



April 5, 2016
L-2016-065
10 CFR 50.46

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555-0001

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" – 30 Day Special Report

References:

1. FPL letter from Michael Kiley to U.S. NRC Document Control Desk, "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' – 2014 Annual Report," L-2015-113, April 28, 2015 ML15133A324.
2. Westinghouse letter, A. Worthington to C. Fries, "NextEra Energy, Turkey Point Units 3 and 4, 10 CFR 50.46 Report for Error in Use of ASME Steam Tables," NF-NEXT-16-44, March 16, 2016

10 CFR 50.46(a)(3)(ii) requires that changes to the Large Break Loss of Coolant Accident (LBLOCA) Evaluation Model (EM) and Small Break LOCA (SBLOCA) EM peak clad temperature (PCT) exceeding 50°F have to be reported to the NRC within 30 days. This letter meets this requirement.

By letter dated March 16, 2016, (Reference 2) Westinghouse identified an error in the LBLOCA EM in the usage of the American Society of Mechanical Engineers (ASME) steam tables to characterize the water in the upper head region. The steam table used was for a steam/gas mixture rather than the more appropriate subcooled water. Therefore, the steam table applicable to a liquid should have been used to determine the upper head temperature. The values from both tables are very close, and it was determined that the estimated impact on PCT is 0°F. The LBLOCA PCT reported in the 2014 Annual Report (Reference 1) was 2124°F. The LBLOCA PCT of 2124°F is unchanged for both Turkey Point Units 3 and 4 as a result of the error.

Table 1 below provides a summary of the LBLOCA PCT for Turkey Point Units 3 and 4. The LBLOCA PCT for Units 3 and 4 is 2124°F with a cumulative change of 80°F due to the LBLOCA EM errors previously reported in the 2014 Annual Report.

The SBLOCA EM is not affected by the identified error. The SBLOCA PCT of 1231°F reported in the 2014 Annual Report remains unchanged.

ADD
NRR

TABLE 1
Turkey Point Units 3 and 4
LBLOCA PCT 2016 30 Day Special Report

	<u>Peak Cladding Temperature</u>	<u>Cumulative Change</u>
<u>LBLOCA</u>		
10 CFR 50.46 Annual Report, April 2014 ^(Ref 1)	2124°F	80°F
<u>ECCS MODEL ASSESSMENTS</u>		
- Errors in Use of ASME Steam Tables ^(Ref 2)	0°F	0°F
March 2016, 30-Day Special Report	2124°F	80°F

10 CFR 50.46(a)(3)(ii) also requires that a schedule for reanalysis be provided or compliance with the requirements of the regulation be shown if the error is significant. Compliance with 10 CFR 50.46 requirements is demonstrated by the total estimated LBLOCA and SBLOCA PCTs of 2124°F and 1231°F, respectively, both remaining below the limit of 2200°F.

Should there be any questions, please contact Mr. Mitch Guth, Licensing Manager, at 305-246-6698.

Sincerely,



Thomas Summers
Vice President
Turkey Point Nuclear Plant

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