

DUKE POWER COMPANY

POWER BUILDING

422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

TELEPHONE: AREA 704
373-4083

January 27, 1976

Mr. Norman C. Moseley, Director
U. S. Nuclear Regulatory Commission
Suite 818
230 Peachtree Street, Northwest
Atlanta, Georgia 30303

Re: IE:II:TNE
50-269/75-13
50-270/75-14
50-287/75-15

Dear Mr. Moseley:

In response to your letter transmitting the subject IE inspection report, Duke Power Company does not consider information included to be proprietary.

Please find attached responses to items I.A.1, I.B.1, and I.B.2 identified in the report.

Very truly yours,

William O. Parker Jr.
William O. Parker, Jr. *WAM*

MST:mmmb

Attachment

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RESPONSES TO IE INSPECTION REPORT
50-269/75-13, 50-270/75-14, 50-287/75-15

Item I.A.1

Contrary to Technical Specification 6.1.2.2.f, the Nuclear Safety Review Committee had not met within the required five-month interval (since May 27, 1975) to review and audit plant operation as required by Technical Specifications 6.1.2.2.i and 6.1.2.2.j.

Response:

Oconee Technical Specification 6.1.2.2.f states that the Nuclear Safety Review Committee (NSRC) shall meet at least three times per year at intervals not to exceed five months and as required on call by the chairman. This requirement was met in 1975 since meetings of the NSRC were held on February 6 and 7, 1975, February 9, 1975, May 27, 1975, and September 10, 1975. Specification 6.1.2.2.i and 6.1.2.2.j require the NSRC to review the normal station operating organization and to perform a backup audit for specific items. It is not, however, required by Technical Specifications to perform all of the reviews and audits required by these Technical Specifications at each meeting. In fact, Specification 6.1.2.2.j states that the committee shall periodically and selectively audit these items, but does not state that they must be audited on the frequency specified for meetings.

Throughout the year, the NSRC chairman distributed all pertinent information, reports, notices, letters, etc. concerning items within the purview of the committee. The NSRC members are required to review this information and to inform the chairman of any item which in their opinion should specifically be the subject of a committee meeting. The members, therefore, have individually had the opportunity to perform all required reviews on a timely basis throughout the time period in question.

A regular meeting of the NSRC has been conducted on January 20, 1976 to perform selected reviews and audits of required items.

Additionally, in response to a December 18, 1974 letter from the NRC, a change was requested to Technical Specifications 6.0, "Administrative Controls" on February 28, 1975 and amended on December 5, 1975. This proposed change, when approved and implemented, will increase the effectiveness of the off-site review function.

Item I.B.1

Contrary to Appendix B of Technical Specification 1.2A and Table 1.2-1, the boron concentration of 0.2 ppm in the Keowee River was exceeded during a 48-hour period on November 19-21, 1975.

Response:

This item has been addressed in a letter dated November 28, 1975 from Mr. W. O. Parker, Jr. to Mr. N. C. Moseley.

Item I.B.2

Contrary to Appendix B of Technical Specification 1.2A and Table 1.2-1, the sulfuric acid concentration in the Keowee River apparently exceeded the 2.5 ppm limit during the period December 1, 1974 - November 30, 1975 in that 207,231 pounds of sulfuric acid was consumed during this period which exceeded the 150,500 pound per year specified in the Technical Specification.

Response:

The bulk chemical inventories of sulfuric acid (66° Baume) of approximately 96% purity show that the limit of 150,500 pounds was exceeded for the year 1975. Inventories conducted December 31, 1975 showed one entry to be in error and that the total usage for 1975 was found to be 10,500 gallons of 66° Baume purity consumed for regeneration of water treatment room mixed bed demineralizers and pH adjustment of the two settling basins. Using the conversion found in Table F-7 of the CRC Handbook of Chemistry and Physics, 50th Edition (14.70 lbs/gallon), the total poundage of 66° Baume sulfuric acid was calculated to be 154,350 lbs. or 3850 lbs. in excess of the Table 1.2-1 limit which infers an increase in sulfate concentration in the Keowee River.

Two mechanisms of sulfate removal occur within the settling basins prior to discharge which are not accounted for by bulk chemical inventories. They are as follows:

1. The sodium hydroxide and sulfuric acid from the water treatment room mixed bed resin regeneration process combine in the settling basins and react to produce a salt and water. The salt, sodium sulfate, is quite soluble and very little settling would be expected.
2. Spent powdered mixed (cation and anion) resin is routinely discharged to the settling basins from the secondary polishing systems. Considerable capacity remains on this spent powdered resin due to the stringent final feedwater specifications and an undeterminable amount of sodium (from NaOH) ions and sulfate (from sulfuric acid) ions are removed through the ion exchange process.

The result of the two above processes reduces both the sodium and sulfate level discharged to the Keowee River. Therefore, it is highly probable that the resulting concentrations in the Keowee River specified in Table 1.2-1 were not exceeded.

The primary reason for excessive sodium hydroxide and sulfuric acid usage for 1975 resulted from poor silica removal by the makeup demineralizers which increased both the number of regenerations and the acid/caustic strength per regeneration. New resin was loaded in both makeup demineralizers in late 1975, thus reducing the overall consumption of regeneration chemicals. A more comprehensive surveillance program has also been initiated to better control and project high chemical usage.