

January 31, 2001 LIC-01-0009

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Mail Station P1-137 Washington, DC 20555

References:

- 1. Docket No. 50-285
- 2. Letter from OPPD (W. G. Gates) to NRC (Document Control Desk) dated April 14, 2000 (LIC-00-0025)
- 3. NRC Generic Letter 99-02, "Laboratory Testing of Nuclear-Grade Activated Charcoal," dated June 3, 1999
- 4. Letter from OPPD (W. G. Gates) to NRC (Document Control Desk) dated June 2, 2000 (LIC-00-0056)

SUBJECT: Additional Information Regarding the Application for Amendment of Facility Operating License No. DPR-40 Related to Generic Letter 99-02, "Laboratory Testing of Nuclear-Grade Activated Charcoal"

In response to Generic Letter 99-02, Omaha Public Power District (OPPD) submitted the Reference 2 license amendment request, which requested credit for containment spray instead of containment charcoal filters for post Loss Of Coolant Accident (LOCA) iodine scrubbing. In support of this amendment request, Stone and Webster Engineering Corporation prepared a calculation of control room, Low Population Zone (LPZ), and Exclusion Area Boundary (EAB) post LOCA doses, which was transmitted to the NRC as an attachment to Reference 4. This calculation utilized a total Emergency Core Cooling System (ECCS) leakage rate of 1500 cc/hour as the combined ECCS leakage (i.e., system external leakage plus the Safety Injection Refueling Water Tank [SIRWT] back leakage [i.e., valve internal, through-seat leakage]), which for calculation purposes, was doubled in accordance with NUREG 0800, 15.6.5, Appendix B. OPPD's current technical specifications (TS), TS 3.16 (2)(a), limit external leakage to 1243 cc/hour and does not address internal (through-seat) back leakage to the SIRWT. OPPD recently determined that the assumed total leakage of 1500 cc/hour is less than the total ECCS leakage measured in 1999, the most recent system surveillance test. In 1999, ECCS total leakage was determined to be 1914 cc/hour, which is the sum of the external leakage of 852 cc/hour and the internal leakage of 1062 cc/hour.



The effect upon calculated control room thyroid dose due to an increase in total leakage has been determined. Previously, in Reference 2, OPPD provided a rounded-up control room exposure of 32 rem based upon the 1500 cc/hour total ECCS leakage rate. This dose corresponds to the rounded value of 31.7 rem presented in the attachment to Reference 4, which included a dose of 2.468 rem from the total ECCS leakage and the multiplier of 2. Assuming an ECCS total leakage of 2000 cc/hour, to bound the existing measured leakages, results in a calculated control room thyroid dose increase of 0.825 rem to 32.55 rem total dose, which is 0.55 rem greater than provided in Reference 2. The calculated EAB and LPZ thyroid doses are also slightly increased but remain significantly below regulatory limits.

The calculated whole body and beta control room doses are not increased since essentially the entire exposures are due to containment leakage.

A review has also determined that the same assumed leakage of 1500 cc/hour was used in the Fort Calhoun Safety Analysis for Operability (SAO), SAO 99-01, which is also being updated. SAO 99-01 has been reviewed, and the conclusions in SAO 99-01 remain valid with an ECCS total leakage rate of 2000 cc/hour.

If you have any questions, Please contact me at (402) 533-6647.

Sincerely.

S. K. Gambhir Division Manager Nuclear Operations

SKG/RLJ/rlj

c: E. W. Merschoff, NRC Regional Administrator, Region IV

L. R. Wharton, NRC Project Manager

W. C. Walker, NRC Senior Resident Inspector

Winston & Strawn