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SUBJECT: Responds to Generic Ltr 88-20, Suppl 1 re individual plant exam.

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Docket No. 50-397

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

Gentlemen:

Subject: NUCLEAR PLANT NO. 2, OPERATING LICENSE NPF-21
 INITIAL SUBMITTAL OF INDIVIDUAL PLANT EXAMINATION (IPE)

Pursuant to the request in Generic Letter 88-20, and its Supplement 1, this letter is to inform the NRC of the Supply System's intentions in responding to the Generic Letter and NUREG-1335. This letter satisfies the 60-day response requirement of the Generic Letter by providing:

- I. The method and approach selected for performing the WNP-2 IPE.
- II. A description (by reference) of the method to be used, and
- III. Schedule milestones for performing the IPE and submittal of the WNP-2 plant-specific results to the NRC.

The following provides the detailed response to each of these items.

I. Method and Approach of WNP-2 IPE

The Supply System has chosen to perform a plant-specific PRA as our preferred methodology in responding to Generic Letter 88-20. The PRA will be completed to Level II as described in NUREG/CR-2300 and 'focused' or modified only to the extent that it will address the NRC's concerns from the Containment Performance Improvement (CPI) program, if available, and lessons learned from NUREG-1150. The scope of the IPE will be for internally initiated events, with the exception that internal flooding cases will be included as directed by Generic Letter 88-20, Supplement 1. The Supply System plans to perform the WNP-2 PRA in a manner to accommodate expansion of the IPE to address the other Severe Accident Closure issues as appropriate.

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The Supply System has established an IPE team of technical experts under the direction of Engineering's Safety and Reliability Analysis Department within the Engineering Analysis and Nuclear Fuels Division. In order to cover the broad area of expertise needed in the PRA approach, the IPE team has participating members from the Engineering, Operations and Licensing and Assurance Directorates. In anticipation of the Generic Letter's requirements, the IPE team has already assembled system descriptions, dependency matrices and additional background information for several frontline and support systems.

II. WNP-2 IPE Method Description

The Supply System will perform a Level I PRA and a focused Level II PRA to satisfy the regulatory requirements specified in Generic Letter 88-20. A probabilistic risk assessment involves the development and integration of logic models that model the response of the plant systems and operators to a spectrum of transient events. The Level I portion of the PRA examines the combinations of events (such as failures of plant systems, or operator errors) that can potentially lead to core damage following an initiating event. Using a combination of WNP-2 and generic operating experience, the likelihood of experiencing a core damage event can be estimated. The Level II portion of the PRA models the response of the operators, plant systems, and containment following a core damage event to determine the likelihood of experiencing a significant release of radionuclides past the primary containment, as well as the constituents of the radionuclide release, for those sequences that exceed the screening criteria of Generic Letter 88-20.

The WNP-2 IPE will be performed using standard PRA methods and practices such as those outlined in the PRA Procedures Guide (NUREG/CR-2300). Procedures will be prepared and utilized for performing the key technical tasks to ensure consistency among the analysis involved in the study.

A. Level I IPE Study

The Level I portion of the IPE study, also called the accident sequence analysis, consists of the following major tasks:

1. Plant Information Collection and Assembly.
2. Component Failure and Common Cause Data Collection and Analysis.
3. Accident Sequence Initiating Event Definition.
4. System Failure Analysis (Fault Tree Analysis).

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5. Accident Sequence Analysis (Event Tree Analysis).
6. Human Reliability Assessment.
7. Accident Sequence Quantification.
8. Accident Sequence Results Analysis.

B. Level II IPE Study

The Level II portion of the IPE study investigates the response of the plant systems, containment, and operators to the most likely core damage accidents identified by the Level I portion of the study. The Level II analysis consists of the following major tasks:

1. Containment Systems Analysis.
2. Containment Structural Capability Review.
3. Containment Event Tree Analysis.
4. Accident Progression and Source Term Determination.

C. Identification of Potential Improvements and Documentation

After completion of the Level I and II portions of the WNP-2 PRA, the Supply System will have a good understanding of the dominant contributors to risk from both a core damage and containment performance perspective. As required by Generic Letter 88-20, these results will be reviewed to identify potential improvements to plant equipment, procedures and training that could further reduce the likelihood of a core damage accident or a significant radionuclide release. Any potential improvements will be thoroughly evaluated by the appropriate Supply System organizations prior to making a decision to implement the change. This examination will include looking for potentially adverse affects in other areas that might offset the expected safety improvement. Other important factors will be assessed to determine the impact on economic performance of the plant and personnel safety an exposure.

After the results of the accident sequence quantification and source term assessment tasks have been evaluated, a final report will be prepared documenting the WNP-2 Level I and II PRA analysis and results. This report will be prepared to satisfy the NRC's regulatory requirements for documenting the IPE as specified in Generic Letter 88-20. The formal submittal will be prepared using the guidance in NUREG-1335. This submittal report will provide an

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overview of the methods used, the Supply System's involvement in the project, and the results of the systems analysis, accident sequence quantification, containment event tree analysis, and radionuclide release characterization. It will also provide a summary of the key insights obtained from the study and the improvements that were evaluated for potential implementation.

III. WNP-2 IPE Schedule Milestones

The Supply System will conduct the WNP-2 IPE for Internal Events, including internal flooding, over a three year period with a final report submittal on or before September 1, 1992.

The major milestones for the WNP-2 IPE are as follows:

- | | | |
|---|--|-------------------|
| o | Complete Accident Sequence Analysis | January 1, 1991 |
| o | Complete Containment Performance Evaluation | April 1, 1991 |
| o | Quantify and Bin CET Releases | September 1, 1991 |
| o | Complete Sensitivity/Uncertainty Analysis | January 1, 1992 |
| o | Screen, List, and Rank Dominant Contributors to Risk | February 1, 1992 |
| o | Complete Peer Reviews and Reviews for Potential Improvements | April 1, 1992 |
| o | Submit IPE Report to NRC | September 1, 1992 |

If you have any questions on this program, please contact Mr. R.O. Vosburgh at (509) 372-5527.

Very truly yours,

G. C. Sorensen

G. C. Sorensen, Manager
Regulatory Programs

ROV/bk

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