

- I. LER NUMBER: RO 78-33/03L-0
- II. LICENSEE NAME: Commonwealth Edison Company
Quad-Cities Nuclear Power Station
- III. FACILITY NAME: Unit One
- IV. DOCKET NUMBER: 050-254
- V. EVENT DESCRIPTION:

On December 19, 1978, gases created by repetitive backwashing the Unit Two Cleanup Demineralizers, caused the Reactor Building Ventilation System to auto isolate. During this isolation it was discovered that the inlet isolation dampers 1-5741 A & B failed to close. The reactor building supply and exhaust fans tripped and the outlet isolation dampers 1-5742 A & B did close as designed. The solenoid for inlet damper 1-5741A was tarped, and the damper shut, thus providing isolation on the inlet vent duct.

VI. PROBABLE CONSEQUENCES OF THE OCCURRENCE:

The consequences of this occurrence were minimal because each fan has louvers which close with the tripping of the fan, thus preventing any reverse air flow. Subsequently, even though inlet dampers 1-5741 A & B failed to close there was redundancy in these louvers. This, in conjunction with the auto starting of the standby gas trains, allowed no leakage of the reactor building atmosphere to the environs.

VII. CAUSE:

The cause of this occurrence is attributed to equipment failure. The pilot solenoid on the air operator of each damper valve had failed to supply the appropriate air signal to close the valve. An inspection of the pilot valves revealed that an accumulation of dirt in the casing had caused the piston, which controls air flow, to stick. The pilot valves are made by the Versa Company and are model number VGS-4522.

VIII. CORRECTIVE ACTION:

The defective solenoid pilot valves were replaced and the dampers operated properly. Procedure changes have been initiated to verify that the dampers close during the Standby Gas Auto Initiation and Reactor Building Ventilation Auto Isolation Surveillance Test (QOS 7500-4) which is performed once per operating cycle. Also a procedure change has been initiated to the Rx Vent Isolation/Fuel Pool Radiation Monitor Outage Report (QOS 1700-01) to verify proper damper operability.