

P. O. BOX 2178

**DUKE POWER COMPANY**  
STEAM PRODUCTION DEPT.  
GENERAL OFFICES  
422 SOUTH CHURCH STREET  
CHARLOTTE, N. C. 28242

TELEPHONE: AREA 704  
373-4011

November 28, 1975

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

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

Dear Mr. Moseley:

Prior to November 19, 1975, the Oconee Unit 3 spent fuel pool, in preparation for the installation of new spent fuel racks, was drained to the upper settling basin pending controlled release to the Keowee River via the lower pond. Oconee Nuclear Station Appendix B Technical Specification 1.2A requires that station releases be limited such that the boron concentration in the Keowee River remain below 0.2 ppm. On November 19, 1975, after calculations were made to assure conformance to this technical specification, discharge from the upper settling basin to the Keowee River was initiated. However, on November 21, 1975, a recalculation was made, and it was subsequently determined that the boron concentration limit of 0.2 ppm in the river had been exceeded. The discharge of the upper settling basin was then secured to prevent further boron release.

The high boron concentration in the Keowee River resulted from an initial miscalculation of the release rate from the lower pond. A discharge of 50 gpm based on a boron concentration of 377 ppm had been calculated for the upper settling basin which, when combined with other sources to the lower pond (approximately 3500 gpm) would be reduced to 5.38 ppm. A release rate of 50 gpm from the lower pond to the Keowee River had been assumed, which with 5.38 ppm boron, would have resulted in a concentration well below the 0.2 ppm limit in the Keowee River. However, the release rate from the lower pond was actually 3500 gpm instead of 50 gpm resulting in an excessive boron concentration of 1.03 ppm in the Keowee River. This error was discovered and corrected after 48 hours. During this 48 hours, the Keowee Hydro Plant had been

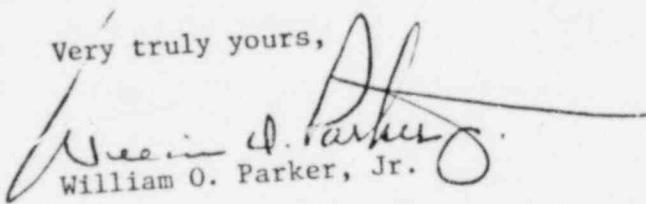
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operated for 13.8 hours during which time the additional discharge to the river had diluted the boron concentration from 1.03 ppm to 0.004 ppm, well below the 0.2 ppm limit. Therefore, for the 48 hours that this problem existed, the technical specification limit of 0.2 ppm was exceeded for approximately 34 hours, but well within limits for the remaining 14 hours. The average boron concentration in the Keowee River over the entire period was calculated to be 0.015 ppm.

When discharge rates are to be calculated for non-routine releases of this type, at least two independent release rates will be determined. Agreement among these independently calculated release rates will be required prior to initiating the discharge. In addition, approval of recommended release rates by the Superintendent Technical Services will be required for non-routine releases. It is felt that implementation of these administrative procedures should prevent recurrence of this incident.

Very truly yours,



William O. Parker, Jr.

EDB:mmb