



Commonwealth Edison

Zion Generating Station
101 Shiloh Blvd.
Zion, Illinois 60099
Telephone 708 / 746-2084

May 26, 1994

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

Dear Sir:

The enclosed supplemental Licensee Event Report number 93-004-01. Docket No. 50-304/DPR-048 from Zion Generating Station is being transmitted to you to update the description of the event and the corrective actions taken.

Very truly yours,

E. A. Broccolo
Station Manager
Zion Generating Station

EAB/sks

Enclosure: Licensee Event Report

cc: NRC Region III Administrator
NRC Resident Inspector
INPO Record Center
CECo distribution List

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LICENSEE EVENT REPORT (LER)

Form Rev 3.0

Facility Name (1) Zion Unit 2	Docket Number (2) 0 5 0 0 0 3 0 4	Page (3) 1 of 0 3
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Title (4)
Violation of the Inservice Testing Program which is required per Technical Specifications

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)	
									Zion Unit 1	0 5 0 0 0 2 9 5	
1	2	2 8 9 3	9 3	--- 0 0 4	--- 0 1	0 5	2 6	9 4			

OPERATING MODE (9) 6

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

POWER LEVEL (10)	0 0 0	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(c)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)
		<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.36(c)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(c)
		<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> Other (Specify
		<input type="checkbox"/> 20.405(a)(1)(iii)	<input checked="" type="checkbox"/> 50.73(a)(2)(f)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	in Abstract
		<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	below and in
		<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(x)	Text)

LICENSEE CONTACT FOR THIS LER (12)

Name Lisa Cook, System Engineering	ext. 3366	TELEPHONE NUMBER AREA CODE 7 0 8 7 4 6 - 2 0 8 4
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFAC- TURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFAC- TURER	REPORTABLE TO NPRDS
A				N					

SUPPLEMENTAL REPORT EXPECTED (14)

Expected Submission Date (15)

YES (If yes, complete EXPECTED SUBMISSION DATE) NO

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

On December 28, 1993, during review of Technical Staff Surveillance (TSS) 15.6.20V-P, "In Service Testing Valve Surveillance, Power Operated Valve Testing", it was noticed that the stroke time from July 29, 1993, for valve 2MOV-CS0002 [BE], had increased by 26.3% compared to the previous stroke time. The ASME code requires that the test frequency be increased to monthly whenever the stroke time of the valve increases by 25% or more. The required increased testing was not performed in August or September.

The cause of the missed surveillances was personnel error. The IST coordinator failed to identify the 25% increase in stroke time, and thus did not place the valve on increased surveillance contrary to the requirements of TSS 15.6.20V-P, step 4.4.

The Safety Analysis maximum stroke time limit was not exceeded during the surveillance. The safety significance of this event was minimal.

Corrective actions include reviewing this event with the appropriate personnel to stress attention to detail, reviewing the 1993 IST program surveillances for additional deficiencies (one additional deficiency was found), revising the IST procedure, and increasing review of the program until the new program is instituted.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION											Form Rev 3.0											
FACILITY NAME (1)	DOCKET NUMBER (2)				LER NUMBER (6)						Page (3)											
					Year	/// /// ///	Sequential Number	/// /// ///	Revision Number													
Zion Unit 2	0	5	0	0	0	3	0	4	9	3	-	0	0	4	-	0	1	0	2	OF	0	3
TEXT Energy Industry Identification System (EIS) codes are identified in the text as [XX]																						

A. CONDITION PRIOR TO EVENT

MODE 0 - Defueled RX Power 0% RCS [AB] Temperature/ Pressure - °F - psig

B. DESCRIPTION OF EVENT

On July 29, 1993, valve 2MOV-CS0002 [BE] was stroked in accordance with Periodic Test (PT) 6A-ST, "Containment Spray Pump A System Tests and Checks". The valve stroked in 60.5 seconds, which was less than the 65 second maximum stroke time. Once the PT was completed, it was forwarded to the Operating Engineers for their review and then on to the IST Coordinator for review per Technical Staff Surveillance (TSS) 15.6.20V-P, "In Service Testing Valve Surveillance, Power Operated Valve Testing". During the IST Coordinator's review, data was transferred from the PT to a graph for each valve in the PT which was covered under the IST program. As part of the review, the IST coordinator also calculated the percent increase in stroke time for each valve.

On December 28, 1993, during review of TSS 15.6.20V-P, it was noticed that the 60.5 second stroke time for valve 2MOV-CS0002 was 26.3% greater than the previous stroke time of 47.9 seconds on May 3, 1993. The IST program, as required by Technical Specifications 4.0.5, is based on the 1980 ASME Section XI code with the Winter 1981 Addenda. The code requires that test frequency be increased to monthly whenever the stroke time of a valve increases by 25% or more for valves with full-stroke times greater than 10 seconds. Unit 2 shut down in September for a planned outage, with the required testing due during August and September having been missed. This was a violation of Technical Specifications, 4.6.1.A.2, which requires that this valve be tested per Technical Specifications, 4.0.5.

Upon identification of this event, the IST coordinator reviewed the valve stroke data for the year of 1993. The review found that the stroke time for valve 2MOV-RH8700B also fell into the alert range. On August 15, 1993 the valve increased by 30% over the last stroke time by stroking at 87.1 seconds as compared to 67.2 seconds. Within 12-24 hours the test was performed again and the stroke time returned to 67.2 seconds. The testing frequency was not increased from quarterly to monthly, so no testing was performed in September or October 1993. An evaluation was written in November 1993 and the discrepancy in the stroke time was determined to be anomalous.

C. APPARENT CAUSE OF EVENT

The cause of the missed surveillances was personnel error. The IST coordinator failed to identify the 25% increase in stroke time, and thus did not place the valve on increased surveillance contrary to the requirements of TSS 15.6.20V-P, step 4.4.

A contributing cause of the missed surveillance was procedural deficiency. TSS 15.6.20V-P required that the percent increase in stroke time be calculated but did not provide a worksheet or log sheet for documenting this value and the pass/fail of the trending acceptance criteria.

A contributing cause was management/QA deficiency. Technical deficiencies in the IST procedures were previously identified, but sufficient resources were not available to ensure that suitable priority was placed on performing the changes in a timely manner.

D. SAFETY ANALYSIS OF EVENT

The Safety Analysis maximum stroke time limit had not been exceeded during the surveillance. There was no increase in the significance of any accident on the health and safety of the public.

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TEXT Energy Industry Identification System (EIS) codes are identified in the text as [XX]

E. CORRECTIVE ACTIONS

1. This event has been reviewed with the Results Engineering Group in order to stress the importance of attention to detail and self-checking.
2. The IST procedure is in the process of being completely revised to incorporate the noted deficiencies and meet the requirements of the Third 10 Year Interval. The Third 10 Year Interval program will be based on the 1989 revision of the ASME Section XI code. The new code does not have the increased frequency requirement based on the 25% increase of stroke time. In place of the increased frequency requirement will be an acceptance band on the stroke time of valves. This acceptance band will allow for identification of problem valves, at the time of valve stroke. ZMAP 01208 is tracking implementation of the third 10 Year Interval Program.
3. The System Engineering/Results Engineering Group Leader will review TSS 15.6.20V-P and TSS 15.6.20P, "IST Pump Surveillance", on a bi-weekly basis until the new procedure is implemented. (304-180-93-00701)
4. The 1993 IST program surveillances was reviewed and one additional deficiency was found. Valve 2MOV-RH8700B missed two months of increased frequency testing. No further discrepancies with the 1993 IST program were found.
5. Valve 2MOV-CS0002 was evaluated on 02/25/94 and was retested satisfactorily per the applicable section of PT 6A-ST prior to startup of Unit 2.
6. System Engineering/Results Engineering Group has hired a contractor to coordinate implementation of the third 10 Year Interval Program.

F. PREVIOUS EVENTS

A Nuclear Tracking System database search was performed on the subject containing "CS0002", "In Service Test", "Stroke Time", "Surveillance" or "Missed Surveillance" and no similar events were located.

G. COMPONENT FAILURE DATA

None