

April 11, 2006

Mr. Gene F. St. Pierre, Site Vice President  
c/o James M. Peschel  
Seabrook Station  
FLP Energy Seabrook, LLC  
PO Box 300  
Seabrook, NH 03874

SUBJECT: SEABROOK STATION, UNIT NO. 1 - REQUESTED EXTENSION OF COMPLETION SCHEDULE FOR NRC GENERIC LETTER 2004-02, "POTENTIAL IMPACT OF DEBRIS BLOCKAGE ON EMERGENCY RECIRCULATION DURING DESIGN BASIS ACCIDENTS AT PRESSURIZED WATER REACTORS" (TAC NO. MC4716)

Dear Mr. St. Pierre:

In a January 27, 2006, supplemental response to Nuclear Regulatory Commission (NRC) Generic Letter (GL) 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized Water Reactors," Florida Power and Light (FPL) described its activities directed at resolution of the GL. FPL also stated that FPL Energy Seabrook, LLC, (the licensee for Seabrook Station, Unit No. 1 (Seabrook)) is in the process of planning and implementing a significant number of regulatory-driven, safety, and equipment reliability projects at Seabrook. FPL stated that major projects scheduled for the fall 2006 refueling outage at Seabrook include a first-time reactor vessel head volumetric inspection, control rod guide tube support (split) pin replacement, 100% steam generator eddy current testing, main generator rewind, installation of a new excitation system on the main generator, and the installation of an upgrade to the feedwater ultrasonic flowmeter instrumentation.

FPL stated that Seabrook's passive strainer design still has a number of open industry and plant-specific design issues to resolve, with the Seabrook strainer head loss and chemical effects testing by the vendor scheduled for completion in April 2006. FPL also stated that the resolution of industry and plant-specific analyses and testing issues after April 2006 may require additional design changes and there may not be adequate time to finalize the design and fabricate the strainers for installation in the fall 2006 refueling outage.

In Attachment 2 to the January 27, 2006, FPL letter, the licensee provided bases for a conclusion that it is acceptable to extend the completion of the corrective actions for the issues discussed in GL 2004-02 until the Seabrook spring 2008 outage, scheduled to begin on April 1, 2008.

Part 1 of Attachment 2 to the FPL letter was a discussion of the low risk associated with approval of the requested extension. In the conclusion of that discussion, FPL stated that it has calculated that the additional risk associated with a four-month extension would be less than  $1E-6$ .

In support of this extension, FPL noted that favorable existing conditions at Seabrook are:

- A relatively large existing sump screen (350 sq. ft.);
- A low sump approach velocity of 0.192 ft/sec for a 50% blocked screen (which facilitates settling of debris);
- The fact that the floor surrounding the sump slopes away from the sump, so heavy particles or pieces of debris would have a difficult time reaching the screen;
- Containment cleanliness with specific loose debris attention;
- Bulletin 2003-01 procedural guidance, training and actions (e.g., throttling or securing pumps);
- The lack of calcium silicate insulation material at Seabrook; and
- The leak-before-break principle applicable at Seabrook.

Attachment 2 also addressed plans for additional mitigative measures to be taken during the fall 2006 refueling outage, including:

- Installation of containment floor flow path debris interceptors;
- A calculated reduction in fibrous insulation material debris load at the sump of 30%;
- An expected ability to claim a four-pipe diameter zone of influence (4D ZOI) for qualified coatings rather than the 10D ZOI of the Nuclear Energy Institute guidance document for implementing solutions for GL 2004-02.

Given the above considerations, the NRC has confidence that FPL has a plan that will result in the installation of modifications that provide acceptable strainer function with adequate margin for uncertainties. Further, the NRC has concluded that FPL has put mitigation measures in place to adequately reduce risk for the requested short extension period, and that it is, therefore, acceptable to extend the completion date for the corrective actions for the issues discussed in GL 2004-02 until the completion of the Seabrook spring 2008 refueling outage,

G. F. St. Pierre

-3-

scheduled to begin on April 1, 2008. Should FPL elect to begin the outage more than 30 days after April 1, 2008, FPL will need to provide the NRC additional justification for further delay in completing corrective actions for GL 2004-02.

Sincerely,

*/RA/*

G. Edward Miller, Project Manager  
Plant Licensing Branch I-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-443

cc: See next page

scheduled to begin on April 1, 2008. Should FPL elect to begin the outage more than 30 days after April 1, 2008, FPL will need to provide the NRC additional justification for further delay in completing corrective actions for GL 2004-02.

Sincerely,

**/RA/**

G. Edward Miller, Project Manager  
Plant Licensing Branch I-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-443

cc: See next page

DISTRIBUTION:

RidsNrrDorLpl1-2  
PUBLIC  
LPL1-2 R/F  
RidsNrrDorl  
JHopkins  
SLu

RidsOgcRp  
RidsNrrPMGMiller  
RidsNrrLACRaynor  
GHill (2)  
MScott  
RGramm

RidsRgn1MailCenter  
RidsAcrsAcnwMailCenter  
LWhitney  
DCullison  
RArchitzel  
TMartin

Accession Number: ML060890398

OFFICE	LPL1-2/PM	LPL1-2/LA	DSS/SSIB/BC	LPL1-2/BC
NAME	GEMiller:em	CRaynor	MScott	DRoberts
DATE	4/5/06	4/6/06	4/5/06	4/11/06

Official Record Copy

Seabrook Station, Unit No. 1

cc:

Mr. J. A. Stall  
Senior Vice President, Nuclear and  
Chief Nuclear Officer  
Florida Power & Light Company  
P.O. Box 14000  
Juno Beach, FL 33408-0420

Mr. Peter Brann  
Assistant Attorney General  
State House, Station #6  
Augusta, ME 04333

Resident Inspector  
U.S. Nuclear Regulatory Commission  
Seabrook Nuclear Power Station  
P.O. Box 1149  
Seabrook, NH 03874

Town of Exeter  
10 Front Street  
Exeter, NH 03823

Regional Administrator, Region I  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406

Office of the Attorney General  
One Ashburton Place, 20th Floor  
Boston, MA 02108

Board of Selectmen  
Town of Amesbury  
Town Hall  
Amesbury, MA 01913

Ms. Deborah Bell  
Federal Emergency Management Agency  
Region I  
J.W. McCormack P.O. &  
Courthouse Building, Room 401  
Boston, MA 02109

Mr. Tom Crimmins  
Polestar Applied Technology  
One First Street, Suite 4  
Los Altos, CA 94019

Mr. Stephen McGrail, Director  
ATTN: James Muckerheide  
Massachusetts Emergency Management Agency  
400 Worcester Road  
Framingham, MA 01702-5399

Philip T. McLaughlin, Attorney General  
Steven M. Houran, Deputy Attorney  
General  
33 Capitol Street  
Concord, NH 03301

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

Mr. M. S. Ross, Managing Attorney  
Florida Power & Light Company  
P.O. Box 14000  
Juno Beach, FL 33408-0420

Mr. Rajiv S. Kundalkar  
Vice President - Nuclear Engineering  
Florida Power & Light Company  
P.O. Box 14000  
Juno Beach, FL 33408-0420

James M. Peschel  
Regulatory Programs Manager  
Seabrook Station  
FPL Energy Seabrook, LLC  
PO Box 300  
Seabrook, NH 03874

Marjan Mashhadi  
Senior Attorney  
Florida Power & Light Company  
801 Pennsylvania Ave., NW Suite 220  
Washington, DC 20004

Seabrook Station, Unit No. 1

cc:

David Moore  
Vice President, Nuclear Operations Support  
Florida Power & Light Company  
P.O. Box 14000  
Juno Beach, FL 33408-0420