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L-99-271 10 CFR §50.46

4001

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

Re: Turkey Point Units 3 and 4 Docket Nos. 50-250 and 50-251 10 CFR 50.46, "Acceptance Criteria for Emergency Core Cooling Systems in Light Water Nuclear Power Reactors" - Annual Report

10 CFR 50.46(a)(3)(ii) requires that licensees report to the Commission at least annually the nature of changes to, or errors discovered in, the Emergency Core Cooling System (ECCS) evaluation models, or in the application of such models that affect the peak clad temperature calculation and their effect on the limiting ECCS analysis. This letter provides the Florida Power and Light Company (FPL) report for Turkey Point Units 3 and 4 since the last report submitted by FPL letter L-99-002, dated January 6, 1999.

Should there be any questions, please contact us.

Very truly yours,

R. J. Hovey

Vice President Turkey Point Plant

an FPL Group company

OIH

attachment

cc: Regional Administrator, Region II, USNRC Senior Resident Inspector, USNRC, Turkey Point Plant

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### Small Break Loss of Coolant Accident (SBLOCA)

By letter L-99-002, dated January 6, 1999, Florida Power and Light Company (FPL) reported a Peak Clad Temperature (PCT) of 1666°F for the worst case SBLOCA transient analysis. A 10°F penalty on PCT has been assessed due to the replacement of solid blankets with annular blankets at both ends of the fuel rod. Annular blankets are expected to be a permanent design change for both units, therefore, the revised PCT of 1676°F is applicable for both units.

### Large Break LOCA (LBLOCA)

By letter L-99-002, dated January 6, 1999, FPL reported a PCT of 2089°F for the worst case LBLOCA transient analysis. Since the last report, a 16°F error has been identified related to incorrect nodalization in the WCOBRA/TRAC model. Based on the PCT reported in L-99-002 of 2089°F, the net change in PCT for the worst case LBLOCA is 16°F, for a total PCT of 2105°F.

#### Summary

The peak clad temperature of 1676°F for the worst case SBLOCA and the revised peak clad temperature of 2105°F for the worst case LBLOCA, correcting for the effects discussed above and summarized in Tables 1 and 2, are below the 10 CFR 50.46 ECCS acceptance criteria limit of 2200°F. Turkey Point Units 3 and 4 remain in compliance with the Emergency Core Cooling System performance criteria specified in 10 CFR 50.46 (b). Attachment Page 2 of 3

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## TABLE 1

TURKEY POINT UNITS 3 AND 4

## PREDICTED PEAK CLAD TEMPERATURES

CURRENT SBLOCA EVALUATIONS THAT HAVE ASSESSED PCT PENALTIES

Analysis of Record	1688°F
Total SBLOCA PCT specified in FPL Letter L-99-002	1666°F
Evaluations since issuance of FPL letter L-99-002	
Natural Uranium Annular Blankets	+10°F
Total Estimated SBLOCA PCT	1676°F

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## TABLE 2

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## TURKEY POINT UNITS 3 AND 4

## PREDICTED PEAK CLAD TEMPERATURES

## CURRENT LBLOCA EVALUATIONS THAT HAVE ASSESSED PCT PENALTIES

Analysis of Record							
Total LBLOCA PC	I specified in FPL	letter L-99-002	2089°F				

# Evaluations since issuance of FPL letter L-99-002

Vesse	. Channel	DX	Error	-	Incorrect	nodalization	+16°]	F
in the	e WCOBRA/'	TRAC	[ mode]	L				

#### Total Estimated LBLOCA PCT

 $2105^{\circ}F$