



**MAR - 4 2005**  
L-2005-034  
10 CFR 50.54(f)

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

Re: Florida Power and Light Company  
St. Lucie Units 1 and 2  
Docket Nos. 50-355 and 50-389  
Turkey Point Units 3 and 4  
Docket Nos. 50-250 and 50-251

FPL Energy – Seabrook, LLC  
Seabrook Station  
Docket No. 50-443

**NRC Generic Letter 2004-02**  
**Potential Impact of Debris Blockage on Emergency Recirculation**  
**During Design Basis Accidents at Pressurized Water Reactors**

On September 13, 2004, the Nuclear Regulatory Commission (NRC) issued Generic Letter 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors." Florida Power & Light Company (FPL), the licensee for the St. Lucie Nuclear Plant, Units 1 and 2, and the Turkey Point Nuclear Plant, Units 3 and 4, and FPL Energy Seabrook, LLC (FPL Energy Seabrook), the licensee for Seabrook Station, hereby submit the first of the two responses requested by Generic Letter 2004-02.

In Generic Letter 2004-02, the NRC requested that specific information be provided within 90 days of the date of the safety evaluation report providing the guidance for performing the requested evaluation. The safety evaluation related to Generic Letter 2004-02 was issued by NRC on December 6, 2004. Accordingly, Attachment 1 provides the FPL St. Lucie Plant 90-day response, Attachment 2 provides the FPL Turkey Point Plant 90-day response, and Attachment 3 provides the FPL Energy Seabrook Station 90-day response regarding the planned actions and schedules for completing the requested evaluation.

The attached information is provided pursuant to the requirements of Section 182a of the Atomic energy Act of 1954, as amended and 10 CFR 50.54(f).

Please contact Rajiv S. Kundalkar at (561) 694-4848 if you have any questions regarding these responses.

Sincerely yours,

J. A. Stall  
Senior Vice President, Nuclear and  
Chief Nuclear Officer

Attachments (3)

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St. Lucie Units 1 and 2, Docket No. 50-335 and 50-389  
Turkey Point Units 3 and 4, Docket No. 50-250 and 50-251  
Seabrook Station, Docket No. 50-443  
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STATE OF FLORIDA                     )  
                                                  )ss.  
COUNTY OF PALM BEACH         )

J. A. Stall being first duly sworn, deposes and says:

That he is Senior Vice President, Nuclear and Chief Nuclear Officer of Florida Power & Light Company and FPL Energy Seabrook, LLC, the Licensees herein;

That he has executed the foregoing document; that the statements made in this document are true and correct to the best of his knowledge, information and belief, and that he is authorized to execute the document on behalf of said Licensees.



J. A Stall

Subscribed and sworn to before me this

4 day of March, 2005



Name of Notary Public (Type or Print)



Roberta S. Economy  
MY COMMISSION # DD007295 EXPIRES  
June 1, 2005  
BONDED THRU TROY FARM INSURANCE, INC.

J. A. Stall is personally known to me.

**NRC GENERIC LETTER 2004-02:  
POTENTIAL IMPACT OF DEBRIS BLOCKAGE ON EMERGENCY RECIRCULATION  
DURING DESIGN BASIS ACCIDENTS AT PRESSURIZED-WATER REACTORS**

**RESPONSE FOR ST. LUCIE UNITS 1 AND 2**

On September 13, 2004, the Nuclear Regulatory Commission (NRC) issued Generic Letter (GL) 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors." In GL 2004-02, the NRC requested that specific information be provided within 90 days of the issuance of the Safety Evaluation (SE) providing the guidance for the evaluations that would be used to determine regulatory compliance. The NRC SE was issued on December 6, 2004. The NRC requested information and associated FPL 90-day response follow:

**NRC Requested Information:** *Within 90 days of the date of the safety evaluation report providing the guidance for performing the requested evaluation, addressees are requested to provide information regarding their planned actions and schedule to complete the requested evaluation. The information should include the following:*

**NRC Request 1.(a):** *A description of the methodology that is used or will be used to analyze the susceptibility of the ECCS and CSS recirculation functions for your reactor to the adverse effects identified in this generic letter of post-accident debris blockage and operation with debris-laden fluids identified in this generic letter. Provide the completion date of the analysis that will be performed.*

**FPL Response to Request 1.(a) for St. Lucie Units 1 and 2:** St. Lucie Units 1 and 2 intend to utilize the deterministic approach described in NEI 04-07 with guidance provided in the NRC SE. Where the NEI 04-07 guidance varies from that in the NRC SE, the SE guidance will be used. Planned exceptions to the use of the NEI 04-07 and the SE guidance include:

1. Additional testing and/or evaluation of existing data relative to qualified and unqualified coatings are planned by EPRI and PWR owner groups. FPL may also perform additional testing and/or evaluations. These test and evaluation results may be used in our evaluations.
2. NEI 04-07 and the NRC SE do not provide specific guidance for evaluating the chemical precipitation effects. Cooperative NRC-EPRI tests for chemical precipitation are in progress. The significance of chemical precipitation and the methodology for head loss to account for the chemical precipitants is currently not developed. St. Lucie Units 1 and 2 intend to use future test results, industry guidance, and NRC guidance to account for chemical precipitation in our evaluations.

The initial evaluations based on the NEI 04-07 and the NRC SE for the current plant configurations will be completed prior to September 1, 2005.

Additional test data, engineering data and/or contractor specific proprietary information will be evaluated for incorporation into these evaluations as they become available, and additional analyses may be completed after September 1, 2005. Should additional exceptions or refinements be incorporated in the analysis methodology, such changes and their bases will be identified and documented.

St. Lucie Units 1 and 2, Docket No. 50-355 and 50-389  
Turkey Point Units 3 and 4, Docket No. 50-250 and 50-251  
Seabrook Station, Docket No. 50-443  
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The final sump strainer configuration and the NPSH margin will be available when the strainer design change is finalized. The schedule for completion of the final configuration and analyses will be included in the September 1, 2005 submittal.

***NRC Request 1.(b):*** *A statement of whether you plan to perform a containment walkdown surveillance in support of the analysis of the susceptibility of the ECCS and CSS recirculation functions to the adverse effects of debris blockage identified in this generic letter. Provide justification if no containment walkdown surveillance will be performed. If a containment walkdown surveillance will be performed, state the planned methodology to be used and the planned completion date.*

**FPL Response to Request 1.(b) for St. Lucie Units 1 and 2:** The walkdowns for St. Lucie Unit 1 were conducted during outages prior to January, 2003. The results of the walkdowns were used to validate information provided for the analyses. Containment piping insulation was surveyed on a sampling basis to verify the current insulation documentation is correct. The containment was walked down using piping isometric drawings to collect data and verify the presence of insulation and insulation type. The insulation information was placed in a data base for use in the analyses.

The walkdowns for St. Lucie Unit 2 were conducted during outages prior to July, 2002. The results of the walkdowns were used to validate the information that was provided for the analyses. Containment piping insulation was surveyed on a sampling basis to verify the current insulation documentation is correct. The containment was walked down using piping isometric drawings to collect data and verify the presence of insulation and insulation type. The insulation information was placed in a data base for use in the analyses.

The methodology of NEI 02-01, "Condition Assessment Guidelines: Debris Sources Inside PWR Containments," was used as guidance for determining the types of potential debris sources and their locations inside containment at the time of a LOCA. The potential debris sources addressed are piping insulation, foreign materials and unqualified coatings.

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POTENTIAL IMPACT OF DEBRIS BLOCKAGE ON EMERGENCY RECIRCULATION  
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**RESPONSE FOR TURKEY POINT UNITS 3 AND 4**

On September 13, 2004, the Nuclear Regulatory Commission (NRC) issued Generic Letter (GL) 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors." In GL 2004-02, the NRC requested that specific information be provided within 90 days of the issuance of the Safety Evaluation (SE) providing the guidance for the evaluations that would be used to determine regulatory compliance. The NRC SE was issued on December 6, 2004. The NRC requested information and associated FPL 90-day response follow:

**NRC Requested Information:** *Within 90 days of the date of the safety evaluation report providing the guidance for performing the requested evaluation, addressees are requested to provide information regarding their planned actions and schedule to complete the requested evaluation. The information should include the following:*

**NRC Request 1.(a):** *A description of the methodology that is used, or will be used, to analyze the susceptibility of the ECCS and CSS recirculation functions for your reactor to the adverse effects identified in this generic letter of post-accident debris blockage and operation with debris-laden fluids identified in this generic letter. Provide the completion date of the analysis that will be performed.*

**FPL Response to Request 1.(a) for Turkey Point Units 3 and 4:** Turkey Point Units 3 and 4 will utilize the deterministic approach described in NEI 04-07 with guidance provided in the NRC SE. Where the NEI 04-07 guidance varies from that in the NRC SE, the SE guidance will be used. Planned exceptions to the use of the NEI 04-07 and the SE guidance include:

1. Additional testing and/or evaluation of existing data relative to qualified and unqualified coatings are planned by EPRI and PWR owner groups. FPL may also perform additional testing and/or evaluations. These test and evaluation results may be used in our evaluations.
2. NEI 04-07 and the NRC SE do not provide specific guidance for evaluating the chemical precipitation effects. Cooperative NRC-EPRI tests for chemical precipitation are in progress. The significance of chemical precipitation and the methodology for head loss to account for the chemical precipitants is currently not developed. Turkey Point Units 3 and 4 intend to use future test results, industry guidance, and NRC guidance to account for chemical precipitation in our evaluations.

The initial evaluations based on the NEI 04-07 and the NRC SE for the current plant configurations will be completed prior to September 1, 2005.

Additional test data, engineering data and/or contractor specific proprietary information will be evaluated for incorporation into these evaluations as they become available, and additional analyses may be completed after September 1, 2005. Should additional exceptions or refinements be incorporated in the analysis methodology, such changes and their bases will be identified and documented.

St. Lucie Units 1 and 2, Docket No. 50-355 and 50-389  
Turkey Point Units 3 and 4, Docket No. 50-250 and 50-251  
Seabrook Station, Docket No. 50-443  
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The final sump strainer configuration and the NPSH margin will be available when the strainer design is finalized. The schedule for completion of the final configuration and analyses will be included in the September 1, 2005 submittal.

***NRC Request 1.(b):*** *A statement of whether you plan to perform a containment walkdown surveillance in support of the analysis of the susceptibility of the ECCS and CSS recirculation functions to the adverse effects of debris blockage identified in this generic letter. Provide justification if no containment walkdown surveillance will be performed. If a containment walkdown surveillance will be performed, state the planned methodology to be used and the planned completion date.*

**FPL Response to Request 1.(b) for Turkey Point Units 3 and 4:** The walkdowns for Turkey Point Unit 3 were complete during the Cycle 20 refueling outage. Documentation of the walkdown results for use in the analyses was completed on June 3, 2004. The containment was walked down using piping isometric drawings to collect data and verify the presence of insulation and insulation type. The collected information was verified and placed in a data base for use in the analyses.

The walkdowns for Turkey Point Unit 4 were complete during the Cycle 21 refueling outage. Documentation of the walkdown results for use in the analyses was completed on November 1, 2004. The containment was walked down using piping isometric drawings to collect data and verify the presence of insulation and insulation type. The collected information was verified and placed in a data base for use in the analyses.

The methodology of NEI 02-01, "Condition Assessment Guidelines: Debris Sources Inside PWR Containments," was used as guidance for determining the types of potential debris sources and their locations inside containment at the time of a LOCA. The potential debris sources addressed are piping insulation, foreign materials and unqualified coatings.

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**RESPONSE FOR SEABROOK STATION**

On September 13, 2004, the Nuclear Regulatory Commission (NRC) issued Generic Letter (GL) 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors." In GL 2004-02, the NRC requested that specific information be provided within 90 days of the issuance of the Safety Evaluation (SE) providing the guidance for the evaluations that would be used to determine regulatory compliance. The NRC SE was issued on December 6, 2004. The NRC requested information and associated FPL Energy Seabrook 90-day response follow:

**NRC Requested Information:** *Within 90 days of the date of the safety evaluation report providing the guidance for performing the requested evaluation, addressees are requested to provide information regarding their planned actions and schedule to complete the requested evaluation. The information should include the following:*

**NRC Request 1.(a):** *A description of the methodology that is used, or will be used, to analyze the susceptibility of the ECCS and CSS recirculation functions for your reactor to the adverse effects identified in this generic letter of post-accident debris blockage and operation with debris-laden fluids identified in this generic letter. Provide the completion date of the analysis that will be performed.*

**FPL Energy Seabrook Response to Request 1.(a):** Seabrook Station will utilize the deterministic approach described in NEI 04-07 with guidance provided in the NRC SE. Where the NEI 04-07 guidance varies from that in the NRC SE, the SE guidance will be used. Planned exceptions to the use of the NEI 04-07 and the SE guidance include:

1. Additional testing and/or evaluation of existing data relative to qualified and unqualified coatings are planned by EPRI and PWR owner groups. FPL Energy Seabrook may also perform additional testing and/or evaluations. These test and evaluation results may be used in our evaluations.
2. NEI 04-07 and the NRC SE do not provide specific guidance for evaluating the chemical precipitation effects. Cooperative NRC-EPRI tests for chemical precipitation are in progress. The significance of chemical precipitation and the methodology for head loss to account for the chemical precipitants is currently not developed. Seabrook intends to use future test results, industry guidance, and NRC guidance to account for chemical precipitation in our evaluations.

The initial evaluations based on the NEI 04-07 and the NRC SE for the current plant configurations will be completed prior to September 1, 2005.

Additional test data, engineering data and/or contractor specific proprietary information will be evaluated for incorporation into these evaluations as they become available, and additional analyses may be completed after September 1, 2005. Should additional exceptions or refinements be incorporated in the analysis methodology, such changes and their bases will be identified and documented.

St. Lucie Units 1 and 2, Docket No. 50-355 and 50-389  
Turkey Point Units 3 and 4, Docket No. 50-250 and 50-251  
Seabrook Station, Docket No. 50-443  
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The final sump strainer configuration and the NPSH margin will be available when the strainer design is finalized. The schedule for completion of the final configuration and analyses will be included in the September 1, 2005 submittal.

***NRC Request 1.(b):*** *A statement of whether you plan to perform a containment walkdown surveillance in support of the analysis of the susceptibility of the ECCS and CSS recirculation functions to the adverse effects of debris blockage identified in this generic letter. Provide justification if no containment walkdown surveillance will be performed. If a containment walkdown surveillance will be performed, state the planned methodology to be used and the planned completion date.*

**FPL Energy Seabrook Response to Request 1.(b):** The walkdown for Seabrook Station piping insulation was completed on October 29, 2003. Containment piping insulation was surveyed on a sampling basis to verify that the current insulation documentation is correct. The insulation documentation contains the input necessary for the analysis. The walkdown confirmed that the current documentation is correct and can be used as input for the analysis.

The methodology of NEI 02-01, "Condition Assessment Guidelines: Debris Sources Inside PWR Containments," was used as guidance for determining the types of potential debris sources and their locations inside containment at the time of a LOCA. The potential debris sources addressed are piping insulation, foreign materials and unqualified coatings.