

## **COOLING WATER**

### **Wateree Steam Electric Station, South Carolina**

**Problem Solved:** Flowmeters alert operators to trash problem in circulating water line

**Site Characteristics:** 84" main circulating cooling water lines

**Configuration:** 4-path full-pipe meters

**Transducers:** Model 7634 Internal Mount Transducers

**Operation Details:** The meters are being used for calculating real-time efficiency of the plant condensers by measuring the circulating water flow. The station's two condensers, built in 1969 and 1970, are virtually identical in design. The circulating water is supplied to each condenser via two pumps of similar design. Each pair of pumps pull suction from the same canal. Typical flowrate through each unit is 150,000 gpm.

On May 14, 1998, Wateree Station operators noticed that the flow reported by the Accusonic flowmeter on the Unit 1 main condenser was lower than usual (i.e., 135 kgpm), while the flowmeter on Unit 2 reported typical flow (150 kgpm).

Based on the difference in flow readings between the two units, plant personnel performed an on-line inspection of the waterboxes on the Unit 1 condenser. The online inspection proved beneficial, as flow returned to normal after several gallons worth of trash was removed from HP inlet tubesheets.

