

ENCLOSURE

WATTS BAR NUCLEAR PLANT UNITS 1 AND 2
UHI HYDRAULIC ISOLATION VALVE ACCUMULATOR
WEIGHING SYSTEM
NCR WBN NEB 8002
10 CFR 50.55(e)
FIRST INTERIM REPORT

Description of Condition

The UHI hydraulic isolation valves were equipped with an accumulator weighing device which was intended to verify proper charge in the accumulators. The accumulators are initially charged by pressurizing the internal nitrogen bladder to a pressure of 1500 psig and then filling the accumulator with hydraulic fluid until the system pressure reaches 3000 psig. A change in the weight of the accumulator would then indicate either a fluid or gas leak. Load cell readout devices were provided in the main control room so that the operator could verify proper accumulator charge. In practice, however, the weighing system is inconsistent and it is difficult to obtain repeatability in accumulator weights. The problem with this system is evidently caused by the stiffening of connecting hydraulic lines under pressure.

Corrective Action

Westinghouse has proposed a design change that will use direct pressure indications to verify proper accumulator charge. TVA is currently reviewing this alternative to determine if it is acceptable. We will supply you with additional information in our next report.