



Commonwealth Edison

Quad Cities Nuclear Power Station
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NJK-84-299

October 1, 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 September, 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

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Enclosure

cc: B. Rybak

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SPECIAL TEST 2-43

Special Test 2-43 was completed on September 7, 1984. The purpose of this test is to verify that the Economic Generation Control System properly controls a unit at significant power levels in the remote modes of operation.

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 operation in the Automatic Flow Control mode has already been analyzed in the FSAR.
2. The possibility for an accident or malfunction of a different type than any previously evaluated in the FSAR is not created because the operation in the EGC mode has already been analyzed in the FSAR.
3. The margin of safety, as defined in the basis for any Technical Specification is not reduced because operation in the Automatic Flow Control mode will be within the limits specified in the Technical Specifications for this mode of operation. Core flow will be maintained between 65 percent and 100 percent, and the proper K_f factor will be applied to the MCPR limit. Thus, no reduction of the margin of safety exists.

Modification M-4-1-76-62

Description

This modification installed a keylock switch to bypass the Refuel Bridge rod blocks, and an alarm to alert the Operator when there is a Refuel Bridge rod block. The purpose of the modification is to allow the Refuel Bridge control circuitry to be de-energized when the bridge is not in use. This will increase the life of the control circuit relays. The installation of the alarm will make it easier to determine the cause of a rod block. When the Refuel Bridge rod blocks are bypassed, the bridge will receive a travel block if an attempt is made to move it over the vessel. The keylock switch will bypass the Refuel Bridge rod blocks only if the Refuel Bridge rod block alarm is clear.

Evaluation

The safety function of the Refueling Platform Interlocks is to prevent a control rod from being withdrawn when the platform is over the core with or without fuel on a hoist. This modification does not circumvent these interlocks. Also, once these interlocks are bypassed, the platform cannot be moved over the vessel. Therefore, the safety function of the Refueling Platform Interlocks has not been changed.

Modification M-4-1-83-49

Description

As a result of Bulletin 7901B (Environmental Qualification of Electrical Equipment) several flow, level, differential pressure and pressure switches were replaced by a Rosemount transmitter/trip unit scheme. The transmitters were installed in the Reactor Protection, Primary Containment Isolation, Residual Heat Removal, Core Spray, and High Pressure Coolant Injection Systems. Transmitters are located in areas considered to be harsh environments and the trip units are located in a mild environment. All equipment was installed seismically and divisionalized. No setpoints were changed and all systems function as per original design.

Evaluation

The margin of safety during regular operations has not changed as a result of this modification. The margin of safety as postulated during an accident however, has increased significantly.

Modification M-4-1-82-48

Description

Due to the sediment which collects at the Torus bottom drain Penetration X-213A and subsequent plugging of the instrument line which takes its suction from this Penetration, the procurement of a standpipe is necessitated.

Evaluation

This modification does not change any of the design criteria of the Pressure Suppression Pool as designated in the FSAR nor does it limit any of the conditions as specified in the Technical Specifications. The integrity of Torus instrument line will be increased, thereby increasing the margin of safety that was originally built into the design of the Pressure Suppression System.

Modification M-4-1-84-14

Description

This modification involves the installation of a two inch decontamination flange in the Reactor vessel bottom drain line to the Reactor Clean-up System. This connection will be used to facilitate a flow path for the chemical decontamination of the Reactor Clean-up System piping located in the Drywell. The modification was accomplished by installing a tee in the two inch Reactor vessel drain line and connecting a two inch flange and blind flange.

Evaluation

The decontamination connection can be isolated from the Primary Coolant System using two existing manual valves. Normal operation of the Clean-up System will not be affected by this modification. The installation used established materials, procedures, welding techniques, and examination methods used previously in the Primary Coolant System boundary. This modification will allow additional piping in the Drywell to be decontaminated; thereby reducing personnel radiation exposure.

Modification M-4-1-73-119

Description

Install wide range level and pressure instrumentation in the Torus with recorders on Control Room Panel 901-3. This will improve post-accident monitoring capability. This was accomplished by using an existing level instrumentation penetration and installing new local pressure and level transmitters. A two pen strip chart recorder was installed in the Control Room to display the Torus pressure and level indications.

Evaluation

This modification, using existing level instrumentation, increases the range of Torus level and pressure monitoring capabilities to improve post accident surveillance.