



July 10, 1989

To: T. P. Joyce

Subject: On-Site Review of Licensee Event Report No. 89-008-00,
Docket No. 50-295 (Unit 1)

We have reviewed the attached Licensee Event Report on Containment Spray Room Cooler SW Supply discrepancy and recommend its submittal to the NRC. The open items are being tracked by commitment #295-200-89-06400.

Prepared by:

Kelvin Henderson

Disciplines required: A,B,G

Station Review:

Tech. Staff Supervisor

Operating Engineer

ASCC

Asst. Superintendent

I concur and approve:

T. P. Joyce
Station Manager
Zion Station

Attachment

cc: Operating Department
Maintenance Departments
Training Supervisor
Technical Staff Supervisor
Reg. Assur. Supervisor (2)
NPRDS Coordinator
QC Supervisor
Nuclear Licensing Administrator
W Representative
Nuclear Safety Manager
Quality Assurance Manager
Regulatory Assurance Superintendent
Nuclear Station Managers(5)
INPO Record Center
VP PWR Operations
Master File

8907140174 890709
PDR ADOCK 05000295
S PDC

0773D

LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1) Zion Unit 1 Docket Number (2) 0 5 10 10 10 2 9 5 Page (3) 1 of 0 2
 Title (4) C. S. Room Cooler Service Water Supply Discrepancy

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 6	0 9	8 9	8 9	0 0 8	0 0	0 7	0 9	8 9	Zion Unit 2	0 5 10 10 10 3 0 4

OPERATING MODE (9) 1

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

POWER LEVEL (10) 9 9	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
	20.405(a)(1)(i)	50.36(c)(1)	X 50.73(a)(2)(v)	73.71(c)
	20.405(a)(1)(ii)	50.36(c)(2)	X 50.73(a)(2)(vii)	Other (Specify in Abstract below and in Text)
	20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
	20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
	20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

Name Kelvin Henderson, Tech Staff Engineer ext. 315

TELEPHONE NUMBER AREA CODE 3 1 2 7 4 6 - 12 10 8 4

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

SUPPLEMENTAL REPORT EXPECTED (14)

X Yes (If yes, complete EXPECTED SUBMISSION DATE) NO

Expected Submission Date (15) 1 1 3 0 8 9

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

During a review of Containment Spray (CS)[BE] Pump Cubicle Room Cooler service water (SW)[BI] supply piping configuration, it was identified that a potential problem exists concerning the service water system ability to supply both room coolers with the current piping configuration and the cross-tie valves OSW0341 and OSW0342 in the normally closed position. The cause of the event is a probable design deficiency and possible procedural deficiencies. The safety significance and requirements for the subject room coolers is being evaluated. A supplemental report will discuss the results of said evaluation and corrective actions required.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

Form Rev 2.0

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)						Page (3)		
		Year	///	Sequential Number	///	Revision Number				
Zion Unit 1	0 5 0 0 0 2 9 5	8 9	-	0 0 8	-	0 0	0 2	OF	0 2	

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

A. CONDITION PRIOR TO EVENT

MODE 1 - Power Operation RX Power 99% RCS [AB] Temperature/ Pressure 559 °F/2235 psig

B. DESCRIPTION OF EVENT

During a review of room cooler Service Water (SW) [BI] supply configuration, it was identified that a potential problem exists concerning the SW system's ability to supply both containment spray (CS) [BE] room coolers, given the plant's current SW piping configuration and the normal position of cross-tie valves 0SW0341 and 0SW0342 (normally closed). With these valves closed, the potential exists that during a safety injection actuation on one unit, SW will only be supplied to one containment spray room cooler.

This configuration is potentially in conflict with the FSAR which states that "essential coolers are provided with two cooling water supplies by loop headers coming off the main header".

C. APPARENT CAUSE OF EVENT

At this time, the most likely cause of event is a design problem. The design is currently being reviewed by the plant's architect - engineering firm. A procedural problem is also a possible cause. Specifically, the proper configuration for cross tie valves 0SW0341 and 0SW0342 is under review. Having the cross-tie valves open would allow the cooler to have a redundant service water supply source.

D. SAFETY ANALYSIS OF EVENT

After discovering the potential problem, the Technical Staff requested an analysis be performed to determine the actual heat load on the coolers in an accident situation and assess the need for room coolers. The safety analysis of this event will be discussed in a supplemental report.

E. CORRECTIVE ACTIONS

Immediate corrective action was to open the cross-tie valves and place them under an administrative out of service. An architect - engineering firm is currently reviewing the cubicle room cooler cooling requirements for the ESF pumps.

Long term corrective action is dependent on the results of this analysis.

A supplemental report will be issued when the results of the analysis are evaluated. (commitment 295-200-89-064)

F. PREVIOUS EVENTS

At this time, previous occurrences have not been specifically identified, because the root cause has not yet been determined. A more detailed review of LER 295-86-01 is being done and a search for any other previous similar events will be documented in the supplemental report.

G. COMPONENT FAILURE DATA

N/A