



UNITED STATES
ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS
REGION 1
970 BROAD STREET
NEWARK, NEW JERSEY 07102

RO Inquiry Report No. 50-29/73-02Q

Licensee: Yankee Atomic Electric Company
20 Turnpike Road
Westboro, Massachusetts

License No.: DPR-3

Facility: Yankee - PWR
Rowe, Massachusetts

Title: Operating Reactor at Power Without Required
Protective Trips (Violation of Technical
Specifications)

Prepared by: C. R. Oberg May 15 1973
Date

A. Date and Manner AEC was Informed:

By telephone call from licensee on May 4, 1973.

B. Description of Particular Event or Circumstance:

During a plant startup (after a scram from power) on May 3, 1973, three protective system pressure switches were not actuated as required by Technical Specifications, paragraph D.2.d.(2). These pressure switches are normally actuated by turbine first stage pressure and insert, at a pressure setting equivalent to 15 MWe, the following automatic protective features through permissive relays:

1. Main coolant low flow trip.
2. Steam generator low level trip
3. Turbine trip
4. Generator trip

Relay actuation is indicated by lights on the main control board. Automatic low coolant pressure and low pressurizer level trips were available throughout the event.

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The licensee stated that the loading of the plant continued past the 15 MWe point without the above automatic protection. The pressure switches were ultimately actuated at a turbine pressure equivalent to 30 - 33 MWe for the reactor permissive relays and 25 - 30 MWe for the turbine generator permissive relays. The abnormal relay operation was suspected to be caused by a leak in the turbine first stage pressure sensing line within the turbine casing.

The licensee stated that a Westinghouse turbine representative had been called in to evaluate this problem. The licensee further stated that this problem was known prior to the plant starting on May 3, 1973, that the Westboro management - engineering office was informed of the problem, and that the decision to continue operation was based on that office's desire to collect first stage steam pressure data in order to recalibrate the pressure switch. Power operation of the plant is continuing within the allowable license limits.

C. Action by Licensee:

1. Orders have been issued by the licensee to: (a) scram the reactor from the point where automatic protection is lost (when shutting down), and (b) if a reactor scram occurs, the reactor will not be started up until the problem is resolved.
2. In addition, the licensee plans to request a change to the reactor protective system which will have the pressure switches sense pressure from a different location which would be more indicative of actual power level of the turbine generator.
3. The licensee will submit a 10 day written report on the violation to the AEC.