

LER No.: 50-366/1980-108, Rev. 1
Licensee: Georgia Power Company
Facility: Edwin I. Hatch
Docket #: 50-366

Narrative Report
for LER 50-366/1980-108, Revision 1
Update Report - Previous Report Date 8/6/80

On July 20, 1980, with the reactor at 91% power, the "J" suppression chamber (torus) to drywell vacuum breaker failed to open during the performance of surveillance required by Tech. Specs. 3.6.4.1, ACTION a (testing being done as a result of event described in LER 50-366/1980-094). Then, on July 23, 1980, with the reactor at 99% power, the "I" vacuum breaker failed to open when it was actuated to allow maintenance personnel to compare the solenoid operation of the "J" and "I" vacuum breakers. Surveillance was then performed on the remaining torus to drywell vacuum breakers as required by Tech. Specs. 3.6.4.1, ACTION b. During this testing, the "E" vacuum breaker failed to open. Since this made four breakers inoperable, Tech. Specs. 3.6.4.1, ACTION c was complied with. The health and safety of the public were not affected by this repetitive event as last reported on LER 50-366/1980-094.

The failure of the "J" and "E" vacuum breakers was due to broken air supply lines to the air cylinders; failure of the "I" vacuum breaker was due to a faulty air control valve. The broken air supply lines were replaced on the "J" and "E" vacuum breakers, and the air control valve was replaced on all the torus to drywell vacuum breakers due to the inaccessibility of this area during operation.

Due to the discovery of three (3) broken air supply lines (i.e., the "J" and "E" vacuum breakers reported herein, and the "B" vacuum breaker for LER No. 50-366/1980-094) during this outage, a dye penetrant test was performed on the air supply line of each torus to drywell vacuum breaker. During this test, the "D" vacuum breaker was discovered to have a crack in its air supply line; this air line was then replaced. The "SUPPRESSION CHAMBER TO DRYWELL VACUUM BREAKER DELTA P TEST" procedure was then performed satisfactorily on the "D", "E", "I", and "J" vacuum breakers, and the breakers returned to service on July 29, 1980.

Although the failed vacuum breakers could not be proven operable by surveillance testing due to the problems with the air cylinders, the mechanical operation of the breakers was not impaired. The breakers would have performed their designed function if an actual differential pressure had occurred between the drywell and suppression chamber.

Further investigation attributed the breakage of the air supply line(s) to vibration. In August, 1980, a design change (DCR # 80-289) was initiated which will change the existing air supply line (tubing) for all the torus to drywell vacuum breaker air control valves to a flexible tubing which will withstand the ambient vibration.