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 STOLZ, J. F. NRC - No Detailed Affiliation Given

SUBJECT: Submits addl info re B60827 proposed amend to Licenses  
 DPR-38, DPR-47 & DPR-55 to include addl operability &  
 surveillance requirements for addl gaseous effluent monitor  
 (4RIA-45).

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September 29, 1986

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Attention: J. F. Stolz

Subject: Oconee Nuclear Station  
Docket Nos. 50-269, -270, -287

Dear Sir:

By letter dated August 27, 1986, Duke Power Company (Duke) submitted a proposed amendment request for the Oconee Nuclear Station Technical Specification. The proposed technical specification changes seeks to include additional operability and surveillance requirements for an additional gaseous effluent monitor (4RIA-45) currently being installed.

Additional information regarding this monitor was requested during subsequent discussions with the NRC staff. The subsequent paragraphs provide the additional information requested.

The exhaust gas radiation monitor for the Oconee Radwaste Facility (4RIA-45) measures effluent exhaust from all potentially contaminated areas of the facility. This includes exhaust gas from the Radwaste Facility Ventilation System, tank vents and the Volume Reduction (VR) Subsystem off-gas exhaust (incinerator). Monitoring is performed in accordance with guidance provided by NUREG 0800, Section 11-5.

Air is drawn from the exhaust duct near the release point by the isokinetic flow sampling device into the sample inlet line of the monitor. Air first enters a particulate/iodine filter. Particulates are retained on filter media and iodine molecules are collected in the charcoal cartridge. After passing through the particulate and iodine collector, the air flow goes to the noble gas monitor. The activity of the gases are monitored by a beta scintillation detector and a GM detector. The air then passes through the flow control device, the pump, and exits the sample line via the sample outlet into the exhaust duct.

The noble gas monitor range satisfies the minimum levels of detectability on the low end per ANSI N42.18-1980 and also satisfies the accident range on the high end per Regulatory Guide 1.97, Table 3 for "all other identified release points". This monitor uses one detector to cover the low gaseous activity range from  $2 \times 10^{-7}$   $\mu\text{Ci/cc}$  to  $2 \times 10^{-1}$   $\mu\text{Ci/cc}$ , Xe-133. A second detector covers the high gaseous activity range from  $7 \times 10^{-3}$   $\mu\text{Ci/cc}$  to  $2 \times 10^2$   $\mu\text{Ci/cc}$ , Xe-133.

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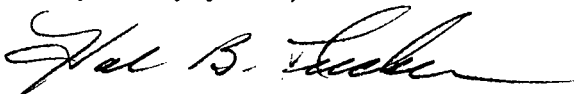
The gas monitors and the particulate/iodine samples are located in the counting room approximately 45 feet directly below the exhaust duct sample point. The sample tube routing meets the intent of ANSI N13.1-1969 and the Instrument Society of American Standard ISA-d567.10, Nov. 1983 to minimize iodine plateout and particulate deposition in the sample tubing.

The sample assembly consists of a sample chamber and a 5 inch thick lead shield. One end of the cylinder is held in place by a snap-ring enabling quick disassembly for decontamination and cleaning.

The noble gas monitor system includes local readout and also control room readout. During any postulated accident, 4RIA-45 will continue to perform and the range is sufficiently high to assure that population dose estimates can be calculated.

In closing, the operation of the radwaste facility including the incinerator will result in offsite releases that will be within the 10CFR 50 Appendix I dose objectives for the Oconee Nuclear Station.

Very truly yours,



Hal B. Tucket

cc: Ms. Helen Pastis  
Office of Nuclear Reactor Regulation  
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Washington, D. C. 20555

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