

50-348/364



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
WASHINGTON, D.C. 20555-0001

December 17, 1999

Mr. D. N. Morey  
Vice President - Farley Project  
Southern Nuclear Operating  
Company, Inc.  
Post Office Box 1295  
Birmingham, Alabama 35201-1295

**SUBJECT: JOSEPH M. FARLEY NUCLEAR PLANT, UNITS 1 AND 2 RE: SITE-SPECIFIC  
WORKSHEETS FOR USE IN THE NRC'S SIGNIFICANCE DETERMINATION  
PROCESS (TAC NO. MA6544)**

Dear Mr. Morey:

Enclosed is a Risk-Informed Inspection Notebook containing Significance Determination Process (SDP) worksheets that inspectors will be using to risk characterize inspection findings. The worksheets are one of the key implementation tools that we will use in the revised reactor oversight process, which we currently expect to implement at Farley Nuclear Plant in April 2000. We discuss the SDP in more detail below.

On January 8, 1999, the NRC staff described to the Commission plans and recommendations to improve the reactor oversight process. These recommendations were contained in SECY-99-007, "Recommendations for Reactor Oversight Process Improvements" (available on the NRC's Web site [www.nrc.gov/nrc/commission/secys/index.html](http://www.nrc.gov/nrc/commission/secys/index.html)). The new process, developed with stakeholder involvement, is designed around a risk-informed framework which is intended to focus both the NRC's and licensee's attention and resources on more risk-significance issues.

The performance assessment portion of the new process involves using both utility-submitted performance indicator (PI) data and inspection findings that have been appropriately categorized based on their risk significance. We developed the SDP in order to properly categorize an inspection finding. This process was also described to the Commission in SECY 99-007A, "Recommendations for Reactor Oversight Process Improvements (Follow-up to SECY-99-007)," dated March 22, 1999, also available on the above-noted Web site.

The SDP for power operations involves evaluating the impact of an inspection finding on the plant capability to:

- Limit the frequency of initiating events.
- Ensure the availability, reliability, and capability of mitigating systems.
- Ensure the integrity of the fuel cladding, reactor coolant system, and containment barriers.

The SDP involves using three tables. Table 1 is the estimated likelihood for initiating event occurrence during the degraded period. Table 2 describes how significance is determined based on remaining mitigation system capabilities. Table 3 provides the bases for the failure probabilities associated with the remaining mitigation equipment and strategies.

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D. N. Morey

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As a result of the recently concluded Pilot Plant review effort, we have determined that we need site-specific risk data in order to provide a repeatable determination of the significance of an issue. Therefore, we contracted with Brookhaven National Laboratory (BNL) to develop site-specific worksheets for use in the SDP review. BNL developed the attached worksheets based on your Individual Plant Examination (IPE) submittal that Generic Letter 88-20 requested. We plan to use this site-specific information in evaluating the significance of issues identified at your facility when we implement the revised reactor oversight process industry-wide. We recognize that the IPE used during this effort may not contain current information. Therefore, we or our contractor will visit Farley Nuclear Plant in the near future to discuss with your staff any changes that may be appropriate. We are not requesting written comments on the NRC's templates.

Sincerely,



L. Mark Padovan, Project Manager, Section 1  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-348 and 50-364

Enclosure: Risk-Informed Inspection Notebook

cc w/encl: See next page

**Joseph M. Farley Nuclear Plant**

cc:

**Mr. L. M. Stinson  
General Manager -  
Southern Nuclear Operating Company  
Post Office Box 470  
Ashford, Alabama 36312**

**Rebecca V. Badham  
SAER Supervisor  
Southern Nuclear Operating Company  
P. O. Box 470  
Ashford, Alabama 36312**

**Mr. Mark Ajluni, Licensing Manager  
Southern Nuclear Operating Company  
Post Office Box 1295  
Birmingham, Alabama 35201-1295**

**Mr. M. Stanford Blanton  
Balch and Bingham Law Firm  
Post Office Box 306  
1710 Sixth Avenue North  
Birmingham, Alabama 35201**

**Mr. J. D. Woodard  
Executive Vice President  
Southern Nuclear Operating Company  
Post Office Box 1295  
Birmingham, Alabama 35201**

**State Health Officer  
Alabama Department of Public Health  
434 Monroe Street  
Montgomery, Alabama 36130-1701**

**Chairman  
Houston County Commission  
Post Office Box 6406  
Dothan, Alabama 36302**

**Resident Inspector  
U.S. Nuclear Regulatory Commission  
7388 N. State Highway 95  
Columbia, Alabama 36319**

**cc: Mr. Steve Floyd  
Nuclear Energy Institute (NEI)  
1776 I Street, NW., Suite 400  
Washington, DC 20006**

**Mr. David Lochbaum  
Nuclear Safety Engineer  
Union of Concerned Scientists (UCS)  
1616 P Street, NW., Suite 310  
Washington, DC 20036-1495**

D. N. Morey

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