

SAFETY EVALUATION BY THE
DIVISION OF OPERATING REACTORS
SUPPORTING AMENDMENT NO. to DPR-38, -47 and -55
DUKE POWER COMPANY
OCONEE NUCLEAR STATION
DOCKETS NOS. 50-269, 50-270 and 50-287

INTRODUCTION

By application for license amendment dated May 27, 1976, Duke Power Company (the licensee) requested changes to the Technical Specifications, Appendix A to Facility Operating Licenses DPR-38, DPR-47 and DPR-55. These proposed changes concern the measurement and control of radioactive liquid and gaseous effluents from the Oconee Nuclear Station (Units 1, 2 and 3).

Discussion

The changes proposed by the licensee were as follows:

1. The condensate monitor tank and the laundry - hot shower tank were added to the list in Table 4.1-3 of tanks to be sampled prior to release of each batch. On these tanks as well as the low activity waste tank and condensate test tank the requirement for gross beta and gamma activity, Ba-La-140 and I-131 were deleted. In place of the gross activity analyses, the licensee will now perform a gamma isotopic analysis including dissolved noble gases on the contents of these tanks prior to the release of effluents. This will provide more encompassing information than the gross activity measurements and includes the isotopes (Ba-La-140 and I-131) now being analyzed.
2. Gamma isotopic sensitivities for the waste gas decay tanks, unit vent and Reactor Building Purge in Table 4.1-3 were revised to include separate sensitivities for the constituents of the gases (gases, particulates and iodine). The required sensitivities for particulates and iodine was decreased from $< 10^{-4}$ $\mu\text{Ci/cc}$ to $< 10^{-10}$ $\mu\text{Ci/cc}$, which is more restrictive than previously required. For the unit vent sampling, an all encompassing gamma isotopic analysis on particulates and gases was substituted for gross gamma analyses and analyses for a few specific isotopes (Ba-La-140 and I-131). For the reactor building, the requirement for gross gamma was deleted since it is included in the gamma isotopic analysis.
3. In the samples required for the offsite radiological monitoring program (Table 4.11-2), water supply samples were divided into two categories: water supply (raw) and water (other than raw water supply). A requirement to measure I-131 in the monthly raw water supply was added to the analyses now performed to check on the intake of this isotope by livestock consuming water from

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Hartwell Reservoir. The requirement for I-131 analyses on the monthly and quarterly milk samples was deleted since it is performed on the weekly samples.

4. The required analytical sensitivities in Table 4.11-3 were revised to be consistent with current guidance to demonstrate that the effluent releases are within the Appendix I design objective annual exposure limits and to reflect the current Oconee radiological sampling program. Sensitivities were added for 9 isotopes that were not previously listed in the Table. The sensitivity for I-131 analyses on water samples was increased from 0.5 to 1.5 p Ci/m³ since this is adequate and reasonable.

Evaluation

The proposed changes to the Technical Specifications will provide more definitive information from the radiological monitoring program. We find the proposed changes to be acceptable.

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental statement, negative declaration, or environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that:
(1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and
(2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.