

# ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

## REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9111260004 DOC.DATE: 91/11/15 NOTARIZED: NO DOCKET #  
 FACIL:50-250 Turkey Point Plant, Unit 3, Florida Power and Light C 05000250  
 AUTH.NAME AUTHOR AFFILIATION  
 POWELL,D.R. Florida Power & Light Co.  
 PLUNKETT,T.F. Florida Power & Light Co.  
 RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 91-009-00:on 911018,axial flux difference discovered  
 outside Tech Spec target band limits for more than 15  
 minutes.Caused by inadequate procedure.TS amend request  
 submitted & procedure revised.W/911115 ltr.

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	NRR/DLPQ/LHFB10	1 1	NRR/DLPQ/LPEB10	1 1
	NRR/DOEA/OEAB	1 1	NRR/DREP/PRPB11	2 2
	NRR/DST/SELB 8D	1 1	NRR/DST/SICB8H3	1 1
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AO 4



November 15, 1991  
L-91-295  
10 CFR 50.73


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

Gentlemen:

Re: Turkey Point Unit 3  
Docket No. 50-250  
Reportable Event: 91-009-00  
Date of Event: October 18, 1991  
Axial Flux Difference Was Outside the Limits of Technical  
Specification 3.2.1 For Greater Than the 15 Minutes  
Allowed by Action a. Due to an Inadequate Procedure

The attached Licensee Event Report 250-91-009-00 is being  
provided in accordance with the requirements of 10 CFR 50.73  
(a) (2) (i) to provide notification of the subject event.

Very truly yours,

  
T. F. Plunkett  
Vice President  
Turkey Point Nuclear

TFP/DPS/ds

enclosures

cc: Stewart D. Ebnetter, Regional Administrator, Region II,  
USNRC,  
Senior Resident Inspector, USNRC, Turkey Point Plant

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PDR ADOCK 05000250  
S PDR

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an FPL Group company

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# LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) <div style="text-align: center;">TURKEY POINT UNIT 3</div>										DOCKET NUMBER (2) <div style="text-align: center;">05000250</div>		PAGE (3) <div style="text-align: center;">1 OF 3</div>	
TITLE (4) <div style="text-align: center;">Axial Flux Difference Was Outside the Limits of Technical Specification 3.2.1 For Greater Than the 15 Minutes Allowed by Action a. Due to an Inadequate Procedure.</div>													
EVENT DATE (5)			LER NUMBER (6)			RPT DATE (7)			OTHER FACILITIES INV. (8)				
MON	DAY	YR	YR	SEQ #	R#	MON	DAY	YR	FACILITY NAMES			DOCKET # (5)	
10	18	91	91	009	00	11	15	91					
OPERATING MODE (9)		1	10 CFR 50.73(a)(2)(i)										
POWER LEVEL (10)		100											
LICENSEE CONTACT FOR THIS LER (12)													
David R. Powell, Superintendent of Licensing										TELEPHONE NUMBER			
										305-246-6559			
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)													
CAUSE	SYSTEM	COMPONENT	MANUFACTURER			NPRDS?	CAUSE	SYSTEM	COMPONENT	MANUFACTURER			NPRDS?
SUPPLEMENTAL REPORT EXPECTED (14) NO <input checked="" type="checkbox"/> YES <input type="checkbox"/>								EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR	
(if yes, complete EXPECTED SUBMISSION DATE)													
ABSTRACT (16)													
<p>On October 18, 1991, at 0010 EDT, with Unit 3 at 100 percent power and Unit 4 in Mode 5 (Cold Shutdown), the 15 minutes allowed by Technical Specification (TS) 3.2.1 (a) (Axial Flux Difference) for axial flux difference outside the target band was exceeded.</p> <p>On October 18, 1991, at 0135 EDT, the condition was determined to be inconsistent with the TS. Reactor power was then reduced to below 90 percent and the axial flux value was returned to within the target band. An evaluation of the event showed that for the worst case, indicated axial flux was outside the target band for about two hours. The Turkey Point Nuclear Steam Supply System Vendor performed a safety evaluation on this event. The safety evaluation concluded that the nuclear safety parameters <math>F_0</math> and DNBR stayed within their limits.</p> <p>This event was caused by a procedure that did not meet the TS requirements and an error that was discovered in the plant TS. A TS amendment request has been submitted to correct the TS error. A temporary waiver of compliance was issued on October 30, 1991, allowing Turkey Point to perform the surveillance. Operations Procedure OP-12304.8, "Inducing Xenon Oscillations to Produce Various Incore Axial Offsets," is being revised to require performance of the procedure below 90 percent power.</p>													



LICENSE EVENT REPORT (LER) TEX CONTINUATION

FACILITY NAME DOCKET NUMBER LER NUMBER PAGE NO.  
TURKEY POINT UNIT 3 05000250 91-009-00 02 OF 03

I. EVENT DESCRIPTION

On October 17, 1991, at 2215 EDT, with Unit 3 at 100 percent power and Unit 4 in Mode 5 (Cold Shutdown), an incore/excore calibration of the Unit 3 NIS detectors was initiated. Operations Procedure OP-12304.8, "Inducing Xenon Oscillations to Produce Various Incore Axial Offsets," was used to induce the Xenon oscillations necessary for this calibration.

On October 18, 1991, at 0010 EDT, the 15 minutes allowed for action by Technical Specification (TS) 3.2.1 (a.), "Axial Flux Difference (AFD)" for axial flux difference outside the target band was exceeded. At 0150 EDT, power was reduced to less than 90 percent to comply with Action a. of TS 3.2.1.

II. EVENT CAUSE

This event was caused by a procedure that did not meet the TS requirements and an error that was discovered in the plant TS.

TS 3.2.1 has a footnote referencing TS 3.2.1, Action statement b(2) which states that, "A total of 16 hours operation may be accumulated with the AFD outside of the above required target band during testing without penalty deviation." This same footnote is in the January 9, 1991, draft edition of NUREG-1431, Westinghouse Owner's Group Methodically Engineered, Restructured, and Improved TS (MERITS) which correctly references the applicability statement of the TS.

The Turkey Point TS were revised to the standard TS format August 28, 1990. The previous TS and the governing procedure for the calibration, OP-12304.8, allowed operation outside of the axial flux target values while performing the incore/excore calibration. Operation outside the target band above 90 percent power had been a standard practice at Turkey Point to acquire accurate data for calibration of the high flux trip setpoint. This practice, along with the error in the TS footnote led to the TS non-compliance.

III. EVENT SAFETY ANALYSIS

An evaluation of the event by Florida Power and Light showed that for the worst case, indicated axial flux was outside the target band for two hours.

The Axial Flux Difference is a measure of the axial power distribution as measured by the excore power range instrumentation. AFD is sensitive to control rod bank position, core power level, and burnup. To compensate for the burnup dependency, an incore/excore calibration is performed at least once per quarter. Control rod bank insertion and a controlled xenon oscillation are mechanisms used to produce the change in the axial power distribution necessary for the calibration.

LICENSE EVENT REPORT (LER) TEX CONTINUATION

FACILITY NAME	DOCKET NUMBER	LER NUMBER	PAGE NO.
TURKEY POINT UNIT 3	05000250	91-009-00	03 OF 03

The limits on AFD assure that the Heat Flux Hot Channel Factor ( $F_Q$ ) upper bound envelope of 2.32 times the normalized axial peaking factor is not exceeded during either normal operation or in the event of xenon redistribution following power changes.

The Turkey Point Nuclear Steam Supply System Vendor performed a safety evaluation on this event. The safety evaluation concluded that the nuclear safety parameters,  $F_Q$ , maximum kw/ft and the Departure From Nucleate Boiling Ratio (DNBR) stayed within their limits.

Based on the above, the health and safety of the public were not adversely affected.

IV. CORRECTIVE ACTIONS

1. Immediate Corrective Actions

Reactor power was reduced below 90 percent and the indicated axial flux value was returned to within the target band on October 18, 1991, at 0150 EDT.

2. Corrective Actions to Prevent Recurrence

A TS amendment request was submitted on October 31, 1991, (FP&L Letter No. L-91-301) to correct the TS error. A temporary waiver of compliance was issued on October 30, 1991, allowing Turkey Point a total of 16 hours operation outside the target band during testing without penalty. Procedure OP 12304.8 is being revised to require performance of the procedure below 90 percent power. This revision is scheduled to be completed by November 30, 1991.

V. ADDITIONAL INFORMATION

1. Similar LERs:

None

2. Additional Information:

None