



Commonwealth Edison

Zion Generating Station
Shiloh Blvd. & Lake Michigan
Zion, Illinois 60099
Telephone 708 / 746-2084

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

November 19, 1990

Dear Sir:

The enclosed Licensee Event Report number 90-022-00, 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)(1)(B), which requires a 30 day written report when any operation or condition occurs that is prohibited by the plant's Technical Specifications.

Very truly yours,

W.R. Kessel
for T. P. Joyce
Station Manager
Zion Generating Station

TPJ/SM/bg

Enclosure: Licensee Event Report

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

9011260178 901119
PDR ADOCK 05000295
S PDC

*TE22
11*

LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1) Zion Unit 1	Docket Number (2) 0 5 0 0 0 2 9 5	Page (3) 1 of 0 3
Title (4)		

Reactor Trip Breaker Maximum Outage Time per Technical Specifications Exceeded

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 Name	Docket Number(s)										
0	9	1	9	0	2	2	0	0	1	1	1	9	9	0						

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 1 %	<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 in Abstract below and in Text)
	<input type="checkbox"/> 20.405(a)(1)(iii)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	
	<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)	
	<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

Name Suzanne L. Mika	ext. 2323	TELEPHONE NUMBER 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	MANUFAC-TURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFAC-TURER	REPORTABLE TO NPRDS
				N					

SUPPLEMENTAL REPORT EXPECTED (14)

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

On October 19, 1990 during the INPO Institute of Nuclear Power Operations (INPO) Evaluation, an INPO team member questioned the lack of an allowable time limit for racking in the Reactor Trip Bypass Breakers. Further investigation showed that there was a restriction in the Technical Specifications (Tech Specs) limiting the outage time for the Reactor Trip Breakers to eight hours. This requirement was added to the Tech Specs in 1989, but the necessary Operating procedure changes were not correctly identified when the Tech Spec change was implemented. Review of completed Operating Surveillances showed that the Tech Spec limit for the maximum Reactor Trip Breaker outage time was exceeded on September 15, 1990 for the Unit 1 Train A Reactor Trip Breakers. Due to the monthly testing of the Reactor Trip System, fail-safe nature of the system design, and the extensive ATWS response training operators receive, a malfunction of the available train of Reactor Protection is considered remote. The operating procedures affected by the Tech Spec limit were changed to include the maximum outage time for the Reactor Trip Breakers. In addition, a more thorough method of distributing Tech Spec change information will be investigated.

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	9 0	- 0 2 2	- 0 0	0 2	OF	0 3

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

A. CONDITION PRIOR TO EVENT

MODE 1 - Power RX Power 91% RCS [AB] Temperature/ Pressure 559 °F/2235 psig

B. DESCRIPTION OF EVENT

On October 19, 1990 during the 1990 Institute of Nuclear Power Operations (INPO) Evaluation, an INPO team member questioned the lack of an allowable time limit for racking in the Reactor Trip Bypass Breakers during his review of Periodic Test (PT)-5 Reactor Protection Logic-Reactor at Normal Operations. Further research by the Regulatory Assurance Department found that Technical Specification (Tech Spec) 3.1 Reactor Protection Instrumentation and Logic Table 3.1-1 has a note for the Operator Action Column restricting the outage time for the Automatic Reactor Trip Logic and Reactor Trip Breakers to a maximum of eight hours. Review of the Sequence of Events recorder printout shows that on September 15, 1990 the Unit 1 Train A Reactor Trip Breaker was opened for approximately fifteen hours which is seven hours over the Tech Spec requirement. The breaker had already been re-closed when this event was discovered, so no immediate action was necessary. Commitment Number 295-251-90-144 was initiated to track the procedure change to PT-5 that will include the eight hour maximum outage time for the breakers.

C. APPARENT CAUSE OF EVENT

On-Site Review OSR/020/89(2) was submitted to the NRC requesting Tech Spec Changes 116 and 105 for Units 1 and 2 respectively. These Tech Spec Changes incorporated the requirements of Generic Letter 85-09, and added "For Automatic Reactor Trip Logic and Reactor Trip Breakers, the allowable outage time is a maximum of eight hours". The OSR letter required the Operating, Technical Staff, and Electrical Maintenance Departments to review the Tech Spec Change, determine their department procedures that would be affected by the Tech Spec Change, and initiate the appropriate changes. During the review performed by the Operating Department dated 06-17-89, there were no procedures that were identified as needing to be changed as a result of the Tech Spec Change. PT-5, which is an Operating Procedure, has the potential to exceed the maximum outage time because it trips the Reactor Trip Breakers and uses the Bypass Breakers to test the Reactor Protection Logic, but it was not identified during the review. This event was caused by PT-5 not being revised after the Tech Spec change was implemented to include a Precaution statement that would identify the eight hour maximum outage time for the Reactor Trip Breakers. Inadequate training for the Operating Department on the Tech Spec change was a contributing cause of this event.

D. SAFETY ANALYSIS OF EVENT

The safety concern in this situation is for an Anticipated Transient Without Scram (ATWS) during the time that the Train A Reactor Trip Breaker is open. While the Train A breaker is being tested, the Train B breaker must function in order to automatically trip the Reactor in the event of a trip signal. If the train not in test malfunctions, the reactor would not trip. Due to the monthly testing of the Reactor Trip system and fail-safe nature of the design, this possibility is considered remote. Additionally, Operators have procedural guidance, and receive extensive training on recognizing and responding to ATWS conditions. Functional Restoration Guide FR-5.1 "Response to Nuclear Power Generation/ATWS" is an established emergency response procedure that provides the operators with the necessary instructions to mitigate ATWS events.

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	9 0	- 0 2 2	-	0 0	0 3	OF	0 3
TEXT	Energy Industry Identification System (EIS) codes are identified in the text as [XX]							

E. CORRECTIVE ACTIONS

Procedure changes TO-90-565, TO-90-567, and TO-90-564 were made to PT-5, PT-5A, and PT-5B respectively on October 19, 1990 to include the Tech Spec requirement for the Reactor Trip Breakers maximum outage time.

The Regulatory Assurance department will investigate improvements to the method of distributing Tech Spec change information to ensure that all the requirements of future Tech Spec changes are thoroughly understood.

F. PREVIOUS EVENTS

There have been no documented previous occurrences similar to this event.

G. COMPONENT FAILURE DATA

None