Southern California Edison Company

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VICE PRESIDENT
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January 3, 1996

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Subject: Docket Nos. 50-361 and 50-362
30 Day Report
Licensee Event Report No. 95-017
San Onofre Nuclear Generating Station, Units 2 and 3

This submittal provides a written Licensee Event Report (LER) for a Toxic Gas Isolation System setpoint being out of specification. Since this occurrence is applicable to Units 2 and 3, a single report for Unit 2 is being submitted in accordance with NUREG-1022. Neither the health nor the safety of plant personnel or the public was affected by this occurrence.

Sincerely,

Enclosure: LER No. 95-017

cc: L. J. Callan, Regional Administrator, NRC Region IV
J. E. Dyer, Director, Division of Reactor Projects, NRC Region IV
K. E. Perkins, Jr., Director, Walnut Creek Field Office, NRC Region IV
J. A. Sloan, NRC Senior Resident Inspector, San Onofre Units 2 & 3
M. B. Fields, NRC Project Manager, San Onofre Units 2 and 3
Institute of Nuclear Power Operations (INPO)

LICENSEE EVENT REPORT (LER)

Facility Name (1)	Docket Number (2)	Page (3)
SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 2	0 5 0 0 0 3 6 1	1 of 0 1

Title (4)

TOXIC GAS ISOLATION SYSTEM MONITOR SETPOINT OMMISSION

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)
										SONGS UNIT 3	0 5 0 0 0 3 6 2
1 2	0 7	9 5	9 5	---	0 1 7	--- 0 0	0 1	0 3	9 6		

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)	1 0 0	___ 20.402(b)	___ 20.40(c)	___ 50.73(a)(2)(iv)	___ 73.71(b)		
//////////////////////		___ 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)		
//////////////////////		___ 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 (12)

Name	TELEPHONE NUMBER
R. W. Krieger, Vice President, Nuclear Generation	AREA CODE 7 1 4 3 6 8 - 6 2 5 5

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFAC.- TRUER	REPORTABLE TO NERDS	///////	CAUSE	SYSTEM	COMPONENT	MANUFAC.- TRUER	REPORTABLE TO NERDS	///////
					///////						///////
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SUPPLEMENTAL REPORT EXPECTED (14)		Expected Submission Date (15)	Month	Day	Year
___ Yes (If yes, complete EXPECTED SUBMISSION DATE)	___ X NO				

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

Technical Specification 3/4.3.2, Engineered Safety Features Actuation System (ESFAS), requires ESFAS instrumentation to have actuation setpoints as specified in Table 3.3-4. Table 3.3-4 lists the Toxic Gas Isolation System (TGIS)[VI] butane and propane trip setpoint value as less than or equal to 193 ppm and the maximum allowable value as less than or equal to 200 ppm. The single analyzer [DET] that monitors butane and propane is not able to distinguish between the gasses. Rather than counting butane or propane molecules, the analyzer counts the number of carbon atoms in the analyzed gas. Consequently, because butane has 4 carbon atoms per molecule, and propane has 3, when the analyzer is calibrated to trip at 193 ppm butane, it will not trip until 257 ppm for propane.

On December 7, Edison recognized that because the TGIS setpoint has always been calibrated with a butane source since plant startup, the propane setpoint has not satisfied the TS setpoint. Therefore, Edison is reporting this condition in accordance with 10CFR50.72(a)(2)(i). At the time of this discovery, both Units 2 and 3 were at about 100 percent power.

In 1983, when the initial TGIS procedures and programs were developed, it appears that the responsible personnel erred in establishing an appropriate butane setpoint that would envelope the propane TS limit based upon number of carbon atoms per molecule. Edison has recalibrated the TGIS butane/propane monitor to ensure compliance with the TS. Although the original setpoint for butane is overwhelmingly conservative for protecting control room personnel from the toxic affects of propane (the toxic limit for butane is 750 ppm as opposed to 143,500 ppm for propane), Edison erred in focusing on the setpoint for butane, not recognizing that the propane setpoint would not be in literal compliance with the TS. Additionally, based on a review of internal memoranda, Edison may have missed an opportunity in November 1993 to identify the need to revise/clarify the TS butane/propane setpoints.

Because TGIS was always capable of isolating the control room before toxic levels of either butane or propane could accumulate, the safety significance of this condition is small. There have been no similar reportable events in the last three years.