

HARTSVILLE AND PHIPPS BEND NUCLEAR PLANTS, ALL UNITS  
ROSEMOUNT MODEL 1152 PRESSURE TRANSMITTER DEFECTS  
10CFR50.55(e) REPORT NO. 1 (INTERIM)  
PRC 80-28

On June 3, 1980, TVA informed NRC-OIE Region II Inspector, R. W. Wright, of a reportable deficiency concerning defects in Rosemount Model 1152 pressure transmitters being supplied for use at the HTN and PBN plants. This deficiency was reported under 10CFR21 to NRC-OIE Region V on June 2, 1980, by General Electric (GE) Company, San Jose, California, the supplier of equipment containing these pressure transmitters to TVA. It was also reported under 10CFR21 to NRC-OIE in Washington, D.C. on June 17, 1980, by the Carrier Air Conditioning Company, Syracuse, New York (Carrier), who supplied air conditioners containing these pressure transmitters to TVA. This is the first interim report on this reportable deficiency. TVA anticipates transmitting the next interim report on or before September 17, 1980.

Description of Deficiency

Rosemount notified GE and Carrier of the existence of the defect described below in Model 1152 pressure transmitters. They in turn notified NRC-OIE and TVA.

The defect involves the observation in testing of an ambiguous output in Model 1152 pressure transmitters exposed to over- and under-pressure conditions. The specified output of these transmitters is 4 to 20 ma throughout its rated range and output at pressures outside the rated range was not specified by Rosemount. A limited number of these transmitters has produced a 4- to 20-ma output when input pressures were well over (140% of the range) or well under (100% below) the rated range. Rosemount indicated that these ambiguous outputs arose from different causes related to transmitter electronics.

GE has provided these transmitters in a number of safety-related components supplied and being supplied to both HTN and PBN. Carrier supplied the subject transmitters in six air-conditioning units for an electrical equipment room in the auxiliary building (four for Hartsville and two for Phipps Bend).

Corrective Actions

TVA and GE are currently in the process of determining exactly how many Model 1152 pressure transmitters have been provided to HTN and PBN and the exact location of each. This study was begun as a result of another defect in the same transmitters which was previously reported to your office (initial call to R. W. Wright on March 28, 1980). The number of Model 1152 transmitters found at the site will be included in the final report. Rosemount has indicated that they will "replace the A and D PC boards" with new E PC boards to correct the deficiency.