



March 27, 2018  
 L-2018-077  
 10 CFR 50.90

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

RE: Turkey Point Nuclear Plant, Unit 3 and 4  
 Docket Nos. 50-250 and 50-251  
 Renewed Facility Operating Licenses DPR-31 and DPR-41  
Schedule for Re-Analysis of Turkey Point Licensing Basis Analyses Affected by PAD5 Implementation

References:

1. Final Safety Evaluation for WCAP-17642-P/NP, Revision 1, "Westinghouse Performance Analysis and Design Model (PAD5)", September 28, 2017 (ADAMS Accession Nos. ML17257A338 and ML17257A071)
2. Topical Report WCAP-16996-P-A, Revision 1, "Realistic LOCA Evaluation Methodology Applied to the Full Spectrum of Break Sizes (FULL SPECTRUM LOCA Methodology)"

In Reference 1, the NRC approved the Performance Analysis and Design Model (PAD) methodology and computer code described in WCAP-17642-P/NP, Revision 1, Westinghouse Performance Analysis and Design Model (PAD5). In accordance with License Condition 3.H, "PAD TCD Safety Analyses", of Renewed Facility Operating Licenses DPR-31 and DPR-41 for Turkey Point Units 3 and 4 (Turkey Point), respectively, within six months of NRC approval of a revised generic version of PAD that accounts for Thermal Conductivity Degradation (TCD), Florida Power & Light Company (FPL) shall:

- a. Demonstrate that PAD 4.0 TCD remains conservatively bounding in licensing basis analyses when compared to the new generically approved version of PAD w/TCD, or
- b. Provide a schedule for the re-analysis using the new generically approved version of PAD w/TCD for any of the affected licensing basis analyses.

FPL has performed an assessment to determine the impact of using PAD5 for the current licensing basis analyses that were based upon input parameters generated by PAD 4.0 and PAD 4.0 TCD. Many of the licensing basis analyses were found to remain conservatively bounding, negligibly impacted or unaffected by the version of the PAD code used. As required by License Condition 3.H, a schedule for re-analysis of the licensing basis analyses affected by PAD5 implementation is provided below. The schedule relies upon NRC approval of a license amendment request (LAR) which revises the peak fuel centerline melt temperature specified in the Turkey Point Technical Specifications (TS) to align with the value defined in Reference 1 and a LAR adopting the Reference 2 Full Spectrum LOCA (FSLOCA) methodology.

Schedule for Re-Analysis of Licensing Basis Analyses Affected By PAD5 Implementation		
UFSAR Section	Analysis	Schedule
3.1.2	Reload Fuel Rod Design Criteria Confirmation Analysis (Rod Internal Pressure, Cladding Stress / Strain, Cladding Fatigue)	Complete re-analysis and implement on a forward fit basis by no later than the next reload campaign following implementation of TS amendment revising the peak fuel centerline melt temperature. (See Note 1)
14.1.1	Uncontrolled RCCA Withdrawal From a Sub-Critical Condition	Complete re-analysis and implement on a forward fit basis by no later than the next reload campaign following implementation of TS amendment revising the peak fuel centerline melt temperature. (See Note 1)

Schedule for Re-Analysis of Licensing Basis Analyses Affected By PAD5 Implementation		
UFSAR Section	Analysis	Schedule
14.1.2	Uncontrolled RCCA Withdrawal At Power (RCS Pressure Case)	Complete re-analysis and implement on a forward fit basis by no later than the next reload campaign following implementation of TS amendment revising the peak fuel centerline melt temperature. (See Note 1)
14.2.5.2	Steam System Piping Failure (Reload Power to Melt (kW/ft) Criteria Confirmation Analysis)	Complete re-analysis and implement on a forward fit basis by no later than the next reload campaign following implementation of TS amendment revising the peak fuel centerline melt temperature. (See Note 1)
14.2.6	Rupture of a Control Rod Mechanism Housing - RCCA Ejection	Complete re-analysis and implement on a forward fit basis by no later than the next reload campaign following implementation of TS amendment revising the peak fuel centerline melt temperature. (See Note 1)
14.3.2.1	Best-Estimate Large Break Loss-Of-Coolant Accident (BE-LOCA) Analysis	Complete re-analysis and submit a LAR adopting FSLOCA methodology by April 2021. Implement on a forward fit basis by no later than next reload campaign following implementation of TS amendment adopting FSLOCA.

Note 1. The LAR which revises the peak fuel centerline melt temperature is scheduled for submittal in April 2018.

This letter includes a regulatory commitment to complete the above re-analysis and implement on a forward fit basis following the approval of the specified LARs.

Should you have any questions regarding this submission, please contact Mr. Robert Hess, Turkey Point Licensing Manager, at 305-246-4112.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on the 27<sup>th</sup> day of March 2018.

Sincerely,

Robert Coffey  
Regional Vice President, Southern Region  
Turkey Point Nuclear Plant

cc: USNRC Regional Administrator, Region II  
USNRC Project Manager, Turkey Point Nuclear Plant  
USNRC Senior Resident Inspector, Turkey Point Nuclear Plant  
Ms. Cindy Becker, Florida Department of Health