rebalanced.

Corrective Action (continued):

All testing and repair will be satisfactorily completed prior to entering mode 4. A followup LER will be submitted at a later date.

Failure Data:

None.

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA. TENNESSEE 37401TI AND A CHATTANOOGA.

September 21, 1983

83 SEP 28 A 9: 11

Mr. James P. O'Reilly, Director U.S. Nuclear Regulatory Commission Suite 2900 101 Marietta Street, NW Atlanta, Georgia 30303

Dear Mr. O'Reilly:

TENNESSEE VALLEY AUTHORITY - SEQUOYAH NUCLEAR PLANT UNIT 2 - DOCKET NO. 50-328 - FACILITY OPERATING LICENSE DPR-79 - REPORTABLE OCCURRENCE REPORT 50-328/83114

The enclosed report provides details concerning one safety injection pump and two centrifugal charging pumps failing to meet surveillance requirements. This report is submitted in accordance with Sequoyah unit 2 Technical Specification 6,9.1.13.b.

Very truly yours,

TENNESSEE VALLEY AUTHOR

H. J. Green // Director of Nuclear Power

Enclosure cc (Enclosure):

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

Records Center Institute of Muclear Power Operations Suite 1500 1100 Circle 75 Parkway Atlanta, Georgia 30339

NRC Inspector, Sequoyah

JE 22