

UNITED STATES NUCLEAR REGULATORY COMMISSION REGION II

101 MARIETTA ST., N.W., SUITE 3100 ATLANTA, GEORGIA 30303

SEP 1 7 1982

Report Nos. 50-269, 50-270, and 50-287/82-32

Licensee: Duke Power Company

422 South Church Street Charlotte, NC 28242

Facility Name: Oconee Units 1, 2 and 3

Docket Nos. 50-269, 50-270 and 50-287

License Nos. DPR-38, DPR-47 and DPR-55

Inspection at Oconee site near Seneca, South Carolina

Inspector:

C. D. Evans

Date Signed

Approved by:

D. M. Montgomery, Section Chief, IMEP Section

EPOS Division

Date Signed

SUMMARY

Inspection on August 17-18, 1982

Areas Inspected

This routine, unannounced inspection involved eight inspector-hours on site in the areas of laboratory quality control and review of radiochemistry procedures and records.

Results

Of the two areas inspected, no violations or deviations were identified in two areas.

DETAILS

1. Persons Contacted

Licensee Employees

*J. E. Smith, Plant Manager

T. B. Owens, Technical Services Superintendent

*T. C. Matthews, Licensing Coordinator

*J. C. Long, Assistant Health Physics Supervisor

S. L.Morgan, Health Physics Specialist

NRC Resident Inspector

*W. Orders

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on August 18, 1982, with those persons indicated in paragraph 1 above.

3. Licensee Action on Previous Inspection Findings

(Closed) Unresolved (50-269/82-21-02, 270/82-21-02, 287/82-21-02). The effect of excessive deadtime generated by trapped noble gas on silver zeolite cartridges used for radioiodine determination by gamma-ray spectroscopy. The inspector reviewed a licensee report that detailed the methodology and results of a test conducted to evaluate the loss in measured activity as a function of Ge(Li) detector deadtime. The results of the test showed a linear relationship between measured activity loss of radio-iodine and deadtime. Licensee representative reviewed all radioiodine determinations for waste gas tank releases during 1982, and concluded that the activity losses due to deadtime did not warrant revision of effluent release data for that period since the corrections would be minor.

4. Unresolved Items

Unresolved items were not identified during this inspection.

- 5. Review of Procedures and Records
 - a. The inspector reviewed the following procedure and records.
 - 1. HP/0/B/1001/14, "Procedure for Nuclear Data 6600 System Operation," 2-12-82.
 - 2. Gaseous Sample Request Forms GWR's 82-198, 82-166, 82-282, and 82-158

The findings of the procedure and record review are discussed in paragraphs 5b-5c.

- b. The inspector noted that based on the results of the test conducted by the licensee to evaluate deadtime losses, that the present Ge(Li) operations procedure could allow for a systematic error of 10 percent on all gamma-spectroscopy analyses of effluent samples. The inspector stated that this was an unexceptable systematic error and that the procedure should be revised to reduce the systematic error to a more appropriate level. Licensee representatives agreed to evaluate the concerns of the inspector. This area will be reviewed in a subsequent inspection (50-269/82-32-01, 270/82-32-01, 287/82-32-01).
- c. The inspector noted that deadtimes as high as 25 percent were observed for gamma-ray analyses of radioiodine in pre-release waste gas tank surveillances conducted during the back-shift in the first half of 1982. The inspector stated that the review process should have detected the high deadtime, and appropriate actions should have been initiated to reduce the deadtime. The inspector stated that these incidents demonstrated a need for more supervision during the backshift and more supervisory review of analytical results.