



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

December 13, 1999

Mr. James Scarola, Vice President  
Shearon Harris Nuclear Power Plant  
Carolina Power & Light Company  
Post Office Box 165, Mail Code: Zone 1  
New Hill, North Carolina 27562-0165

SUBJECT: SHEARON HARRIS NUCLEAR POWER PLANT, UNIT 1 - SITE-SPECIFIC  
WORKSHEETS FOR USE IN THE NRC'S SIGNIFICANCE DETERMINATION  
PROCESS

Dear Mr. Scarola:

As a participant in the Pilot Plant Review of the revised reactor oversight program, you are aware of the NRC's efforts to develop a Significance Determination Process (SDP) for use by the NRC to provide a risk characterization to an inspection finding. The purpose of this letter is to provide you with the enclosed Risk-Informed Inspection Notebook which contains site-specific SDP worksheets that inspectors will be using to risk characterize inspection findings. The SDP is discussed 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 those issues of more risk significance.

The performance assessment portion of the new process involves the use of both licensee-submitted performance indicator (PI) data and inspection findings that have been appropriately categorized based on their risk significance. In order to properly categorize an inspection finding, the NRC has developed the SDP. 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 an inspection finding's impact on the plant's capability to: limit the frequency of initiating events; ensure the availability, reliability, and capability of mitigating systems; and to ensure the integrity of the fuel cladding, reactor coolant system, and containment barriers. The SDP involves the use of three tables. Table 1 is the estimated likelihood for initiating event occurrence during the degraded period. Table 2 describes how the significance is determined based on remaining mitigation system capabilities and Table 3 provides the bases for the failure probabilities associated with the remaining mitigation equipment and strategies.

As a result of the recent Pilot Plant review effort, the NRC has determined that site-specific risk data is needed in order to provide a repeatable determination of the significance of an issue.

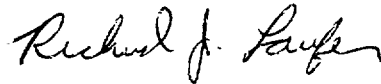
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Therefore, the NRC has contracted with Brookhaven National Laboratory (BNL) to develop site-specific worksheets to be used in the SDP review. These enclosed worksheets were developed based on your Individual Plant Examination (IPE) submittal that was requested by Generic Letter 88-20. The NRC plans to use this site-specific information in evaluating the significance of issues identified at your facility. It is recognized that the IPE utilized during this effort may not contain current information. Therefore, the NRC conducted a site visit to your facility and discussed appropriate changes with your staff, which have been incorporated. We are not requesting written comments on the NRC's work product enclosed with this letter.

If there is a need to conduct additional follow-up visits, we will coordinate our efforts through your licensing or risk organizations as appropriate. If you have any questions, please contact me at (301) 415-1373.

Sincerely,



Richard J. Laufer, Project Manager, Section 2  
Project Directorate II  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-400

Enclosure: Risk-Informed Inspection Notebook

cc w/encl: See next page

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Sincerely,

Original signed by:

Richard J. Laufer, Project Manager, Section 2  
 Project Directorate II  
 Division of Licensing Project Management  
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Enclosure: Risk-Informed Inspection Notebook

cc w/encl> See next page

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Mr. James Scarola  
Carolina Power & Light Company

Shearon Harris Nuclear Power Plant  
Unit 1

cc:

Mr. William D. Johnson  
Vice President and Corporate Secretary  
Carolina Power & Light Company  
Post Office Box 1551  
Raleigh, North Carolina 27602

Mr. Chris L. Burton  
Director of Site Operations  
Carolina Power & Light Company  
Shearon Harris Nuclear Power Plant  
Post Office Box 165, MC: Zone 1  
New Hill, North Carolina 27562-0165

Resident Inspector/Harris NPS  
c/o U.S. Nuclear Regulatory Commission  
5421 Shearon Harris Road  
New Hill, North Carolina 27562-9998

Mr. Robert P. Gruber  
Executive Director  
Public Staff NCUC  
Post Office Box 29520  
Raleigh, North Carolina 27626

Ms. Karen E. Long  
Assistant Attorney General  
State of North Carolina  
Post Office Box 629  
Raleigh, North Carolina 27602

Chairman of the North Carolina  
Utilities Commission  
Post Office Box 29510  
Raleigh, North Carolina 27626-0510

Public Service Commission  
State of South Carolina  
Post Office Drawer  
Columbia, South Carolina 29211

Mr. Vernon Malone, Chairman  
Board of County Commissioners  
of Wake County  
P. O. Box 550  
Raleigh, North Carolina 27602

Mr. Mel Fry, Director  
Division of Radiation Protection  
N.C. Department of Environment  
and Natural Resources  
3825 Barrett Dr.  
Raleigh, North Carolina 27609-7721

Mr. Richard H. Givens, Chairman  
Board of County Commissioners  
of Chatham County  
P. O. Box 87  
Pittsboro, North Carolina 27312

Mr. Terry C. Morton  
Manager  
Performance Evaluation and  
Regulatory Affairs CPB 7  
Carolina Power & Light Company  
Post Office Box 1551  
Raleigh, North Carolina 27602-1551

Ms. Donna B. Alexander, Manager  
Regulatory Affairs  
Carolina Power & Light Company  
Shearon Harris Nuclear Power Plant  
P.O. Box 165, Mail Zone 1  
New Hill, NC 27562-0165

Mr. Bo Clark  
Plant General Manager - Harris Plant  
Carolina Power & Light Company  
Shearon Harris Nuclear Power Plant  
P.O. Box 165  
New Hill, North Carolina 27562-0165

Mr. Johnny H. Eads, Supervisor  
Licensing/Regulatory Programs  
Carolina Power & Light Company  
Shearon Harris Nuclear Power Plant  
P. O. Box 165, Mail Zone 1  
New Hill, NC 27562-0165

Mr. John H. O'Neill, Jr.  
Shaw, Pittman, Potts & Trowbridge  
2300 N Street, NW.  
Washington, DC 20037-1128

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