



Commonwealth Edison

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

April 8, 1994

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

Dear Sir:

The enclosed Licensee Event Report number 94-002-00, Docket No. 50-295/DPR-39 from Zion Generating Station is being transmitted to you in accordance with the requirements of 10CFR50.73(a)(2)(V), which requires a 30 day written report when any event or condition occurs that alone could have prevented the fulfillment of the safety function of structures or systems that are needed to a) shutdown the reactor and maintain it in a safe shutdown condition; b) remove residual heat; c) control the release of radioactive material; or d) mitigate the consequences of an accident.

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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PDR ADOCK 05000295
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LICENSEE EVENT REPORT (LER)

Form Rev 3.0

Facility Name (1) Zion Unit 1	Docket Number (2) 0 5 0 0 0 2 9 5	Page (3) 1 of 0 3
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Title (4)
Auxiliary Building Ventilation Panel OLP17 Found to be Insufficiently Seismically Mounted

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 3 1 0	9 4	9 4	0 0 2	---	0 0	0 4	0 8	9 4	Zion Unit 2	0 5 0 0 0 3 0 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 checked="" 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)	Other (Specify
	<input type="checkbox"/> 20.405(a)(1)(iii)	<input type="checkbox"/> 50.73(a)(2)(i)	<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)(ix)	Text)	

LICENSEE CONTACT FOR THIS LER (12)

Name	TELEPHONE NUMBER
Bob Kushner, Site Support Engineering ext. 2012	AREA CODE: 7 0 8 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 NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS
B				N					

SUPPLEMENTAL REPORT EXPECTED (14)

<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO	Expected	Month	Day	Year
		Submission Date (15)			

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

On 03/10/94, a seismic evaluation was performed on auxiliary building ventilation panel OLP17, that indicated that OLP17 was not sufficiently seismically mounted. This calculation was performed as a result of information gathered during a walkdown of that panel. This walkdown was conducted while investigating the seismic qualification of an instrument mounted in OLP17.

The cause of this event is the lack of implementation of original design criteria. This event had minimal safety significance.

Corrective actions include implementing a design change on 03/13/94 to seismically mount OLP17, initiating design changes on three other panels to bring them into compliance with the original design criteria, ensuring all other HVAC panels are adequately supported, and implementing the Seismic Qualification Utility Group (SQUG) Program to address the mounting of designated equipment throughout the plant.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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

A. CONDITION PRIOR TO EVENT

MODE 6 - Cold Shutdown RX Power 6 % RCS [AS] Temperature/ Pressure AMB / AMB psig

B. DESCRIPTION OF EVENT

As an ongoing task, a pneumatic controller mounted in various panels for the auxiliary building ventilation system was being evaluated for seismic qualification. The seismic evaluation involved looking at how the controller was mounted in the panel and how the panel was mounted to the floor to verify proper seismic mounting. HVAC panels OLP17, OLP18, OLP19, OLP20, OLP21, OLP22, and 1(2)LP22 were walked down as a part of this effort since these panels house safety related ventilation instrumentation.

OLP17 was found to be anchored to the floor, but because of the size of the panel (it is actually two walk-in panels which are attached) the adequacy of the existing anchorage was questionable. OLP22, 1LP22 and 2LP22 were found to have no base anchorage.

On 03/10/94, calculations were performed to establish the forces which would be applied to the base of the HVAC panels in question during a seismic event. These forces were then used to calculate the effect a seismic event would have on these panels based on their configuration (height, width, etc.). The results of these calculations indicated that OLP17 could tip over during a seismic event thereby rendering the safety related instrumentation in it inoperable. These calculations also indicated that OLP22 and 1(2)LP22 would not tip over during a seismic event.

An exempt change to provide guidance and specify hardware to seismically anchor OLP17 was immediately prepared and approved on 3/11/94. This work was completed on 03/13/94.

C. APPARENT CAUSE OF EVENT

The cause of this event is the lack of implementation of original design criteria. Specification X-2286 for heating, ventilation, and air conditioning controls for Zion Station specified that HVAC panels, including the ones being addressed in this report, meet certain seismic design criteria. It was the responsibility of the installation contractor to mount the panels to meet this criteria. This was not done.

D. SAFETY ANALYSIS OF EVENT

HVAC Panel OLP17 houses various controls for the operation of Aux Building ventilation equipment, if this instrumentation was rendered inoperable, the control of Auxiliary Building supply and exhaust fans, charcoal booster fans, and their associated dampers would be adversely affected. In addition, controls for the proper positioning of dampers associated with various release paths (to route exhaust through HEPA or charcoal filters) would also be impacted. In summary, a low probability seismic event which renders the instrumentation in OLP17 inoperable could affect the proper cooling of equipment in the Auxiliary Building and the ability of the ventilation system to route radioactive exhaust flow through the proper filter trains.

E. CORRECTIVE ACTIONS

1. The immediate corrective action was to initiate a design change (exempt change No. E22-0-94-217, ECN No. 22-00647M) to seismically mount HVAC panel OLP17. This design change was approved on March 11, 1994, and implemented on March 13, 1994.
2. Even though the calculations performed determined that panels OLP22 and 1(2)LP22 would not be upset by a seismic event, exempt changes are being initiated to anchor these panels to the floor to bring them into compliance with the original design criteria. The exempt changes are being prepared by Zion Site Engineering and will be implemented through nuclear work request numbers Z37285, Z37286, and Z37287.
3. All other HVAC panels housing safety related instrumentation have been recently walked down and were found to be adequately supported.
4. A long term corrective action is to implement the A-46 rule - Seismic Qualification Utility Group (SQUG) Program. This program is scheduled to be completed by June 1, 1996 and is already being tracked by commitment number 295-104-87-002-0151.1.

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F. PREVIOUS EVENTS

In 1987, DC Bus Panels 1(2)CB63 and 1(2)CB64 were found to be not attached to the floor during trial walkdowns performed to validate the SOUG Program. This condition was corrected at that time.

G. COMPONENT FAILURE DATA

None