

**POLICY ISSUE
NOTATION VOTE**

SECY-00-0081

April 10, 2000

FOR: The Commissioners
FROM: William D. Travers /RA/
Executive Director for Operations
SUBJECT: OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3 - RENEWAL OF FULL-POWER OPERATING LICENSE

- **PURPOSE:**
- **BACKGROUND:**
- **DISCUSSION:**
- **COORDINATION:**
- **RECOMMENDATION:**

PURPOSE:

To (1) inform the Commission of the results of the NRC staff's review of the Oconee Nuclear Station license renewal application submitted by Duke Energy Corporation and (2) request that the Commission authorize the Director of NRR to make the appropriate findings and renew the operating licenses for the Oconee Nuclear Station, Units 1, 2, and 3 for an additional 20 years.

BACKGROUND:

By letter dated July 6, 1998, Duke Energy Corporation (Duke) submitted its application to renew the operating licenses (Reference 1) for Oconee Nuclear Station, Units 1, 2, and 3 in accordance with [10 CFR Parts 51 and 54](#). In its submittal, Duke requested renewal of operating licenses DPR-38, DPR-47, and DPR-55, which were initially issued under Section 104b of the Atomic Energy Act, for a period of 20 years beyond the current license expiration dates of midnight, February 6, 2013 (for Unit 1); midnight, October 6, 2013 (for Unit 2); and midnight, July 19, 2014 (for Unit 3).

DISCUSSION:

The staff performed its safety review of the Oconee Nuclear Station license renewal application in accordance with 10 CFR Part 54, using guidance in NRR Office Letter 805, "License Renewal Application Review Process," and the draft "Standard Review Plan for the Review of License Renewal Applications for Nuclear Power Plants," dated September 1997. NUREG-1723, "Safety Evaluation Report Related to the License Renewal of Oconee Nuclear Station, Units 1, 2, and 3" (Reference 2), describes the results of the staff's review of the scoping and screening, aging management programs, and time-limited aging analyses, in accordance with the requirements of 10 CFR Part 54.

The Oconee Nuclear Station renewal application included a supplement to the Updated Final Safety Analysis Report (UFSAR), as required by [10 CFR 54.21\(d\)](#). Duke revised the UFSAR supplement in a letter dated March 27, 2000, which superseded the version that was contained in the application. The revised UFSAR supplement contains a summary description of the programs and activities for managing the effects of aging and the evaluation of the time-limited aging analysis for the period of extended operation. The staff has reviewed the UFSAR supplement dated March 27, 2000 and has found that it meets the requirements of 10 CFR 54.21(d). The attached proposed renewed licenses require that Duke include the UFSAR supplement in the update to the UFSAR scheduled for July 2001. Until the UFSAR update is complete, a condition in the proposed renewed licenses requires that any changes to the UFSAR supplement be made in accordance with 10 CFR 50.59. Since future changes to the UFSAR will be made in accordance with [10 CFR 50.59](#), the NRC is assured that these programs, maintenance activities, and inspection procedures will be adequately controlled.

The UFSAR supplement also identifies future actions. Throughout NUREG-1723, the staff has described various schedules for future actions. The staff has determined that the future actions are not required for operation during the existing license term; however, they are required to be completed before entering the period of extended operation to effectively manage aging. The proposed renewed licenses include license conditions for the completion of these future actions. Duke can change the schedules for these actions without prior NRC approval, so long as the actions are completed in accordance with the license condition.

On the basis of its safety evaluation, as described in NUREG-1723, the staff, as provided in [10 CFR 54.29](#), concludes that,

- (1) actions have been identified and have been or will be taken with respect to managing the effects of aging during the period of extended operation on the functionality of structures and components that have been identified to require an aging management review under 10 CFR 54.21(a)(1), and
- (2) actions have been identified and have been or will be taken with respect to time-limited aging analyses that have

been identified to require review under 10 CFR 54.21(c).

Accordingly, the staff finds that there is reasonable assurance that the activities authorized by the renewed license will continue to be conducted in accordance with the current licensing basis for Oconee Nuclear Station, Units 1, 2, and 3.

To support the review of Duke's license renewal application, Region II conducted three inspections at Oconee Nuclear Station with support from Region I and NRR. The inspections were conducted in accordance with Inspection Manual Chapter 2516, "Policy and Guidance for the License Renewal Inspection Programs"; and Inspection Procedure 71002, "License Renewal Inspection." As described in the memorandum from Luis A. Reyes, Regional Administrator NRC Region II, dated March 16, 2000 (Reference 3), the results of these three inspections verified that there is reasonable assurance that the contents of the application, aging management programs, implementation, and other activities related to license renewal for the Oconee Nuclear Station are in accordance with docketed commitments and regulatory requirements.

Following issuance of the safety evaluation report (SER) with open and confirmatory items on June 16, 1999 (Reference 4), the staff and representatives of Duke briefed the Advisory Committee on Reactor Safeguards (ACRS) Subcommittee on Plant License Renewal on June 30, and July 1, 1999, and the ACRS Full Committee on September 1, 1999, on the SER. On September 13, 1999, the ACRS issued its "Interim Letter Related to the License Renewal of Oconee Nuclear Station." In its interim letter, the ACRS noted the following:

Notwithstanding a number of open issues and confirmatory items yet to be resolved, Duke has developed and implemented adequate processes to identify structures, systems, and components (SSCs) at Oconee, Units 1, 2 and 3 that are subject to an aging management review and will be able to demonstrate that aging-induced degradation will be adequately managed during the period of extended operation.

Following resolution of the open and confirmatory items, the staff briefed the ACRS Subcommittee on Plant License Renewal on February 24, 2000, regarding resolution of these items. On March 2, 2000, the staff and representatives of Duke briefed the ACRS Full Committee. On March 13, 2000, the ACRS issued its recommendation, "Report on the Safety Aspects of the License Renewal Application for the Oconee Nuclear Station, Units 1, 2 and 3," on the basis of its review of the license renewal application and the SER. In its report (included in Chapter 5 of NUREG-1723, Reference 2), the ACRS concluded that Duke has properly identified the SSCs that are subject to aging management programs according to the requirements of 10 CFR Part 54; that possible aging mechanisms associated with passive, long-lived SSCs have been appropriately identified; and that the programs instituted to manage aging-related degradation of the identified SSCs are appropriate and provide reasonable assurance that Oconee Units 1, 2, and 3 can be operated in accordance with their current licensing basis for the period of the extended license without undue risk to the health and safety of the public.

The staff performed its environmental review of the Oconee Nuclear Station license renewal application in accordance with [10 CFR Part 51](#), using the guidelines described in a draft of the "Standard Review Plans for Environmental Reviews for Nuclear Power Plants, Supplement 1: Operating License Renewal," NUREG-1555, Supplement 1 (February 1999 prepublication copy). On September 14, 1998, the staff published a Notice of Intent (63 FR [EXIT](#) 50257-50258) to prepare an environmental impact statement (EIS) and conduct scoping, initiating a 60-day scoping period. The EIS, prepared by the staff for the plant-specific review, is a supplement to the Generic Environmental Impact Statement (GEIS), NUREG-1437, that was codified in 10 CFR Part 51 for license renewal; for the Oconee Nuclear Station, the EIS is Supplement 2 to the GEIS (SEIS). Two public scoping meetings were held in October 1998 in Clemson, South Carolina. The staff also visited the Oconee Nuclear Station site in October 1998, reviewed the comments received during scoping, reviewed related documents, and consulted with Federal, State, and local agencies. On May 20, 1999, the staff issued a draft of the SEIS (Supplement 2 to NUREG-1437), which contained the preliminary results of the staff's evaluation and recommendation. With the publication of the Environmental Protection Agency Notice of Filing of the draft SEIS (64 FR 28843-28844, May 27, 1999), the NRC initiated a 75-day public comment period on the preliminary results of the staff's review. During this comment period, two public meetings were held in Clemson, South Carolina, in July 1999. In these meetings, the staff described the approach and results of the NRC environmental review and answered questions to give members of the public information to assist them in formulating their comments. The comment period for the draft SEIS ended on August 16, 1999.

The staff evaluated the comments received on the draft SEIS and completed its analysis, considering and weighing the environmental effects of the proposed action, the environmental impacts of alternatives to the proposed action, and the alternatives available for reducing or avoiding adverse effects. The final version of the SEIS regarding Oconee Nuclear Station was issued on December 9, 1999 (Reference 5). Disposition of the comments from members of the public are addressed in the SEIS. As discussed in Section 9.3 of the SEIS, the staff determined that, on the basis of (1) the analysis and findings in the "Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants," NUREG-1437; (2) the Environmental Report submitted by Duke; (3) consultation with other Federal, State, and local agencies; (4) the staff's own independent review; and (5) the staff's consideration of public comments, the adverse environmental impacts of license renewal for Oconee Nuclear Station, Units 1, 2, and 3 are not so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable.

In accordance with [10 CFR 54.19\(b\)](#), license renewal applications include "conforming changes to the standard indemnity agreement, [10 CFR 140.92](#), Appendix B, to account for the expiration term of the proposed renewed license." The staff intends to maintain the license numbers on issuance of the renewed license. Therefore, there is no need to make conforming changes to the indemnity agreement, and the requirements of [10 CFR 54.19\(b\)](#) have been met.

The Chattooga River Watershed Coalition and Messrs. Norman "Buzz" Williams, William "Butch" Clay, and William Steven "W.S." Lesan (collectively referred to as the "Petitioners") requested a hearing and petitioned for leave to intervene in the

proceeding on Duke's license renewal application for the Oconee Nuclear Station. On December 29, 1998, the Atomic Safety and Licensing Board (ASLB) affirmed the Petitioners' standing but denied the Petitioners intervention petition and dismissed the proceeding. The Petitioners appealed the ASLB's denial to the Commission, and the Commission upheld the ASLB's decision on April 15, 1999.

As a result of the staff's review of Duke's license renewal application, the staff recommends that the Commission authorize the Director of NRR to make the appropriate findings and, once he has made those findings, to issue renewed operating licenses for the Oconee Nuclear Station, Units 1, 2, and 3 for an additional 20 years of operation in accordance with the attached renewed licenses.

COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objections to its content. The Office of the Chief Financial Officer has reviewed this paper for resource implications and has no objections to its content.

RECOMMENDATION:

That the Commission:

1. Authorize the Director of NRR to renew the operating licenses for the Oconee Nuclear Station, Units 1, 2, and 3, upon making the appropriate findings on safety and environmental matters.
2. Note that the staff will make any necessary conforming changes to the renewed licenses as a result of any pending licensing actions while the Commission is considering the staff's recommendations.

/RA by Frank J. Miraglia Acting For/

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Attachment: [Renewed Licenses for Oconee Nuclear Station Units 1, 2, and 3](#) 

References:

1. "Oconee Nuclear Station, Units 1, 2, and 3 - Application for Renewed Operating Licenses," Accession Number 9807200136.
2. "NUREG-1723, Safety Evaluation Report Related to the License Renewal of Oconee Nuclear Station, Units 1, 2 and 3," dated March 2000, Accession Number ML003695154
3. Regional Administrator Letter on "Oconee Units 1, 2, and 3 License Renewal Application," Accession Number ML003692763.
4. "Safety Evaluation Report Related to the License Renewal of Oconee Nuclear Station, Units 1, 2 and 3," dated June 16, 1999, Accession Number 9906210071.
5. "Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 2, Regarding the Oconee Nuclear Station, Final Report," Accession Number ML003670518.