

boron concentration and fuel storage. The proposed amendment would eliminate the need to credit Boraflex neutron absorbing material for reactivity control in the H. B. Robinson Steam Electric Plant, Unit No. 2, spent fuel storage pool. The new analyses submitted by the licensee take credit for a combination of soluble boron and controlled fuel loading patterns within the spent fuel storage pool in order to maintain acceptable margins of subcriticality.

*Basis for proposed no significant hazards consideration determination:* As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

An evaluation of the proposed change has been performed in accordance with 10 CFR 50.91(a)(1) regarding no significant hazards considerations using the standards in 10 CFR 50.92(c). A discussion of these standards as they relate to this amendment request follows:

1. The Proposed Change Does Not Involve a Significant Increase in the Probability or Consequences of an Accident Previously Evaluated.

The proposed changes do not modify the facility. They apply additional administrative controls for maintaining the required boron concentration in the spent fuel storage pool. They also revise the acceptance criteria for the spent fuel storage pool criticality analyses. There will be a procedural change requiring increased frequency of spent fuel storage pool sampling for boron analysis. The sampling is performed in accordance with approved procedures and does not impact the probability or consequences of spent fuel storage pool accidents, which are a fuel handling accident and a loss of spent fuel storage pool cooling. The changes will allow for the further degradation of the Boraflex within the high density racks. The existence or degradation of the Boraflex has no relationship to the probability or consequences of a fuel handling accident or a loss of spent fuel storage pool cooling.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The Proposed Change Does Not Create the Possibility of a New or Different Kind of Accident From Any Previously Evaluated.

The proposed changes are related to the possibility of a criticality accident in the spent fuel storage pool. Detailed analyses have been performed to ensure a criticality accident in the spent fuel storage pool is not a credible event. The events that could lead to a criticality accident are not new. These events include a fuel mis-positioning event, a fuel drop event, and a boron dilution event. The proposed changes do not impact the probability of any of these events. The detailed criticality analyses performed demonstrate that criticality would not occur following any of these events. For the more likely events, such as a fuel mis-positioning

event,  $k_{eff}$  remains less than or equal to 0.95. For the unlikely event that the spent fuel storage pool boron concentration was reduced to zero,  $k_{eff}$  remains less than 1.0. Since a criticality accident remains "not credible," the proposed changes do not create the possibility of a new or different kind of accident from any previously evaluated.

3. The Proposed Change Does Not Involve a Significant Reduction in the Margin of Safety.

The proposed changes continue to provide the controls necessary to ensure a criticality event could not occur in the spent fuel storage pool. The acceptance criteria are consistent with the acceptance criteria specified in 10 CFR 50.68, which provide an acceptable margin of safety in regard to the potential for a criticality event. Therefore, the changes do not result in a significant reduction in the margin of safety.

Based on the above discussion, [Carolina Power & Light Company] has determined that the requested change does not involve a significant hazards consideration.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

*Attorney for licensee:* Steven R. Carr, Associate General Counsel—Legal Department, Progress Energy Service Company, LLC, Post Office Box 1551, Raleigh, North Carolina 27602.

*NRC Section Chief:* Allen G. Howe.

**Dominion Nuclear Connecticut Inc., et al., Docket No. 50–423, Millstone Power Station, Unit No. 3, New London County, Connecticut**

*Date of amendment request:* March 4, 2003, as supplemented May 13, 2003.

*Description of amendment request:* The proposed amendment would revise selected sections of the Technical Specifications (TSs) based upon a re-analysis of fuel handling accidents (FHAs). The revised analysis is based upon selective implementation of the alternative source term (AST) methodology of Regulatory Guide (RG) 1.183, and in accordance with Title 10 of the Code of Federal Regulations (10 CFR), Section 50.67. Specifically, the amendment would revise: TS 3.7.8, "Plant Systems, Control Room Envelope Pressurization System;" TS 3.9.4, "Refueling Operations, Containment Building Penetrations;" TS 3.9.9, "Refueling Operations, Containment Purge and Exhaust Isolation System," and TS 3.9.12, "Refueling Operations, Fuel Building Exhaust Filter System."

*Basis for proposed no significant hazards consideration determination:* As required by 10 CFR 50.91(a), the licensee has provided its analysis of the

issue of no significant hazards consideration. The NRC staff has reviewed the licensee's analysis against the standards of 10 CFR 50.92(c). The staff's review is presented below:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed changes do not involve physical modifications to the plant equipment and do not change the operational methods or procedures used for the physical movement of fuel in containment or in the fuel building. As such, the proposed changes have no effect on the probability of occurrence of any accident previously evaluated.

The proposed changes are based upon the re-analysis of an FHA in the containment and an FHA in the fuel building area. The consequences of the re-analyzed events are expressed in terms of total effective dose equivalent (TEDE), and are not directly comparable to either the thyroid or whole body doses reported in the existing analyses. However, even taking this comparison into consideration, any dose increase is considered not to be significant as the revised analyses results meet the applicable TEDE acceptance criteria for AST implementation.

2. Create the possibility of a new or different kind of accident from any accident previously evaluated.

The containment closure components (e.g., equipment access hatch, personnel access hatch doors, and various containment penetrations) and filtration systems are not accident initiators. The proposed changes do not involve the addition of new systems or components nor do they involve the modification of existing plant systems. The proposed changes do not change the operational modes or procedure used for the physical movements of fuel in containment or in the fuel building. The proposed changes do not affect the way in which an FHA is postulated to occur. Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any previously evaluated.

3. The proposed change does not involve a significant reduction in a margin of safety.

The margin of safety for the dose consequence analysis is considered to be that provided by meeting the applicable regulatory limits. The dose consequences of the existing FHA are within regulatory limits for whole body and thyroid doses as established in 10 CFR 100. The revised FHA using the AST method demonstrates that the dose consequences are within the regulatory limits for TEDE established in 10 CFR 50.67 and RG 1.183. There is no direct