

ENCLOSURE

PHIPPS BEND NUCLEAR PLANT
HIGH PRESSURE CORE SPRAY DIESEL GENERATOR SWITCHGEAR
WIRING DISCREPANCIES
10CFR50.55(e) REPORT NO. 4 (INTERIM)
NCR PBN-033

On August 2, 1979, TVA notified NRC-OIE Region II Inspector, F. S. Cantrell, of a reportable condition under 10CFR50.55(e) regarding wiring discrepancies discovered in high pressure core spray (HPCS) diesel generator (DG) control switchgear for both units of the Phipps Bend Nuclear Plant (PBN).

TVA previously reported similar problems in HPCS DG switchgear for the Hartsville Nuclear Plant (NCR HNP-A-021) and our final report to you on that deficiency was dated March 7, 1979, from J. E. Gilleland to James P. O'Reilly. This is the fourth interim report on the subject reportable deficiency for the Phipps Bend Nuclear Plant. TVA will submit a final report on this deficiency on or before June 30, 1980.

Description of Deficiency

TVA site personnel at Phipps Bend Nuclear Plant performed a wiring check on the two sets of HPCS DG switchgear as a result of their followup on corrective actions taken. As a result of this wiring check, TVA found similar discrepancies as reported for the Hartsville Nuclear Plant HPCS DG switchgear and found the switchgear wiring contained evidence of poor workmanship such as wires pulled out of terminal lugs, inadequate terminations, loose and broken soldering joints, and cables with considerable wear or several strands of conductor cut. Work which was done to correct the discrepancies also uncovered several instances where the wiring was functionally correct but the wiring drawings did not match the as-built wiring configuration.

The DG control switchgear was fabricated by International Controls and Switchgear (IC&S), Rocky Mt., North Carolina, for Morrison-Knudson Power Systems Division, Rocky Mt., North Carolina, under subcontract from GE who supplied these components to TVA as part of the NSSS package for the Hartsville and Phipps Bend Nuclear Plants.

Corrective Actions

Representatives from GE-San Jose, Morrison-Knudson, and IC&S met at Phipps Bend Nuclear Plant beginning February 25, 1980, to thoroughly investigate and resolve the discrepancies and to do a 100-percent "ring out" of all wiring on the two Phipps Bend units. Since then over 90 percent of the discrepancies noted in the nonconformance report (PBN-033, Revision 1) have been corrected. The 100-percent "ring out" of wiring also uncovered a few more minor discrepancies which have been or will be corrected. The only other corrections (due to conditions listed on the NCR) remaining to be made involve replacing some rpm indicating lights on the engine control cubicles for both units due to loose, broken, or improper connections. The replacement parts were not available at the site in late February, but are expected to be received in May 1980. Additionally, two drawings (which were found to be in error and revisions marked in the field) have not been received "officially" at Phipps Bend as revised. The uncertainty in the date when the revisions to these two drawings will be transmitted to TVA is the reason for this being an interim rather than final report.