

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

NJK-81-2

January 2, 1981

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 December 1980, for Quad-Cities Station Units One and Two, 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

howanik

N. J. Kalivianakis Station Superintendent

bb

2

Enclosure

cc R. F. Janecek

8101200302

M-4-1-77-36

Drywell Mechanical Snubber

Description of Modification

The modification involved replacement of the hydraulic snubbers in the drywell with mechanical type. The mechanical snubbers were obtained from Pacific Scientific and are of the same rating as the hydraulic units they replaced. This modification was installed because the mechanical snubbers are more reliable than the hydraulic type due to the elimination of relatively radiation-sensitive components such as hydraulic fluids and seals and the non-leaking character of the mechanical type.

Summary of Safety Evaluation

3

The design function of the affected systems will not be altered. The performance characteristics of the snubbers will not be altered since the mechanical and hydraulic snubbers are of the same ratings. However, the mechanical snubbers will provide greater reliability because the consideration of hydraulic fluid degradation and leakage does not exist. No design basis margin of safety as defined in the Technical Specifications is affected by this modification.

M-4-1-78-12

Recirculation Pump Suction Valves

Description of Modification

This modification removed the LPCI loop selection closure of the recirculation system suction valves (MO-1-202-4A & B). Both valves will now remain in the open position in case of a line break between the recirculation suction and discharge valves thus allowing the reactor to depressurize. This modification was installed to prevent a situation where inventory in the vessel is decreased while system pressure remains high during a recirculation line break.

This was an NRC commitment. LPCI loop select still remains with respect to the LPCI injection valves, Recirc Pump Trip function, and Recirc Discharge Valve closure.

Summary of Safety Evaluation

?

The probability of an occurrence is decreased because maintaining both recirculation suction valves in the open position decreases the chance of a vessel pressure build-up following a water line break. The valves will be surveillance tested as before; therefore, the margin of safety is unaffec 'd.

M-4-1-80-11

Groups I & II PCI Valve Circuitry

Description of Modification

Three-position control switches were installed for the air-operated valves used for Group I and II Isolation. The SJAE suction valve switch on 901-7 is also changed. This modification eliminates the need to place all control switches for a given group to CLOSE before permission for manual isolation reset. The switches are OPEN, CLOSE, spring return to AUTO. Also, for the MSIVs, cabinets were installed in the Cable Spreading Room with light indications for the MSIV's pilot solenoids. These lights are on when the solenoids are energized, and will indicate which solenoid may have malfunctioned (AC or DC).

Summary of Safety Evaluation

The probability of an occurrence is decreased by eliminating the possibility of automatically opening of containment isolation when reset. The margin of safety increases by requiring an operator action to change the position of these valves.

M-4-1-76-51

Feedwater Check Valves Seal Material Replacement

Description of Modification

This modification replaced the feedwater check valve seal material from Viton to Kalrez. Kalrez material is more suitable to the operating conditions, thereby increasing the reliability of the valves.

Summary of Safety Evaluation

?

The design of the valve remains unchanged by this modification, therefore no new .Jdes of failure are created. The margin of safety is unaltered. The durability of the valve is improved which will increase reliability.

M-4-1-77-21

Standby Emergency Diesel Generator Trip

Description of Modification

This modification revised the tripping functions for Unit 1 Diesel Generator to provide increased protection during surveillance testing. Several new tripping functions were added, which will trip the Diesel Generator to Bus 14-1 breaker (thus tripping the diesel engine) when it is operating in the test mode. The new trips are as follows:

- 1. Loss of excitation.
- 2. Generator neutral voltage (fault condition).
- 3. Generator reverse power (monitoring).
- 4. Overcurrent.

In addition, the existing underfrequency trip was modified to trip only in the test mode. All of the above trips are bypassed when the Diesel Generator auto starts.

Summary of Safety Analysis

3

The FSAR related function is unchanged by this modification because the additional trips are not operable during an emergency start. The additional trips will give more protection during Diesel Generator surveillance testing. The margin of safety as defined in the Technical Specification is unchanged.