

U. S. ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS

REGION III

RO Inquiry Report No. 050-254/72-10

Subject: Commonwealth Edison Company
License No. DPR-29
Quad-Cities Unit 1
Damage to a Reinforced Rubber Expansion Joint and Flooding of
the Lower Level of the Turbine Building

Prepared By: *A. M. Hannicutt* *6/12/72*
(Date)

A. Date and Manner AEC was Informed:

1. Telecon, Messrs. F. Palmer and B. Stephenson (Station Superintendent and Assistant Superintendent) to Mr. D. C. Boyd on June 9, 1972.
2. TWX, Mr. B. Stephenson to Region III, received June 12, 1972.

B. Description of Particular Event or Circumstance:

The licensee reported that while performing work on the reverse flow valves on the north end of the north half of the main condenser, the reinforced rubber expansion joint was damaged. This damage resulted in flooding the lower level of the turbine building to a depth of about 14.5 feet with approximately 600,000 gallons of untreated river water.

The flooding resulted in loss of the 1 and the 1/2 diesel generators cooling water pumps, two condensate transfer pumps, four condensate and condensate booster pumps and miscellaneous other pumps; the seismograph; and various lighting circuits.

The reactor had been in a subcritical condition for nine (9) days prior to this incident. The Unit 2 reactor was immediately shut down as only one diesel generator was available for continuous emergency operation.

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C. Action by Licensee:

The situation was appraised and the licensee determined that no immediate safety problem was involved. Water analyses indicated no radioactivity would be released, if the untreated water was pumped back to the river. Grab samples of the water were taken at approximately one hour intervals to determine if radioactivity was present. The continuous monitor in the discharge canal was checked frequently to assure that no radioactivity was discharged to the river.

The licensee positioned six portable pumps and pumped the untreated river water to the site discharge canal. When the water level was down to approximately one foot (initially the water level was 14.5 feet), the water was diverted through the oil separators to assure that no oil (from pump bearings, etc.) was inadvertently discharged into the river.

The licensee stated that the affected motors would be dried out and checked subsequent to reinstallation. The equipment would be inspected, tested, and operated to assure that each motor and pump was satisfactorily repaired.

Unit 1 will not be restarted until all equipment has been repaired, tested, and demonstrated as operable. Unit 2 will not be restarted until the 1/2 diesel has been tested to assure adequate operation and that a replacement seismograph, other appropriate means to monitor seismic movement is available, or the installed seismograph is repaired and shown to operate as designed.