



FPL Energy
Seabrook Station

FPL Energy Seabrook Station
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FEB 9 2005

Docket No. 50-443
SBK-L-05032

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

Seabrook Station
Facility Operating License NPF-86
Supplemental Response to Request for Additional Information Regarding
License Amendment Request 04-03, Application for Stretch Power Uprate

References:

1. FPL Energy Seabrook, LLC letter NYN-04016, LAR 04-03, "Application for Stretch Power Uprate," dated March 17, 2004.
2. NRC letter to FPL Energy Seabrook, LLC, "Seabrook Station Unit 1 – Request for Additional Information for Proposed Amendment Request Regarding the Application for Stretch Power Uprate (TAC MC2364)," dated August 18, 2004.
3. FPL Energy Seabrook, LLC letter SBK-L-04072, "Response to Request for Additional Information Regarding License Amendment Request 04-03, Application for Stretch Power Uprate," dated October 12, 2004.

By letter dated March 17, 2004 (Reference 1), FPL Energy Seabrook, LLC (FPL Energy Seabrook) requested amendment to facility operating license NPF-86 and the Technical Specifications for Seabrook Station. This License Amendment Request (LAR) is an application for a stretch power uprate which will increase the Seabrook Station licensed reactor core power by 5.2% from 3411 megawatts thermal (MWt) to 3587 MWt.

In Reference 2, the NRC requested additional information to support its review of Seabrook Station LAR 04-03. By letter dated October 12, 2004 (Reference 3) FPL Energy Seabrook provided its responses to the requests for additional information (RAIs) provided in your correspondence.


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Based on a request from the NRC staff during a teleconference on December 7, 2004, FPL Energy Seabrook is providing a revision to the information provided in response to RAI #36. Also included in this submittal is a response to a new RAI identified during the December 7, 2004 teleconference. The new RAI addresses pressurizer and main steam safety valve sizing.

Should you have any questions concerning this LAR, please contact Mr. Stephen T. Hale, Power Uprate Project Manager, at (603) 773-7561.

Very truly yours,

FPL Energy Seabrook, LLC


For Mark E. Warner
Site Vice President

Enclosure

cc: S. J. Collins, NRC Region I Administrator
V. Nerses, NRC Project Manager, Project Directorate I-2
G. T. Dentel, NRC Resident Inspector

Mr. Bruce Cheney, Director
New Hampshire Bureau of Emergency Management
State Office Park South
107 Pleasant Street
Concord, NH 03301-3809

Oath and Affirmation

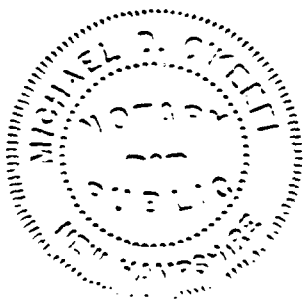
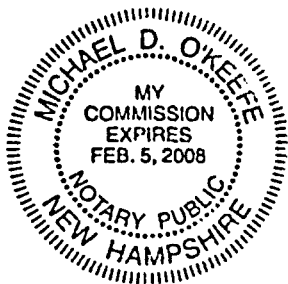
I, Gene F. St.Pierre, Station Director of FPL Energy Seabrook, LLC hereby affirm that the information and statements contained within the new and supplemental responses to request for additional information regarding license amendment request 04-03 are based on facts and circumstances which are true and accurate to the best of my knowledge and belief.

Sworn and Subscribed
Before me this

9 day of Feb., 2005

Michael D. O'Keefe
Notary Public

Gene F. St. Pierre
Gene F. St.Pierre
Station Director



U.S. Nuclear Regulatory Commission

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Enclosure to Letter SBK-L-05032

**Supplemental Responses to NRC
Requests for Additional Information (RAIs)
Regarding Seabrook Station LAR 04-03
Application for Stretch Power Uprate
(Non-Proprietary)**

RAI #36

Based on NRC Staff questions pertaining to actual plant response and operator actions, additional information is added to FPL Energy Seabrook letter SBK-L-04072, Enclosure 2, RAI #36 response. The revised response is non-proprietary

FPL Energy Seabrook Response:

The fourth and fifth bullets on Enclosure 2 page 32 are revised to read:

- Post-accident cooldown of the Reactor Coolant System continuously decreases the probability of establishing conditions necessary for a stable core uncover to occur.
- Should core uncover occur that results in a fuel rod temperature excursion, per the diagnostic indications provided at the plant (core exit thermocouples and Reactor Vessel Level Indication System, if available), the operators will follow prescribed emergency operating procedure (response to degraded / inadequate core cooling) actions to preclude sustained conditions for core level depression and recover the core. Note that these procedures would be utilized regardless of the cause of the event. The post-accident cooldown actions noted in the previous bullet, will depressurize the plant, such that the probability for core uncover becomes negligible.

Safety Valve Sizing RAI

Section 5.2.2.2 (Section 5.2, Page 5) of the Seabrook Updated Final Safety Analysis Report states that an evaluation and analyses of the capability and performance of these valves is presented in Reference 2 (see Section 5.2). Reference 2 identifies WCAP-7769, Revision 1, "Overpressure Protection for Westinghouse Pressurized Water Reactors," June 1972 as the licensing basis report for these specific pressure relieving safety valves. Reference 2 also identifies a letter NS-CE-622, April 16, 1975, from Westinghouse to NRC (then AEC) which contains additional information related to WCAP-7769, Revision 1. The staff has the 1972 report, but not the 1975 letter. Based on review of the Seabrook proposed power uprate and comparison of parameters with those of the largest plant analyzed in WCAP-7769, it is not clear that WCAP-7769 continues to apply to Seabrook operating at the uprated power because the uprated power for Seabrook appears to be higher than the power of the uprated plant analyzed in the report. Show that WCAP-7769 continues to apply to Seabrook operating at the proposed uprated power. One way to demonstrate that the report applies might be to show that for Seabrook operating at the uprated power, the ratio of the safety valve flow to the peak surge rate for Seabrook operating at the uprated power is greater than 1.0 (see WCAP-7769, Table 2-2, Figure 2-2, Table 2-3, and related discussions).

FPL Energy Seabrook Response:

WCAP-7769 is not the licensing basis report for the pressurizer and the main steam safety valves for Seabrook Station. This document is referenced in the Seabrook Station UFSAR only to provide additional information with respect to the methodology used. The licensing basis for Seabrook Station is the Loss of External Load / Turbine Trip analysis (Seabrook Station UFSAR Section 15.2.3). This analysis ensures the proper sizing of the pressurizer and main steam safety valves and was specifically performed at the uprated conditions, as described in LAR Subsection 6.3.3.1 (page 6-101).