UNITED STATES NUCLEAR REGULATORY COMMISSION OMAHA PUBLIC POWER DISTRICT FORT CALHOUN STATION, UNIT NO. 1 DOCKET NO. 50-285

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. DPR-40, issued to Omaha Public Power District (the licensee), for operation of the Fort Calhoun Station, Unit 1, located in Washington County, Nebraska.

ENVIRONMENTAL ASSESSMENT

Identification of the Proposed Action

The proposed action would issue an amendment to allow an increase in the initial nominal Uranium-235 (U-235) enrichment limit for fuel assemblies which may be stored in the spent fuel pool. This action would allow the licensee to extend the biennial interval until the first guarter of 1996.

The proposed action is in accordance with the licensee's application for amendment dated February 1, 1996.

The Need for the Proposed Action

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Twe licensee intends to store unirradiated fuel with a maximum initial enrichment of 4.5 w/o U-235 in Region 1 of the spent fuel pool during the next refueling outage (Refuel 17). Spent fuel will be stored in Region 2 of the spent fuel pool. At present, fuel with a maximum initial enrichment up to 4.2weight percent of U-235 can be stored in Region 1 and Region 2 of the spent fuel pool.

Environmental Impact of the Proposed Action:

The Commission has completed its evaluation of the proposed revision to the technical specifications (TSs) and concludes that the use of fuel with a maximum enrichment of 4.5 w/o U-235 would not significantly increase the probability or consequences of any accident previously analyzed. The proposed amendment would increase the allowable fuel enrichment from 4.2 w/o to 4.5 w/o U-235 in Region 1 of the spent fuel pool and modify the burnup/enrichment restrictions imposed on fuel stored in Region 2 to include fuel with an enrichment up to 4.5 w/o.

The environmental impacts of transportation resulting from the use of higher enrichment and extended irradiation are discussed in the staff assessment entitled "NRC Assessment of the Environmental Effects of Transportation Resulting from Extended Fuel Enrichment and Irradiation." This assessment was published in the Federal Register on August 11, 1988 (53 FR 30355) as corrected on August 24, 1988 (53 FR 32322) in connection with the Shearon Harris Nuclear Power Plant, Unit 1: Environmental Assessment and Finding of No Significant Impact. As indicated therein, the environmental cost contribution of an increase in fuel enrichment of up to 5 weight percent U-235 and irradiation limits of up to 60 Gigawatt Days per Metric Ton (GWD/MT) are either unchanged, or may in fact be reduced from those summarized in Table S-4 as set forth in 10 CFR 51.52(c). These findings are applicable to the proposed amendment for the Ft. Calhoun Station, Unit 1. Accordingly, the Commission concludes that this proposed action would result in no significant radiological environmental impact.

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With regard to potential nonradiological impacts, the proposed changes involve systems located within the restricted area as defined in 10 CFR Part 20. It does not affect nonradiological plant effluents and has no other environmental impact. Therefore, the Commission concludes that there are no significant nonradiological environmental impacts associated with the proposed amendment.

The Notice of Consideration of Issuance of Amendment to Facility Operating License, Proposed No Significant Hazards Consideration Determination, and Opportunity for a Hearing in connection with this action was published in the Federal Register on March 13, 1996 (61 FR 10396).

Alternative to the Proposed Action

Since the Commission concluded that there are no significant environmental effects that would result from the proposed action, any alternative with equal or greater environmental impacts need not be evaluated.

The principal alternative would be to deny the requested amendment. This would not reduce environmental impacts of plant operation and would result in reduced operational flexibility.

Alternative Use of Resources

This action does not involve the use of any resources not previously considered in the Final Environmental Statement (FES) for the Fort Calhoun Station, Unit 1, dated August 1972.

Agencies and Persons Consulted

In accordance with its stated policy, on June 13, 1996, the staff consulted with the Nebraska State official, Ms. Cheryl Rodgers of the

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Department of Health, regarding the environmental impact of the proposed action. The State official had no comments.

FINDING OF NO SIGNIFICANT IMPACT

Based upon the environmental assessment, the Commission concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the Commission 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 February 1, 1996, which is available for public inspection at the Commission's Public Document Room, The Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room located at the W. Dale Clark Library, 215 South 15th Street, Omaha, Nebraska 68102.

Dated at Rockville, Maryland, this 14th day of June 1996.

FO" THE NUCLEAR REGULATORY COMMISSION

J. Lamard Sharter

L. Raynard Wharton, Project Manager Project Directorate IV-2 Division of Reactor Projects III\IV Office of Nuclear Reactor Regulation

June 14, 1996

Mr. Terry L. Patterson Division Manager - Nuclear Operations Omaha Public Power District Fort Calhoun Station FC-2-4 Adm. Post Office Box 399 Hwy. 75 - North of Fort Calhoun Fort Calhoun, Nebraska 68023-0399

SUBJECT: FORT CALHOUN STATION - ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT (TAC NO. M94789)

Dear Mr. Patterson:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to your application for amendment dated February 1, 1996. The proposed amendment would allow an increase in the initial nominal Uranium-235 enrichment limit for fuel assemblies which may be stored in the spent fuel pool.

The assessment is being forwarded to the Office of the Federal Register for publication.

Sincerely,

Original Signed By

L. Raynard Wharton, Project Manager Project Directorate IV-2 Division of Reactor Projects - III/IV Office of Nuclear Reactor Regulation

OGC

ACRS

JDyer, RIV

WJohnson, RIV

Docket No. 50-285

Enclosure: Environmental Assessment

cc w/encl: See next page

Docket PUBLIC PDIV-2 Reading JRoe EAdensam WBateman EPeyton RWharton

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