FPL Energy
Seabrook Station

FPL Energy Seabrook Station
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October 18, 2004

Docket No. 50-443
SBK-L-04083

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

Reference: 1. FPLE Seabrook Letter NYN-04039, "Seabrook Station Response to Request for Additional Information Regarding License Amendment Request 03-02," dated May 5, 2004.
2. FPLE Seabrook Letter NYN-04046, "Seabrook Station Response to Request for Additional Information Regarding License Amendment Request 03-02," dated May 24, 2004

Seabrook Station
Revised Response to Request for Additional Information
Regarding License Amendment Request 03-02

Enclosed is the FPL Energy Seabrook, LLC (FPL Energy Seabrook) revised response to a request for additional information associated with License Amendment Request (LAR) 03-02 received on March 23, 2004.

The initial response to RAI 6h stated that the containment enclosure drawdown time for a LOCA was 4.5 minutes and 6 minutes for a rod ejection accident. It has since been determined that these times were non-conservative. The drawdown time for both accidents has been determined to be 8 minutes. Enclosure 1 provides the revised response to RAI 6h.

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

Very truly yours,

FPL Energy Seabrook, LLC

Gene St. Pierre
FOR Mark E. Warner
Site Vice President

A001

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

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

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 revised response to the Request for Additional Information to License Amendment Request 03-02 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
18 day of October, 2004

Michael O'Keefe
Notary Public

Gene F. St.Pierre
Station Director

MICHAEL D. O'KEEFE
MY COMMISSION EXPIRES FEB. 5, 2008
NOTARY PUBLIC
NEW HAMPSHIRE

Enclosure to SBK-L-04083

Revised Response to NRC Request for Additional Information
Seabrook Station Alternative Source Term

RAI 6h:

Table 2.1-1 identifies the containment enclosure drawdown time for the LOCA as 4.5 minutes (270 seconds). Table 2.6- identifies the draw down time for the rod control cluster assembly (RCCA) ejection accident as 360 seconds. Appendix A of the Seabrook Updated Final Safety Analysis Report (UFSAR) states that filtration credit is not assumed for the first eight minutes. Please explain the difference in these values. What is the value of the acceptance criteria for surveillance testing of this system safety function?

FPLE Response to RAI 6h:

Technical Specification 3/4.6.5, Containment Enclosure Emergency Air Cleanup System, Surveillance Requirement 4.6.5.1b.2d.4 verifies that one train of Containment Enclosure Emergency Air Cleanup System is capable of producing a negative pressure of greater than or equal to 0.25" w.g. in the Containment Enclosure within 4 minutes after a fan start. The Alternate Source Term (AST) analysis assumed it would take 4.5 minutes for the Containment Enclosure to reach a negative pressure greater than or equal to 0.25" w.g. The 4.5 minutes is the Surveillance Requirement Acceptance Criteria plus an assumed 30 seconds for the Emergency Diesel Generators to start and provide power to the emergency busses. Following submittal of the original response to RAI 6h, investigation into the basis for the 4 minute drawdown time concluded that the time used in the AST analysis was not correct.

The evaluation concluded that the 4 minute Technical Specification Surveillance Requirement acceptance criteria does not include the time to generate the actuation signal, the time for the diesel generator to supply power during a simultaneous loss of offsite power or the time required to compensate for the Containment growth caused by the pressurization of Containment following a LOCA. Signal actuation time, containment growth compensation and a design margin add an additional 3.48 minutes to the time to reach a negative pressure of greater than or equal to 0.25" w.g. in the Containment Enclosure. Therefore, the minimum time used in analysis for Containment Enclosure drawdown should be 7.48 minutes. This value is rounded up to 8 minutes for added conservatism.

The AST LOCA analysis has been re-evaluated using a drawdown time of 8 minutes. The RCCA ejection accident has also been re-evaluated using the same drawdown time of 8 minutes.

The results of the revised analysis indicate a minimal change in dose consequences from the original analysis. The following tables present the revised analysis which also includes the limiting 0-2 hour EAB atmospheric dispersion factor (i.e X/Q) applied for the entire duration of the event as stated in the response to RAI 5 (letter dated May 24,

2004) and the 10% of the total iodine activity in the ECCS leakage as stated in the response to RAIs 6d1 and 6d2 (letter dated May 24, 2004). LAR 03-02 Tables 2.1-1 and 2.6-1 are revised to specify an 8 minute Containment Enclosure drawdown time.

Results of New Cases with CEVA Drawdown Time of 8 Minutes

Table 1 Radiological Doses for LOCA Base Case with 8 Minute CEVA Drawdown

Dose Contribution	TEDE Dose (rem) EAB worst 2-hr	LPZ 30 days	CR 30 days
Containment Purge	4.2391E-04	2.0602E-04	3.8398E-04
Containment Leakage	4.6199E+00	3.2319E+00	3.8024E+00
ECCS Leakage	9.5305E-03	4.7662E-02	2.7304E-02
RWST Leakage	1.0728E-02	1.4140E-01	4.7062E-01
Shine Dose			0.45
Total	**4.64**	**3.42**	**4.75**
Acceptance Criteria	***25***	***25***	***5***
Control Room Unfiltered Inleakage = 150 cfm			

Table 2 Radiological Doses for RCCA Ejection Containment Release Case with 8 Minute CEVA Drawdown

Dose Contribution	TEDE Dose (rem) EAB worst 2-hr	LPZ 30 days	CR 30 days
15% DNB	1.6421E+00	1.8687E+00	4.2968E+00
0.375% FCM	9.1060E-02	1.0086E-01	2.1146E-01
Shine Dose			0.45
Total	**1.73**	**1.97**	**4.96**
Acceptance Criteria	***6.3***	***6.3***	***5***
Control Room Unfiltered Inleakage = 190 cfm			