March 2, 2007

Mr. Gene St. Pierre
Site Vice President
FPL Energy Seabrook, LLC
Seabrook Station
c/o Mr. James M. Peschel
P.O. Box 300
Seabrook, NH 03874

SUBJECT: ANNUAL ASSESSMENT LETTER - SEABROOK NUCLEAR POWER STATION (REPORT 05000443/2007001)

Dear Mr. St. Pierre:

On February 13, 2007, the U.S. Nuclear Regulatory Commission (NRC) staff completed its performance review of the Seabrook Nuclear Power Station (Seabrook). Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31, 2006. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility.

This performance review and enclosed inspection plan do not include physical protection information. A separate letter designated and marked as "Exempt from Public Disclosure in accordance with 10 CFR 2.390" will include the physical protection review and resultant inspection plan.

Overall, Seabrook operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the most recent quarter was within the Licensee Response column of the NRC’s Action Matrix, based on all inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green). Therefore, we plan to conduct reactor oversight process (ROP) baseline inspections at your facility.

While plant performance for the most recent quarter was within the Licensee Response column of the Action Matrix, Seabrook was within the Regulatory Response column for the 3rd quarter of the assessment cycle due to one White (low to moderate safety significance) PI. Specifically, Seabrook had a White PI for the emergency diesel generator (EDG) Mitigating System Performance Index, Emergency Alternating Current Power System, which crossed the Green/White threshold in late August 2006 when both EDGs became inoperable due to voltage regulator problems. Following repairs of both EDGs in early September 2006, your staff performed a root cause evaluation of the failures. The NRC performed a special inspection to evaluate the circumstances associated with the event and has scheduled a 95001 supplemental inspection for May 2007. The objective of the supplemental inspection will be to provide...
assurance that Seabrook understands the root causes and contributing causes of the failures, identifies the extent of condition, and establishes corrective actions that are sufficient to prevent recurrence.

The enclosed inspection plan details the inspections, less those related to physical protection, scheduled through June 30, 2008. In addition to the 95001 supplemental inspection and the ROP baseline inspections, we plan to conduct an independent spent fuel storage facility inspection. The inspection plan is provided to allow for the resolution of any scheduling conflicts and personnel availability issues well in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last nine months of the inspection plan are tentative and may be revised at the mid-cycle review.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

If circumstances arise which cause us to change this inspection plan, we will contact you to discuss the change as soon as possible. Please contact Paul Krohn at 610-337-5120 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA/

David C. Lew, Director
Division of Reactor Projects

Docket No. 50-443
License No. NPF-86

Enclosure: Seabrook Inspection/ Activity Plan

cc w/encl:
J. A. Stall, FPL Senior Vice President, Nuclear & CNO
M. Warner, Vice President, Nuclear Support Services
R. S. Kundalkar, FPL Vice President, Nuclear Engineering
M. Mashhadi, Senior Attorney, Florida Power & Light Company
M. S. Ross, Managing Attorney, Florida Power & Light Company
J. M. Peschel, Manager, Regulatory Programs
M. Kiley, Plant General Manager, Seabrook Station
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R. Poole, FEMA, Region-I
Office of the Attorney General, Commonwealth of Massachusetts
K. Ayotte, Attorney General, State of New Hampshire
O. Fitch, Deputy Attorney General, State of New Hampshire
D. Harnish, Assistant Attorney General, State of Maine
R. Walker, Director, Radiation Control Program, Dept. of Public Health, Commonwealth of MA
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D. O'Dowd, Administrator, Radiological Health Section, DPHS, DHHS, State of New Hampshire
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Town of Exeter, State of New Hampshire
Board of Selectmen, Town of Amesbury
S. Comley, Executive Director, We the People of the United States
R. Shadis, New England Coalition Staff
M. Metcalf, Seacoast Anti-Pollution League
| Unit Number | Inspection Activity | Title                                                                 | No. of Staff on Site | Planned Dates Start | Planned Dates End | Inspection Type |
|-------------|---------------------|                                                                     |                      |                    |                  |                |
| IP 60854    | ISFSI INSP          | Preoperational Testing Of An ISFSI                                 | 2                    | 02/12/2007         | 02/16/2007       | Other Routine  |
| 7112101     | ISFSI INSP          | Access Control to Radiologically Significant Areas                | 1                    | 03/05/2007         | 03/09/2007       | Baseline Inspections |
| U01666      | LICENSED OPERATOR INITIAL EXAMS | FY07-SEABROOK INITIAL OPERATOR EXAM                              | 4                    | 06/11/2007          | 06/15/2007       | Not Applicable |
| U01666      | LICENSED OPERATOR INITIAL EXAMS | FY07-SEABROOK INITIAL OPERATOR EXAM                              | 1                    | 07/09/2007          | 07/13/2007       | Not Applicable |
| 7111121     | CDBI (COMPONENT DESIGN BASES INSPECTION) | Component Design Bases Inspection                              | 6                    | 03/19/2007         | 03/23/2007       | Baseline Inspections |
| 7112201     | PUB RAD SAFETY - RETS | Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems | 1                    | 04/09/2007         | 04/13/2007       | Baseline Inspections |
| 7111107     | HEAT SINK INSPECTION | Heat Sink Performance                                             | 1                    | 05/14/2007         | 05/18/2007       | Baseline Inspections |
| 95001       | SUPPLEMENTAL INSPECTION FOR WHITE EDG MSPI | Supplemental Inspection For One Or Two White Inputs In A Strategic Performance Area | 1                    | 05/14/2007         | 05/18/2007       | Supplemental Prograr |
| 7112203     | PUB RAD SAFETY - REMP | Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Pr | 1                    | 09/03/2007         | 09/07/2007       | Baseline Inspections |
| 7112103     | OCC RAD SAFETY - INSTRUMENTS | Radiation Monitoring Instrumentation and Protective Equipment     | 1                    | 09/04/2007         | 09/07/2007       | Baseline Inspections |
| 7112102     | OCC RAD SAFETY - ALARA | ALARA Planning and Controls                                      | 1                    | 12/03/2007         | 12/07/2007       | Baseline Inspections |

This report does not include INPO and OUTAGE activities.
This report shows only on-site and announced inspection procedures.
### Inspection / Activity Plan

**Seabrook**

**Inspection / Activity Plan**

01/01/2007 - 06/30/2008

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<th>Unit Number</th>
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G. St. Pierre

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SUNSI Review Complete:   PGK  (Reviewer’s Initials)

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