

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)

Turkey Point Unit 3

DOCKET NUMBER (2)

0 5 0 0 0 2 5 0 1 OF 0 2

PAGE (3)

TITLE (4)

Engineered Safety Feature Actuation - Safety Injection

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)	
01	08	84	84	002	0	00	20	78	N/A	0 5 0 0 0	
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)											
OPERATING MODE (9)			20.402(b)			20.406(c)			X 80.73(a)(2)(iv)		
POWER LEVEL (10)			20.406(a)(1)(i)			50.36(c)(1)			80.73(a)(2)(v)		
01011			20.406(a)(1)(ii)			50.36(c)(2)			80.73(a)(2)(vii)		
			20.406(a)(1)(iii)			50.73(a)(2)(i)			80.73(a)(2)(viii)(A)		
			20.406(a)(1)(iv)			50.73(a)(2)(ii)			80.73(a)(2)(viii)(B)		
			20.406(a)(1)(v)			50.73(a)(2)(iii)			80.73(a)(2)(ix)		
									73.71(b)		
									73.71(c)		
									OTHER (Specify in Abstract below and in Text, NRC Form 366A)		

LICENSEE CONTACT FOR THIS LER (12)

NAME

Paul A. Roach, Compliance Engineer

TELEPHONE NUMBER

AREA CODE

3 0 5 2 4 5 - 2 9 1 0

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
<input checked="" type="checkbox"/>	<input type="checkbox"/>				

ABSTRACT (Limit to 1400 sps. approximately fifteen single-space typewritten lines) (16)

On January 8, 1984, a reactor trip occurred due to initiation of "Safety Injection" (SI) with flow not required to be delivered to the core. The root cause was determined to be due to excessive steam usage in the secondary system and steam leakage through the steam supply valves to the moisture separator reheaters. The bypass valves for the Main Steam Isolation Valves (MSIVs) are opened to warm-up the steam header and to equalize the steam header pressure with the steam generator (S/G) pressures, equalizing the steam pressures across the MSIVs which is required to open these valves. However, the excessive steam usage and the steam leakage identified above resulted in higher than normal differential pressures remaining across the MSIVs. Efforts to reduce the differential pressure across the MSIVs were attempted by increasing atmospheric steam dump. This resulted in "High Steam Flow" coincident with "Low T(Average)" protection signals and initiated "SI" which tripped the reactor. All equipment functioned as designed on initiation of the Engineered Safety Feature Actuation Signal (ESFAS). Following completion of the post-trip review, a walkdown of the secondary system resulted in a reduction of steam usage and isolation of steam leak paths. Ongoing work to upgrade equipment in the secondary system will help prevent a recurrence of this event. Additionally, procedure changes are being incorporated under the Procedure Review Project that direct the operator to locate and isolate and/or reduce significant sources of steam usage and/or leakage under conditions where the differential pressure across the MSIVs prevents their opening. The health and safety of the public were not affected. Similar occurrences: None.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/85

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Turkey Point Unit 3	0 5 0 0 0 2 5 0	8 4	— 0 0 2	— 0 0	0 2	OF	0 2

TEXT (If more space is required, use additional NRC Form 366A's) (17)

On January 8, 1984, at 7:35 a.m., the Unit 3 reactor tripped from approximately one percent power while performing the unit evolution - hot shutdown to power operation, following a previous reactor trip (LER 250-84-001). This reactor trip occurred due to initiation of "Safety Injection" (SI) actuated on "High Steam Flow" in 'A' and 'B' steam lines (1/2 channels for 2/3 steam lines) coincident with "Low T(Average)" in reactor coolant loops 'B' and 'C' (2/3 loops). The root cause was determined to be due to excessive steam usage in the secondary system and steam leakage through the steam supply valves to the moisture separator reheaters located downstream of the Main Steam Isolation Valves (MSIVs).

Opening the MSIVs is performed under step 8.13.6 of Operating Procedure 0202.2, Unit Start-up - Hot Shutdown to Power Operation. Prior to performing this step, the bypass valves for the MSIVs are opened to warm-up the steam header and to equalize the steam header pressure with the steam generator (S/G) pressures, equalizing the steam pressures across the MSIVs which is required to open these valves. However, the excessive steam usage and the steam leakage identified above resulted in higher than normal differential pressures remaining across the MSIVs. Efforts to reduce the differential pressure across the valves were attempted in accordance with normal operating practice by increasing atmospheric steam dump. This resulted in exceeding the setpoint of the "High Steam Flow" protection bistables (i.e., flow increasing above the programmed value based on turbine load or first stage pressure) for 'A' and 'B' steam lines and reduced T(Average) below the "Low T(Average)" protection bistables setpoint of 543 degrees Fahrenheit for reactor coolant loops 'B' and 'C' and initiated "SI", tripping the reactor.

All equipment functioned as designed on initiation of the Engineered Safety Feature Actuation Signal. Following completion of the post-trip review, a walkdown of the secondary system resulted in a reduction of steam usage and isolation of steam leak paths. The unit evolution hot shutdown to power operation re-commenced without problems. Ongoing work to upgrade equipment in the secondary system will help prevent a recurrence of this event. Additionally, procedure changes are being incorporated under the Procedure Review Project that direct the operator to locate and isolate and/or reduce significant sources of steam usage and/or leakage under conditions where the differential pressure across the MSIVs prevents their opening.



February 7, 1984
PNS-LI-84-43

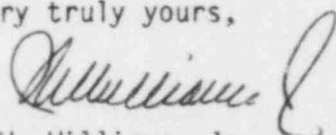
U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, D.C. 20555

Gentlemen:

Re: Reportable Event 83-02
Turkey Point Unit 3
Date of Event: January 8, 1984
Engineered Safety Feature Activation

The attached Licensee Event Report is being submitted pursuant to the requirements of 10 CFR to provide notification of the subject event.

Very truly yours,


J.W. Williams, Jr.
Vice President
Nuclear Energy

JWW/PLP:djc

Attachment

cc: J.P. O'Reilly, Region II, USNRC
Harold F. Reis, Esquire
File 933.1

IE22
1/1