- The licensee's motor-operated valve program had progressed considerably since the previous inspection in July 1991 and appeared to be meeting the intent of Generic Letter 89-10.

In NCR 93-143, a disc T-head was overstressed by exceeding allowable thrust. The disc T-head was inspected and found to be undamaged. Root cause of the overstressing was an oversized actuator, combined with an excessive motor contactor dropout time. Stated corrective action was (1) to use a limit switch (instead of the torque switch) to control travel, and (2) to evaluate use of a smaller operator. A smaller operator could not be used, therefore the only change was to use a limit switch instead of a torque switch. The limit switch was used to achieve consistent closure thrust below the level at which the torque switch could operate reliably.

3.7 Schedule

The licensee planned to accomplish the actions in GL 89-10 in accordance with the recommended schedule. Testing was being accomplished as prescribed by the licensee's program. The licensee completed dp testing for 15 of 39 MOVs and planned to complete dp testing on an additional 8 valves by the end of 1993. The remaining sixteen MOVs will be dp tested during the next refueling outage scheduled to begin in October of 1994. Baseline testing was performed for 33 of 60 valves. Baseline testing for all other MOVs in the program has been scheduled for 1994. The licensee was informed that any request for a schedule extension would be granted only for testing and that the methodology for verifying the operability of MOVs must be in place by October 1994.

3.8 Associated Reviews

3.8.1 Diagnostics

Since the last MOV inspection, the licensee converted from their previous MOV diagnostic test equipment to VOTES to test MOVs under both static and dynamic conditions. This required not only the conversion of equipment, but also the retraining of all personnel performing testing, engineering, and trending of MOV testing. It also required integrating the new results with the old. This was an extensive undertaking in addition to scheduled testing. The personnel involved with MOVs had a good understanding of the equipment and applied it effectively.

3.8.2 Walkdown

A general plant inspection and a detailed inspection of several MOVs was performed by the inspectors. The general external condition of the MOVs observed during the walkdown was considered to be good. Valve stems were lubricated and no grease leaks were noted. Valve and motor nameplate data was usually readily retrievable. Overall, the plant housekeeping was considered to be good.

3.8.3 Pressure Locking and Thermal Binding

The licensee's actions to avoid pressure locking and thermal binding were considered appropriate. No irregularities were found with the basis for determining susceptibility to these problems. MOV repair priorities were established in accordance with the Monticello PRA. Holes were drilled between the bonnet and the upstream sides of the disc to prevent pressure build-up in

ENCLOSURE 2

MOVS SELECTED FOR REVIEW

MO-1751 - CORE SPRAY OUTBOARD ISOLATION VALVE - SB-2 - 8" gate

MO-1753 - CORE SPRAY INBOARD ISOLATION VALVE - SB-2 - 8" gate

MO-2006 - RESIDUAL HEAT REMOVAL DISCHARGE VALVE TO TORUS - SMB-1 - 12" gate

MO-2007 - RESIDUAL HEAT REMOVAL DISCHARGE VALVE TO TORUS - SMB-1 - 12" gate

MO-2014 - LOW PRESSURE COOLANT INJECTION INBOARD INJECTION VALVE - SMB-2 - 16" gate

MO-2015 - LOW PRESSURE COOLANT INJECTION INBOARD INJECTION VALVE - SMB-2 - 16" gate

MO-2035 - OUTBOARD STEAM SUPPLY VALVE - SMB-1 - 8" gate

MO-2374 - OUTBOARD MAIN STEAM LINE DRAIN VALVE - SMB-000 - 3" gate