

DUKE POWER COMPANY
OCONEE UNIT 1

Report No.: UE-269/74-4

Report Date: October 8, 1974

Event Date: August 26, 1974

Facility: Oconee Unit 1, Seneca, South Carolina

Identification of Event: Failure to sample borated water storage tank

Conditions Prior to Event: Operation at various power levels

Description of Event:

The Oconee Nuclear Station operating procedure OP/O/A/1102/04, "Operation at Power," specifies that each Tuesday at 0600 the Unit 1 Borated Water Storage Tank (BWST) shall be placed in the recirculation mode. This is to ensure adequate mixing prior to the weekly sampling required by Technical Specification 4.1.

On Wednesday, August 21, 1974, the station Chemist was informed that the BWST was not in the recirculation mode due to difficulties with the borated water recirculating pump. On August 23, the BWST was placed in recirculation, however, the tank was not recirculated for the required 24 hours due to the necessity to purify the spent fuel pool and a sample was not taken. On August 26, 1974 at 1710, the BWST was put in recirculation and a sample was taken after approximately six hours of recirculation. The measured concentration was 2200 ppm boron. At 1800, August 27, 1974, the sample taken after 24 hours of recirculation showed a boron concentration of 1984 ppm. Technical Specification 3.3 requires that the boron concentration in the BWST be maintained above 1800 ppm.

Designation of Apparent Cause of Event:

Initially, difficulties with the borated water recirculating pump prevented placing the BWST in recirculation in order to take the scheduled sample. The resultant displacement of the sampling schedule inadvertently caused the next sample to be called for beyond August 24, 1974, which exceeded the maximum time allowed by the Technical Specifications.

Analysis of Event:

The sample taken on August 27, 1974 showed the borated water storage tank was within specification with a boron concentration of 1984 ppm. The previous sample, taken on August 14, 1974, had shown a boron concentration of 2017 ppm. The only interchange of water in the BWST was on August 26, 1974 from the spent fuel pool which had a known concentration of 1973 ppm boron. It is

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thus concluded that the BWST was within specifications throughout the period August 14 to August 27, 1974. It is further concluded that the health and safety of the public was not affected.

Corrective Action:

Chemistry personnel have been instructed to identify to control room personnel when a sample is required by the Technical Specifications. The Technical Services Superintendent must be notified when any required sample cannot be taken as scheduled. The Shift Supervisor must also log any sample which could not be taken at the specified time or is out of specifications, and the corrective action taken to remedy the situation. A step has been added to OP/O/A/1104/4, "Operation at Power," requiring that the control operator log the boron concentration after recirculation of the tank is complete.