



**FPL Energy**  
**Seabrook Station**

**FPL Energy Seabrook Station**  
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March 26, 2008

SBK-L-08053  
Docket No. 50-443

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

Seabrook Station

Response to Request for Additional Information Regarding License Amendment Request  
(LAR) 08-01, "Application for Change to the Technical Specification Surveillance  
Requirements for Nuclear Instrumentation"

References:

1. FPL Energy Seabrook, LLC letter SBK-L-08039, Application for Change to the Technical Specification Surveillance Requirements for Nuclear Instrumentation," March 7, 2008.
2. NRC Draft Request for Additional Information (TAC No. MD8247), March 21, 2008.

In Reference 1, FPL Energy Seabrook, LLC submitted a request for an amendment to the Technical Specifications (TS) for Seabrook Station. The proposed amendment modifies the surveillance requirements associated with the intermediate range and power range neutron detectors. The change modifies the frequency of the channel calibrations for the intermediate and power range detectors to permit 24 hours to measure neutron detector plateau curves after achieving steady-state operation at rated thermal power.

In Reference 2, the NRC requested additional information in order to complete its review of the LAR. Attachment 1 contains FPL Energy Seabrook, LLC's response to the request for additional information. Attachment 2 provides a replacement mark-up page that reflects the change to TS Table 4.3-1 resulting from this response to the request for information. This page supersedes the corresponding page in Reference 1.

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The modification to the proposed change does not alter the conclusion in Reference 1 that the proposed change does not involve a significant hazard consideration pursuant to 10 CFR 50.92. A copy of this letter has been forwarded to the New Hampshire State Liaison Officer pursuant to 10 CFR 50.91(b).

Should you have any questions regarding this letter, please contact Mr. James M. Peschel, Regulatory Programs Manager, at (603) 773-7194.

Very truly yours,

FPL Energy Seabrook, LLC.

A handwritten signature in dark ink, appearing to read "Gene St. Pierre", is written over a horizontal line.

Gene St. Pierre  
Site Vice President

Attachments (2)

cc: S. J. Collins, NRC Region I Administrator  
G. E. Miller, NRC Project Manager, Project Directorate I-2  
W. J. Raymond, NRC Senior Resident Inspector

Mr. Christopher M. Pope, Director Homeland Security and Emergency Management  
New Hampshire Department of Safety  
Division of Homeland Security and Emergency Management  
Bureau of Emergency Management  
33 Hazen Drive  
Concord, NH 03305



**FPL Energy**  
**Seabrook Station**

**AFFIDAVIT**

**SEABROOK STATION UNIT 1**

Facility Operating License NPF-86

Docket No. 50-443

**Response to Request for Additional Information Regarding License Amendment  
Request (LAR) 08-01, "Application for Change to the Technical Specification  
Surveillance Requirements for Nuclear Instrumentation"**

I, Gene F. St. Pierre, Site Vice President of FPL Energy Seabrook, LLC hereby affirm that the information and statements contained within this response to request for additional information regarding License Amendment Request 08-01 are based on facts and circumstances which are true and accurate to the best of my knowledge and belief.

Sworn and Subscribed

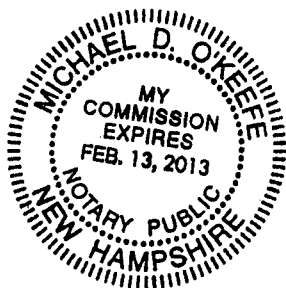
before me this

26 day of March, 2008

Michael O'Keefe  
Notary Public

Gene St. Pierre

Gene St. Pierre  
Site Vice President



**Attachment 1**

FPL Energy, LLC Response to Request for Additional Information Regarding License  
Amendment Request (LAR) 08-01, "Application for Change to the Technical  
Specification Surveillance Requirements for Nuclear Instrumentation"

### Request for Additional Information

The proposed Surveillance Requirement would require measurement of the initial plateau curves within 24 hours of reaching steady state operation at 100% of rated thermal power. Please identify what is considered steady state operation for Seabrook and where this definition is located and by what mechanism is it controlled. Additionally, how long after reaching appropriate conditions to perform the test is needed for collection of plateau curves.

### Response:

Steady-state operation for the purpose of measuring neutron detector plateau curves is attained following a power increase when (1) reactor power is between 3638 and 3648 MWth, (2) RCS Tavg is within one degree of Tref, and (3) these conditions have existed for one hour. The scheduled duration for measuring the detector plateau curves, upon reaching steady state operation at 100% of rated thermal power, is five hours.

Since achieving steady-state conditions and measuring the detector plateau curves can be accomplished within 24 hours of attaining a power level of 100% of rated thermal power, no need exists to include "steady-state operation" in the proposed change. Therefore, FPL Energy Seabrook, LLC proposes to modify proposed note 5 to Technical Specification Table 4.3-1, Reactor Trip System Instrumentation Surveillance Requirements, by removing the reference to steady-state operation.

Note 5 is revised to the following:

- (5) Initial plateau curves shall be measured for each detector. Subsequent plateau curves shall be obtained, evaluated and compared to the initial curves. *The plateau curves for the Intermediate Range and Power Range detectors are required to be measured or obtained within 24 hours after attaining 100% of RATED THERMAL POWER.* For the Intermediate Range and Power Range Neutron Flux channels the provisions of Specification 4.0.4 are not applicable for entry into MODE 2 or 1.

**Attachment 2**

Revised TS Mark-up

TABLE 4.3-1 (Continued)

TABLE NOTATIONS

\*Only if the Reactor Trip System breakers happen to be closed and the Control Rod Drive System is capable of rod withdrawal.

\*\*Below P-6 (Intermediate Range Neutron Flux Interlock) Setpoint.

\*\*\*Below P-10 (Low Setpoint Power Range Neutron Flux Interlock) Setpoint.

- (1) If not performed in previous 92 days. ⊕
- (2) Comparison of calorimetric to excore power indication above 15% of RATED THERMAL POWER. Adjust excore channel gains consistent with calorimetric power if absolute difference is greater than 2%. The provisions of Specification 4.0.4 are not applicable to entry into MODE 2 or 1.
- (3) Single point comparison of incore to excore AXIAL FLUX DIFFERENCE above 50% of RATED THERMAL POWER. Recalibrate if the absolute difference is greater than or equal to 3%. The provisions of Specification 4.0.4 are not applicable for entry into MODE 2 or 1. For the purposes of this surveillance requirement, monthly shall mean at least once per 31 EFPD.
- (4) Neutron detectors may be excluded from CHANNEL CALIBRATION.
- (5) Initial plateau curves shall be measured for each detector. Subsequent plateau curves shall be obtained, evaluated and compared to the initial curves. For the Intermediate Range and Power Range Neutron Flux channels the provisions of Specification 4.0.4 are not applicable for entry into MODE 2 or 1.
- (6) Incore - Excore Calibration, above 75% of RATED THERMAL POWER. The provisions of Specification 4.0.4 are not applicable for entry into MODE 2 or 1. For the purposes of this surveillance requirement, quarterly shall mean at least once per 92 EFPD.
- (7) Each train shall be tested at least every 62 days on a STAGGERED TEST BASIS.
- (8) If not performed in previous 31 days. ⊕
- (9) Surveillance in MODES 3\*, 4\*, and 5\* shall also include verification that permissives P-6 and P-10 are in their required state for existing plant conditions by observation of the permissive annunciator window.
- (10) Setpoint verification is not applicable.
- (11) The TRIP ACTUATING DEVICE OPERATIONAL TEST shall independently verify the OPERABILITY of the undervoltage and shunt trip attachments of the Reactor Trip Breakers.

*The plateau curves for the Intermediate Range and Power Range detectors are required to be measured or obtained within 24 hours after attaining 100% of RATED THERMAL Power*