

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

400 Chestnut Street Tower II

December 3, 1980

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

Dear Mr. O'Reilly:

TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT, UNIT 1 -  
DOCKET NO. 80-259 - FACILITY OPERATING LICENSE - DPR-33 - ENVIRONMENTAL  
REPORTABLE OCCURRENCE - BPRO-80-259/8085

The enclosed report is submitted in accordance with Browns Ferry's  
technical specification 5.2.5b. This report supplements our report  
by telecopy to you on November 24, 1980, from H. L. Abercrombie,  
Power Plant Superintendent, Browns Ferry Nuclear Plant, and provides  
details concerning the reservoir water temperature exceeding the  
maximum temperature rise of 5 degrees Fahrenheit on November 23, 1980.

Very truly yours,

TENNESSEE VALLEY AUTHORITY

L. M. Mills, Manager  
Nuclear Regulation and Safety

Enclosure

cc (Enclosure):

Director  
Division of Licensing  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Director (3)  
Office of Management  
and Program Analysis  
U.S. Nuclear Regulatory Commission ✓  
Washington, DC 20555

Director (40)  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

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## LCO VIOLATION

Report Date: December 3, 1980  
Report Number: BFRO 50-259/8085  
Occurrence Date: November 23, 1980  
Facility: Browns Ferry Nuclear Plant

### Description of Violation

The temperature rise of Wheeler Reservoir measured between upstream and downstream thermal monitors exceeded the maximum allowable temperature rise limitation of 5.0 degrees Fahrenheit from 2030 through 2230 CST on November 23, 1980. The maximum temperature rise during this period was 5.6 degrees Fahrenheit at 2115 CST. The maximum downstream temperature during this period was 58 degrees Fahrenheit.

### Cause of Violation

Extensive rainfall in the area rapidly lowered the temperature in the tributary streams that discharge into Wheeler Reservoir. A thermal monitor at the mouth of Flint Creek, upstream of the plant at TRM 308.5 indicated 50.2 degrees Fahrenheit while the upstream control thermal monitor at TRM 297.6 indicated greater than 54 degrees Fahrenheit. When the colder water reached the upstream control monitor the noncompliance occurred. The violation was caused by the influence of colder water upstream, not by an increase in temperature of the condenser cooling water.

### Analysis of Violation

An analysis of all river water temperature data available before and after the violation indicates that the Environmental Technical Specification limit regarding the maximum temperature rise was exceeded. Since the violation only lasted for 2.00 hours, and the limit was only exceeded by 0.6 degrees Fahrenheit, we believe that no significant adverse environmental impact was experienced in Wheeler Reservoir due to plant-induced heating.

### Corrective Action

The load on unit 3 was reduced in 4 stages from 862 MW at 2009 hours to 460 MW at 2107 hours and shutdown completely at 2144 hours in an attempt to prevent a continuation of the noncompliance. Also, the flows at Guntersville Dam and Wheeler Dam were increased at 2004 hours.

Recommendations to Avoid Future Violations --Since this violation was primarily because of a sudden decrease in the upstream temperature caused by localized rainfall and not because of plant-induced heating, no further action is recommended at this time.