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10 CFR 72.7



Serial: RNP-RA/05-0026

APR 19 2005

United States Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261/LICENSE NO. DPR-23

REQUEST FOR EXEMPTION FROM 10 CFR 72.212(b)(7)

Ladies and Gentlemen:

Pursuant to the provisions of 10 CFR 72.7, "Specific exemptions," Progress Energy Carolinas, Inc., also known as Carolina Power and Light Company, requests an exemption from a requirement specified in 10 CFR 72.212, "Conditions of general license issued under §72.210," for H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2.

As detailed in the attachment, the specific exemption would be from the requirement of 10 CFR 72.212(b)(7), which states, "The licensee shall comply with the terms and conditions of the certificate." The exemption would only apply to compliance with one specific requirement in the Technical Specifications for 10 CFR 72, Certificate of Compliance No. 1004, which is issued to Transnuclear, Inc., for the Standardized NUHOMS® System. The requirement involves cask lift height restrictions when outside the spent fuel pool building. Justification for this requested exemption, including an environmental assessment, is provided in the attachment to this letter.

The exemption is required to load fuel into the planned dry fuel storage facility at HBRSEP, Unit No. 2. The first loading is scheduled for late July/early August 2005, following the issuance of the final rule change to 10 CFR 72.214 to incorporate Amendment No. 8 to 10 CFR 72, Certificate of Compliance No. 1004. Loading must occur at that time to ensure full core offload capability upon startup from Refueling Outage No. 23, which is scheduled to begin on September 17, 2005.

Progress Energy Carolinas, Inc.
Robinson Nuclear Plant
3581 West Entrance Road
Hartsville, SC 29550

4mss01

United States Nuclear Regulatory Commission

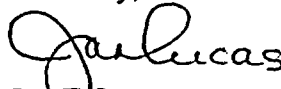
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Proposed Amendment No. 9 to Certificate of Compliance No. 1004 includes proposed changes to the Technical Specifications that would make this exemption unnecessary. However, the estimated effective date for the final rule change to 10 CFR 72.214 to incorporate Amendment No. 9 would not support the HBRSEP, Unit No. 2, scheduled loading. Therefore, it is requested that this exemption be granted by the same date that the final rule change for Amendment No. 8 becomes effective, which is currently estimated for the end of July 2005. The exemption would remain in effect until Amendment No. 9 is issued.

If you have any questions concerning this matter, please contact Mr. C. T. Baucom at (843) 857-1253.

Sincerely,



Jan E. Lucas

Manager – Support Services – Nuclear

RAC/rac

Attachment

- c: NRC Resident Inspector, HBRSEP
- Dr. W. D. Travers, NRC, Region II
- Mr. J. R. Hall, NRC, NMSS, SFPO
- Mr. L. R. Wharton, NRC, NMSS, SFPO
- Mr. C. P. Patel, NRC, NRR

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

REQUEST FOR EXEMPTION FROM 10 CFR 72.212(b)(7)

I. Background

The current Technical Specifications for 10 CFR 72, Certificate of Compliance (CoC) No. 1004, which is issued to Transnuclear, Inc., for the Standardized NUHOMS[®] System, contains the following requirements in regard to lifting height restrictions for a Transfer Cask (TC)/Dry Shielded Canister (DSC):

Specification 1.2.10, "DSC Handling Height Outside the Spent Fuel Building," states: "Limit/Specification: 1. The loaded TC/DSC shall not be handled at a height greater than 80 inches outside the spent fuel pool building."

Specification 1.2.13, "TC/DSC Lifting Heights as a Function of Low Temperature and Location," states: "Limit/Specification: 4. The maximum lift height and handling height for all transfer operations outside the spent fuel pool building shall be 80 inches and the basket temperature may not be lower than 0°F."

The above wording has not caused a problem at sites where the evolution of lifting the TC/DSC out of the spent fuel pool and then lowering it onto the transfer trailer takes place within the spent fuel pool building. However, at H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2, the cask handling crane is outside the spent fuel pool building. After roof and wall panels are removed, the TC/DSC must be lifted out of the spent fuel pool and then moved outside the spent fuel pool building before it is lowered onto the transfer trailer. Therefore, for a short period of time, the TC/DSC would be lifted higher than 80 inches while outside the spent fuel pool building. This would not be in compliance with the current Technical Specifications wording.

The basis for the 80 inch lift height limit is related to the structural integrity of the TC/DSC. Evaluations have determined that drops of the TC/DSC of up to 80 inches can be sustained without breaching the confinement boundary, causing a criticality accident, or preventing the removal of spent fuel assemblies from the TC/DSC for transfer back into the spent fuel pool. These evaluations would be applicable to a drop inside or outside the spent fuel pool building. The reason the Technical Specifications requirements distinguish between inside and outside the spent fuel pool building is based on the assumption that all lifts within the spent fuel pool building will be in compliance with the heavy load requirements and procedures of the 10 CFR 50 license and hence a TC/DSC drop is not considered credible inside the spent fuel pool building.

The proposed Amendment No. 9 to CoC No. 1004, as transmitted in an October 8, 2004 letter from Transnuclear, Inc., to the NRC, includes proposed changes to Specifications 1.2.10 and 1.2.13 to clarify the intent. The proposed wording states:

Specification 1.2.10, "TC/DSC Handling Height Outside the Spent Fuel Building," states: "Limit/Specification: 1. The loaded TC/DSC shall not be handled at a height greater than 80 inches outside the spent fuel pool building when it is not being handled in accordance with the General Requirements and Conditions of Specification 1.1.4."

Specification 1.2.13, "TC/DSC Lifting Heights as a Function of Low Temperature and Location," states: "Limit/Specification: 4. The maximum lift height and handling height for all transfer operations outside the spent fuel pool building shall be 80 inches (when it is not being handled in accordance with the General Requirements and Conditions of Specification 1.1.4) and the basket temperature may not be lower than 0°F."

Specification 1.1.4 requires that lifts of the TC/DSC be made within the existing heavy load requirements of the 10 CFR 50 license. HBRSEP, Unit No. 2, will be in compliance with the revised wording, as the only time the TC/DSC will be lifted above 80 inches when inside or outside the spent fuel pool building is when the TC/DSC is being lifted by the spent fuel cask crane, which meets the 10 CFR 50 license heavy load requirements. However, Amendment No. 9 is not expected to be incorporated into 10 CFR 72.214 in time to support the scheduled TC/DSC loading.

II. Exemption Request

Pursuant to the provisions of 10 CFR 72.7, "Specific exemptions," Progress Energy Carolinas, Inc. (PEC), also known as Carolina Power and Light Company, requests an exemption from a requirement specified in 10 CFR 72.212, "Conditions of general license issued under §72.210," for H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2. The specific exemption would be from the requirement of 10 CFR 72.212(b)(7), which states, "The licensee shall comply with the terms and conditions of the certificate."

The exemption would be limited to compliance with the requirements of Technical Specifications 1.2.10 and 1.2.13 for Certificate of Compliance No. 1004. Specifically, the exemption would be from the requirement to limit the lift height of a loaded TC/DSC to 80 inches when outside the spent fuel pool building. In lieu of this requirement, PEC procedures ensure that the TC/DSC will not be lifted higher than 80 inches when not being handled by devices that meet the existing 10 CFR 50 license heavy load requirements.

Proposed Amendment No. 9 to Certificate of Compliance No. 1004 includes changes to the Technical Specifications that would make this exemption unnecessary. However, the estimated effective date for the final rule change to 10 CFR 72.214 to incorporate Amendment No. 9 would not support the scheduled fuel loading. Therefore, it is requested that this exemption be granted and remain in effect until Amendment No. 9 is issued.

III. Justification

Paragraph 10 CFR 72.7 specifies that the Commission may grant exemptions from the requirements of 10 CFR Part 72 when the exemptions are authorized by law and will not endanger life or property or the common defense and security, and are otherwise in the public interest.

The procedures that will be employed at HBRSEP, Unit No. 2, for handling of the TC/DSC will meet the intent of the Technical Specifications requirements. The intent is to preclude a drop of the TC/DSC from a height of greater than 80 inches. This will be accomplished by use of handling devices that meet the heavy load requirements whenever the TC/DSC is lifted over 80 inches, and hence a drop need not be postulated either inside or outside the spent fuel pool building. Since the intent of the Technical Specifications will be met, the exemption will not endanger life or property or the common defense and security. The exemption will be in the public interest in that it will allow for the safe and efficient storage of spent nuclear fuel at HBRSEP, Unit No. 2.

IV. Environmental Assessment Information

The following information is provided in support of an environmental assessment and finding of no significant impact for the proposed exemption.

Identification of the Proposed Action

Progress Energy Carolinas, Inc. (PEC), also known as Carolina Power and Light Company, requests an exemption from a requirement specified in 10 CFR 72.212, "Conditions of general license issued under §72.210," for H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2. The specific exemption would be from the requirement of 10 CFR 72.212(b)(7), which states, "The licensee shall comply with the terms and conditions of the certificate."

The exemption would be limited to compliance with the requirements of Technical Specifications 1.2.10 and 1.2.13 for Certificate of Compliance No. 1004. Specifically, the exemption would be from the requirement to limit the lift height of a loaded TC/DSC to 80 inches when outside the spent fuel pool building. In lieu of this requirement, PEC procedures ensure that the TC/DSC will not be lifted higher than 80 inches when not being handled by devices that meet the existing 10 CFR 50 license heavy load requirements.

The Need for the Proposed Action

In order to transport fuel from the spent fuel pool to an Independent Spent Fuel Storage Installation (ISFSI) being constructed on the HBRSEP, Unit No. 2, site, the TC/DSC must be lifted above a height of 80 inches while outside the spent fuel pool building. This action would not be permitted based on the current Technical

Specifications. Therefore, the exemption is required to allow for the transfer of fuel to the ISFSI and implementation of plans for dry fuel storage at HBRSEP, Unit No. 2. Dry fuel storage is required at HBRSEP, Unit No. 2, to allow for full core offload capability following the scheduled 2005 refueling outage.

10 CFR 72.7 specifies that the Commission may grant exemptions from the requirements of 10 CFR Part 72 when the exemptions are authorized by law and will not endanger life or property or the common defense and security, and are otherwise in the public interest. PEC has concluded that these conditions for granting an exemption are met and has provided the justification in this submittal.

Environmental Impacts of the Proposed Action

PEC has determined that the requested exemption will ensure that the intent of the Technical Specifications are met, which is to preclude a drop of a loaded TC/DSC from greater than 80 inches. Therefore, PEC concludes that the exemption will not significantly increase the probability or consequences of accidents, that no changes are being made in the types or amounts of effluents that may be released off site, and that there is no significant increase in occupational or public radiation exposure as a result of the proposed activities. Therefore, there are no significant radiological environmental impacts associated with the proposed exemption. With regard to potential non-radiological environmental impacts, PEC has determined that the proposed exemption has no potential to affect any historic sites. It does not affect non-radiological plant effluents and has no other environmental impact. Therefore, there are no significant non-radiological environmental impacts associated with the requested exemption.

Environmental Impacts of the Alternatives to the Proposed Action

As an alternative to the requested exemption, the Commission could consider denial (i.e., the "no-action" alternative). Denial of the exemption would result in no change to the current environmental impacts. PEC considers the "no-action" alternative to potentially impact PEC's ability to provide safe, affordable, competitive, and reliable electrical power generation.

Alternative Use of Resources

The requested exemption does not involve the use of any different resources than those previously considered in the Final Environmental Statement for HBRSEP, Unit No. 2, dated April 1975. Accordingly, the proposed action is not a major federal action significantly affecting the quality of the environment.