



Commonwealth Edison
Quad Cities Nuclear Power Station
22710 206 Avenue North
Cordova, Illinois 61242
Telephone 309/654-2241

NJK-85-38

February 1, 1985

Mr. Edson G. Case, Deputy Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Case:

Enclosed please find a listing of those changes, tests, and experiments completed during the month of January, 1985, for Quad-Cities Station Units 1 and 2, DPR-29 and DPR-30. A summary of the safety evaluation is being reported in compliance with 10 CFR 50.59.

Thirty-nine copies are provided for your use.

Respectfully,

COMMONWEALTH EDISON COMPANY
QUAD-CITIES NUCLEAR POWER STATION

L. J. Dorman for
N. J. Kalivianakis
Station Superintendent

bb

Enclosure

cc: B. Rybak

8502200279 850201
PDR ADOCK 05000254
R PDR

0027H
0061Z

502541

A055
1/39

Modification M-4-1-79-2

Description

The Anticipated Transient Without Scram (ATWS) System was designed as a redundant, independent, and diverse Reactor shutdown system. The ATWS System responds to transients anticipated in the event of a failure of the Reactor Protection System (RPS) to initiate a SCRAM of the Control Rods when a SCRAM signal is present. This modification is required per H. Denton letter to C. Reed, dated January 8, 1979.

The transients anticipated for the RPS failure are Reactor vessel high pressure (1250 psig) and/or Reactor vessel low-low water level (-59"). For either situation, the ATWS System will trip both Recirculation Motor-Generator Set field breakers and depressurize the SCRAM pilot valve air header. This in effect stops recirculation flow and inserts the Control Rods.

The SCRAM pilot valve air header may also be depressurized by arming and depressing the ATWS manual pushbuttons located on the 901-5 Panel.

Evaluation

Failure of the RPS to SCRAM the Control Rods when a SCRAM signal is present could result in Reactor vessel over-pressurization or loss of Reactor water level. To alleviate this condition(s) the power production must be halted.

ATWS provides a method of power interruption via the Recirculation pump trip and Control Rod insertion which is redundant and diverse from the RPS.

Modification M-4-1-84-24

Description

Under the EQ Program, some Limitorques on valves had their brakes removed. This resulted in "hammering" in which the valve repeatedly slammed against the seat until the CLOSE signal was removed. Adding contacts in series with the valve CLOSE contactor stops the hammering; the valve now only tries to close once on a continuous CLOSE signal. This modification eliminates the valve stem damage caused by the hammering.

Evaluation

Plant safety is enhanced by the modification. The valves affected by it (HPCI steam supply and Core Spray injection) will no longer be damaged by hammering. Operation of the valves from the Control Room is unchanged.