Special Test 2-42

Special Test 2-42 was completed on March 5, 1984. The purpose of this test was to provide added indication of the proper connection of the Traversing Incore Probe tubes by using the Traversing Incore Probe System with special Control Rod maneuvers.

Safety Evaluation

1. The probability of an occurrence or the consequence of an accident, or malfunction of equipment important to safety as previously evaluated in the Final Safety Analysis Report is not increased because all rod movements will be performed using Station approved procedures under the direction of a qualified Nuclear Engineer. Power will be maintained at approximately 50 percent of rated core thermal power. Thus, there are no additional safety implications from a rod drop accident.

2. The possibility for an accident or malfunction of a different type than any previously evaluated in the Final Safety Analysis Report is not created because the rod maneuvers will be performed at normal operating conditions but at reduced power. All rod movements will be inserted deeper into the core from their target pattern position. Response will be noted on the adjacent Traversing Incore Probe, and the Control Rods will be returned to their normal target position before proceeding to the next step.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because all rod movements will be performed using approved operating procedures and within Technical Specifications; thus, no Technical Specification safety margins are reduced.

Diesel Generator, 4 KV Breaker, 480 Volt Breaker
Local Control

M-4-2-79-26

Description

This modification allows control of Unit Two Diesel Generator in the Diesel Generator room. It also allows control of the 4 KV breaker for the main feed to ESS buses, bus ties, 480 main feed breaker at ESS buses, RHR and RHR Service Water Pumps at the individual breaker. A fire in the Control Room, Auxiliary Electrical Equipment Room, or Cable Tunnel could cause loss of control from the Control Room.

For each of the 4 KV circuit breakers affected, a knife switch was installed to disconnect the control cables to the Control Room and enable control capabilities at the breaker. A pushbutton control switch, located near each bus, will allow for control of an individual breaker.

For the Unit Two Diesel Generator, this modification includes a transfer switch in the Unit Two Diesel Generator room which will give the capabilities of separating the Unit Two Diesel Generator controls in the Control Room from those in the Unit Two Diesel Generator room. This will allow for a local Unit Two Diesel Generator start and load.

Evaluation

Installing the local control will not hinder normal operation from the Control Room for the Diesel Generator, RHR Pumps, and RHR Service Water Pumps. For the Diesel Generator, all logic for auto start and load functions was not altered. Also, auto initiation of the RHR pumps was not impaired. If a fire in the Control Room, Auxiliary Equipment Room, or Cable Tunnel occurred, local control of Diesel Generator will ensure that the buses that feed RHR Pumps can be energized and RHR Pump's 4 KV breakers operated.

Main Steam Relief Valve Logic Change

M-4-2-82-32

Description

This modification prevents possible overstress conditions that have been identified for the Mark I Suppression Chamber when Main Steam Safety Relief Valves are reactuated within a few seconds after valve closure with steam present.

Additional relays and contacts have been added to the Electromatic Relief Valves 203-3B and 3C logic schemes to provide a ten second re-opening inhibit following valve closure. Also, the relief valve opening setpoints have been changed as follows:

203-3A	1135 psig
203-3B	1115 psig
203-3C	1115 psig
203-3D	1135 psig
203-3E	1135 psig

Evaluation

The logic change has been applied to only two of the five relief valves and is on a valve-by-valve basis; thus, no failure in one valve can affect the remaining valves. Also, the logic change is redundant, therefore, no single failure will prevent ADS from opening or closing the relief valves outside of the inhibit function, nor will a single failure override the inhibit function when required. The addition of the inhibit logic does not affect initial actuation of the relief valves in the ADS mode, and manual control remains available at all times.

The change in setpoints has produced a net relief valve setpoint decrease thereby lowering the peak pressure and power during the limiting transient. The increase in Target Rock Safety Relief Valve (203-3A) setpoint will increase peak pressure less than 5 psi during the ASME overpressurization event. No change has been identified for the large break LOCA and the impact on worst case small break LOCA is estimated to be $\pm$ 20^{o}F in peak cladding temperature. This increase is insignificant.

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NJK-84-117

April 9, 1984

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 March 1984, 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.

Very truly yours,

COMMONWEALTH EDISON COMPANY
QUAD-CITIES NUCLEAR POWER STATION

N. J. Kalivianakis
Station Superintendent

bb

Enclosure

cc: B. Rybak

IE24 Original To Reg File
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