TR

DUKE POWER COMPANY
POWER BUILDING
422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

May 24, 1979

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

TELEPHONE: AREA 704
373-4083

Mr. James P. O'Reilly, Director
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

Re: RII:DMM
50-269/79-8
50-270/79-8
50-287/79-8

Dear Mr. O'Reilly:

With regard to Mr. J. T. Sutherland's letter of April 30, 1979, which transmitted IE Inspection Report 50-269/79-8, 50-270/79-8, 50-287/79-8, Duke Power Company does not consider the information to be proprietary.

Please find attached responses to the deviation item and the infraction item.

Very truly yours,

William O. Parker Jr.

William O. Parker, Jr. by WAH

RLG:scs
Attachment

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DUKE POWER COMPANY
OCONEE NUCLEAR STATION

Response to IE Inspection Report
50-269/79-8, 50-270/79-8, 50-287/79-8

INFRACTION

Technical Specification 6.4.1 requires the station to be operated and maintained in accordance with approved procedures.

Contrary to the above, from March 1978 through March 1979, the Ge (Li) efficiency calibrations were obtained using a procedure other than HP/O/B/1003/09, which had been approved.

RESPONSE

The GeLi detectors were calibrated using a new technique because the NBS radioisotopes necessary for a complete GeLi detector calibration were not available. An outside vendor was used to calibrate the GeLi detector in the Charlotte Environmental Lab and then this detector was used as a standard for the Duke system.

A procedure for system GeLi detector calibration was approved on March 6, 1979. Sources have been requisitioned so that (1) the new technique for calibration can be verified and (2) procedure HP/O/B/1003/09 - Calibration Procedure for GeLi Detectors on the ND 6620 Multichannel Analyzer - can be used for calibration. The equipment will be calibrated using HP/O/B/1003/09 when the new sources are received. The calibration should be completed by July, 1979.

DEVIATION

ANSI Standard N323-1978, Radiation Protection Instrumentation Test and Calibration, Section 4.3.2 states, "Calibration shall be performed with a standard source of sources providing radiation fields similar to those in which the instrument will be used."

Contrary to the above, the licensee utilized a ^{90}Sr source for calibration of a GM-counter used for counting smears contaminated with radionuclides having much lower beta energies than ^{90}Sr. This procedure may lead to underestimation of contamination levels.

RESPONSE

Immediate corrective action consisted of increasing the efficiency factors on all swipe counters (β-γ) by a factor of three until the average beta energies could be determined and standards could be prepared for checking the efficiency factors.

Swipes were taken at several locations in the station to determine the radionuclide composition of the contamination present. The isotopes found were largely Co-58/60 and Cs-134/137 which have a weighted average beta energy of approximately 0.18 MeV. Since this energy is slightly greater than the average beta energy for Cs-134, Cs-134 was chosen to determine the efficiency factors. New efficiency factors were determined for all swipe detectors on March 20, 1979.

The swipe counters were all calibrated with a Cs-134 source in a two-inch stainless steel planchet. Periodic swipe checks will be made to determine if the average beta energy has changed.