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Zion Generating Station
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May 30, 1997

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

The enclosed Licensee Event Report Number 97-014, Docket No. 50-00295 /DPR-39 from Zion Generating Station is being transmitted to you in accordance with the 10CFR50.73(A)(2)(i), which requires a 30-day written report when any operation or condition occurs that is prohibited by the plant's Technical Specifications.

Corrective Actions are listed in Attachment A:

Very truly yours,

A handwritten signature in dark ink, appearing to read "R. Starkey".

R. Starkey
Station Manager
Zion Generating Station

RS/jw

Enclosure: Licensee Event Report

cc: NRC Region III Administrator
NRC Resident Inspector
IDNS Resident Inspector
INPO Record Center
Illinois Department of Nuclear Safety

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PDR ADOCK 05000295
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LICENSEE EVENT REPORT (LER)

FACILITY NAME ZION NUCLEAR POWER STATION UNIT												DOCKET NUMBER 0 5 0 0 0 2 9 5 1 OF 0 4				PAGE 1 OF 0 4												
TITLE Missed Technical Specification Surveillances (TS) on Radiation Monitors because of interpretation of TS, with minimal plant impact.																												
EVENT DATE			LER NUMBER				REPORT DATE			OTHER FACILITIES INVOLVED																		
MONTH	DAY	YEAR	YEAR	SEQ.	REV.	MONTH	DAY	YEAR	FACILITY NAMES ZION UNIT 2				DOCKET NUMBER(S) 0 5 0 0 0 3 0 4															
0	5	0	2	9	7	9	7	-	0	1	4	-	0	0	0	5	3	0	9	7								
OPERATING MODE		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (CHECK ONE OR MORE OF THE FOLLOWING)																										
		20.402(b)				20.405(e)				50.73(a)(2)(iv)				73.71(b)														
POWER LEVEL		20.405(a)(1)(i)				50.36(c)(1)				50.73(a)(2)(v)				73.71(c)														
		20.405(a)(1)(ii)				50.36(c)(2)				50.73(a)(2)(vii)				OTHER (Specify in Abstract below and in Text, NRC Form 366A)														
		20.405(a)(1)(iii)				x 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																												
NAME N. Brennan Ext.: 2380												TELEPHONE NUMBER 8 4 7 7 4 6 - 2 0 8 4																
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT																												
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS																			
SUPPLEMENTAL REPORT EXPECTED										EXPECTED SUBMISSION DATE		MONTH	DAY	YEAR														
<input type="checkbox"/> YES, (If yes, complete EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO																												

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

During a "Readiness for Restart" review of procedure ZRP 5820-12, "Out of Service Surveillance for Radiation Monitors," it was determined that Technical Specification (TS) 3.14 surveillance requirements for an inoperable radiation monitor 1(2)RT-PR15 had not been met. Seven radiation monitors provide noble gas inputs to 1(2)RT-PR15 that would be indicative of a reactor coolant system (RCS) leak. Inoperability of 1(2)RT-PR15 requires that "...a grab sample analysis at least once per shift" be performed. The surveillance, as implemented by procedure, non-conservatively required a grab sample selectively, such that grab samples would be taken only for certain input failures, instead of any input failure.

The root cause of this event was a technical interpretation that kept 1(2)RT-PR15 operable when its non-TS feeds were inoperable, rather than compliance to TS 3.14 as written. Corrective Actions are to revise station procedures to ensure TS compliance and to provide appropriate training on the procedure revisions.

1(2)RT-PR15 has no automatic actuation, and is not associated with the control/quantification of plant effluents. The areas monitored by 1(2)RT-PR15 are monitored by other noble gas radiation monitors within the plant, consequently the safety significance was minimal.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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ZION NUCLEAR POWER STATION		YEAR	SEQ.	REV.					
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TEXT Energy Industry Identification System (EIIS) codes are identified in the text as [XX]

A. PLANT CONDITIONS PRIOR TO EVENT

Unit 1 MODE- 6Rx Power - 0 RCS [AB]-Ambient Temperature/Atmospheric Pressure
 Unit 2 MODE- 5Rx Power - 0 RCS [AB]-Ambient Temperature/Atmospheric Pressure

B. DESCRIPTION OF EVENT

This event is reportable per 10CFR50.73(a)(2)(i)(B), any operation or condition prohibited by the plant's Technical Specification (TS) in that Radiation Monitor 1(2)RT-PR15 was not declared inoperable as required by TS when any one of its inputs was rendered inoperable.

During a "Readiness for Restart" review of ZRP 5820-12, "Out of Service Surveillance for Radiation Monitors [IL]," on May 2, 1997, it was discovered that the surveillance requirements of TS 3.14 for the inoperability of 1(2)RT-PR15 were not being performed as required when any of its flowpath inputs was inoperable.

1(2)RT-PR15 are radiation monitors that sample and monitor the ventilation system return air from the (A/B) Residual Heat Removal (RHR) [BP] Pump rooms, the (A/B) RHR Heat Exchanger rooms, the (A/B) Centrifugal Charging [CB] Pump Cubicles and the Seismic Class I Pipe Tunnel for gaseous activity which would be indicative of a reactor coolant system (RCS) leak.

Inoperability of 1(2)RT-PR15, per Zion Station TS 3.14 requires that "...a grab sample analysis at least once per shift" be performed in applicable modes (modes 1,2,3,4,7). Compensatory actions for 1(2)RT-PR15 are not required with the plant in its current configuration (Unit-1 Mode 6 and Unit-2 in Mode 5).

Six of the seven cubicle radiation monitors (1(2)RT-PR01 through 1(2)RT-PR06) that provide input into 1(2)RT-PR15, have no surveillance requirements if they are inoperable. However, inoperability of 1(2)RT-PR07 requires actions in accordance with Technical Specifications (Table 3.14-1, Action 20): "With the number of channels OPERABLE less than the minimum number required, verify that the pipe tunnel and fuel building exhaust ventilation systems are diverted through the charcoal filters."

The 1(2)RT-PR15 radiation monitors do not have blowers to provide sample flow. Sample flow is provided via blowers in each cubicle's respective process radiation monitor (specifically, 1(2)RT-PR01 through 1(2)RT-PR07). When a blower associated with an individual cubicle radiation monitor becomes inoperable, no flow is provided to 1(2)RT-PR15 from the respective cubicle.

1(2)RT-PR15 has an indexer in the detector cabinet that cycles in order to sample flow from the discharge of each of the input monitors. 1(2)RT-PR15 is the common noble gas monitor for the separate inputs. When one of the input monitors to 1(2)RT-PR15 became inoperable, operations bypassed the respective input at the indexer and kept 1(2)RT-PR15 operable for the other channels.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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	0 5 0 0 0 2 9 5	9 7 -	0 1 4 -	0 0	0 3	OF 0 4

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

B. DESCRIPTION OF EVENT (Continued)

Historically, Zion Station has not complied with TS 3.14-4 sampling requirements when the non-TS inputs into 1(2)RT-PR15 were inoperable. This was based on a determination that a non-TS feed to 1(2)RT-PR15 did not render the monitor inoperable. Per Zion Station procedures, inoperable 1(2)RT-PR15 compensatory actions were such that grab sample analyses were required only for those cubicles that required area-specific monitoring per Technical Specifications, i.e., the Seismic Class I Pipe Tunnel.

C. CAUSE OF EVENT

The Root Cause of this event was interpreting Technical Specification requirements based on a technical justification rather than direct compliance when developing the implementing procedures.

D. SAFETY ANALYSIS

The purpose of the 1(2)RT-PR15 radiation monitors is to provide early indication of an RCS leak within selected Auxiliary Building cubicles. The monitor provides no automatic plant actuations and is not associated with the control/quantification of plant effluents. The RCS leak detection functions provided by 1(2)RT-PR15 are also provided by many other radiation monitors within the plant. Specifically, Auxiliary (Aux.) Building ventilation monitoring is also provided via:

1(2)RT-PR25 Aux. Building Ventilation (Gas)
 1(2)RT-PR49 Vent Stack SPINGs (Particulate, Iodine and Gas)
 ORE-0014 Miscellaneous Aux. Building Ventilation (Gas)

The response of 1(2)RT-PR15 is used by the station for informational purposes only. Primary system leakage is mainly identified via reactor coolant mass balancing. A significant leak is identifiable through an immediate discrepancy between Chemical Volume Control System (CVCS) Charging and Letdown. Since 1(2)RT-PR15 is used for informational purposes only, and other radiation monitors are available to provide similar functions, safety significance was minimal.

E. CORRECTIVE ACTIONS

1. Compensatory actions in procedures for other TS and Off-Site Dose Calculation Manual (ODCM) radiation monitors were reviewed to ensure that the required surveillances are being performed.
2. Revise Zion Station Operability Determination Manual, Process Radiation Monitor section (ZODM-PR) such that 1(2)RT-PR15 is declared inoperable when any of the seven radiation monitor feeds (input flow path) are inoperable. Must be complete prior to mode 4 on either unit.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME	DOCKET NUMBER	LER NUMBER			PAGE	
STATION ZION NUCLEAR POWER		YEAR	SEQ.	REV.		
	0 5 0 0 0 2 9 5	9 7 -	0 1 4 -	0 0	0 4	OF 0 4

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

E. CORRECTIVE ACTIONS (Continued)

3. Revise ZRP 5820-12 "Surveillance Requirements for Inoperable Radiation Monitors" to address the seven separate 1(2)RT-PR15 flow paths and subsequent inoperability surveillance requirements. Must be complete prior to mode 4 on either unit.
4. The Training Department will determine and conduct the appropriate training regarding this event for RP and Operations personnel.
5. Management's expectations for maintaining procedural and Technical specification compliance were communicated to personnel during a series of meetings conducted in the fall of 1996.

F. PREVIOUS EVENTS SEARCH AND ANALYSIS

There have been other Licensee Event Reports such as the missed surveillance for the hydrogen recombiners and containment sump recirculation level calibration which was placed on a wrong inspection frequency because of interpretation of Technical Specification requirements. The more detailed TS requirement reviews that are in place today are the result of past similar events.

G. COMPONENT FAILURE DATA

N/A

Attachment A

List of Commitments Identified in this Violation Response

The following table identifies those actions committed to by ComEd in this document. Any other actions discussed in this submittal represent intended or planned actions by ComEd. They are described to the NRC for the NRC's information and are not regulatory commitments. Please notify Mr. Robert Godley, Zion Station Regulatory Assurance Manager, of any questions regarding this document or any associated regulatory commitments.

Commitment (Corrective Actions)	Commitment Date
1. Revise Zion Station Operability Determination Manual, Process Radiation Monitor section (ZODM-PR) such that 1(2)RT-PR15 is declared inoperable when any of the seven radiation monitor feeds (input flow path) are inoperable. Must be complete prior to mode 4 on either unit. (295-180-97-2173-01)	Prior to Mode 4
2. Revise ZRP 5820-12 "Surveillance Requirements for Inoperable Radiation Monitors" to address the seven separate 1(2)RT-PR15 flow paths and subsequent inoperability surveillance requirements. Must be complete prior to mode 4 on either unit. (295-180-97-2173-02)	Prior to Mode 4
3. The Training Department will determine and conduct the appropriate training regarding this event for RP and Operations personnel. (295-180-97-2173-03)	Prior to Mode 4