

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) LaSalle County Station Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 3 7 4	PAGE (3) 1 OF 4
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TITLE (4)
Reactor Scram on Loss of Feedwater

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		DOCKET NUMBER(S)								
0	5	0	3	8	4	8	4	0	1	7	0	0	5	2	3	8	4	NA	0 5 0 0 0
									NA		0 5 0 0 0								

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §. (Check one or more of the following) (11)

OPERATING MODE (9) 1	20.402(b)	<input checked="" type="checkbox"/>	80.73(a)(2)(iv)	<input type="checkbox"/>	73.71(b)
	20.406(a)(1)(i)	<input type="checkbox"/>	80.73(a)(2)(v)	<input type="checkbox"/>	73.71(e)
	20.406(a)(1)(ii)	<input type="checkbox"/>	80.73(a)(2)(vi)	<input type="checkbox"/>	OTHER (Specify in Abstract below and in Text, NRC Form 206A)
	20.406(a)(1)(iii)	<input type="checkbox"/>	80.73(a)(2)(vii)(A)	<input type="checkbox"/>	
	20.406(a)(1)(iv)	<input type="checkbox"/>	80.73(a)(2)(vii)(B)	<input type="checkbox"/>	
	20.406(a)(1)(v)	<input type="checkbox"/>	80.73(a)(2)(viii)	<input type="checkbox"/>	

LICENSEE CONTACT FOR THIS LER (12)

NAME D. M. Pristave, x209	TELEPHONE NUMBER	
	AREA CODE 8 1 1 5	3 1 5 7 1 - 1 6 1 7 1 1

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS
A	SJ	Z191919	Z191919	N					

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

The Unit 2 reactor was manually scrambled on 5/3/84 at 2340 when it became apparent that the reactor vessel level could not be maintained due to the loss of the motor driven feedwater pump (MDRFP). The turbine driven feedwater pumps were valved out due to the shutdown in progress. The loss of the MDRFP was due to a non-licensed operator valving error. Valve 2CB037 was closed instead of valve 2FW037. These valves are only about five (5) feet apart. Error was due to not completely reading the valve number. A sign has been placed on the 2CB037 valve which was improperly closed. Procedures which deal with these valves will be reviewed to ensure they are proper and revised as necessary. The MDRFP has been repaired.

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PDR ADOCK 05000374
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TEXT (If more space is required, use additional NRC Form 388A's) (17)

I. EVENT DESCRIPTION

The Unit 2 Reactor was scrammed manually on 5-3-84 at 2340 when it became apparent that the Motor Driven Reactor Feed Pump (SJ) could not be re-started and reactor vessel level could not be maintained above 12.5 inches. At the time of the event, the unit was proceeding with a normal shutdown to obtain data for the Start-Up Test Program.

The NSO (Licensed Operator) on the unit decided that at that point in the shutdown, it was convenient to close all the Reactor Feed Pump Warming Line Valves. These valves provide a flow path to the Reactor Vessel even though the discharge valve on the Reactor Feed Pump is closed. With any Warming Line Valve open on any of the Reactor Feed Pumps, it provides enough make-up to the vessel that make-up would exceed blowdown during low power operation and vessel level would rise at a rapid rate, which is not desirable. Therefore, the NSO on the unit instructed an Equipment Attendant (EA) (Non-Licensed Operator) to close the warming line valves on all three feedwater pumps. The warming line valves on the 2A and 2B TDRFP were correctly valved out. Immediately after, the Equipment Attendant valved out the Balancing Line Valve 2CB037 on the Motor Driven Reactor Feed Pump instead of the Warming Line Valve 2FW037. The Motor Driven Reactor Feed Pump tripped and could not be restarted. Both valves, the Balancing Line Valve 2CB037 and the Warming Line Valve 2FW037, are in the same room and about five (5) feet apart.

II. CAUSE

The Motor Driven Reactor Feed Pump had tripped on low lube oil pressure. The low lube oil pressure occurred due to clogging of the lube oil strainer. The clogging of the lube oil strainer occurred due to damage to the Thrust Bearing on the Motor Driven Reactor Feed Pump which released babbitt into the Lube Oil System. Damage to the Thrust Bearing occurred because of a valving error which mistakenly closed the Drum Balancing Line Valve 2CB037 instead of the Warming Line Valve 2FW037. The Drum Balancing Line Valve 2CB037 must be kept open at all times except when the Motor Driven Reactor Feed Pump is to be taken out of service to ensure that no problems will occur on the Motor Driven Reactor Feed Pump.

The Equipment Attendant who closed the Balancing Line Valve 2CB037 instead of the Warming Line Valve 2FW037 indicated that he thought he was on the correct valve because the number "37" caught his eye on the valve Equipment Part Number. He did not read the entire noun name of the valve that was indicated on the associated valve tag. The Equipment Attendant also thought he was on the correct valve when he read the number "37" on the valve tag because he had just closed the Warming Line Valves on the A and B Turbine Driven Reactor Feed Pumps and there was similarity associated with the piping and valves between the Turbine Driven Reactor Feed Pumps and the Motor Driven Reactor Feed Pump. The Equipment Attendant was not given any indication that a Balancing Line Valve 2CB037 existed or the consequences if it were closed.

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TEXT (If more space is required, use additional NRC Form 388A's) (17)

III. PROBABLE CONSEQUENCES OF THE OCCURRENCE

The ability to maintain Reactor Vessel Level was immediately lost. The RCIC (BN) System was started to aid in the Level Control, and the Reactor was manually scrammed while level was above 12.5 inches, which is the low level scram setpoint. Reactor Vessel Level dropped to -12 inches before level control was achieved primarily by using the RCIC System. Level was then returned to a normal range and a normal plant shutdown was commenced which followed the scram. All systems functioned per design. Since this evolution would only occur during a plant shutdown, this event is not expected to have been worse under different plant conditions.

IV. CORRECTIVE ACTIONS

1. A Caution Card was placed immediately on the Balancing Line Valve 2CB037 with instructions indicating that it should not be closed unless the Motor Driven Reactor Feed Pump is to be taken out of service (for both Units 1 and 2).
2. Work Request L36421 was initiated so that repairs could be made to the Motor Driven Reactor Feed Pump. (Repairs have been completed and the Motor Driven Reactor Feed Pump is back in operation.)
3. Signs were placed on both Unit 1 and 2 Balancing Line Valves 1CB037 and 2CB037 indicating that the valves should not be closed unless the pump is out of service. This replaced the Caution Cards.
4. AIR 01-84-67076 was submitted to ensure personnel (Equipment Attendants and License Personnel and all new Equipment Attendants) were trained on the purpose of the Motor Driven Reactor Feed Pump Balancing Line.
5. The following procedures were reviewed to ensure that the Reactor Feed Pump Warming Lines were in the proper position for the plant condition:
 - a. LOP-FW-01M U-1 FW Mechanical Checklist
 - b. LOP-FW-02M U-2 FW Mechanical Checklist
 - c. LOP-FW-01 Feedwater System Filling and Venting
 - d. LOP-FW-02 Feedwater System Draining
 - e. LOP-FW-03 Start-Up of Motor Driven Reactor Feed Pump
-Change submitted
 - f. LOP-FW-06 Shutdown of Motor Driven Reactor Feedpump to Hot Standby - Change submitted

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TEXT (if more space is required, use additional NRC Form 368A's) (17)

IV. CORRECTIVE ACTIONS (continued)

- g. LOP-FW-04 Start-Up of a Unit 1 TDRFP - Change submitted
- h. LOP-FW-05 Shutdown of a TDRFP - Change submitted
- i. LOP-FW-07 Preparation For TDRFP S/U with Main Steam System Pressurized
- j. LOP-FW-08 Condensate Recirc to Condenser via Heater Drain System
- k. LOP-FW-09 TDRFP Exhaust Duct Isolation During Unit Operation
- l. LOP-FW-11 Start-Up of Unit TDRFP - Change submitted
- m. LGP-1-1 Normal Unit Start-Up - Change submitted
- n. LGP-1-2 Unit Start-Up to Hot Standby - Change submitted
- o. LGP-1-3 Unit Start-Up From Hot Standby to Power Operation - Change submitted
- p. LGP-2-1 Normal Unit Shutdown - Change submitted
- q. LGP-2-2 Shutdown to Hot Standby - Change Submitted
- r. LGP-3-2 Reactor Scram - Change submitted

The above procedure changes will be tracked by AIR 01-84-67077. In addition, the procedures were reviewed to ensure correct reference and use of the Balancing Line Valves.

V. PREVIOUS OCCURRENCES

None.

VI. NAME AND TELEPHONE NUMBER OF PREPARER

Dennis M. Pristave, (815)357-6761, extension 209



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LaSalle County Nuclear Station
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Telephone 815/357-6761

May 23, 1984

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

Dear Sir:

Reportable Occurrence Report #84-017-00, Docket #050-374 is being submitted to your office in accordance with 10 CFR 50.73.

G. J. Diederich
Superintendent
LaSalle County Station

GJD/MLD/kg

Enclosure

xc: NRC, Regional Director
INPO-Records Center
File/NRC

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