



FPL

JAN 30 2004

L-2004-014
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 and 30-Day 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. The attachment to this letter provides the Florida Power and Light Company (FPL) report for Turkey Point Units 3 and 4 for 2003.

Attachment 1 provides the summary of changes in Peak Clad Temperature (PCT) identified during 2003 for the Small Break Loss of Coolant Accident (SBLOCA) and Large Break Loss of Coolant Accident (LBLOCA) for Turkey Point Units 3 and 4.

As a result of a recent reassessment of the approach followed to track cumulative changes to PCT in the past, a more conservative approach has been adopted starting with the 2003 Annual Report. As a result, the cumulative changes for the LBLOCA and SBLOCA are established at 78 °F and 105 °F, respectively. Previously, changes in PCT were reported to the NRC in the annual report, but the cumulative change was not provided.

The cumulative changes to the LBLOCA EM and SBLOCA EM PCT exceed 50 °F by 28 °F and 55 °F, respectively. As per 10 CFR 50.46 requirements, a change exceeding 50 °F has to be reported within 30 days from its determination. This letter meets the 30-day reporting requirement. In addition to reporting, 10 CFR 50.46 also requires that a schedule for reanalysis be provided or compliance with the requirements of the regulation be shown. Compliance with 10 CFR 50.46 requirements is 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 is required.

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

Very truly yours,

A handwritten signature in cursive script that reads "Terry O. Jones".

Terry O. Jones
Vice President
Turkey Point Nuclear Plant

OIH

Attachment

cc: NRC Regulatory Issue Summary 2001-05 waived the requirements that multiple copies of documents be submitted to the NRC.

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**

Evaluations Performed in 2003

None

Total Estimated SBLOCA PCT 1689 °F

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.