

FPL Energy Seabrook Station P.O. Box 300 Seabrook, NH 03874 (603) 773-7000

**DEC 28** 2004 Docket No. 50-443 SBK-L-04135

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 plant technical specifications for Seabrook Station. This 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 during the morning of December 2, 2004, FPL Energy Seabrook is providing a revised response to RAI #41 regarding time for switchover to hot leg injection. The revised response in the enclosure to this letter supercedes the previously submitted response in its entirety.

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

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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 U. S. Nuclear Regulatory Commission SBK-L-04135 / Page 3

Oath and Affirmation

I, Gene F. St.Pierre, Station Director of FPL Energy Seabrook, LLC hereby affirm that the information and statements contained within this supplemental response 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

28 day of Becember, 2004 ls. O'Kufe Miles

Notary Public





Gene F. St.Pierre Station Director

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Enclosure to Letter SBK-L-04135

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

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## <u>RAI #41</u>

Provide the minimum time for switchover to hot leg injection and the basis for this time. Include, (a) the times specified in the EOPs that address switchover to hot leg injection, (b) a description of the applicable EOP (or a copy of the EOP), and (c) information that reasonably ensures the EOP actions will occur consistent with the stated times.

## FPL Energy Seabrook Response:

This response supercedes the response submitted by FPL Energy Seabrook letter SBK-L-04072 in its entirety. This response is being revised to change the operator action times in the emergency operating procedure for switchover to hot leg injection. This change will ensure that the minimum and maximum required times to accomplish the switchover are met.

The emergency operating procedure for switchover to hot leg injection includes a minimum and a maximum time to accomplish the switchover. The minimum time is based on ensuring there is adequate emergency core cooling flow for decay heat removal. This minimum time has been calculated to be 4 hours following the initiation of a loss of cooling accident (LOCA). The maximum time to accomplish the switchover to hot leg injection is based on precluding boron precipitation. As presented in LAR Attachment 1, Subsection 6.1.5.4 "Acceptance Criteria and Results" (page 6-12), this maximum time was calculated to be 7.46 hours following the initiation of a LOCA. Specific responses to the RAI are provided below.

- a. The times specified in the emergency operating procedures that address switchover to hot leg injection will be a minimum time of 5 hours and a maximum time of 6 hours following the initiation of a LOCA.
- b. There is a specific emergency operating procedure for hot leg injection entitled "Transfer to Hot Leg Recirculation". This emergency operating procedure is entered when the times specified in the loss of reactor or secondary coolant emergency operating procedure have elapsed, or when a decision is made, based upon the recommendation of the Technical Support Center, that transfer to hot leg injection is required. The times specified in the emergency operating procedures for hot leg injection will be (1) prepare for hot leg injection 4 hours after event initiation, and (2) initiate hot leg injection no sooner than 5 hours and no later than 6 hours after event initiation.
- c. Assurance is provided that hot leg injection emergency operating procedure actions will occur consistent with the calculated times because of two reasons: (1) there will be a margin of 1 hour (5 hours in the emergency operating procedures minus 4.0 hours calculated) for minimum time to hot leg injection, and a margin of 1.46 hours (7.46 hours calculated minus 6 hours in the emergency operating procedures) for maximum time to hot leg injection, and (2) based on discussions with Seabrook Station operations staff, the actions described in the hot leg injection emergency operating procedure can be performed in about 10 minutes.