



Commonwealth Edison

Quad Cities Nuclear Power Station
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RAR-88-46

September 27, 1988

Director of Nuclear Reactor Regulations
U. S. Nuclear Regulatory Commission
Mail Station P1-137
Washington, D. C. 20555

Enclosed please find a listing of those changes, tests, and experiments completed during the month of September, 1988, 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

R. A. Robey

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Services Superintendent

RAR/vmk

Enclosure

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SPECIAL TEST 2-86

Special test 2-86 was completed on September 23, 1988. The purpose of this test was to run the 2A Core Spray Pump at minimum flow to gather data for assessment of minimum flow line sizing in accordance with NRC Bulletin 88-04.

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 the system was in the normal operating configuration, and was designed to operate in the manner described by this test.
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 no operations were performed outside specified in the FSAR.
3. The margin of safety, as defined in the basis for any Technical Specification is not reduced because no operations outside the Technical Specifications were done.

SPECIAL TEST 2-87

Special test 2-87 was completed on September 23, 1988. The purpose of this test was to run the 2D Residual Heat Removal pump at minimum flow to gather data for assessment of minimum flow line sizing in accordance with NRC Bulletin 88-04.

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 the system was operated in the normal operating configuration. Monitoring instruments are all external to the pump and do not affect the operation of the pump.
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 no operations were performed outside that specified in the FSAR. The pump was operated in a normal configuration.
3. The margin of safety, as defined in the basis for any Technical Specification is not reduced because no operations outside the Technical Specifications were done.

SPECIAL TEST 1-118

Special test 1-118 was completed on September 16, 1988. The purpose of this test was to run the 1A Residual Heat Removal pump at minimum flow to gather data for assessment of minimum flow line sizing in accordance with NRC Bulletin 88-04.

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 the system was in the normal operations configuration. Monitoring instruments are all external to the pump and do not affect the operation of the pump.
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 no operations were performed outside that specified in the FSAR. The pump was operated in a normal configuration.
3. The margin of safety, as defined in the basis for any Technical Specification is not reduced because no operations outside the Technical Specifications were done.

SPECIAL TEST 1-116

Special test 1-116 was completed on September 16, 1988. The purpose of this test was to run a core spray minimum flow test to verify proper operation in accordance with NRC Bulletin 88-04.

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 is not increased because the system was designed to operate under the conditions of this test. The system was in the normal operations configuration.
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 pump was operated under the conditions it was designed for. No operation was performed outside that specified in the FSAR.
3. The margin of safety, as defined in the basis for any Technical Specification is not reduced because the test conditions do not differ from the conditions the system was designed and intended to operate under. No operations outside the Technical Specification were done.

SPECIAL TEST 1-117

Special test 1-117 was completed on September 15, 1988. The purpose of this test was to measure float and equalize currents of the 24/48, 125, and 250 VDC Station Batteries. This test gives quantitative data on the applicability of using a current probe to measure battery currents in the range of 50 to 2000 milliamps and to detect stabilized float and equalize currents.

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 the probe being tested clamps around a cable and creates no disturbance on the DC system.
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 probe has no electrical connection with the system. It is only a sensing device that detects fields around the battery cable. Placing the battery in equalize mode only increases the reserve capacity available.
3. The margin of safety, as defined in the basis for any Technical Specification is not reduced because the test has less interactions on the DC system than standard station surveillances (i.g. Station Battery Weekly Surveillance QOS 6900-1).

Modification M-4-1-82-017

Description

The modification is to replace the drywell H₂ monitor system. The existing system does not fully satisfy NRC requirements as listed NUREG 0737. The existing in-containment system will be replaced with an out-of-containment system.

Evaluation

The basic function and operation of the system is not being changed, so the modification doesn't create a new accident situation.

Modification M-4-1-83-45

Description

This modification was initiated to replace the old Unit One 125 volt battery which was nearing the end of its service life. A new 125 volt battery, a GNB type NCT 1344, was installed along with a new seismically qualified battery rack. Also included in this modification was the installation of a seismically qualified overhead x-y crane to facilitate battery installation and maintenance.

Evaluation

The new 125 volt battery has a greater ampere-hour capacity which enhances plant safety. The battery rack and overhead crane are designed to be seismically qualified and therefore do not change the margin of plant safety.

Modification M-4-1/2-85-6

Description

Failures of General Electric type HFA relays have been reported industry-wide since 1973. The principle cause of the failures has been cracking of the nylon or lexan bobbins of the magnetic coil assemblies (detailed in NRC IE Bulletin 84-02). The station committed to the NRC to replace the coil assemblies on all safety related HFA relays with a Tefzel bobbin (G.E. Century series coils). After the coils were replaced, relays were bench tested for contact wipe and gap, proper mating of contacts, pick-up voltages, and smoothness of motion. Once the relays were returned to their locations, de-energized and energized tests were done to ensure correct contact configuration. No logic circuitry was altered by the coil replacement.

Evaluation

The new coils with a Tefzel bobbin are more resistant to cracking and have made the relays more reliable. The margin of safety, therefore, has increased due to the replacement.

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Evaluation

The new coils with a Tefzel bobbin are more resistant to cracking and have made the relays more reliable. The margin of safety, therefore, has increased due to the replacement.

Modification M-4-2-85-38

Description

A decon flange was installed on line 2-1913F-6"RWC where it bends to a 10" x 6" reducer attached to line 2-1913-10"RWC. This decon flange consists of a two inch tap with a gate valve and a capped end. This decon flange enables a hydrolazer to be used on the ten inch line. This will remove the crud and eliminate the hot spots from this line. This is the Bellows Seal Drain Line.

Evaluation

This decon flange will not in any way obstruct the flowpath or affect the operation of the system. The decon flange is equipped with a capped end which is in series with a manual valve. This combination provides redundancy in isolating the line from the environs.