



**Commonwealth Edison**

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RJW-93-11

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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 Docket 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 February 1993, 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

Robert J. Walsh  
Tech Staff Supervisor

RJW/dak

Enclosure

cc: A. B. Davis, Regional Administrator  
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SE-93-19  
Interim Procedure #049

**DESCRIPTION:**

Rearranged the order of monthly surveillance QOS 5750-2 so that RHRSW is used as the cooling water supply to the condenser section of the refrigeration condensing unit (RCU) 1/2-9400-102. Add steps to ensure that the RCU local selector switch must be manipulated locally to start the RCU and is in OFF when the compressor is shut down. Add step to allow for throttling of 1/2-5799-409 valve during operation. Add step to ensure that "A" train of Control Room HVAC is started before the "B" train control switch is taken out of pull-to-lock upon shutdown of the "B" train.

**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

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 this change does not cause the RCU or the "B" train as a whole to operate in a manner inconsistent with its design. No new operating characteristics or functions are being created. The steps being added provide additional information on system operation for the operators so that malfunctions can be reduced. The end result will be less malfunctions or problems of types that have already been identified such as compressor cycling and unplanned auto-starts.
3. The margin of safety, is not defined in the basis for any Technical Specification, therefore, the safety margin is not reduced.

SE-93-20  
QTS 110-1, Temporary  
Unit One ECCS Simulated Automatic Actuation and  
Diesel Generator Auto-Start Surveillance

**DESCRIPTION:**

1. Relocated the step to secure shutdown cooling.
2. Changed the step in the procedure that verifies equipment repositioning following removal of the low-low level signals during the testing of the first division.
3. Relocated the step that verifies proper equipment operation on the 901-4 panel during testing of the second division.
4. Deleted the step that test that tests the 1/2 Diesel Generator Fuel Oil Transfer pump during the Division I portion of this test.
5. Added a step to verify that the fluke installed in Bus 14-1 reads infinite resistance when initially installed.

**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:

Loss of Coolant Accident

UFSAR SECTION 15.6

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.

SE-93-20 CONTD

2. The possibility for an accident or malfunction of a different type than any previously evaluated in the UFSAR is not created because the changes made to this procedure do not create the possibility of an accident different from those evaluated in the UFSAR. The simulation of the ECCS signal and verified response of the ECCS systems will remain the same as in the original procedure. These changes only clarify the information to be verified, the order they are verified in, and minimize redundant testing performed in this surveillance.
3. The margin of safety, is not defined in the basis for any Technical Specification, therefore, the safety margin is not reduced.

SE-93-21  
QTS 160-5  
Secondary Containment Test

DESCRIPTION:

1. Revised procedure QTS 160-5 to add:
  - a. Limitations and Action providing additional information.
  - b. SBGT has both Trains in primary and they will both AUTO-START when Auto-Initiation is simulated for QTS 160-5, Secondary Containment Test. Therefore additional steps are added to STOP one Train.

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 this change is to provide for stopping one train of SBGT when both auto-start as part of the test. The Tech Spec requirements require the measurement of Secondary Containment Capability with one SBGT.
3. The margin of safety, is not defined in the basis for any Technical Specification, therefore, the safety margin is not reduced.

SE-93-24  
VOTES 100 SOFTWARE, REVISION 2.3

**DESCRIPTION:**

Installed VOTES 100 Software Rev. 2.3 in VOTES data acquisition computers. The new software will be utilized to determine thrust and switch settings on plant motor operated valves. The software will also be utilized as a diagnostic tool to troubleshoot MOV problems.

**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:

Loss of Coolant Accident	UFSAR SECTION	15.6
Main Steamline Break	UFSAR SECTION	15.6
ATWS	UFSAR SECTION	15.8

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 VOTES 2.3 Software is used to set the torque switch of an MOV to measuring force on the actuator stem when the torque switch trips. This thrust setting is greater than the minimum required force to actuate under design basis conditions and less than the structural limit of the limiting component of the valve/actuator. The software does not alter any component or system function and does not add or remove any interlocks in the system. The function of the valve and system remain consistent with the descriptions provided in the UFSAR and will provide more reliable actuation due to the more precise method of setting actuator output. VOTES 2.3 Software will not adversely impact systems or functions to create the possibility of an accident or malfunction 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.

SE-93-25  
TEMP ALT #93-2-5

**DESCRIPTION:**

This Temporary Alteration made 3 changes to the Unit 2 125 VDC system. First, Jumpers (250MCM lugged cables) were connected between compartment box of 125 VDC Bus 2A and Compt. C03 of 125 VDC Bus 2. Second, 14 gauge jumpers (lugged jumpers) were connected between fuses of undervoltage relay at Compt. B04, Bus 2A and fuses at Com Pt C01, Bus 2, which are associated with the DC battery undervoltage alarm in the control room. Third, 400A fuses in Com Pt B04 of 125 VDC Bus 2A are replaced with 800A fuses.

**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 with Loop

UFSAR SECTION 15.8

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.

SE-93-25 CONTD

2. The possibility for an accident or malfunction of a different type than any previously evaluated in the UFSAR is not created because the Unit 2 125 alternate battery is not in the same room as the normal 125V battery. Therefore, the additional use of the alternate battery will not increase the Hydrogen Gas Concentration in the Unit 2 Battery Room, where the normal 125V Battery is stored. Thus, there is no additional risk of an explosion accident due to Hydrogen Gas build up in the Battery Room. The Alternate Battery is sized to carry the same loads as the normal 125 VDC Battery.
3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the parameters used to establish the Technical Specification limits are not changed. Tech Spec 3.9B requires that two 125V Batteries be operable. By connecting the alternate 125V Battery to the 2A Battery Charger through the Temp. Alt., the normal 125VDC Battery can be isolated for testing and the 125 VDC loads can be supplied by the Alternate Battery. The normal 125V Battery is required to be tested in order to satisfy Tech Spec 4.9.B (Discharge Test Surveillance). This Temp Alt. allows both 3.9.B and 4.9.B Tech Specs to be satisfied without changing Tech Spec parameters.

**DESCRIPTION:**

Installed version 5.0 of Core Monitoring Code (CMC) on QCNPS1.

**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 CMC is used for calculation of thermal limits to meet the Tech Spec requirements. The software takes inputs of plant parameters, but does not interact with systems or components in any way. Since the software does not affect plant systems or components, no new UFSAR accident type is created.

No new failure modes will be created in the upgrade to CMC 5.0. The functions of the software are unchanged from the current CMC software. This upgrade to correct problems documented in SPRs will not alter any calculation methods regarding thermal limits.

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

SE-93-02  
QCAP 1000-1  
On-Site Review and Investigation Function

**DESCRIPTION:**

- a. Added a discussion and a definition section to the procedure.
- b. Added steps to briefly describe Onsite Review, Onsite Review Participants and participants qualifications.
- c. Added a more in depth reference section.

**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 since this procedure is an administrative procedure that describes the administrative process for Onsite Review and Investigative Function it can NOT directly 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.

SE-93-03  
QCAP 1000-1  
On-Site Review Items

**DESCRIPTION:**

- a. Added a discussion section to the procedure.
- b. Incorporated QAP 1400-4 into this procedure.
- c. Incorporated QAP 1400-6 into this procedure.
- d. Incorporated Technical Specification Section 6 requirements.

**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 accidents are affected by these administrative changes. The administrative Tech Spec requirements are accurately implemented by this change.

Since this procedure is an administrative procedure that describes the process for Onsite Review items it can NOT directly create the possibility of an accident or malfunction of a type different from those evaluated in the UFSAR.

SE-93-03 CONTD

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

## QCAP 1000-2 On-Site Review Participant Responsibility

## DESCRIPTION:

- a. Added a discussion and a definition section to the procedure.
- b. Moved Onsite Review Participants Qualifications and selections to QCAP 1000-5.
- c. Expanded discussion of Onsite Review Participants Responsibilities.
- d. Added a more in depth reference section.

## 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 since this procedure is an administrative procedure that describes the administrative process for Onsite Review Participant Responsibilities it can NOT directly 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.

SE-93-05  
QCAP 1000-3  
Conduct of On-Site Reviews

**DESCRIPTION:**

- a. Added a discussion section to the procedure.
- b. Incorporated QAP 1400-3 into this procedure.
- c. Incorporated QAP 1400-T1 and T2 into this procedure.
- d. Added a check off sheet for OSR Report transmittal.
- e. Added an instructional sheet for performing the new Transmittal Sheet.
- f. Added information from the New Technical Specification Section 6 to the procedure.

**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 since this procedure is an administrative procedure that describes the process for Conduct of Onsite Reviews it can NOT directly create the possibility of an accident or malfunction of a type different from those evaluated in the UFSAR.

SE-93-05 CONTD

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

SE-93-23  
Component Replacement 93-50

**DESCRIPTION:**

Replaced 1/2-3941-27 flow indicator with a 0-2000 GPM indicator. The installed 0-1800 gpm indicator requires replacement and is not immediately available.

**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 required flow rates to 1/2 DG heat exchanger are on scale of the new instrument, mounting/seismic qualification requirements are not applicable and indicator is not required to be read under any accident conditions.
3. The margin of safety, is not defined in the basis for any Technical Specification, therefore, the safety margin is not reduced.

SE-93-27

Temp Alt

**DESCRIPTION:**

A Dranetz disturbance analyzer was installed to monitor the input and output voltage of Unit 2 Reserve RPS bus EPA voltage regulator. The duration of this analyzer installation is one week. The analyzer would only be hooked up when the reserve RPS bus is not needed. If dirty power is required from this reserve RPS bus, the analyzer will be disconnected.

**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 analyzer would only be connected to the voltage regulator when the unit 2 RPS reserve bus is not being utilized. When reserve power is needed, this analyzer will be disconnected. Thus, this does not adversely impact systems or functions so as to create the possibility of an accident or malfunction mentioned 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.

SE-91-337  
M-4-0-84-16A

**DESCRIPTION:**

Installed Conduit junction box and TRX Module for the upgrades to the 1/2 DG C02 system Electro-Manual Pilot Valve Cabinet (EMPC).

**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:

ACCIDENT	UFSAR SECTION
Fire	10.6
Refueling Accident	14.2.2

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 UFSAR is not created because the fire detection equipment is not being terminated to existing equipment under the scope of this work package.
3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because QOP 020-1, "Opening a Penetration in Secondary Containment," will be followed during the performance of core bore and conduit sealing. Compensating factors required by this procedure are.

SE-91-337 CONTD

1. A person must be stationed at the opening with a sealant material on hand and be in communications with the Control Room.
2. Both standby gas treatment system trains must be running.
3. Reactor Building vent system should be in service.

SE-91-367  
M4-0-84-16A

**DESCRIPTION:**

Installed cables and miscellaneous devices for modification M4-0-84-16A; Phase 10B upgrades for the Unit 1/2 Standby Diesel Generator Cardox System Electro-Manual pilot Valve Cabinet (EMPC).

**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:

ACCIDENT	UFSAR SECTION
Fire	10.6

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 replacement of the existing limit switch with a new limit switch with two form-c contacts provides only for monitoring of the Unit 1/2 DG room EMPC via the XL3 computer. The existing limit switch provides contacts which monitor the Unit 1/2 DG room CO2 valve such that when the valve is opened (due to a fire in the room) local annunciation is provided. The two sets of contacts in the new limit switch will allow one set of contacts to be used per the original design intent and the second set to provide monitoring of the valve position on the Control Room Typer.

SE-91-367 CONTD

Therefore, the original design intent of the system is maintained and any malfunctions (on either the new or existing circuitry) will be identified by the XL3 supervisory system.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because during the performance of the work identified in this package, backup suppression and twice per shift fire watches will be maintained for the affected areas.

M04-0-91-015B  
Make-Up Demineralizer Demolition

**DESCRIPTION:**

This partial modification removed the Makeup Demineralizer (MUD) system from the plant. This system is no longer needed and is currently abandoned in place. The portable trailer system replaced the MUD's in supplying makeup demineralized water to both nuclear units. The trailer installation is not part of the scope of this partial modification.

**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 Air Failure	SAR SECTION	10.7
LOCA (bounding)	SAR 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 MUD system has been inoperable for 2-3 years. In that time, a portable trailer demineralizer system has been used to generate makeup water for the nuclear units. This portable system will be installed permanently in Partial A of this modification.

The removal of the inoperable MUD system as it currently exists in the plant will improve housekeeping and reduce hazards associated with the current incomplete installation of M04-0-87-003. The ECN addresses temporary measures required to remove the MUD equipment from interfacing plant systems that are retained.

These features of the modification enhance plant personnel and equipment safety and, therefore, make the probability of an unanalyzed accident less likely.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the MUD system removal will not adversely affect reactor water chemistry. Alternative methods will continue to supply high quality demineralized makeup water. Sampling and monitoring equipment is not adversely affected.

The MUD system removal will not adversely affect Radwaste function or efficiency. Release paths are not created. Drain (directly to the river) and other release paths are reduced to make a release less likely.

**DESCRIPTION:**

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

**SAFETY EVALUATION SUMMARY:**

1. The probability of an occurrence or the consequence of an accident, or malfunction of equipment important to safety as previously evaluated in the UFSAR 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 UFSAR 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.

**DESCRIPTION:**

This modification included the addition of pressure transmitters (0 to 100 psig) at the bottom of the torus (X-213A or B) and the drywell vent (X-25), converting the signals for processing and subtracting the higher elevation signal from the lower to determine level (0 to 100 feet). Indicators were provided on panels 901-3 and 902-3 for containment pressure, torus bottom pressure, and containment level. Signals are also provided to the plant computer.

**SAFETY EVALUATION SUMMARY:**

1. The probability of an occurrence or the consequence of an accident, or malfunction of equipment important to safety as previously evaluated in the UFSAR is not increased because containment water level indication is not discussed in the accident section of the FSAR. Containment water level measurement is not required for any design base accident. The failure of the containment water level indication system will not affect the operation of any safety-related systems.
2. The possibility for an accident or malfunction of a different type than any previously evaluated in the UFSAR is not created because no change has been made that affects any bounding condition of the FSAR accident analysis. All bounding conditions remain the same. No new accidents are introduced by this modification.
3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because the containment water level system is not addressed in the technical specifications or their basis will be affected by the installation, operation, or failure of the system.

SE-93-182 Rev. 1  
Modification M04-1-92-016

**DESCRIPTION:**

This modification changed the Instrument Air compressors (1A & 1/2) cooling water source from Service Water to Turbine Building Component Cooling Water (TBCCW). The compressors will take flow from an existing 8" TBCCW supply header and return this flow via a series of new 3" piping to a point near the TBCCW pump suction tap downstream of the TBCCW heat exchangers.

As an optional cooling water source, taps will be provided to allow connection to Service Water or Well Water should the normal TBCCW supply become un-available. The alternate cooling water will be isolated from TBCCW by the use of valves and spectacle flanges.

**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 Air Failure                      UFSAR SECTION 9.3.1.1

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 a complete loss of cooling water to the Instrument Air compressors can cause no worse than a failure of the compressors and a resultant loss of instrument air. The current design allows for Service Air to be used as an emergency supply for Instrument Air, or supply from the other unit Instrument Air system is possible as well.

Loss of Instrument Air would not prevent the safe shutdown of the reactor if necessary. TBCCW is a low-pressure, non-safety related system with no interfaces with any safety related systems or components not previously evaluated. This proposed design change does not effect any previously evaluated systems or components. A change in the source of cooling water supply for Instrument Air compressors does not change their operating function or their interaction with other plant equipment.

Based upon the stated evaluation, no new accident or possibility of the occurrence of any postulated accidents previously evaluated is seen to be created.

3. The margin of safety, as defined in the basis for any Technical Specification, is not reduced because Turbine Building Component Cooling Water (TBCCW), Service Water, and Instrument Air are all non-safety related systems and are not required to safely shutdown the reactor.

These systems are not discussed in the Technical Specifications. They are all "in service" systems with no operational surveillance tests requirements. Therefore no "margin of safety" criteria are applicable to these systems (with relation to Technical Specifications).