[7590-01-P]

NUCLEAR REGULATORY COMMISSION

CAROLINA POWER & LIGHT COMPANY

SHEARON HARRIS NUCLEAR POWER PLANT, UNIT NO. 1

DOCKET NO. 50-400

EXEMPTION

[NRC-2010-0020]

1.0 BACKGROUND

Carolina Power & Light Company (CP&L, the licensee) is the holder of Renewed Facility Operating License No. NPF-63, which authorizes operation of the Shearon Harris Nuclear Power Plant (HNP), Unit 1. The license provides, among other things, that the facility is subject to all rules, regulations, and orders of the U.S. Nuclear Regulatory Commission (NRC, the Commission) now or hereafter in effect. The facility consists of one pressurized-water reactor located in New Hill, North Carolina.

2.0 REQUEST/ACTION

Title 10 of the *Code of Federal Regulations* (10 CFR) Part 73, "Physical protection of plants and materials," Section 73.55, "Requirements for physical protection of licensed activities in nuclear power reactors against radiological sabotage," published as a final rule in the *Federal Register* on March 27, 2009, effective May 26, 2009, with a full implementation date of March 31, 2010, requires licensees to protect, with high assurance, against radiological sabotage by designing and implementing comprehensive site security plans. The amendments to 10 CFR 73.55 published on March 27, 2009 (74 FR 13926), establish and update generically applicable security requirements similar to those previously imposed by Commission orders issued after the terrorist attacks of September 11, 2001, and implemented by licensees. In addition, the amendments to 10 CFR 73.55 include additional requirements to further enhance site security

based upon insights gained from implementation of the post-September 11, 2001, security orders.

By letter dated February 24, 2010 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML093620908), the NRC granted an exemption to the licensee for three specific items subject to the new rule in 10 CFR 73.55, allowing the implementation of these items to be extended until December 15, 2010. The licensee has implemented all other physical security requirements established by this rulemaking prior to March 31, 2010, the required implementation date.

By letter dated September 20, 2010, the licensee requested an exemption in accordance with 10 CFR 73.5, "Specific exemptions." Specifically, the licensee requested an extension of the implementation date for one remaining item from December 15, 2010, to November 30, 2011. Portions of the licensee's September 20, 2010, letter contain security-related information and, accordingly, a redacted version of this letter is available for public review in the ADAMS No. ML102650191. The licensee requested this exemption to allow an additional extension from the current implementation date granted in the prior exemption to implement one remaining item of the requirements that involves important physical modifications to the HNP, Unit 1 security system. The licensee identified several issues that have delayed the work to this point and impacted the projected schedule, such as the existence of safety-related conduit and dedicated safe shut down equipment of HNP, Unit 1 within the area where important security modifications are planned. These issues were revealed as the design evolved from the conceptual state to a detailed design state and led to a significant increase in the project's complexity and scope of tasks to be performed. The licensee stated that additional time, beyond that previously approved, is needed due the extensive redesign and review effort that was unforeseen at the conceptual design stage. Granting an exemption would allow the

licensee time to complete the necessary security modifications to meet the regulatory requirements.

3.0 DISCUSSION OF PART 73 SCHEDULE EXEMPTION FROM THE MARCH 31, 2010, FULL IMPLEMENTATION DATE

Pursuant 10 CFR 73.55(a)(1), "By March 31, 2010, each nuclear power reactor licensee, licensed under 10 CFR Part 50, shall implement the requirements of this section through its Commission-approved Physical Security Plan, Training and Qualification Plan, Safeguards Contingency Plan, and Cyber Security Plan referred to collectively hereafter as 'security plans.'" In accordance with 10 CFR 73.5, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR Part 73 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.

NRC approval of this exemption would allow an additional extension from the implementation date granted under a previous exemption from December 15, 2010, to November 30, 2011, for one remaining item of the three requirements of the final rule. As stated above, 10 CFR 73.5 allows the NRC to grant exemptions from the requirements of 10 CFR 73. The NRC staff has determined that granting of the licensee's proposed exemption would not result in a violation of the Atomic Energy Act of 1954, as amended, or the Commission's regulations. Therefore, the exemption is authorized by law.

In the draft final rule provided to the Commission, the NRC staff proposed that the requirements of the new regulation be met within 180 days. The Commission directed a change from 180 days to approximately 1 year for licensees to fully implement the new requirements. This change was incorporated into the final rule.

As noted in the final rule, the Commission anticipated that licensees would have to conduct site-specific analyses to determine what changes were necessary to implement the

rule's requirements, and that changes could be accomplished through a variety of licensing mechanisms, including exemptions. Since issuance of the final rule, the Commission has rejected a request to generically extend the rule's compliance date for all operating nuclear power plants, but noted that the Commission's regulations provide mechanisms for individual licensees, with good cause, to apply for relief from the compliance date (Reference: June 4, 2009, letter from R. W. Borchardt, NRC, to M. S. Fertel, Nuclear Energy Institute (ADAMS Accession No. ML091410309)). The licensee's request for an exemption is, therefore, consistent with the approach set forth by the Commission and discussed in the June 4, 2009, letter.

Shearon Harris Schedule Exemption Request

The licensee provided detailed information in its letter dated September 20, 2010, describing the reason and justification for an exemption to extend the implementation date for the one remaining requirement. Additionally, the licensee has provided information regarding the revised scope for projects at HNP, Unit 1 and the impacts on the licensee's ability to meet the current implementation date of December 15, 2010. The existence of safety-related conduit and dedicated safe shut down (SSD) equipment of HNP, Unit 1 within the area where important security modifications are planned have delayed the work and impacted the projected schedule. A direct outside access route to the physical construction area has not been available due to design basis tornado and missile considerations for the safety-related conduits and SSD equipment. The licensee is now pursuing a design solution that will allow both temporary and ultimately permanent direct outside access to the area to ensure that the new plans will meet all regulatory requirements. The extensive redesign and review efforts that were unforeseen at the conceptual design stage need additional time beyond that previously approved. Portions of the September 20, 2010, letter contain security-related information regarding the site security plan, details of specific portions of the regulation from which the licensee seeks exemption,

justification for the additional extension request, a description of the required changes to the physical security systems, and a revised timeline with critical path activities that would enable the licensee to achieve full compliance by November 30, 2011. The timeline provides dates indicating when (1) design activities will be completed and approved, (2) the exterior missile protection plate will be modified for entry, and (3) the new and relocated equipment will be installed and tested.

The site-specific information provided within the HNP exemption request is relative to the requirements from which the licensee requested exemption and demonstrates the need for modification to meet the one specific remaining requirement of 10 CFR 73.55. The proposed implementation schedule depicts the critical activity milestones of the security system upgrades; is consistent with the licensee's solution for meeting the requirements; is consistent with the scope of the modifications and the issues and challenges identified; and is consistent with the licensee's requested compliance date.

Notwithstanding the proposed schedule exemption for this one remaining requirement, the licensee will continue to be in compliance with all other applicable physical security requirement as described in 10 CFR 73.55 and reflected in its current NRC-approved physical security program. By November 30, 2011, the HNP physical security system will be in full compliance with all of the regulatory requirements of 10 CFR 73.55, as published on March 27, 2009.

4.0 CONCLUSION FOR PART 73 SCHEDULE EXEMPTION REQUEST

The NRC staff has reviewed the licensee's submittals and concludes that the licensee has provided adequate justification for its request for an extension of the previously authorized implementation date from December 15, 2010, with regard to one remaining requirement of 10 CFR 73.55, to November 30, 2011. This conclusion is based on the NRC staff's determination that the licensee has made a good faith effort to meet the requirements in a timely manner, has sufficiently described the reason for the unanticipated delays, and has provided an updated

detailed schedule with adequate justification to the additional time requested for the extension.

The long-term benefits that will be realized when the security systems upgrade is complete justify extending the full compliance date with regard to the specific requirements of 10 CFR 73.55 for this particular licensee. The security measures that HNP needs additional time to implement are new requirements imposed by amendments to 10 CFR 73.55, as published on March 27, 2009, and are in addition to those required by the security orders issued in response to the events of September 11, 2001. Accordingly, an exemption from the March 31, 2010, implementation date is authorized by law and will not endanger life or property or the common defense and security, and the Commission hereby grants the requested exemption.

As per the licensee's request and the NRC's regulatory authority to grant an exemption to the March 31, 2010, implementation date for the one item specified in Attachment 1 of the CP&L letter dated September 20, 2010, the licensee is required to implement this one remaining item and be in full compliance with 10 CFR 73.55 by November 30, 2011. In achieving compliance, the licensee is reminded that it is responsible for determining the appropriate licensing mechanism (i.e., 10 CFR 50.54(p) or 10 CFR 50.90) for incorporation of all necessary changes to its security plans.

In accordance with 10 CFR 51.32, “Finding of no significant impact,” the Commission has previously determined that the granting of this exemption will not have a significant effect on the quality of the human environment (75 FR 77919 dated December 14, 2010).

This exemption is effective upon issuance.

Dated at Rockville, Maryland, this 14th day of December 2010.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

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