

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Commonwealth Edison, Zion Station, Unit 1	DOCKET NUMBER (2) 0 5 0 0 0 2 9 5	PAGE (3) 1 OF 0 2
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TITLE (4)

Failure of 1MOV-SI8812 A&B

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	1	2	4	8	5	8	5	-	0 0 4	0 1	0 5 2 2 8 5		

OPERATING MODE (9) 1		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §. (Check one or more of the following) (11)									
POWER LEVEL (10) 01 61 7	20.402(b)	20.406(c)	50.73(a)(2)(iv)	73.71(b)							
	20.406(a)(1)(i)	50.36(c)(1)	X 50.73(a)(2)(v)	73.71(c)							
	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)							
	20.406(a)(1)(iii)	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)(x)								

LICENSEE CONTACT FOR THIS LER (12)

NAME William H. Reeher	TELEPHONE NUMBER
	AREA CODE 3 1 2 7 4 6 - 2 0 8 4

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										
X	B	P	I	S	V	L	2	0	0	Y									

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
<input type="checkbox"/>	<input checked="" type="checkbox"/>				

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

While performing sump valve stroke test (PT-2B), 1MOV-SI8812 A&B failed to re-open after being stroked closed. This occurred at 0455 on 1/25/85, with Unit 1 at 67% power.

The failure caused the loss of suction flowpath from the refueling water storage tank (RWST) to the residual heat removal (RHR) pumps. The valves re-opened after several attempts, and the flow path was restored after approximately two minutes.

Maintenance has been performed on the valves and the root cause of the failures has been determined to be that the bypass circuit time was too short. This prevented the valves from opening until the control switch had been operated several times. The bypass circuit time has been correctly reset on both valves, and they have been successfully tested.

A procedure change was made to test these valves at cold shutdown, when their operation would not affect plant safety.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Zion Station, Unit 1	0 5 0 0 0 2 9 5	8 5	- 0 0 4	- 0 1	0 2	OF	0 2

TEXT (If more space is required, use additional NRC Form 366A's) (17)

While performing sump valve stroke test (PT-2B), valves 1MOV-SI8812 A and B failed to re-open on the first attempt after being stroked closed. This caused the loss of the suction flowpath from the refueling water storage tank (RWST) to the Residual Heat Removal pumps (RHR). This event occurred at 0455 on 1/25/85, with Unit 1 at 67% power. Only after several attempts did the valves reopen.

The valves were tested sequentially; therefore, only one valve was closed at any one time. The normal safeguards position of these valves is open.

During the time each valve was inoperable, the RHR system was unable to take suction from the RWST. In the event of a LOCA, low pressure safety injection through the RHR system would not have been possible. The safety significance of this is reduced, because the valves did stroke open after several attempts, and the low pressure safety injection function was restored after approximately two minutes. The charging and safety injection systems were not affected.

A similar failure of 1MOV-SI8812A is documented in DVR 22-1-76-193. On that occasion, the failure could not be duplicated once the valve was reopened. The valve stem was lubricated and no further action was taken.

A procedure change has been made, to test 1MOV-SI8812 A and B during PT-27 (Miscellaneous Valve Tests) instead of PT-2B. Since PT-27 is performed during cold shutdown, the valves would be tested at a time when a failure of this type would not affect plant safety.

Maintenance has been performed on the valves and the root cause of the failure has been determined to be that the bypass circuit time was too short. The bypass circuit overrides the torque switch long enough for the valve motor operator to overcome the torque required to begin opening the valve. The bypass circuit times have been correctly reset on both valves and they have been tested. No further corrective action is required.



Commonwealth Edison

Zion Generating Station
Shiloh Blvd. & Lake Michigan
Zion, Illinois 60099
Telephone 312/746-2084

May 22, 1985

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

References: 10CFR50

Dear Sir:

The enclosed Supplemental Licensee Event Report from Zion Generating Station is being transmitted to you to update you on the final determination of root cause for this event.

This report is number 85-004-01, Docket No. 50-295/DPR-39.

Very truly yours,

J.A. Ruck
for K.L. Graesser
Station Manager
Zion Station

Enclosure: Licensee Event Report No. 85-004-01

Attachment

cc: J.G. Keppler, NRC Region III Administrator
M. Holzmer, NRC Resident Inspector
INPO Record Center
CECO Distribution List

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