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 50-251, Turkey Point Plant, Unit 4, Floridal Power and Light Co
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 RECIPI. NAME: VARGA, S. A.; RECIPIENT AFFILIATION: Operating Reactors Branch 1

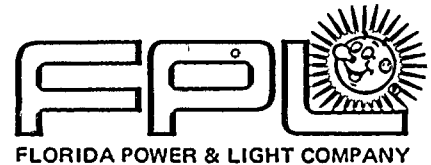
SUBJECT: Forwards info presented at 830126 meeting re plans & schedules to resolve pressurized thermal shock at facilities in response to NRC 830201 request. Util plans to focus efforts on flux reduction to reactor vessel inner wall.

see REPTS
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March 25, 1983
L-83-180

Office of Nuclear Reactor Regulation
Attention: Mr. Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Varga:

Re: Turkey Point Units 3 & 4
Docket Nos. 50-250, 50-251
Pressurized Thermal Shock

Your letter dated February 1, 1983 requested that we submit the information presented in our January 26, 1983 meeting regarding our plans and schedules to resolve Pressurized Thermal Shock at Turkey Point Units 3 & 4. The attachments address our presentation and contain the information requested in your letter.

- Attachment A: Present Plant Status
- Attachment B: Vessel Flux Reduction Program
- Attachment C: Assessment of Safety Margins
- Attachment D: Transient Analyses
- Attachment E: Surveillance Program

We were also requested to address how much relief would be necessary with respect to plant safety limits to allow continued full power operation. This relief would consider the fuel management necessary to reduce flux to achieve end-of-life operation without exceeding the screening criteria. The assistance we requested from the NRC fell into three broad categories:

1. RETRAN APPROVAL

We plan on performing our plant specific transient analyses utilizing the RETRAN Code. This Code has been recently submitted by a User's Group for NRC review and approval. We request a quick review of RETRAN to prevent us from expending manpower utilizing a code that may not be acceptable to the NRC. We request that the NRC provide at least a preliminary opinion of the User's Group submittal by May 1983.

2. EXTENSION OF TECHNICAL SPECIFICATION LIMITS

Based on our preliminary evaluations, we foresee no need for Appendix K exemptions or relaxations. However, to achieve the desired flux reduction in Turkey Point Unit 3, Cycle 9, scheduled to start operation in early

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December 1983, an increase in the $F_{\Delta H}$ limit of the Technical Specification is required. To achieve the higher $F_{\Delta H}$ without a power limiting reduction in the F_0 limit, we need approval of the improved LOCA Reflood Model (BART) already submitted by Westinghouse. This approval is required by August 1, 1983, to support our anticipated Technical Specification amendment to increase the $F_{\Delta H}$ limit in a timely manner prior to startup of Cycle 9. Approval of the Westinghouse High Burnup Topical is also needed in 1983. Approval of a Technical Specification change to increase the enrichment limit for the Turkey Point Unit 4 Cycle 10 (Spring 1984) will be dependent upon that approval.

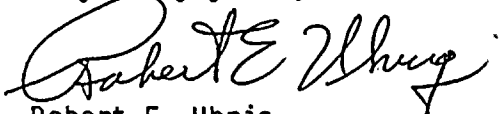
In future cycles it may be necessary to increase $F_{\Delta H}$ parameters of the Westinghouse Improved Thermal Design Procedure (ITDP) for which generic NRC approval has already been obtained. A longer term topical which needs NRC approval, and which will greatly affect FPL's flux reduction effort is the Advanced LOCA Reflood Model (BASH).

3. FORMULATION OF ACCEPTANCE CRITERIA

Scheduled to be submitted in 1983. We plan on focusing the bulk of our efforts on flux reduction to the reactor vessel inner wall. However, we intend on submitting plant specific analyses to justify operation past the 300°F RT_{NDT} screening criterion, should our best effort at flux reduction not be able to completely limit the increase in RT_{NDT} . Therefore, we request that NRC expeditiously develop acceptance criteria for these plant specific analyses. These criteria should include acceptable transient probabilities as well as analytical pressure, temperature and fracture mechanic results.

We appreciated the opportunity to present our plans to your staff and look forward to working actively with you in the future. We will continue to communicate the results of our work to you as our effort progresses.

Very truly yours,



Robert E. Uhrig
Vice President
Advanced Systems & Technology

REU/JEM/js

Attachments

cc: J. P. O'Reilly, Region II
Harold F. Reis, Esquire
PNS-LI-83-154-1

