



MAY 26 2004

L-2004-116
10 CFR 50.46

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. By letter L-2004-014, dated January 30, 2004, Florida Power and Light Company (FPL) submitted the annual report for Turkey Point Units 3 and 4 for 2003.

In addition, FPL letter L-2004-014 submitted the 30-day report as required by 10 CFR 50.46 when cumulative changes to Peak Clad Temperature (PCT) exceed 50 °F. The cumulative changes to the Large Break Loss of Coolant Accident (LBLOCA) Evaluation Model (EM) and Small Break Loss of Coolant Accident (SBLOCA) EM PCT exceed 50 °F by 28 °F and 55 °F, respectively. 10 CFR 50.46 also requires that a schedule for reanalysis be provided or compliance with the requirements of the regulation be shown, when cumulative changes to PCT exceed 50 °F. Compliance with 10 CFR 50.46 requirements was demonstrated by the total estimated LBLOCA PCT of 2089 °F and the SBLOCA PCT of 1689 °F remaining well below the limit of 2200 °F and by the total cumulative PCT changes having been calculated conservatively. Accordingly, no schedule for reanalysis was required.


The purpose of this letter is to resubmit the annual report in accordance with 10 CFR 50.46(a)(3)(ii) and redefine the annual reporting requirement schedule to align with the annual update provided to FPL by Westinghouse.

Attachment 1 provides the summary of changes in PCT identified during 2003 for the SBLOCA and LBLOCA for Turkey Point Units 3 and 4. Although the results are unchanged from those presented in FPL letter L-2004-014, the complete report is included in this letter for consistency.

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Should there be any questions, please contact Walter Parker, Licensing Manager, at 305-246-6632.

Very truly yours,



Terry O. Jones
Vice President
Turkey Point Nuclear Plant

OIH

Attachment

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

Small Break Loss of Coolant Accident (SBLOCA)

By letter L-2003-018, dated January 30, 2003, Florida Power and Light Company (FPL) reported a Peak Clad Temperature (PCT) of 1691 °F applicable for Unit 3, and a PCT of 1689 °F applicable for Unit 4, for the SBLOCA transient analysis. The +2 °F difference in PCT for Unit 3 was a PCT penalty due to the presence of one stainless steel rod in Cycles 18 and 19. The assembly with the filler rod was discharged during the March 2003 refueling outage, therefore, the +2 °F no longer applies. The revised SBLOCA PCT is 1689 °F for Turkey Point Units 3 and 4. The cumulative PCT change for SBLOCA PCT is 105 °F for Turkey Point Units 3 and 4.

Large Break LOCA (LBLOCA)

By letter L-2003-018, dated January 30, 2003, FPL reported a PCT of 2089 °F for the LBLOCA transient analysis for Turkey Point Units 3 and 4. There are no reported changes for the Turkey Point Units 3 and 4 LBLOCA PCT during 2003. The cumulative PCT change for LBLOCA is 78 °F for Turkey Point Units 3 and 4.

Summary

The PCT of 1689 °F for Units 3 and Unit 4 for the SBLOCA and the PCT of 2089 °F for the LBLOCA, 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).

Table 1

Turkey Point Unit 3

Predicted SBLOCA Peak Clad Temperature

**Total SBLOCA PCT reported in 2002 Annual Report
(FPL letter L-2003-018) 1691 °F**

Evaluations Performed in 2003

Temporary Penalty removed

**Non-Uranium Filler Rods Penalty -2 °F
(Assembly with Filler Rod Discharged -
Penalty No Longer Applies)**

Total Estimated SBLOCA PCT 1689 °F

Table 2

Turkey Point Unit 4

Predicted SBLOCA Peak Clad Temperature

Total SBLOCA PCT reported in 2002 Annual Report (FPL letter L-2003-018)	1689 °F
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Evaluations Performed in 2003

None

Total Estimated SBLOCA PCT	1689 °F
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Table 3

Turkey Point Units 3 and 4

Predicted LBLOCA Peak Clad Temperature

Total LBLOCA PCT reported in 2002 Annual Report (FPL letter L-2003-018)	2089 °F
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Evaluations Performed in 2003

None

Total Estimated LBLOCA PCT	2089 °F
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Turkey Point Units 3 and 4 SBLOCA
Peak Clad Temperature Cumulative Change

	Clad Temperature	Cumulative Change*
<u>UNIT 3 SBLOCA</u>		
2002 10 CFR 50.46 Annual Report	1691 °F	
Changes in 2003	-2 °F	
2003 10 CFR 50.46 Annual Report	1689 °F	105 °F
<u>UNIT 4 SBLOCA</u>		
2002 10 CFR 50.46 Annual Report	1689 °F	
No Changes in 2003		
2003 10 CFR 50.46 Annual Report	1689 °F	105 °F

* Note: SBLOCA PCT changes reported to NRC per L-96-279 dated 11/06/1996, L-99-271 dated 01/06/2000, and L-2001-010 dated 01/29/2001.

Turkey Point Units 3 and 4
LBLOCA Cumulative Change in Peak Clad Temperature

<u>UNITS 3 AND UNIT 4 LBLOCA</u>	<u>Cumulative Change*</u>
Year 2000, ZIRLO™ Cladding Plant Evaluation	22 °F
Year 2000, Vessel Channel DX Error Assessment	16 °F
Year 2001, Axial Power Distribution Range (P _{MID} / P _{BOT}) Plant Evaluation	8 °F
Year 2001, MONTECF Decay Heat Uncertainty Error Plant Evaluation	12 °F
Year 2002, Increase Upper Limit in P _{MID} Range Plant Evaluation	20 °F
	78 °F

		<u>Clad Temperature</u>
2002 10 CFR 50.46 Annual Report	2089 °F	
Changes in 2003	0 °F	
2003 10 CFR 50.46 Annual Report	2089 °F	78 °F

* Note: LBLOCA PCT changes reported to NRC per L-98-010 dated 01/12/1998, L-99-002 dated 01/06/1999, L-99-271 dated 01/06/2000, L-2002-014 dated 01/24/2002 and L-2003-018 dated 01/30/2003.