

UNITED STATES NUCLEAR REGULATORY COMMISSION

DUKE ENERGY CORPORATION

DOCKET NOS. 50-269, 50-270, AND 50-287

OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3

ENVIRONMENTAL ASSESSMENT AND FINDING OF

NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an exemption from 10 CFR Part 50, Appendix J, Section III.D.2(b)(ii) for Facility Operating License Nos. DPR-38, DPR-47, and DPR-55, issued to the Duke Energy Corporation (the licensee), for operation of the Oconee Nuclear Station, Units 1, 2, and 3, located in Oconee County, South Carolina.

ENVIRONMENTAL ASSESSMENT

Identification of the Proposed Action:

Whenever the plant is in cold shutdown (Mode 5) or refueling (Mode 6), containment integrity is not required. However, if an airlock is opened when in Modes 5 or 6 (which is usually the case), 10 CFR 50, Appendix J, Section III.D.2(b)(ii) requires that an overall air lock leakage test be performed before plant heatup and startup (i.e., before Mode 4 is entered). The proposed exemption would allow this test requirement to be met by performing an air lock door seal leakage test per 10 CFR 50, Appendix J, Section III.D.(b)(iii) during plant startup prior to entering Mode 4. The licensee would apply this exemption only if no maintenance has been performed on the air lock that could affect its sealing capability. If maintenance has been performed that could affect its sealing capability, an overall air lock leakage test per 10 CFR 50,

Appendix J, Section III.D.2(b)(ii) would be performed prior to establishing containment integrity.

The proposed action is in accordance with the licensee's application for an exemption dated October 5, 1999.

The Need for the Proposed Action:

The existing air lock doors are designed so that the air lock pressure test can only be performed after a strong back (structural bracing) has been installed on the inner door because the pressure used to perform the test is opposite that of accident pressure and would tend to unseat the door. Performing the full air lock test in accordance with the present requirements takes approximately 12 hours, since it requires installation of the strong back, performing the test, and removing the strong back. During the test, access through the air lock is prohibited, which, therefore, requires evacuation of personnel from the containment or the personnel must remain inside the containment during the test until Mode 4 is reached. The licensee has determined that pressurizing the volume between the seals to 60 pounds per square inch gauge pressure prior to establishing containment integrity provides the necessary surveillance to ensure the sealing capability of the door seals.

Since plant personnel usually need to enter the containment while in Mode 5, the full pressure air lock test must be performed almost every time before entering Mode 4 from Mode 5. Exemption from the full pressure leakage test would reduce the number of tests performed and the time required to perform the tests, which would provide greater plant flexibility over the lifetime of the plant.

Environmental Impact of the Proposed Action:

The proposed exemption would permit the substitution of an air lock seal leakage test (10 CFR Part 50, Appendix J, Section III.D.2(b)(iii)) for the full pressure air lock test otherwise required by 10 CFR Part 50, Appendix J, Section III.D.2(b)(ii) when the air lock is opened while

the reactor is in the cold shutdown or refueling modes. If the tests required by 10 CFR Part 50, Appendix J, Section III.D.2(b)(i) and (iii) are current, and there has been no maintenance performed on the air lock, then adequate assurance of leak tight integrity of the air lock continues to exist. Consequently, this exemption will not affect containment integrity and does not affect the risk of facility accidents.

Therefore, the Commission concludes that there are no significant radiological environmental impacts associated with the proposed exemption, the proposed action will not significantly increase the probability or consequences of accidents, no changes are being made in the types of any effluents that may be released off site, and there is no significant increase in occupational or public radiation exposure. Therefore, there are no significant radiological environmental impacts associated with the proposed action.

With regard to potential non-radiological environmental impacts, the proposed action does not involve 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 proposed action.

Accordingly, the NRC concludes that there are no significant environmental impacts associated with the proposed action.

Alternatives to the Proposed Action:

As an alternative to the proposed action, the staff considered denial of the proposed action (i.e., the "no-action" alternative). Denial of the application would result in no change in current environmental impacts. The environmental impacts of the proposed action and the alternative action are similar.

Alternative Use of Resources:

This action does not involve the use of any resources not previously considered in the Final Environmental Statement for the Oconee Nuclear Station, Units 1, 2, and 3.

Agencies and Persons Consulted:

In accordance with its stated policy, on November 30, 1999, the staff consulted with the South Carolina State official, Mr. Virgil Autry, of the Division of Radiological Waste Management, Bureau of Land and Waste Management, Department of Health and Environmental Control, regarding the environmental impact of the proposed action. The State official had no comments.

FINDING OF NO SIGNIFICANT IMPACT

On the basis of the environmental assessment, the NRC concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the NRC has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to the proposed action, see the licensee's letter dated October 5, 1999, which is available for public inspection at the Commission's Public Document Room, The Gelman Building, 2120 L Street, NW., Washington, DC. Publicly available records will be accessible electronically from the ADAMS Public Library component on the NRC Web site, <http://www.nrc.gov> (the Electronic Reading Room).

Dated at Rockville, Maryland, this 9th day of December 1999.

FOR THE NUCLEAR REGULATORY COMMISSION



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