



Commonwealth Edison

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

GCT-92-38

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U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

SUBJECT: Quad Cities Nuclear Station Units 1 and 2
Changes, Tests, and Experiments Completed
NRC Jocket Nos. 50-254 and 50-265

Enclosed please find a listing of those facility and procedure changes, tests, and experiments requiring safety evaluations completed during the month of August 1992, for Quad-Cities Station Units 1 and 2, DPR-29 and DPR-30. A summary of the safety evaluations are being reported in compliance with 10CFR50.59 and 10CFR50.71(e).

Respectfully,

COMMONWEALTH EDISON COMPANY
QUAD-CITIES NUCLEAR POWER STATION

Gerald Tietz
Gerald Tietz
Technical Superintendent

GCT/dak

Enclosure

cc: A. B. Davis, Regional Administrator
T. Taylor, Senior Resident Inspector

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Tietz

Temporary Alteration

DESCRIPTION:

A Furmanite clamp is installed on the 2-2301-18 valve in order to stop the leak. The clamp will remain installed on the valve until an outage of sufficient duration allowing maintenance personnel to repair the leak. This valve is located on a 3/4" pressure test tap line between the A02-2301-7 valve and MO2-2301-8 valve.

SAFETY EVALUATION SUMMARY:

1. The change described above has been analyzed to determine each accident or anticipated transient described in the UFSAR where any of the following is true:
 - The change alters the initial conditions used in the UFSAR analysis.
 - The changed structure, system or component is explicitly or implicitly assumed to function during or after the accident.
 - Operation or failure of the changed structure, system, or component could lead to the accident.

The accidents which meet these criteria are listed below:

LOCA	UFSAR SECTION	6.1, 6.3, 15.0
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For each of these accidents, it has been determined that the change described above will not increase the probability of an occurrence or the consequence of the accident, or malfunction of equipment important to safety as previously evaluated in the UFSAR.

2. The possibility for an accident or malfunction of a different type than any previously evaluated in the UFSAR is not created because the installation of the furmanite clamp on the 3/4" HPCI test tap line to stop the 2-2301-18 valve from leaking will not reduce the ability for HPCI to fulfill its intended safety function during a LOCA. The weight and location of the furmanite clamp has been analyzed and satisfactorily meets all seismic and pipe stress design allowables in the UFSAR and code requirements and therefore, is acceptable for HPCI operation. In the event of the clamp failing the release of radioactive coolant would be directed into the Radwaste system where the flow would be monitored and processed. This would maintain the MSIV room from flooding and reduce contamination area.
3. The margin of safety, is not defined in the basis for any Technical Specification, therefore, the safety margin is not reduced.

Component Replacement C04-U-92-033

DESCRIPTION:

The component replacement replaces the two existing .100, and one .050 kva control power transformers in MCC 18-4 cubicles 1C, 2B and 2C with .300 kva control power transformers. The design of the new transformers is similar to that of the existing transformers. The new transformers have a lower impedance because the size of the wire in the transformer windings is larger in diameter than that of the existing. This makes the new transformers more reliable because less heat will be generated in the transformers during normal and degraded voltage conditions. The new transformers do not change the power requirements of the Control Room AFU Booster Fan A, Control Room AFU Booster Fan B, or the Control Room HVAC Heater because no additional loading is being added to the control circuit. In addition, the new transformers are being purchased Safety-Related to meet the requirements of the existing transformer.

SAFETY EVALUATION SUMMARY:

1. The change described above has been analyzed to determine each accident or anticipated transient described in the UFSAR where any of the following is true:
 - The change alters the initial conditions used in the UFSAR analysis.
 - The changed structure, system or component is explicitly or implicitly assumed to function during or after the accident.
 - Operation or failure of the changed structure, system, or component could lead to the accident.

The accidents which meet these criteria are listed below:

LOCA	UFSAR SECTION	15.6.5
MAIN STEAM LINE BREAK	UFSAR SECTION	15.6.4
REFUELING ACCIDENT	UFSAR SECTION	15.7.2

For each of these accidents, it has been determined that the change described above will not increase the probability of an occurrence or the consequence of the accident, or malfunction of equipment important to safety as previously evaluated in the UFSAR.

2. The possibility for an accident or malfunction of a different type than any previously evaluated in the UFSAP is not created because the component replacement has no adverse effect on plant operating modes or equipment functions. The installation of the new control power transformers enhances the reliability of the B Train of Control Room HVAC, because it improves the control power voltage under degraded voltage conditions. The new transformers have a lower impedance because the size of the wire in the transformer windings is larger in diameter than that of the existing transformers. This makes the new transformers more reliable because less heat will be generated in the transformers during normal and degraded voltage conditions, ensuring adequate voltage to the control circuits. The new transformers are being purchased Safety-Related to meet the requirements of the existing transformers. Therefore, the component replacement will not create the possibility of an accident or malfunction of a type different from those evaluated in the UFSAR.
3. The margin of safety, is not defined in the basis for any Technical Specification, therefore, the safety margin is not reduced.

ALARA Dose Reduction Request 92-095
(Loading Evaluation 92-019)**DESCRIPTION:**

Mechanical Maintenance is performing work on the waste collector filter in the radioactive waste building. They have constructed a temporary platform that will allow them to work on the top of the filter. In order to minimize the dose the maintenance personnel receive, lead shielding will be placed on the platform.

SAFETY EVALUATION SUMMARY:

1. The change described above has been analyzed to determine each accident or anticipated transient described in the UFSAR where any of the following is true:
 - The change alters the initial conditions used in the UFSAR analysis.
 - The changed structure, system or component is explicitly or implicitly assumed to function during or after the accident.
 - Operation or failure of the changed structure, system, or component could lead to the accident.

The accidents which meet these criteria are listed below:

None.

For each of these accidents, it has been determined that the change described above will not increase the probability of an occurrence or the consequence of the accident, or malfunction of equipment important to safety as previously evaluated in the UFSAR.

2. The possibility for an accident or malfunction of a different type than any previously evaluated in the UFSAR is not created because the waste collector filter does not perform any function in any of the UFSAR accident analyses. Such that if the maintenance platform fails, the plant will not be placed in an unsafe condition.

Loading Evaluation 92-019 calculates the minimum weight the filter vault plug supports can handle is 12,407 pounds. The weight that the maintenance platform can safely support was calculated to be 9,256 pounds. The weight of the platform, lead shielding and personnel was determined to be 5,600 pounds. Because this weight is less than both the weight the supports can handle and the weight the platform can support, this has been determined to be an acceptable load.

3. The margin of safety, is not defined in the basis for any Technical Specification, therefore, the safety margin is not reduced.

UFSAR Change

DESCRIPTION:

Change two sections of the UFSAR from "supply air dampers" to exhaust fan dampers'. Sections to be revised are 6.2.3.2.2. Secondary containment Isolation and Control and 9.4 Ventilation.

SAFETY EVALUATION SUMMARY:

1. The change described above has been analyzed to determine each accident or anticipated transient described in the UFSAR where any of the following is true:
 - The change alters the initial conditions used in the UFSAR analysis.
 - The changed structure, system or component is explicitly or implicitly assumed to function during or after the accident.
 - Operation or failure of the changed structure, system, or component could lead to the accident.

The accidents which meet these criteria are listed below:

None

For each of these accidents, it has been determined that the change described above will not increase the probability of an occurrence or the consequence of the accident, or malfunction of equipment important to safety as previously evaluated in the UFSAR.

2. The possibility for an accident or malfunction of a different type than any previously evaluated in the UFSAR is not created because no physical change is being made to the plant the Reactor Building Ventilation System will function the same. Therefore, the FSAR change does not create the possibility of an accident of a type different from those previously evaluated.

The as-built configuration is that the Reactor Building Exhaust fan dampers modulate to control DP in the building. The UFSAR stated that the supply air dampers controlled DP in the building.

3. The margin of safety, is not defined in the basis for any Technical Specification, therefore, the safety margin is not reduced.

Procedure Change Request for QCOP 202-14

DESCRIPTION:

This procedure change request (PCR) develops a new procedure to bypass Group I Isolation signals on the 1(2)-220-44 and 1(2)-220-45 Recirculation (recirc) System Sample Valves to allow for the extraction of a reactor coolant sample when required by a GSEP event.

SAFETY EVALUATION SUMMARY:

1. The change described above has been analyzed to determine each accident or anticipated transient described in the UFSAR where any of the following is true:
 - The change alters the initial conditions used in the UFSAR analysis.
 - The changed structure, system or component is explicitly or implicitly assumed to function during or after the accident.
 - Operation or failure of the changed structure, system, or component could lead to the accident.

The accidents which meet these criteria are listed below:

Dual Recirculation Pump Trip	UFSAR SECTION	15.3.1.1
Recirculation Pump Seizure	UFSAR SECTION	15.3.1.3
Recirculation Flow Controller		
- Dec Flow	UFSAR SECTION	15.3.2
Feedwater Controller Failure		
- Zero Flow	UFSAR SECTION	15.2.7
Feedwater Controller Failure		
- Max Flow	UFSAR SECTION	15.1.2
Turbine Trip w/Bypass	UFSAR SECTION	5.2.2.2
Turbine Trip w/o Bypass	UFSAR SECTION	15.2.3.1
Pressure Regulator Failure		
- Full Closed	UFSAR SECTION	15.2.1
Pressure Regulator Failure		
- Full Open	UFSAR SECTION	15.1.3
Loss of Condenser Vacuum	UFSAR SECTION	15.2.5
Generator Load Rejection	UFSAR SECTION	15.2.2
Loss of Offsite Power	UFSAR SECTION	8.3
Loss of Feedwater Heater(s)	UFSAR SECTION	15.1.1
MSL Break Outside Containment	UFSAR SECTION	15.6.4
Large Break LOCA	UFSAR SECTION	15.6.5

For each of these accidents, it has been determined that the change described above will not increase the probability of an occurrence or the consequence of the accident, or malfunction of equipment important to safety as previously evaluated in the UFSAR.

2. The possibility for an accident or malfunction of a different type than any previously evaluated in the UFSAR is not created because the procedure is written as a response action to an event (including UFSAR accidents and transients) that result in GSEP classification. The procedure bypasses Group I Isolation logic for the recirc sample valves. The valves can then be opened to draw a reactor coolant sample. After the jumpers are placed, the valves can be manually opened to take a sample or manually closed as the event conditions dictate. Performance of this procedure will not degrade or negatively impact the operation or integrity of any other structure, system, or component (SSC) assumed to perform a task to mitigate UFSAR postulated accidents.
3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the valves being operable under normal circumstances. In a GSEP event with a Group I Isolation in place, these valves will be opened to obtain a Reactor coolant sample. After sampling, the valve logic will be returned to normal and the valves reclosed. At all times during this procedure, these valves can be manually closed as required by plant conditions.

DESCRIPTION:

Install a time delay relay in the first floor turbine building to reactor building interlock doors circuitry and the 1/2 Diesel Generator Room.

SAFETY EVALUATION SUMMARY:

1. The change described above has been analyzed to determine each accident or anticipated transient described in the UFSAR where any of the following is true:
 - The change alters the initial conditions used in the UFSAR analysis.
 - The changed structure, system or component is explicitly or implicitly assumed to function during or after the accident.
 - Operation or failure of the changed structure, system, or component could lead to the accident.

The accidents which meet these criteria are listed below:

Instrument Line Break	UFSAR SECTION	5.3.4.1
Refueling	UFSAR SECTION	14.2.2
Loss of Coolant	UFSAR SECTION	14.2.4

For each of these accidents, it has been determined that the change described above will not increase the probability of an occurrence or the consequence of the accident, or malfunction of equipment important to safety as previously evaluated in the UFSAR.

2. The possibility for an accident or malfunction of a different type than any previously evaluated in the UFSAR is not created because the new relay is replacing the existing one with no change in function except the addition of a time delay to prevent two doors opening simultaneously. No new accidents or malfunctions exist.
3. The margin of safety, is not defined in the basis for any Technical Specification, therefore, the safety margin is not reduced.

Fire Suppression and Detection

DESCRIPTION:

Install fire suppression and detection systems in several areas of the plant.

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 fire suppression and detection is not classified as Safety Related in the FSAR. Seismic installation of equipment ensures adequate operation of existing safety equipment and safety related equipment in the immediate area of installation.
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 installation does not interfere with any existing safety systems.
3. The margin of safety, as defined in the basis for any Technical Specification is not reduced because suppression and detection is not Safety Related. The reliability of the Fire Protection system is increased by providing this additional suppression and detection.