Southern California Edison Company
SAN ONOFRE NUCLEAR GENERATING STATION
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March 19, 1992

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

Subject: Docket No. 50-361
30-Day Report
Licensee Event Report No. 92-008
San Onofre Nuclear Generating Station, Unit 2

Pursuant to 10 CFR 50.73(d), this submittal provides the required 30-day written Licensee Event Report (LER) for an occurrence involving minor reactor coolant leakage through a pressurizer instrument nozzle due to stress corrosion cracking. This was initially identified at Unit 3; however, a subsequent inspection at Unit 2 identified two nozzles which exhibited similar signs of leakage. Since this occurrence involves similar systems, causes, and corrective actions 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 or condition.

If you require any additional information, please so advise.

Sincerely,

Enclosure: LER No. 92-008

cc: C. W. Caldwell (USNRC Senior Resident Inspector, Units 1, 2 and 3)
J. B. Martin (Regional Administrator, USNRC Region V)
Institute of Nuclear Power Operations (INPO)

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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)
Primary Water Stress Corrosion Cracking of Pressurizer Instrument Nozzles, SONGS Units 2 and 3

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
0 2	1 8	9 2	9 2	0 0 4	0 0	0 3	1 9	9 2		0 5 0 0 0 1

OPERATING MODE (9): 1

POWER LEVEL (10): 0 0

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

___ 20.402(b)	___ 20.405(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		
___ 20.405(a)(1)(iii)	X 50.73(a)(2)(i)	___ 50.73(a)(2)(viii)(A)	Abstract below and		
___ 20.405(a)(1)(iv)	___ 50.73(a)(2)(ii)	___ 50.73(a)(2)(viii)(B)	in text)		
___ 20.405(a)(1)(v)	___ 50.73(a)(2)(iii)	___ 50.73(a)(2)(x)			

LICENSEE CONTACT FOR THIS LER (12)

Name	TELEPHONE NUMBER AREA CODE
R. W. Krieger, Station Manager	7 1 4 3 6 4 - 4 2 5 1

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)

___ XX Yes (If yes, complete EXPECTED SUBMISSION DATE) ___ NO

Expected Submission Date (15): Month 0 5, Day 1 9, Year 9 2

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

On 2/18/92, with Unit 3 defueled for the Cycle 6 refueling outage, a dye-penetrant examination of a pressurizer vapor space level instrument nozzle revealed the presence of a crack. The examination was prompted by earlier observations of rust and boric acid crystals in the vicinity of the nozzle during a walkdown of the reactor coolant system (RCS) following the shutdown. Since it is likely that this condition existed during Modes of reactor operation in which no primary pressure boundary leakage is allowed, Technical Specification 3.4.5.2.a, "Reactor Coolant System - Operational Leakage", is considered not to have been satisfied.

The observed leakage was attributed to primary water stress corrosion cracking (PWSCC) of the Inconel 600 material from which the nozzle was fabricated. This phenomenon had been previously identified as an industry problem associated with the use of Inconel 600 in the RCS. The leaking nozzle, as well as the remaining 3 vapor space nozzles in the pressurizer, were replaced with nozzles made from Inconel 690, a material less susceptible to PWSCC. Our preliminary evaluation, supported by detailed modeling and failure analysis performed by the Combustion Engineering Owners Group, has indicated that catastrophic failure of a nozzle with PWSCC induced cracking is highly unlikely. In addition, if catastrophic failure did occur, its consequences would be bounded by the existing small break loss of coolant accident analysis.

On 3/14/92, Unit 2 was shutdown for reasons unrelated to this event. A thorough inspection of the pressurizer vapor space instrument nozzles, prompted by the findings at Unit 3, revealed similar signs of rust and boric acid crystals at two of the nozzles. Although a detailed inspection has not yet been performed, it is likely that this leakage will also be attributed to PWSCC. An interim repair will be implemented prior to startup from the present outage. Upon completion of our evaluation, a supplement to this report will be submitted providing further discussion, as appropriate, of the cause(s), corrective action(s), and safety significance of these occurrences.