



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

WASHINGTON, D.C. 20555-0001

March 30, 2001

Mr. Oliver D. Kingsley, President  
Exelon Nuclear  
Exelon Generation Company, LLC  
1400 Opus Place, Suite 500  
Downers Grove, IL 60515

**SUBJECT: ISSUANCE OF AMENDMENTS (TAC NOS. MA8378 AND MA8379)**

Dear Mr. Kingsley:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 199 to Facility Operating License No. DPR-29 and Amendment No. 195 to Facility Operating License No. DPR-30 for the Quad Cities Nuclear Power Station, Units 1 and 2 (Quad Cities), respectively. The amendments are in response to your application dated March 3, 2000, as supplemented by letters dated March 24, June 5 (two letters), July 18, July 31, September 1, September 22, October 5, October 9, November 20, and December 18, 2000; and February 15, February 28, and March 26, 2001. The original application was submitted by Commonwealth Edison Company (ComEd), which merged to form Exelon Generation Company, LLC (EGC). By letter dated February 7, 2001, EGC assumed responsibility for all pending NRC actions that were requested by ComEd.

The amendments convert the current Technical Specifications (TS) for Quad Cities to a set of improved Technical Specifications (ITS) based on NUREG-1433, Revision 1, "Standard Technical Specifications, General Electric Plants BWR/4," dated April 1995, and on guidance provided in the Commission's "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors," published on July 22, 1993 (58 FR 39132).

The draft Safety Evaluation (SE) for the ITS conversion was sent to you by letters dated January 19 and March 6, 2001, for your review to verify the accuracy of the draft SE. You provided comments by letters dated February 2 and March 9, 2001. You submitted the ITS and Bases pages for Quad Cities, and certified their correctness, by letter dated March 21, 2001. The comments you provided were reviewed and incorporated in the enclosed final SE for the amendments, as appropriate. The draft SE was also revised based on the staff's review of the draft SE after it was issued.

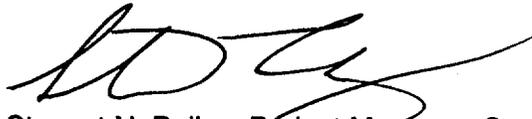
Included with the amendment request were proposed license conditions, which you submitted in your letter of February 28, 2001. The license conditions related to the relocation of current TS requirements into licensee-controlled documents as part of the implementation of the ITS, and the schedule for the first performance of new and revised surveillance requirements for the ITS (four conditions). These license conditions are part of the implementation of the ITS and ensure enforceability of commitments that the staff relied upon in approving this amendment. Your February 28, 2001, submittal also requested a license condition to allow continued operation with a current setpoint until an outage of sufficient duration to change the setpoint. By letter dated March 26, 2001, you withdrew that license condition because the setpoint was adjusted during a planned maintenance outage. Any changes to these license conditions,

including the implementation date for the ITS conversion, must be submitted as a 10 CFR 50.90 license amendment request and must be approved by the staff.

The ITS will become effective immediately and must be implemented within 120 days of the date of this letter. If there is an amendment to the TS before implementation of the ITS is completed, separate amendments to both the current TS and the ITS will be required. You are requested to submit a letter stating that the ITS are implemented within 14 days of the date of implementation.

A copy of the related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,



Stewart N. Bailey, Project Manager, Section 2  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-254 and 50-265

Enclosures: 1. Amendment No. 199 to DPR-29  
2. Amendment No. 195 to DPR-30  
3. Safety Evaluation  
4. Notice of Issuance

cc w/encls: See next page

including the implementation date for the ITS conversion, must be submitted as a 10 CFR 50.90 license amendment request and must be approved by the staff.

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A copy of the related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

/RA/

Stewart N. Bailey, Project Manager, Section 2  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-254 and 50-265

- Enclosures: 1. Amendment No. 199 to DPR-29
- 2. Amendment No. 195 to DPR-30
- 3. Safety Evaluation
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cc w/encls: See next page

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NAME	SBailey <i>Sub</i>	THarris <i>JAH</i>	WBeckner	<i>Getunk with change</i>	AMendiola
DATE	<i>3/29/01</i>	<i>3/9/01</i>	<i>3/8/01</i>	<i>3/20/01</i>	<i>3/30/01</i>

DOCUMENT NAME: G:\PDIII-2\comedits\qc lts amd.wpd

OFFICIAL RECORD COPY

O. Kingsley  
Exelon Generation Company, LLC

Quad Cities Nuclear Power Station  
Units 1 and 2

cc: w/enclosures (without Technical Specifications\*)

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O. Kingsley  
Exelon Generation Company, LLC

- 2 -

Quad Cities Nuclear Power Station  
Units 1 and 2

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

EXELON GENERATION COMPANY, LLC

AND

MIDAMERICAN ENERGY COMPANY

DOCKET NO. 50-254

QUAD CITIES NUCLEAR POWER STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 199  
License No. DPR-29

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated March 3, 2000, as supplemented by letters dated March 24, June 5 (two letters), July 18, July 31, September 1, September 22, October 5, October 9, November 20, and December 18, 2000; and February 15, February 28, and March 26, 2001, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B. of Facility Operating License No. DPR-29 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 199, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

In addition, the license is amended to add paragraphs 3.S. and 3.T. to Facility Operating License DPR-29 as follows:

- S. EGC shall relocate certain Technical Specifications requirements to EGC-controlled documents. Implementation of the Improved Technical Specifications shall include relocating these certain Technical Specification requirements to the appropriate documents, as described in Table LA, "Removal of Details Matrix," and Table R, "Relocated Specifications," that are attached to the NRC's Safety Evaluation enclosed with Amendment No. 199.
- T. The schedule for performing Surveillance Requirements (SRs) that are new or revised in Amendment No. 199 shall be as follows:

For SRs that are new in this amendment, the first performance is due at the end of the first surveillance interval that begins on the date of implementation of Amendment No. 199.

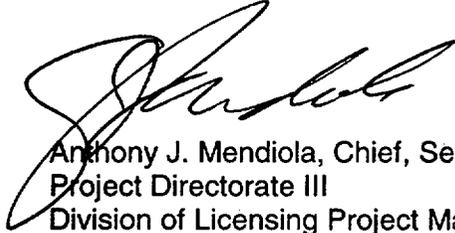
For SRs that existed prior to this amendment whose intervals of performance are being reduced, the first reduced surveillance interval begins upon completion of the first surveillance performed after implementation of Amendment No. 199.

For SRs that existed prior to this amendment that have modified acceptance criteria, the first performance is due at the end of the first surveillance interval that began on the date the surveillance was last performed prior to the implementation of Amendment No. 199.

For SRs that existed prior to this amendment whose intervals of performance are being extended, the first extended surveillance interval begins upon completion of the last surveillance performed prior to implementation of Amendment No. 199.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 120 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Anthony J. Mendiola, Chief, Section 2  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

- Attachment:
1. Pages 6 thru 8 of License No. DPR-29
  2. Changes to the Technical Specifications

Date of Issuance: March 30, 2001



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

EXELON GENERATION COMPANY, LLC

AND

MIDAMERICAN ENERGY COMPANY

DOCKET NO. 50-265

QUAD CITIES NUCLEAR POWER STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 195  
License No. DPR-30

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated March 3, 2000, as supplemented by letters dated March 24, June 5 (two letters), July 18, July 31, September 1, September 22, October 5, October 9, November 20, and December 18, 2000; and February 15, February 28, and March 26, 2001, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B. of Facility Operating License No. DPR-30 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 195, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

In addition, the license is amended to add paragraphs 3.R. and 3.S. to Facility Operating License DPR-30 as follows:

R. EGC shall relocate certain Technical Specifications requirements to EGC-controlled documents. Implementation of the Improved Technical Specifications shall include relocating these certain Technical Specification requirements to the appropriate documents, as described in Table LA, "Removal of Details Matrix," and Table R, "Relocated Specifications," that are attached to the NRC's Safety Evaluation enclosed with Amendment No. 195.

S. The schedule for performing Surveillance Requirements (SRs) that are new or revised in Amendment No. 195 shall be as follows:

For SRs that are new in this amendment, the first performance is due at the end of the first surveillance interval that begins on the date of implementation of Amendment No. 195.

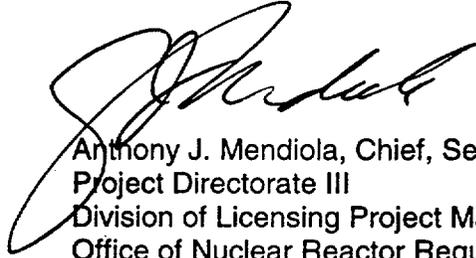
For SRs that existed prior to this amendment whose intervals of performance are being reduced, the first reduced surveillance interval begins upon completion of the first surveillance performed after implementation of Amendment No. 195.

For SRs that existed prior to this amendment that have modified acceptance criteria, the first performance is due at the end of the first surveillance interval that began on the date the surveillance was last performed prior to the implementation of Amendment No. 195.

For SRs that existed prior to this amendment whose intervals of performance are being extended, the first extended surveillance interval begins upon completion of the last surveillance performed prior to implementation of Amendment No. 195.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 120 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Anthony J. Mendiola, Chief, Section 2  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment: 1. Pages 6 thru 8 of License No. DPR-30  
2. Changes to the Technical Specifications

Date of Issuance: March 30, 2001

ATTACHMENT TO LICENSE AMENDMENT NOS. 199 AND 195

FACILITY OPERATING LICENSE NOS. DPR-29 AND DPR-30

DOCKET NOS. 50-254 AND 50-265

1. Remove Facility Operating License No. DPR-29, pages 5a thru 6, and replace with pages 6 thru 8.
2. Remove Facility Operating License No. DPR-30, pages 5a thru 6, and replace with pages 6 thru 8.
3. Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the attached pages. The revised pages are identified by the captioned amendment number.

REMOVE

All pages

INSERT

All pages

- P. EGC shall have the decommissioning trust funds for Quad Cities, Unit 1, in the following minimum amount, when Quad Cities, Unit 1, is transferred to EGC:

Quad Cities, Unit 1	\$192,149,504
---------------------	---------------

- Q. The decommissioning trust agreement for Quad Cities, Unit 1, at the time the transfer of the unit to EGC is effected and thereafter, is subject to the following:

- (1) The decommissioning trust agreement must be in a form acceptable to the NRC.
- (2) With respect to the decommissioning trust fund, investments in the securities or other obligations of Exelon Corporation or affiliates thereof, or their successors or assigns are prohibited. Except for investments tied to market indexes or other non-nuclear sector mutual funds, investments in any entity owning one or more nuclear power plants are prohibited.
- (3) The decommissioning trust agreement for Quad Cities, Unit 1, must provide that no disbursements or payments from the trust shall be made by the trustee unless the trustee has first given the Director of the Office of Nuclear Reactor Regulation 30 days prior written notice of payment. The decommissioning trust agreement shall further contain a provision that no disbursements or payments from the trust shall be made if the trustee receives prior written notice of objection from the NRC.
- (4) The decommissioning trust agreement must provide that the agreement can not be amended in any material respect without 30 days prior written notification to the Director of the Office of Nuclear Reactor Regulation.
- (5) The appropriate section of the decommissioning trust agreement shall state that the trustee, investment advisor, or anyone else directing the investments made in the trust shall adhere to a "prudent investor" standard, as specified in 18 CFR 35.32(a)(3) of the Federal Energy Regulatory Commission's regulations.

- R. EGC shall take all necessary steps to ensure that the decommissioning trust is maintained in accordance with the application for approval of the transfer of the Quad Cities, Unit 1, license and the requirements of the Order approving the transfer, and consistent with the safety evaluation supporting the Order.
- S. EGC shall relocate certain Technical Specification requirements to EGC-controlled documents upon implementation of Amendment No. 199. The items and appropriate documents are as described in Table LA, "Removal of Details Matrix," and Table R, "Relocated Specifications," that are attached to the NRC's Safety Evaluation enclosed with Amendment No. 199.
- T. The schedule for performing Surveillance Requirements (SRs) that are new or revised in Amendment No. 199 shall be as follows:

For SRs that are new in this amendment, the first performance is due at the end of the first surveillance interval that begins on the date of implementation of Amendment No. 199.

For SRs that existed prior to this amendment whose intervals of performance are being reduced, the first reduced surveillance interval begins upon completion of the first surveillance performed after implementation of Amendment No. 199.

For SRs that existed prior to this amendment that have modified acceptance criteria, the first performance is due at the end of the first surveillance interval that began on the date the surveillance was last performed prior to the implementation of Amendment No. 199.

For SRs that existed prior to this amendment whose intervals of performance are being extended, the first extended surveillance interval begins upon completion of the last surveillance performed prior to implementation of Amendment No. 199.

4. This license is effective as of the date of issuance, and shall expire at midnight, December 14, 2012.

FOR THE ATOMIC ENERGY COMMISSION

Original signed by:

A. Giambusso, Deputy Director  
for Reactor Projects  
Division of Licensing

Enclosures:  
Appendixes A and B --  
Technical Specifications

- O. EGC shall have decommissioning trust funds for Quad Cities, Unit 2, in the following minimum amount, when Quad Cities, Unit 2, is transferred to EGC:

Quad Cities, Unit 2	\$193,209,439
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- P. The decommissioning trust agreement for Quad Cities, Unit 2, at the time the transfer of the unit to EGC is effected and thereafter, is subject to the following:

- (1) The decommissioning trust agreement must be in a form acceptable to the NRC.
- (2) With respect to the decommissioning trust fund, investments in the securities or other obligations of Exelon Corporation or affiliates thereof, or their successors or assigns are prohibited. Except for investments tied to market indexes or other non-nuclear sector mutual funds, investments in any entity owning one or more nuclear power plants are prohibited.
- (3) The decommissioning trust agreement for Quad Cities, Unit 2, must provide that no disbursements or payments from the trust shall be made by the trustee unless the trustee has first given the Director of the Office of Nuclear Reactor Regulation 30 days prior written notice of payment. The decommissioning trust agreement shall further contain a provision that no disbursements or payments from the trust shall be made if the trustee receives prior written notice of objection from the NRC.
- (4) The decommissioning trust agreement must provide that the agreement can not be amended in any material respect without 30 days prior written notification to the Director of the Office of Nuclear Reactor Regulation.
- (5) The appropriate section of the decommissioning trust agreement shall state that the trustee, investment advisor, or anyone else directing the investments made in the trust shall adhere to a "prudent investor" standard, as specified in 18 CFR 35.32(a)(3) of the Federal Energy Regulatory Commission's regulations.

- Q. EGC shall take all necessary steps to ensure that the decommissioning trust is maintained in accordance with the application for approval of the transfer of the Quad Cities, Unit 2, license and the requirements of the Order approving the transfer, and consistent with the safety evaluation supporting the Order.
- R. EGC shall relocate certain Technical Specification requirements to EGC-controlled documents upon implementation of Amendment No. 195. The items and appropriate documents are as described in Table LA, "Removal of Details Matrix," and Table R, "Relocated Specifications," that are attached to the NRC's Safety Evaluation enclosed with Amendment No. 195.
- S. The schedule for performing Surveillance Requirements (SRs) that are new or revised in Amendment No. 195 shall be as follows:

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FOR THE ATOMIC ENERGY COMMISSION

Original signed by:

A. Giambusso, Deputy Director  
for Reactor Projects  
Division of Licensing

Enclosures:  
Appendixes A and B --  
Technical Specifications

Date of Issuance: December 14, 1972



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 199 TO FACILITY OPERATING LICENSE NO. DPR-29  
AND AMENDMENT NO. 195 TO FACILITY OPERATING LICENSE NO. DPR-30  
EXELON GENERATION COMPANY, LLC  
AND  
MIDAMERICAN ENERGY COMPANY  
QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2  
DOCKET NOS. 50-254 AND 50-265

1.0 INTRODUCTION

In a letter dated March 3, 2000, as supplemented, Commonwealth Edison Company (ComEd, the licensee) requested a license amendment to change the Technical Specifications (TS) for Quad Cities Nuclear Power Station, Units 1 and 2 (Quad Cities). Subsequent to the date of the amendment request, ComEd was merged into Exelon Generation Company, LLC (EGC). By letter dated February 7, 2001, EGC assumed responsibility for all pending actions that were requested by ComEd.

Quad Cities has been operating with TS, issued on June 28, 1996, that were developed during the Technical Specification Upgrade Program (TSUP), as amended from time to time. The TSUP was a partial adoption of the TS found in NUREG-0123, "Standard Technical Specifications General Electric Plants BWR/4," Revision 4. The TSUP was initiated as a result of findings by a Diagnostic Evaluation Team inspection performed at Dresden Nuclear Power Station (Quad Cities' sister site) in 1987.

The March 3, 2000, application proposed new TS based on the following:

- NUREG-1433, "Standard Technical Specifications - General Electric Plants, BWR/4" Revision 1, of April 1995,
- "NRC Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors" (Final Policy Statement), published on July 22, 1993 (58 FR 39132),
- The current Quad Cities TS.

The overall objective of the request, consistent with the Final Policy Statement, is to rewrite, reformat, and streamline TS consistent with 10 CFR 50.36.

Hereinafter, the proposed TS are referred to as the Improved TS (ITS), the existing Quad Cities TS are referred to as the Current TS (CTS), and the TS in NUREG-1433 are referred to as the Standard TS (STS). The corresponding TS Bases are ITS Bases, CTS Bases, and STS Bases, respectively.

EGC retained portions of the CTS in the ITS in addition to basing the ITS on the STS and the Final Policy Statement. The Nuclear Regulatory Commission (NRC) discussed plant-specific issues, including design features, requirements, and operating practices with EGC during a series of conference calls and meetings. In addition, EGC proposed generic changes that were not in the STS. The NRC staff asked EGC to submit such generic issues as proposed changes to the STS through the Nuclear Energy Institute's Technical Specifications Task Force (TSTF). These generic issues were considered for the Quad Cities ITS before evaluating them generically. EGC proposed transferring some CTS requirements to EGC-controlled documents as this was consistent with the Final Policy Statement. In addition, EGC used human factors principles to clarify CTS requirements being retained in the ITS and to define more clearly the appropriate scope of the ITS. Further, EGC proposed changes to the CTS Bases to make each ITS requirement clearer and easier to understand.

Since the licensee prepared the March 3, 2000, application, a number of amendments to the Quad Cities operating license were approved, as follows:

Amendment No. (Unit 1, Unit 2)	Description of Change	Issue Date
196 192	Remove Main Steam Line Radiation Monitor SCRAM and Isolation Functions	10/13/2000
197 193	Transfer of Operating License to EGC	01/12/2001
198 194	Increase Surveillance Test Interval and Allowed Outage Time for Assorted Instrumentation	03/28/2001

These amendments have been incorporated, as appropriate, into the ITS.

The March 3, 2000, application was supplemented by letters dated March 24, June 5 (two letters), July 18, July 31, September 1, September 22, October 5, October 9, November 20, and December 18, 2000; and February 15, February 28, and March 26, 2001. The NRC staff issued requests for additional information (RAIs) by letters dated June 21, July 3, August 18, August 31, September 12, and November 3, 2000.

In addition, the ITS conversion was supported by two other license amendment applications, both dated August 30, 2000, which the licensee identified as being required to implement the ITS. One request related to the Emergency Diesel Generator Cooling Water Pump Allowed Outage Time, and the other changed the surveillance requirements for the Emergency Diesel Generator. The August 30, 2000, applications provided additional supporting information for changes that had already been included in the March 3, 2000, application, and this information was subsequently fully incorporated into the ITS conversion via the December 18, 2000, supplement. The changes requested in the August 30, 2000, applications are included in this amendment.

The NRC published its proposed actions on EGC's application for amendment of March 3, 2000, in the *Federal Register* on February 16, 2001 (63 FR 10751). This Safety Evaluation (SE) assesses EGC's application, supplemental information that resulted from NRC requests for information, and discussions with EGC during the NRC staff's review. All ITS changes are within the scope of the actions described in the *Federal Register* notices.

The NRC staff relied on the Final Policy Statement and the STS as guidance for reviewing proposed deviations from the STS. This SE provides the basis for the NRC staff's conclusions that 1) EGC developed the ITS based on the STS as modified by plant-specific changes, and 2) using the Quad Cities ITS is acceptable for continued plant operation. It is acceptable that the ITS differs from STS, since the ITS reflects Quad Cities's current licensing basis. The NRC staff approves EGC's changes to their CTS with modifications documented in their revised submittals.

For the reasons stated in this SE, the NRC staff finds that the TS issued with this license amendment comply with Section 182a of the Atomic Energy Act, 10 CFR 50.36, and the guidance in the Final Policy Statement and that the TS are in accord with the common defense and security and provide adequate protection of the health and safety of the public.

## 2.0 BACKGROUND

Section 182a of the Atomic Energy Act requires that applicants for nuclear power plant operating licenses will state:

[S]uch technical specifications, including information of the amount, kind, and source of special nuclear material required, the place of the use, the specific characteristics of the facility, and such other information as the Commission may, by rule or regulation, deem necessary in order to enable it to find that the utilization . . . of special nuclear material will be in accord with the common defense and security and will provide adequate protection to the health and safety of the public. Such technical specifications shall be a part of any license issued.

In 10 CFR 50.36, the Commission established its regulatory requirements for TS content. In doing so, the Commission emphasized those matters related to preventing accidents and mitigating accident consequences. The Commission noted that applicants were expected to incorporate into their TS "those items that are directly related to maintaining the integrity of the physical barriers designed to contain radioactivity" (see Statement of Consideration, "Technical Specifications for Facility Licenses; Safety Analysis Reports," of December 17, 1968 (33 FR 18610)).

10 CFR 50.36 requires that TS include items in the following five specific categories:

- (1) safety limits, limiting safety system settings and limiting control settings
- (2) limiting conditions for operation (LCOs)
- (3) surveillance requirements (SRs)
- (4) design features
- (5) administrative controls

However, the rule does not specify particular TS requirements.

For several years, NRC and industry representatives have tried to develop guidelines for improving nuclear power plant TS content and quality. On February 6, 1987, the Commission issued their "Interim Policy Statement on Technical Specification Improvements for Nuclear Power Reactors" (52 FR 3788). During the period from 1989 to 1992, the utility Owners Groups and the NRC staff developed improved STS for each primary reactor type that would comply with the Commission's policy. In addition, the NRC staff, licensees, and Owners Groups developed a Writers Guide containing generic administrative and editorial guidelines for preparing TS. The Guide emphasized human factors principles, and EGC used it to develop their ITS.

In September 1992, the Commission issued the General Electric BWR/4 STS as NUREG-1433, which was developed using the guidance and criteria contained in the Commission's Interim Policy Statement. The General Electric STS are a model for developing ITS for General Electric plants. The results from applying the Interim Policy Statement criteria to generic system functions were published in a "Split Report" issued to the Nuclear Steam System Supplier (NSSS) Owners Groups in May 1988. The Interim Policy Statement criteria along with the Writer's Guide ensured that the ITS would consistently reflect system configurations and operating characteristics for all NSSS designs. In addition, the generic Bases provide a lot of information about the basis for the STS requirements.

On July 22, 1993, the Commission issued its Final Policy Statement indicating that satisfying the guidance in the policy statement also satisfies Section 182a of the Act and 10 CFR 50.36 (58 FR 39132). The Final Policy Statement described the STS safety benefits and encouraged licensees to use the STS as the basis for plant-specific TS amendments and for complete conversions to the ITS. Further, the Final Policy Statement gave guidance for evaluating the required scope of the ITS and defined the guidance criteria for determining which of the LCOs and associated surveillances should remain in the ITS. The Commission noted that, in allowing certain items to be relocated to licensee-controlled documents while requiring that other items be retained in the ITS, it was adopting the qualitative standard enunciated by the Atomic Safety and Licensing Appeal Board in Portland General Electric Company's hearing (Trojan Nuclear Plant), ALAB-531, 9 NRC 263, 273 (1979). There, the Appeal Board observed the following:

[T]here is neither a statutory nor a regulatory requirement that every operational detail set forth in an applicant's safety analysis report (or equivalent) be subject to a technical specification, to be included in the license as an absolute condition of operation which is legally binding upon the licensee unless and until changed with specific Commission approval. Rather, as best we can discern it, the contemplation of both the Act and the regulations is that technical specifications are to be reserved for those matters as to which the imposition of rigid conditions or limitations upon reactor operation is deemed necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety.

Using this approach, licensees should keep in the ITS existing LCO requirements that fall within or satisfy any of the Final Policy Statement criteria. Those LCO requirements that do not fall within or satisfy these criteria may be relocated to licensee-controlled documents. The Commission codified the four criteria in 10 CFR 50.36 (60 FR 36593, July 19, 1995). The Final

Policy Statement criteria are as follows:

- Criterion 1 — Installed instrumentation that is used to detect and indicate in the control room a significant abnormal degradation of the reactor coolant pressure boundary.
- Criterion 2 — A process variable, design feature, or operating restriction that is an initial condition of a design-basis accident or transient analysis that either assumes the failure of or presents a challenge to fission product barrier integrity.
- Criterion 3 — A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design-basis accident or transient that either assumes the failure of or presents a challenge to fission product barrier integrity.
- Criterion 4 — A structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety.

Section 3.0 of this SE explains the NRC staff's conclusion that converting Quad Cities's CTS to those based on STS as modified by plant-specific changes is consistent with Quad Cities's current licensing basis and the requirements and guidance of the Final Policy Statement and 10 CFR 50.36.

### 3.0 EVALUATION

The NRC staff's review evaluates changes to CTS that fall into categories, defined by EGC, and includes an evaluation of whether existing regulatory requirements are adequate for controlling future changes to requirements removed from the CTS and placed in EGC-controlled documents.

The NRC staff's review of the March 3, 2000, submittal, as supplemented, identified the need for clarifications and additions to the submittal in order to establish an appropriate regulatory basis for translation of CTS requirements into ITS. Each change to the CTS proposed in the amendment request is identified as a discussion of change (DOC) to the CTS. EGC also provided justifications for deviation from the STS, as appropriate. The NRC staff comments were documented as requests for additional information (RAIs) and forwarded to EGC. EGC provided written responses to the NRC staff requests in supplemental letters indicated above. The docketed letters clarified and revised EGC's basis for translating CTS requirements into ITS. The NRC staff finds that EGC's submittals provide sufficient detail to allow the staff to reach a conclusion regarding the adequacy of EGC's proposed changes.

EGC's license amendment application categorized CTS changes as follows:

- Administrative Changes, (A), i.e., non-technical changes in existing CTS requirements,
- Technical Changes - More Restrictive, (M), i.e., new or additional CTS requirements,
- Technical Changes - Less Restrictive (specific), (L), i.e., deleting or relaxing CTS requirements,

- Technical Changes - Less Restrictive Relocated Requirements (generic), (LA), i.e., relocation of details out of the CTS and into licensee-controlled documents,
- Technical Changes - Less Restrictive (generic), (LB), i.e., extending an instrument completion time or surveillance frequency according to approved vendor topical reports (not used for Quad Cities),
- Technical Changes - Less Restrictive (generic), (LC), i.e., relocation of instrumentation requirements for alarm and indication only functions out of the CTS and into licensee-controlled documents (not used for Quad Cities),
- Technical Changes - Less Restrictive (generic), (LD), i.e., extending CTS surveillance intervals to 24 months from 18 months for items other than Channel Calibrations,
- Technical Changes - Less Restrictive (generic), (LE), i.e., extending CTS surveillance intervals to 24 months from 18 months for Channel Calibrations,
- Technical Changes - Less Restrictive (generic), (LF), i.e., use of revised methodologies for determining Allowable Values and instrument setpoints, and analyzing channel/instrument performance to ensure that the design basis and associated safety limits will not be exceeded during plant operation, and
- Relocated Specifications, (R), i.e., relaxations in which whole specifications are removed from the CTS and placed in EGC-controlled documents.

The changes that are in the ITS conversion for Quad Cities are listed in the following tables attached to this SE:

- Table A of Administrative Changes to the CTS
- Table M of More-Restrictive Changes to the CTS
- Table L of Less-Restrictive Changes to the CTS (includes L, LD, LE, and LF categories)
- Table LA of Less-Restrictive, Relocated Requirements Changes to the CTS
- Table R of Relocated Specifications

The tables are only meant to summarize the changes being made to the CTS. The details, as to what the actual changes are and how they are being made to the CTS or ITS, are provided in the licensee's application and supplemental letters.

The general categories of changes to the CTS requirements are described in more detail below.

#### **A. Administrative Changes (A)**

Administrative (non-technical) changes are intended to incorporate human factors principles into the form and structure of the ITS so that plant operations personnel can use them more easily. These changes are editorial in nature or involve the reorganization or reformatting of CTS requirements without affecting technical content or operational restrictions. Every section of the ITS reflects this type of change. In order to ensure consistency, the NRC staff and EGC

have used STS as guidance to reformat and make other administrative changes. Among the changes proposed by EGC and found acceptable by the NRC staff are:

- (1) Identifying plant-specific wording for system names, etc.,
- (2) Changing the wording of specification titles in the CTS to conform to STS,
- (3) Splitting up requirements currently grouped under a single current specification to more appropriate locations in two or more specifications of ITS,
- (4) Combining related requirements currently presented in separate specifications of the CTS into a single specification of ITS, and
- (5) Presentation changes that involve rewording or reformatting for clarity but which do not involve a change in requirements.

Table A lists the administrative changes proposed in ITS. Table A is organized by the corresponding ITS section DOC, and provides a summary description of the administrative change that was made, and CTS and ITS LCO references. The NRC staff reviewed all of the administrative and editorial changes proposed by EGC and finds them acceptable because they are compatible with the Writers Guide and STS, do not result in any substantive change in operating requirements, and are consistent with the Commission's regulations.

#### **B. Technical Changes — More Restrictive (M)**

EGC, in electing to implement the specifications of STS proposed a number of requirements more restrictive than those in the CTS. ITS requirements in this category include requirements that are either new, more conservative than corresponding requirements in the CTS, or have additional restrictions that are not in the CTS but are in the STS. Examples of more restrictive requirements are placing an LCO on plant equipment which is not required by the CTS to be operable, adopting more restrictive requirements to restore inoperable equipment, and adopting more restrictive SRs. Table M lists all the more restrictive changes proposed in ITS. Table M is organized by the corresponding ITS section DOC and provides a summary description of the more restrictive change that were adopted along with CTS and ITS LCO references. These changes are additional restrictions on plant operation that enhance safety. The staff reviewed these changes and found them to be acceptable.

#### **C. Technical Changes — Less Restrictive (L, LD, LE and LF)**

L, LD, LE and LF technical changes are grouped here to simplify discussion of the broad range of proposed less restrictive changes in technical requirements. L is used to designate a CTS change that requires a unique discussion in the licensee's application. LD, LE and LF are used to identify a recurring change evaluated by a single discussion in the application.

When requirements have been shown to give little or no safety benefit, their relaxation or removal from the TS may be appropriate. In most cases, relaxations previously granted to individual plants on a plant-specific basis were the result of (1) generic NRC actions, (2) new

staff positions that have evolved from technological advancements and operating experience, or (3) resolution of the Owners Groups' comments on STS. The NRC staff reviewed generic relaxations contained in the STS and found them acceptable because they are consistent with current licensing practices and the Commission's regulations. The Quad Cities design was also reviewed to determine if the specific design basis and licensing basis are consistent with the technical basis for the model requirements in the STS and thus provide a basis for ITS.

All of the less-restrictive changes to the CTS have been evaluated and found to involve deletions and relaxations to portions of CTS requirements that can be grouped in ten types as follows:

- Type 1 — Relaxation of LCO Requirements
- Type 2 — Relaxation of Applicability
- Type 3 — Relaxation of Surveillance Requirement
- Type 4 — Relaxation of Required Action Detail
- Type 5 — Relaxation of Required Actions to Exit Applicability
- Type 6 — Relaxation of Completion Time
- Type 7 — Allow Mode Changes When LCO Not Met
- Type 8 — Elimination of Requirement to Lock the Reactor Mode Switch in Shutdown or Refuel
- Type 9 — Elimination of CTS Reporting Requirement
- Type 10 — Relaxation of Surveillance Frequency from 18 months to 24 months

The following discussions address why the various types of changes are acceptable.

#### Type 1 — Relaxation of the LCO Requirements

Certain CTS LCOs contain operational and system parameters beyond those necessary to meet safety analysis assumptions and therefore are considered overly restrictive. CTS also contain limits which have been shown to give little or no safety benefit to the safe operation of the plant. The ITS, consistent with the guidance in the STS, delete or revise operating limits in this type. CTS LCO changes included in this type are: (1) revising setpoints to be consistent with instrument setpoint methodologies; (2) deleting or revising operational limits to establish requirements consistent with applicable safety analyses; (3) deleting equipment or systems which establish redundant system capability beyond that assumed to function by the applicable safety analyses or which are implicit to the ITS requirement for systems, components and devices to be operable; and (4) adding allowances to use administrative controls on plant devices and equipments during times when automatic control is required or to establish temporary administrative limits, as appropriate, to allow time for systems to establish equilibrium operation.

ITS changes represented by this type allow operators to more clearly focus on issues important to safety. The resultant ITS LCOs maintain an adequate degree of protection consistent with the safety analysis. They also improve focus on issues important to safety and provide reasonable operational flexibility without adversely affecting the safe operation of the plant. These changes are consistent with STS and are acceptable.

### Type 2 — Relaxation of Applicability

The CTS require compliance with the LCO during the Operational Mode(s) or other conditions specified in the LCO Applicability statement. Five Operating Modes are defined by TS according to average reactor coolant temperature, the position of the reactor mode switch located in the control room, and reactor vessel head closure bolt tensioning; Power Operation, Startup, Hot Shutdown, Cold Shutdown and Refueling. When CTS Applicability requirements are inconsistent with the applicable accident analyses assumptions for a system, subsystem or component specified in the LCO, the LCO is changed in the ITS to establish a consistent set of requirements. These modifications or deletions are acceptable because, during the conditions referenced in the ITS, the operability requirements are consistent with the applicable safety analyses. These changes are consistent with STS and are acceptable.

### Type 3 — Relaxation of Surveillance Requirement

CTS require maintaining the LCO equipment operable by meeting the SRs in accordance with the specified SR Frequency. This requires conducting tests to demonstrate equipment is operable, or that LCO parameters are within specified limits. When the test acceptance criteria and any specified conditions for the conduct of the test are met, the equipment is deemed operable. The changes in this type relate to relaxation of CTS SR acceptance criteria and/or the conditions for performing the SR.

Relaxing the SR acceptance criteria for these items provides operational flexibility consistent with the objective of the STS without reducing confidence that the equipment is operable. The ITS also permits the use of an actual, as well as a simulated, actuation signal to satisfy SRs for automatically actuated systems. TS required features cannot distinguish between an "actual" signal and a "test" signal. The changes to TS acceptance criteria are acceptable because appropriate testing standards are retained for determining that the LCO-required features are operable.

Relaxing conditions for performing SRs include, for example, not requiring testing of de-energized equipment (e.g., instrumentation Channel Checks) or equipment that is already performing its intended safety function (e.g., position verification of valves locked in their safety actuation position). The changes also include the allowance to verify the position of valves in high radiation areas by administrative means. ITS administrative controls (ITS 5.7) regarding access to high radiation areas make the likelihood of mispositioning valves small. These changes are acceptable because the changes do not affect the ability to determine whether equipment is capable of performing its intended safety function.

These relaxations of CTS SRs optimize test requirements for the affected safety systems and increase operational flexibility. These changes are consistent with STS and are acceptable.

### Type 4 — Relaxation of Required Action Detail

LCOs are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When an LCO is not met, CTS specify actions to be

taken until the equipment is restored to its required capability or performance level, or remedial measures are established. In revising the Required Actions, details are deleted or options are added such that resulting ITS actions continue to provide measures that conservatively compensate for the inoperable equipment. Furthermore, adopting STS action requirements results in simpler, more concise and more direct action requirements. This allows more effective use of operator resources for placing and maintaining the reactor in a safe condition when the LCO is not met. These changes are consistent with STS and are acceptable.

#### Type 5 — Relaxation of Required Actions

LCOs are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When an LCO is not met, CTS specify actions to be taken until the equipment is restored to its required capability or performance level, or remedial measures are established. Compared to CTS required actions, the ITS actions result in extending the time period for taking the plant outside the applicability into shutdown conditions. For example, changes in this type include providing an option to: isolate a system, place equipment in the state assumed by the safety analysis, satisfy alternate criteria, take manual actions in place of automatic actions, "restore to operable status" within a specified time frame, place alternate equipment into service, or use more conservative TS setpoints. The resulting ITS actions continue to provide measures that conservatively compensate for the inoperable equipment. The ITS actions are commensurate with safety importance of the inoperable equipment, plant design and industry practice and do not compromise safe operation of the plant. These changes are consistent with STS and are acceptable.

#### Type 6 — Relaxation of Completion Time

Upon discovery of a failure to meet an LCO, TS specify times for completing Required Actions of the associated TS conditions. Required Actions establish remedial measures that must be taken within specified completion times (allowed outage times). These times define limits during which operation in a degraded condition is permitted.

Incorporating completion time extensions is acceptable because completion times take into account the operability status of the redundant systems of TS required features, the capacity and capability of remaining features, a reasonable time for repairs or replacement of required features, vendor-developed standard repair times, and the low probability of a design-basis accident (DBA) occurring during the repair period. These changes are consistent with STS, and allowed outage time extensions specified as Type 6 are acceptable.

#### Type 7 — Allow Mode Changes When LCO Not Met

CTS 3.0.D (ITS 3.0.4) precludes entry into the applicable Mode or other specified conditions while relying on the Actions, even though the Actions are designed to provide for safe operation of the plant. Unless otherwise stated, LCO 3.0.4 is always applicable to ITS LCO Actions. However, ITS adds a Note to certain Actions stating "LCO 3.0.4 is not applicable." The addition of this Note allows transition between Applicability Modes or other specified conditions with the LCO not met (i.e., relying on the Actions) even

though the Actions may require plant shutdown. The addition of "LCO 3.0.4 is not applicable" notes does not impact normal operation of the plant for the specified LCO features and would not provide additional initiators for plant transients during the Mode or other specified conditions. This exception to ITS 3.0.4 is acceptable due to the passive function or the installed redundancy of the features, the plant conditions that apply to the Note, and the low probability of an event requiring the inoperable features. These changes are consistent with STS and are acceptable.

#### Type 8 — Elimination of the Requirement to Lock the Reactor Mode Switch in Shutdown or Refuel

Some CTS LCOs and Actions specify "lock" the mode switch in "Shutdown" (shutdown position) or "Refuel" (refueling position). Other CTS Action requirements also specify placing the reactor in the shutdown or refueling Mode without requiring the mode switch to be "locked." The requirement to "lock" the mode switch in Shutdown or Refuel is not retained in the ITS. CTS Table 1-2, "Operational Modes" (ITS Table 1.1-1) defines reactor operational Modes based on the reactor mode switch position, among other things. Moving a reactor mode switch from Shutdown into a position other than Shutdown or Refuel may cause a Mode change as defined by TS, and results in associated TS compliance requirements for the LCOs that become applicable in the new Mode. CTS 3.0.D (ITS 3.0.4) precludes changes in reactor Modes without all TS required equipment operable. Thus, ITS 3.0.4 is an administrative requirement put in place to prevent movement of the reactor mode switch between positions without first ensuring TS required equipment is operable, and changing the mode switch from the required position is adequately controlled by ITS Table 1.1-1 without adding a requirement to "lock" the mode switch. These changes are consistent with the STS and are acceptable.

#### Type 9 — Elimination of CTS Reporting Requirement

CTS include requirements to submit special reports to the NRC when specified limits or conditions are not met. Typically, the time period for the report to be issued is "within 30 days." However, the ITS eliminates the TS requirements for special reports and instead relies on the reporting requirements of 10 CFR 50.73. The changes to the reporting requirements are acceptable because 10 CFR 50.73 provides adequate reporting requirements, and the special reports do not affect continued plant operation.

CTS also include requirements for reports to be made to the NRC on data gathered as part of routine plant programs. These requirements are removed from the ITS. The requirement to report test frequency changes that occur due to consecutive SR failures has been deleted since the test schedule is already covered by the TS. In addition, a historical review has shown the SR has never failed.

Deleting TS reporting requirements reduces unnecessary regulatory burden on the plant and allows licensee efforts to be concentrated on maintaining TS required limits. These changes are consistent with the STS and are acceptable.

Type 10 — Relaxation of Surveillance Frequency from 18 months to 24 months  
(LD and LE)

CTS require maintaining the LCO equipment operable by conducting SRs in accordance with the specified SR Frequency. The changes in this type relate to extending SR frequencies. Improved reactor fuels allow the licensee to consider an increase in the duration of the fuel cycle for their facility. TS that specify an 18-month surveillance interval are changed to specify a 24-month interval. The CTS 4.0.B (ITS SR 3.0.2) provision to extend surveillances by 25 percent of the specified interval would extend the time limit for completing these surveillances from the CTS limit of 22.5 months to a maximum of 30 months. The staff review of these items is covered in more detail in Section G of this SE. These changes are consistent with the STS and are acceptable.

Table L includes all L, LD, LE, and LF changes and is organized by ITS section. The table specifies: the section designation; a summary description of the change; CTS and ITS LCO references; a reference to the specific change type as discussed above; and a characterization of the DOC.

For the reasons presented above, these less restrictive requirements are acceptable because they will not affect the safe operation of the plant. The ITS requirements are consistent with current licensing practices, operating experience, and plant accident and transient analyses, and provide reasonable assurance that public health and safety will be protected.

**D. Technical Changes — Less Restrictive Relocated Requirements (Not Entire Specifications) (LA)**

When requirements have been shown to give little or no safety benefit, their removal from the TS may be appropriate. These are grouped as LA changes. In most cases, relaxations previously granted to individual plants on a plant-specific basis were the result of (1) generic NRC actions, (2) new staff positions that have evolved from technological advancements and operating experience, or (3) resolution of the Owners Groups comments on STS. The NRC staff reviewed generic relaxations contained in the STS and found them acceptable because they are consistent with current licensing practices and the Commission's regulations. The Quad Cities design was also reviewed to determine if the specific design basis and licensing basis are consistent with the technical basis for the model requirements in the STS and thus provide a basis for ITS. A significant number of changes to the CTS involved the removal of specific requirements and detailed information from individual specifications evaluated to be Types 1 through 3 that follow:

- Type 1 — Details of System Design and System Description including Design Limits
- Type 2 — Descriptions of Systems Operation
- Type 3 — Procedural Details for Meeting TS Requirements, Reporting Requirements, and Specification Requirements

The following discussions address why each of the three types of information or requirements is not required to be included in ITS.

**Type 1 — Details of System Design and System Description Including Design Limits**

The design of the facility is required to be described in the Updated Final Safety Analysis Report (UFSAR) by 10 CFR 50.34. In addition, the quality assurance (QA) requirements of Appendix B to 10 CFR Part 50 require that plant design be documented in controlled procedures and drawings and maintained in accordance with an NRC-approved QA plan (UFSAR Chapter 17). In 10 CFR 50.59, controls are specified for changing the facility as described in the UFSAR (including the Technical Requirements Manual, (TRM)); and in 10 CFR 50.54(a) criteria are specified for changing the QA plan. The ITS Bases also contain descriptions of system design. ITS 5.5.10 specifies controls for changing the Bases. Removing details of system design from the CTS is acceptable because this information will be adequately controlled in the UFSAR (including TRM) or the ITS Bases, as appropriate. Cycle-specific design limits are contained in the Core Operating Limits Report (COLR). ITS Administrative Controls include the programmatic requirements for the COLR.

**Type 2 — Descriptions of Systems Operation**

The plans for the normal and emergency operation of the facility are required to be described in the UFSAR by 10 CFR 50.34. ITS 5.4.1.a requires written procedures to be established, implemented, and maintained for plant operating procedures including procedures recommended in Regulatory Guide (RG) 1.33, Revision 2, Appendix A, February 1978. Controls specified in 10 CFR 50.59 apply to changes in procedures as described in the UFSAR. The ITS Bases also contain descriptions of system operation. It is acceptable to remove details of system operation from the TS because this type of information will be adequately controlled in the UFSAR (including TRM) and the TS Bases, as appropriate.

**Type 3 — Procedural Details for Meeting TS Requirements, Reporting Requirements, and Specification Requirements**

Details for performing TS Actions and SRs are more appropriately specified in the plant procedures required by ITS 5.4.1, the UFSAR, and ITS Bases. For example, control of the plant conditions appropriate to perform a surveillance test is an issue for procedures and scheduling and has previously been determined to be unnecessary as a TS restriction. As indicated in GL 91-04, allowing this procedural control is consistent with the vast majority of other SRs that do not dictate plant conditions for surveillances. Prescriptive procedural information in an Action requirement is unlikely to contain all procedural considerations necessary for the plant operators to complete the actions required, and referral to plant procedures is therefore required in any event. Other changes to procedural details include those associated with limits retained in the ITS. For example, the ITS requirement may refer to programmatic requirements such as COLR, included in ITS Section 5.6, which specifies the scope of the limits contained in the COLR and mandates NRC approval of the analytical methodology. The QA Program is approved by the NRC and contained in UFSAR Chapter 17, and changes to the QA Program are controlled by 10 CFR 50.54(a). The Offsite Dose Calculation Manual (ODCM) is required by ITS 5.5.1. The TRM is incorporated by reference in to the UFSAR, and changes to the TRM are controlled by 10 CFR 50.59. The Inservice Test (IST) program is required by ITS 5.5.6.

Relocating specification requirements, including LCO, required actions, and surveillance requirements, have been made in adopting the STS. For example, for certain power operated isolation valves that do not receive an automatic isolation signal and for which the closure time is not assumed in the safety analysis, requirements for periodic testing of these valves are moved to the procedures that implement the inservice testing program (10 CFR 50.55a). Support system specification requirements for other equipment with its own specifications are moved to the TRM. The definition of operability provides sufficient assurance that the supporting system can perform its required support function.

The removal of these kinds of procedural details from the CTS is acceptable because they will be adequately controlled in the UFSAR (including TRM), Bases, and COLR, as appropriate. This approach provides an effective level of regulatory control and provides for a more appropriate change control process.

Table LA consists of LA changes. Table LA lists CTS specifications and describes the information that is removed from individual specifications and deleted or relocated to EGC-controlled documents. Table LA is organized by ITS section and includes the following: a DOC identification number referenced to ITS Section; a CTS reference; a summary description of the requirement; the document that retains the CTS requirements; and the specific change type, as discussed above.

The NRC staff has concluded that these types of detailed information and specific requirements are not necessary in the ITS to ensure the effectiveness of ITS to adequately protect the health and safety of the public. Accordingly, these requirements may be moved to one of the following EGC-controlled documents for which changes are adequately governed by a regulatory or TS requirement:

- (1) TS Bases controlled by ITS 5.5.10, "Technical Specifications Bases Control Program."
- (2) UFSAR (includes TRM by reference) controlled by 10 CFR 50.59.
- (3) ODCM controlled by ITS 5.5.1, "Offsite Dose Calculation Manual."
- (4) QA Manual controlled by 10 CFR 50.54.
- (5) Inservice Testing Program controlled by ITS 5.5.6, "Inservice Testing Program," and 10 CFR 50.55a.
- (6) Inservice Inspection Program controlled by 10 CFR 50.55a.
- (7) Core Operating Limits Report controlled by ITS 5.6.5, "Core Operating Limits Report (COLR)."

To the extent that requirements and information have been relocated to EGC-controlled documents, such information and requirements are not required to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety. Further, where such information and requirements are contained in LCOs and associated requirements in the CTS, the NRC staff has concluded that they do not fall within any of the four criteria in the Final Policy Statement (discussed in Part 2.0 of this SE). Accordingly, existing detailed information and specific requirements, such as generally described above, may be deleted from the CTS.

## **E. Relocated Specifications (R)**

The Final Policy Statement states that LCOs and associated requirements that do not satisfy or fall within any of the four specified criteria may be relocated from CTS (an NRC-controlled document) to appropriate licensee-controlled documents. These requirements include the LCOs, Action Statements (Actions), and associated SRs. EGC proposed, in accordance with the criteria in the Final Policy Statement, to entirely remove certain TS from the CTS and place them in EGC-controlled documents. The staff has reviewed EGC's submittals, and finds that relocation of these requirements to licensee-controlled documents (described above) is acceptable in that changes to these documents will be adequately controlled by 10 CFR 50.59 and other regulations (described above). These provisions will continue to be implemented by appropriate plant procedures (i.e., operating procedures, maintenance procedures, surveillance and testing procedures, and work control procedures).

Table R lists all specifications that are relocated, based on the Final Policy Statement, to EGC-controlled documents. Table R provides: a DOC identification number referenced to ITS Section; a CTS reference; a summary description of the requirement; the name of the document that retains the CTS requirements; and the method for controlling future changes to relocated requirements. The NRC staff evaluation of each relocated specification and specific CTS detail presented in Table R is provided below.

### **3/4.2.E Control Rod Block Actuation**

The CTS requires the control rod block actuation channels shown in Table 3.2.E-1 to be operable with their trip setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.2.E-1. Several control rod block actuation functions are relocated to the TRM.

#### **3/4.2.E.2 Average Power Range Monitors (APRM)**

The APRM control rod block instrumentation is installed to prevent conditions that would otherwise require actuation of the reactor protection system (RPS) if plant conditions were allowed to persist, such as during a "control rod withdrawal error at power." The APRMs use local power range monitor (LPRM) signals to provide information about the average core power and to create the APRM rod block signal. However, the rod block function of the APRMs is not used to mitigate a DBA or transient.

#### **3/4.2.E.3 Source Range Monitors (SRM)**

The SRM control rod block instrumentation is installed to monitor neutron flux during refueling, shutdown, and startup conditions. When intermediate range monitors (IRMs) are not above Range 2, the SRM control rod block prevents a control rod withdrawal if the count rate exceeds a preset value or falls below a preset limit. However, the rod block signals initiated by the SRMs are not used to mitigate a DBA or transient.

#### 3/4.2.E.4 Intermediate Range Monitors (IRM)

The IRM control rod block instrumentation is installed to monitor the neutron flux levels during refueling, shutdown, and startup conditions. The IRM control rod block prevents a control rod withdrawal if the IRM reading exceeds a preset value, or if the IRM is inoperable. However, the rod block signals initiated by the IRMs are not used to mitigate a DBA or transient.

#### 3/4.2.E.5 Scram Discharge Volume (SDV)

The SDV control rod block instrumentation uses signals derived from SDV level monitors to prevent control rod withdrawals when accumulated water reaches a pre-set level in the SDV. This instrumentation ensures there is sufficient volume remaining in the SDV to contain the water discharged by the control rod drives during a scram, thus ensuring that the control rods will be able to insert fully. This rod block signal also provides an indication to the operator that water is accumulating in the SDV and prevents further rod withdrawals. With continued water accumulation, a reactor protection system initiated scram signal will occur. Thus, the SDV water level rod block signal provides an opportunity for the operator to take action to avoid a reactor scram. However, the rod block signals initiated by the SDV instrumentation are not used to mitigate a DBA or transient.

#### 3/4.2.F Accident Monitoring Instrumentation

All Regulatory Guide (RG) 1.97 non-Type A, non-Category 1 instruments specified in the plant's Safety Evaluation Report (SER) on RG 1.97 are relocated to the TRM. The CTS require the accident monitoring instrumentation channels shown in Table 3.2.F-1 to be operable. Accident monitoring instrumentation is provided to monitor variables and systems over their anticipated ranges for accident conditions as appropriate to ensure adequate safety during and following accidents. These variables are used by the control room operating personnel to perform their role in the emergency plan in the evaluation, assessment, and monitoring of events, and execution of control room functions.

The NRC staff documented deterministic screening criteria for post-accident monitoring instrumentation in letter dated May 7, 1988, from T.E. Murley (NRC) to R. F. Janecek (BWROG). The staff requires all plant-specific RG 1.97 Type A instruments specified in the plant's SER on RG 1.97, and all RG 1.97 Category 1 instruments to be included in ITS. Accordingly, this position has been applied to the Quad Cities RG 1.97 instruments.

The CTS accident monitoring instruments that do not meet the RG 1.97 deterministic criteria and which are relocated include: Drywell air temperature, safety and relief valve position indicators - acoustic and temperature, neutron monitoring (source range), and torus air temperature. Those instruments meeting the criteria are retained by the ITS criteria.

### 3/4.2.H Explosive Gas Monitoring Instrumentation

Explosive gas monitoring instrumentation is relocated to the TRM. The CTS require explosive gas monitoring instrumentation channels shown in Table 3.2.H-1 to be operable with their Alarm/Trip setpoints set to ensure that the limits of specification 3.8.H are not exceeded. The explosive gas monitoring instrumentation monitors the gaseous radwaste treatment system process for potentially explosive gas mixtures to ensure that hydrogen concentration is maintained below the flammability limit. However, the offgas system is designed to contain detonations without affecting safety-related equipment functions. Neither the concentration of hydrogen in the offgas stream, nor the instrumentation used to monitor the hydrogen concentration is an initial assumption of any DBA or transient analysis.

### 3/4.2.I Suppression Chamber and Drywell Spray Actuation

Suppression chamber and drywell spray actuation instrumentation are relocated to the TRM. CTS require the suppression chamber and drywell spray actuation instrumentation channel(s) shown in Table 3.2.I-1 to be operable with their trip setpoints set consistent with the values shown in the Trip Setpoint column of Table 3.2.I-1. The suppression chamber and drywell spray actuation instrumentation preclude inadvertent actuation of containment and suppression pool sprays during a LOCA. In the presence of a LOCA signal, the spray valves can not open unless 1) the reactor vessel water level is above the 2/3 core height level, to preclude diversion of low-pressure coolant injection (LPCI) flow when water inventory is needed for core flooding, and 2) the drywell pressure is between 0.5 psig and 1.5 psig, to ensure a valid need for operating drywell and suppression chamber spray is detected.

The operability of the suppression chamber and drywell spray actuation instrumentation does not affect the operability of LPCI. If either of the two instruments trip too soon, the other instrument Function still ensures that flow is not diverted away from core flooding. While tripping of both the instruments allow the permissives for opening drywell and suppression pool spray valves to be met, inadvertent operation does not automatically result, since manual actions must still be taken to open the valves. In addition, if a LOCA signal is not present, this instrumentation does not preclude operation of the drywell and suppression pool spray valves. Therefore, inadvertent operation of drywell spray has been analyzed at Quad Cities and does not result in containment failure due to operation of the reactor building-suppression chamber and the suppression chamber-drywell vacuum breakers. These vacuum breakers are controlled by both CTS and ITS. Therefore, operability of the drywell spray system and the suppression chamber spray system are not impacted.

If the instruments trip too late or not at all, then no flow can be diverted by the drywell and suppression chamber sprays; thus, LPCI is not affected. The only TS system affected in this case are the drywell spray system and the suppression chamber spray system. A failure of the instrumentation to function would preclude the spray valves from being opened from the control room. However, these systems are manually controlled systems that are not needed for a minimum of 10 minutes following a DBA LOCA, and the valves could still be opened locally at the valve operator. In addition, the

instruments could be overridden to allow operation from the control room. Therefore, operability of these instruments is not an initial assumption of any DBA or transient analysis.

#### 3/4.2.K Toxic Gas Monitoring

The toxic gas monitoring system is relocated to the TRM. CTS require the toxic gas monitoring system to be operable with their alarm/trip setpoints adjusted to actuate at an ammonia concentration of less than or equal to 50 ppm. This system ensures sufficient capability is available to promptly detect and initiate protective action in the event of an accidental ammonia release. This capability protects control room personnel; however, the instruments are not assumed to mitigate a DBA or transient since an accidental ammonia release is not a DBA or transient.

#### 3/4.3.N Economic Generation Control System (EGCS)

The EGCS requirements are relocated to the TRM. CTS 3/4.3.N specify that the EGCS may be in operation with automatic flow control provided that core flow is  $\geq 65$  percent and  $\leq 100$  percent of rated core flow, and thermal power is  $\geq 20$  percent of rated thermal power. The system was designed to allow the load dispatcher to control power output of the station within appropriate limits based on reactor operating conditions. These EGCS limiting conditions for operation were chosen to be well within the analyzed system setpoints utilized in DBA and transient analyses; however, the EGCS limits are not relied on for any assumptions used in DBA or transient analyses. The requirements of the EGCS LCO do not meet the requirements for TS and have been relocated to the TRM.

#### 3/4.6.N Structural Integrity

The CTS requirements that the structural integrity of American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (Code) Class 1, 2 and 3 components (pumps and valves) be maintained operable in accordance with Specification 4.6.N are relocated to the TRM. Specification 4.6.N establishes the programmatic elements for conducting ASME Code Class 1, 2, and 3 component inspections by reference to Section XI of the ASME Code. The safety basis for establishing programmatic requirements on structural integrity in CTS relate to prevention of component degradation and continued long-term maintenance of acceptable structural conditions. Therefore, structural integrity of safety systems are not operational limits that are an initial assumption of any DBA or transient analysis.

#### 3/4.7.L Drywell Spray

CTS require the drywell spray function of the LPCI/containment cooling systems to be operable with two independent subsystems, each subsystem consisting of one operable LPCI pump, and an operable flow path capable of recirculating water from the suppression pool through a heat exchanger and the drywell spray nozzles. These requirements are relocated to the TRM.

The drywell spray function of the LPCI/containment cooling systems is utilized in post-LOCA conditions to condense steam in the drywell, thereby further lowering containment

pressure. Emergency operating procedures direct manual initiation of the drywell spray function of the LPCI/containment cooling systems. However, in the analysis of the bounding event for containment pressurization due to the DBA, the drywell spray function of the LPCI/containment cooling systems was not utilized for mitigation of the event. The drywell spray function is not required for proper performance of the containment pressure suppression system and is not an initial assumption of any DBA or transient analysis.

#### 3/4.8.E Flood Protection

Flood protection requirements are relocated to the TRM. Flood protection shall be available for all required safe shutdown systems, components and structures. This TS has provisions for high river level. A high river water level is a preliminary indication of flood conditions. Flooding is not a DBA or transient. In addition, flooding is not postulated to occur during any DBA or transient, thus, river water level (as it pertains to flooding) is not credited in any safety analysis. The flood protection TS requirements were put in place to ensure that facility protective actions will be taken and operation will be terminated in the event of flood conditions. This requirement is adequately controlled in plant emergency procedures.

#### 3/4.8.G Sealed Source Contamination

Sealed source contamination requirements are relocated to the TRM. CTS specifies removable contamination limits for sealed sources. Each sealed source containing radioactive material in excess of 100 microcuries of either beta or gamma emitting material or 5 microcuries of alpha emitting material shall be free of  $\geq 0.005$  microcuries of removable contamination. These limits ensure that the total body or individual organ irradiation doses do not exceed ingestion or inhalation limits. This TS requirement and the associated SRs do not relate to the operational conditions or limitations that are necessary to ensure safe reactor operation. Sealed source contamination limits are not an initial assumption of any DBA or transient analysis.

#### 3/4.10.E Communications

Communication requirements are relocated to the TRM. CTS specify that direct communications are to be maintained between the control room and refueling platform personnel to ensure that refueling personnel can be promptly informed of significant changes in the plant status or core reactivity condition during refueling operations. Communications between control room and refuel platform personnel are necessary for coordinating activities such as the insertion of control rods prior to loading fuel. However, operable control room communications with refueling platform personnel is not an assumption for response to refueling system failures, or design accident or transient response.

The relocated CTS discussed above are not required to be in the TS under 10 CFR 50.36 and do not meet any of the four criteria in the Final Policy Statement. They are not needed to obviate the possibility that an abnormal situation or event will give rise to an immediate threat to the public health and safety. In addition, the NRC staff finds that sufficient regulatory controls exist under the regulations cited above to maintain the effect of the provisions in these

specifications. The NRC staff has concluded that appropriate controls have been established for all of the current specifications, information, and requirements that are being moved to EGC-controlled documents. This is the subject of a license condition established herewith. Until incorporated in the UFSAR (includes TRM by reference), changes to these specifications, information, and requirements will be controlled in accordance with the applicable current procedures that control these documents. Following implementation, the NRC will audit the removed provisions to ensure that an appropriate level of control has been achieved. The NRC staff has concluded that, in accordance with the Final Policy Statement, sufficient regulatory controls exist under the regulations, particularly 10 CFR 50.59. Accordingly, these specifications, information, and requirements, as described in detail in this SE, may be relocated from CTS and placed in the UFSAR (includes TRM by reference) or other EGC-controlled documents.

#### **F. Control of Specifications, Requirements, and Information Removed from the CTS**

The facility and procedures described in the UFSAR and TRM, incorporated into the UFSAR by reference, can only be revised in accordance with the provisions of 10 CFR 50.59, which ensures records are maintained and establishes appropriate control over requirements removed from CTS and over future changes to the requirements. Other licensee-controlled documents contain provisions for making changes consistent with other applicable regulatory requirements: for example, the ODCM can be changed in accordance with ITS 5.5.1; the emergency plan implementing procedures (EPIPs) can be changed in accordance with 10 CFR 50.54(q); and the administrative instructions that implement the QA Plan can be changed in accordance with 10 CFR 50.54(a) and 10 CFR Part 50, Appendix B. Temporary procedure changes are also controlled by 10 CFR 50.54(a). The documentation of these changes will be maintained by EGC in accordance with the record retention requirements specified in EGC's QA plan for Quad Cities and such applicable regulations as 10 CFR 50.59.

The license condition for the relocation of requirements from the CTS addresses the implementation of the ITS conversion and when the relocation of the CTS requirements into licensee-controlled documents will be completed. The submittal of the updated licensee-controlled documents (e.g., UFSAR) to the Commission will be as required by, and in accordance with, the regulations (e.g., 10 CFR 50.71(e) for the updated UFSAR), and not as part of the implementation of the ITS.

#### **G. Other TS Changes Included in the Application**

This section evaluates other TS changes included in EGC's ITS conversion application. These include items which deviate from both the CTS and the STS, do not fall clearly into a category, or are in addition to those changes that are needed to meet the overall purpose of the conversion.

##### **CONVERSION TO ITS SECTION 3.6.1.3**

CTS 4.7.A.2 verifies that all penetrations not capable of being closed by automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges or deactivated automatic valves secured in their position, except as provided in CTS 3.7.D. In the ITS, this surveillance is moved from the CTS Primary Containment Integrity specification

(CTS 3/4.7.A) to the ITS Primary Containment Isolation Valve Specification (ITS 3.6.1.3) and broken up into two specifications - one for valves and blind flanges outside containment and one for valves and blind flanges inside containment. During the review of the licensee's submittal, a difference of opinion arose between the staff and the licensee as to what would constitute a failure of this CTS surveillance and what appropriate actions should be taken. The wording and structure of the Quad Cities CTS would allow several interpretations of how CTS 4.7.A.2 is to be met, what actions to take if the surveillance is not met, and which ITS Action Notes are implied by the CTS wording in CTS 3/4.7.A. Depending on the interpretation, the change from the CTS to the ITS could be characterized as Administrative, More Restrictive, Less Restrictive, or a combination thereof.

In addition, there are several interpretations of how CTS 3.6.M Action and 3.7.D Action 1 can be applied to penetrations with one primary containment isolation valve. One interpretation would require an immediate shutdown since there is no other OPERABLE isolation valve. Another interpretation considers the closed system boundary as the other OPERABLE isolation valve. Depending on which interpretation is used, the change from the CTS to ITS 3.6.1.3 Action C could be characterized as Administrative, Less Restrictive, or a combination of the two.

One objective of the conversion to the ITS is to correct these types of problem areas. The Quad Cities ITS provide the appropriate SRs and Actions, if the surveillances are not met, to correct the ambiguity of the CTS while not degrading the safe operation of the plant. Thus, the staff finds that ITS 3.6.1.3 is acceptable.

#### CONVERSION TO 24-MONTH SURVEILLANCE INTERVAL AND CHANGES TO ALLOWABLE VALUES (LD, LE, LF)

Improved reactor fuels allow licensees to consider increasing the duration of the fuel cycle for their facilities. The staff has reviewed and approved a number of requests to extend surveillance requirements to accommodate a 24-month fuel cycle. The staff has found that the effect on plant safety is small because safety systems use redundant electrical and mechanical components and because licensees perform other surveillances during plant operation that confirm that these systems and components can perform their safety functions.

GL 91-04, "Changes in Technical Specification Surveillance Intervals to Accommodate a 24 Month Fuel Cycle," issued on April 2, 1991, provides staff guidance that identifies the types of information that must be addressed when proposing extensions of the fuel cycle to 24 months. The GL addressed steam generator inspections (which are not applicable to Quad Cities), leak rate testing pursuant to Appendix J to 10 CFR Part 50 (which is not applicable to Quad Cities because individual leak testing requirements have been replaced by the Primary Containment Leakage Rate Testing Program), instrument drift, and other 18-month surveillances that are extended to 24 months.

The GL requires that licensees address instrument drift when proposing an increase in the surveillance interval for calibrating instruments that perform safety functions including providing the capability for safe shutdown. The effect of the increased calibration interval on instrument errors must be addressed because instrument errors caused by drift were considered when determining safety system setpoints and when performing safety analyses.

For the remaining 18-month surveillances, the GL requires the following information to support conversion to a 24-month operating cycle:

- (1) Licensees should evaluate the effect on safety of an increase in 18-month surveillance intervals to accommodate a 24-month fuel cycle. This evaluation should support a conclusion that the effect on safety is small.
- (2) Licensees should confirm that historical plant maintenance and surveillance data support this conclusion.
- (3) Licensees should confirm that assumptions in the plant licensing basis would not be invalidated on the basis of performing any surveillance at the bounding surveillance interval limit provided to accommodate a 24-month fuel cycle.

In consideration of these confirmations, the staff concluded that licensees need not quantify the effect of the change in surveillance intervals on the availability of individual systems or components.

#### INSTRUMENTATION CHANGES

The staff's review grouped the instrumentation changes together. This primarily includes extensions of channel calibrations and logic system functional tests from 18 to 24 months. Coupled with these changes are changes to the instrument setpoints and allowable values that are determined from the licensee's setpoint methodology, which considers drift over the calibration interval.

The March 3, 2000, application proposes changes to the TS to extend the surveillance intervals for selected TS items from 18 months to 24 months. By letter dated March 24, 2000, the licensee submitted the methodology used for the determination of instrument setpoints and allowable values. On April 27, 2000, a meeting was held with the licensee to discuss the staff request for additional information and by letter dated June 5, 2000, the licensee provided the information requested by the staff. On August 22 and 23, a meeting was held with the licensee to review their sample calculations. During that meeting, the staff identified some concerns with the licensee's response of June 5, 2000, and by letter dated November 30, 2000, the licensee provided the response to resolve the staff's concerns.

GL 91-04 required that information in seven specific areas be addressed in order to provide an acceptable basis for increasing the calibration interval for instruments that are used to perform safety functions. The following discussion identifies these seven areas and includes a summary of the licensee's response along with the staff's conclusions.

- (1) Confirm that instrument drift as determined by as-found and as-left calibration data from surveillance and maintenance records have not, except on rare occasions, exceeded acceptable limits for a calibration interval.

- (2) Confirm that the values of drift for each instrument type (make, model, and range) and application have been determined with a high probability and a high degree of confidence. Provide a summary of the methodology and assumptions used to determine the rate of instrument drift with time based upon historical plant calibration data.
- (3) Confirm that the magnitude of instrument drift has been determined with a high probability and a high degree of confidence for a bounding calibration interval of 30 months for each instrument type (make, model number, and range) and application that performs a safety function. Provide a list of the channels by TS section that identifies these instrument applications.
- (4) Confirm that a comparison of the projected instrument drift errors has been made with the values of drift used in the setpoint analysis. If this results in revised setpoints to accommodate large drift errors, provide proposed TS changes to update trip setpoints. If the drift errors result in a revised safety analysis to support existing setpoints, provide a summary of the updated analysis conclusions to confirm that safety limits and safety analysis assumptions are not exceeded.
- (5) Confirm that the projected instrument errors caused by drift are acceptable for control of plant parameters to effect a safe shutdown with the associated instrumentation.
- (6) Confirm that all conditions and assumptions of the setpoint and safety analyses have been checked and are appropriately reflected in the acceptance criteria of plant surveillance procedures for channel checks, channel functional tests, and channel calibrations.
- (7) Provide a summary description of the program for monitoring and assessing the effects of increased calibration surveillance intervals of instrument drift and its effect on safety.

The licensee performed a safety assessment for the proposed changes to the surveillance test intervals in accordance with the GL 91-04 guidance stated above. This assessment entailed reviewing the historical maintenance and surveillance test data at the bounding surveillance test interval limit, performing an evaluation to ensure that a 24-month surveillance test interval would not invalidate any assumption in the plant licensing bases, and the determination that the effect of the surveillance interval extension is small.

In their submittals of March 3, and 24, 2000, the licensee identified Nuclear Engineering Standard NES-EIC-20.04, Rev. 1, "Analysis of Instrument Channel Setpoint Error and Instrument Loop Accuracy," which included Appendix J, "Guidelines For the Analysis and Use of As-Found/As-Left Data," as the basis for performing analyses of drift for all affected instrument loops in order to establish the effect of a 30-month (24 months + 25 percent allowable tolerance) calibration frequency on instrument performance. This appendix is based on Electric Power Research Institute (EPRI) TR-103335, "Guidelines for Instrument Calibration Extension/Reduction Programs," Rev. 1, October 1998. The licensee has used Microsoft Excel spreadsheets to document information for performing additional analyses to be consistent with the analyses recommended by NRC in its SER for the Peach Bottom Atomic Power Station, Units 2 and 3.

Additionally, the licensee performed evaluations and analyses using the methodology described in NEDC-31336P-A, "General Electric Instrument Setpoint Methodology," dated September 1996 (for Nuclear Instrumentation functions only).

During the meeting of April 27, 2000, the staff identified concerns with the licensee's sample data, outlier determination, time dependency, the graded approach to instrument setpoint determination (Appendix D to the Nuclear Engineering Standard), and miscellaneous other items. Based on the staff's comments, the licensee, by letter dated June 5, 2000, submitted the revised Nuclear Engineering Standard and its justification for surveillance extensions. The staff reviewed the revised documents and was still concerned with the outlier determination, time dependency, and the graded approach to instrument setpoint determination. However, during a conference call the licensee was able to satisfy the staff's concerns. The staff reviewed some sample calculations to better understand the licensee's methodology. The staff determined the licensee's approach to be acceptable but wanted the licensee to revise the Nuclear Engineering Standard to clearly describe its methodology. Based on this, the licensee provided Rev. 3 of the Nuclear Engineering Standard and submitted a letter dated November 30, 2000, to state that a graded approach to setpoint determination has not been used by the licensee.

The staff has reviewed the licensee's submittals, including the responses to the requests for additional information, and has verified that the licensee has addressed the issues identified in GL 91-04 and provided an acceptable basis for increasing the calibration interval and for determining the instrument setpoint and allowable values for instruments that are used to perform safety functions. On the basis of the evaluation, the staff concludes that the licensee has confirmed that safety limits and safety analysis assumptions will not be exceeded after the worst-case drift is considered for the instruments whose surveillance intervals will be extended to 24 months.

On the basis of its review, the staff concludes that the proposed methodology for extending surveillance intervals for certain safety-related instrumentation components is consistent with the guidance in GL 91-04 in that the licensee has demonstrated that the effect of extending the surveillance intervals to 24 months is negligible and the system will continue to perform within assumed limits during the longer surveillance interval. The staff also finds that the instrument setpoint methodology used by the licensee to determine the allowable values is acceptable.

#### Change to Reactor Coolant System (RCS) Leakage Detection Instrumentation

The licensee did not use the above methodology to evaluate the acceptability of extending the surveillance interval for the leakage detection system instrumentation from 18 months to 24 months. The staff reviewed this change and determined that the effect on plant safety is small, based on the availability of redundant equipment as well as other surveillances conducted during plant operation, as described below.

**SR 3.4.5.3 Perform a CHANNEL CALIBRATION of required leakage detection instrumentation.**

This SR ensures that the required primary containment atmosphere particulate monitoring system and drywell floor drain sump monitoring systems are operable and within the established calibration requirements.

System availability during the operating cycle is assured by:

- The primary containment atmosphere particulate monitoring system and the drywell floor drain sump monitoring system provide independent methods to detect RCS leakage.
- Instrument drift occurs incrementally over an extended time frame whereas the detection of RCS leakage would be represented by a sudden step change. Therefore, the long-term effects of instrument drift would not preclude the detection of RCS leakage.
- The primary containment atmosphere particulate monitoring system and the drywell floor drain sump monitoring system only provide a monitoring function and are not relied upon for actuation of safety-related equipment.
- SR 3.4.5.1, which is performed once every 12 hours, verifies operation of the primary containment atmospheric monitoring system.
- SR 3.4.5.2, which is performed once every 31 days, requires a channel functional test which would detect significant system degradation.
- The licensee's review of historical calibration records concludes that the impact, if any, of this change on system availability is minimal.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

#### NON-INSTRUMENTATION CHANGES

Regarding non-instrumentation changes, GL 91-04 requires licensees to evaluate the effect on safety of the change in surveillance intervals to accommodate a 24-month fuel cycle. This evaluation should support a conclusion that the effect on safety is small. In addition, licensees should confirm that the performance of surveillances at the bounding surveillance interval limit provided to accommodate a 24-month fuel cycle would not invalidate any assumption in the plant licensing basis. In consideration of these confirmations, the licensees need not quantify the effect of the change in surveillance intervals on the availability of individual systems or components.

To address the requirements of the GL 91-04, the licensee has referenced the NRC SER (dated August 2, 1993) relating to the extension of the Peach Bottom Units 2 and 3 surveillance intervals from 18 months to 24 months. In this SER, the staff stated the following:

*Industry reliability studies for boiling water reactors (BWRs), prepared by the BWR Owners Group (NEDC-30936P) show that the overall safety systems' reliabilities are not dominated by the reliabilities of the logic system, but by that of the mechanical components, (e.g., pumps and valves), which are consequently tested on a more frequent basis. Since the probability of a relay, or contact failure is small relative to the probability of mechanical component failure, increasing the Logic System Functional Test interval represents no significant change in the overall safety system unavailability.*

The licensee has reviewed the surveillance test history at Quad Cities and has validated this conclusion. The licensee's review has demonstrated that there are no failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month operating cycle.

The following discussion describes how the staff determined that the effect of extending surveillance intervals on plant safety is small. The staff's review focused on redundant electrical and mechanical components as well as other surveillances conducted during plant operation that confirm that these systems and components can perform their safety functions.

#### TS 3.1.7 Standby Liquid Control (SLC) System

The SLC system is a backup to the control rod drive system and designed to be single-failure proof.

SR 3.1.7.8 Verify flow through one SLC subsystem from pump into reactor pressure vessel.

This SR ensures that the SLC system is capable of injecting into the reactor pressure vessel by verifying a flow path and also by firing one of the explosive valves.

SR 3.1.7.9 Verify all heat traced piping between storage tank and pump suction is unblocked.

This SR ensures that the SLC system is capable of injecting into the reactor pressure vessel by verifying a flow path through the heat traced piping.

System availability during the operating cycle is assured by:

- The SLC system is designed so that all active components are single-failure proof.
- Each SLC pump is tested during the operating cycle in accordance with the IST Program.
- Daily SRs verifies that temperatures in the SLC system tank and the SLC pump suction piping precludes boron precipitation.
- Monthly SRs ensure the continuity of the explosive charge on the discharge valves.
- The explosive valves are designed to be highly reliable.
- The licensee's review of surveillance test history did not identify any test failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month operating cycle.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

#### TS 3.1.8 SDV Vent and Drain Valves

SR 3.1.8.3 Verify each SDV vent and drain valve:

- (a.) Closes in  $\leq 30$  seconds after receipt of an actual or simulated scram signal; and
- (b.) Opens when the actual or simulated scram signal is reset.

This SR ensures that the SDV vent and drain valves close in  $\leq 30$  seconds after receipt of an actual or simulated scram signal and open when the actual or simulated scram signal is reset.

System availability during the operating cycle is assured by:

- SR 3.1.8.2 requires that the SDV vent and drain valves be cycled fully closed and fully open once every 92 days during the operating cycle.
- Performance of SR 3.1.8.2 demonstrates that mechanical components and portions of the valve logic remain operable.
- The licensee's review of surveillance test history did not identify any test failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month operating cycle.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

### TS 3.5.1 ECCS - Operating

The staff's evaluation for TS 3.5.1 separately groups ECCS systems (i.e., SRs 3.5.1.7 and 3.5.1.8) and the automatic depressurization system (ADS) (i.e., SRs 3.5.1.9, and 3.5.1.10).

SR 3.5.1.7 Verify, with reactor pressure  $\leq 180$  psig, the high-pressure coolant injection (HPCI) pump can develop a flow rate of  $\geq 5000$  gpm against a system head corresponding to reactor pressure.

This SR ensures that the HPCI can perform its design function by developing the appropriate system flow.

SR 3.5.1.8 Verify each ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal.

This SR includes the HPCI system, the LPCI system, and the core spray (CS) system. The ECCS functional test ensures that a system initiation signal (actual or simulated) to the automatic initiation logic will cause the systems or subsystems to operate as designed, including actuation of the system throughout its emergency operating sequence, automatic pump startup and actuation of automatic valves to their required positions.

HPCI, LPCI, and CS system availability during the operating cycle is assured by:

- The ECCS network has built-in redundancy so that no single failure prevents starting of the ECCS.
- Extensions of the calibration cycle and logic system functional test frequency have previously been justified.
- Pumps and valves associated with these systems are tested in accordance with the IST Program. These tests will detect significant failures in the ECCS subsystems.
- SR 3.5.1.1, which is performed once every 31 days, ensures that the ECCS piping systems are filled with water to prevent water hammer affects.
- SR 3.5.1.2, which is performed once every 31 days, ensures that the ECCS valves are in the correct position.
- SR 3.5.1.3, which is performed once every 31 days, verifies the correct breaker alignment to the LPCI swing bus.

- The licensee's review of surveillance test history for the ECCS system did not identify any test failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month operating cycle.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

SR 3.5.1.9 Verify the ADS actuates on an actual or simulated automatic initiation signal.

This SR verifies that the ADS operates as designed when initiated either by an actual or simulated initiation signal and that the valve and solenoid are functioning properly.

SR 3.5.1.10 Verify each required ADS valve opens when manually actuated.

This SR verifies that the ADS function operates as designed when manually actuated and also ensures the valve actuator and solenoids operate properly.

System availability during the operating cycle is assured by:

- The ADS has built-in redundancy so that no single failure prevents the opening of the required number of ADS valves.
- The relief valves associated with the ADS are equipped with remote manual switches so that the entire system can be operated manually as well as automatically.
- The licensee's review of surveillance test history for the ADS system did not identify any test failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month operating cycle.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

#### TS 3.5.2 ECCS - Shutdown

SR 3.5.2.5 Verify each required ECCS injection/spray subsystem actuates on an actual or simulated automatic initiation signal.

This SR includes the LPCI system and the CS system. The ECCS functional test ensures that a system initiation signal (actual or simulated) to the automatic initiation logic will cause the systems or subsystems to operate as designed, including actuation of the system throughout its emergency operating sequence, automatic pump startup and actuation of automatic valves to their required positions.

LPCI and CS system availability during the operating cycle is assured by:

- The ECCS network has built-in redundancy so that no single failure prevents starting of the ECCS.
- Extensions of the calibration cycle and logic system functional test frequency have previously been justified.
- Pumps and valves associated with these systems are tested in accordance with the IST Program. These tests will detect significant failures in the ECCS subsystems.

- SR 3.5.2.1, which is performed once every 12 hours, verifies for each required ECCS subsystem that (a) suppression pool water level is  $\geq 8.5$  ft, or (b) contaminated condensate storage tank water level is  $\geq 7.5$  ft.
- SR 3.5.2.2, which is performed once every 31 days, verifies for each required ECCS subsystem that the piping is filled with water.
- SR 3.5.2.3, which is performed once every 31 days, ensures that the ECCS valves are in the correct position.
- The licensee's review of surveillance test history for the ECCS systems did not identify any test failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month operating cycle.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

### TS 3.5.3 Reactor Core Isolation Cooling (RCIC) System

SR 3.5.3.4 Verify, with reactor pressure  $\leq 180$  psig, the RCIC pump can develop a flow rate of  $\geq 400$  gpm against a system head corresponding to reactor pressure.

SR 3.5.3.5 Verify the RCIC System actuates on an actual or simulated automatic initiation signal.

SR 3.5.3.4, the RCIC low pressure flow test, ensures the RCIC system is capable of performing its design function at approximately the system minimum required pressure. SR 3.5.3.5, the RCIC system functional test, ensures that a system initiation signal to the automatic initiation logic will initiate the system to respond as designed.

System availability during the operating cycle is assured by:

- SR 3.5.3.1, which is performed once every 31 days, verifies that the RCIC system piping is filled with water to avoid effects of water hammer.
- SR 3.5.3.2, which is performed once every 31 days, verifies valve position in the RCIC system.
- SR 3.5.3.3, which is performed once every 92 days, requires a RCIC pump test to verify pump capacity at system pressure.
- The RCIC system is a backup to the HPCI system. In addition, technical specifications prohibit extended plant operation with both the RCIC and HPCI systems inoperable. Finally, the safety analysis does not take credit for operation of the RCIC system.
- The licensee's review of surveillance test history did not identify any test failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month operating cycle.

Based on this information and the fact that the RCIC system is not relied upon in the safety analysis, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

### TS 3.6.1.1 Primary Containment

SR 3.6.1.1.2 Verify drywell-to-suppression chamber bypass leakage is less than or equal to the TS limit.

The drywell-to-suppression chamber bypass leak test ensures that the boundary between the drywell airspace and the suppression chamber airspace is maintained to ensure the pressure suppression function is operable by limiting the amount of bypass steam leakage which would not be directed through the suppression pool water.

System availability during the operating cycle is assured by:

- The suppression chamber-to-drywell vacuum breakers are the only active mechanical devices in the boundary between the drywell air space and the suppression chamber. The vacuum breakers are verified to be in the closed position once every 14 days through performance of proposed SR 3.6.1.8.1. In addition, a functional test of each required vacuum breaker is performed once every 31 days through performance of SR 3.6.1.8.2. These tests ensure that the valves are functional and closed.
- The suppression chamber-to-drywell vacuum breakers include a passive design which does not appear to be subject to any time-based changes that would be affected by the change to a 24-month operating cycle.
- The licensee's review of surveillance test history did not identify any test failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month operating cycle.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

### TS 3.6.1.3 Primary Containment Isolation Valves (PCIVs)

SR 3.6.1.3.7 Verify each automatic PCIV actuates to the isolation position on an actual or simulated isolation signal.

This SR ensures that each PCIV will actuate to its isolation position on a primary containment isolation signal.

System availability during the operating cycle is assured by:

- The PCIVs, including the actuating logic, are designed to be single-failure proof and, therefore, are highly reliable.
- Extension of the logic system functional test has been previously justified.
- During the operating cycle the PCIVs are either exercised (closed or open) or partially stroked (open or closed) in accordance with the IST Program or have justifications and reliefs to document why testing on an extended frequency is acceptable. The exercise or partial stroke testing of these PCIVs tests a significant portion of the PCIV's circuitry and will detect failures of this circuitry or failures with valve movement.
- The licensee's review of surveillance test history did not identify any test failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month operating cycle.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

SR 3.6.1.3.8 Verify each reactor instrumentation line excess flow check valve (EFCV) actuates to the isolation position on an actual or simulated instrument line break signal.

This SR provides assurance that the instrumentation line EFCVs will perform as designed by actuating to their isolation position on an actual or simulated instrument line break signal. The 24-month surveillance frequency is based on the need to perform the SR under conditions that apply during a plant outage and the potential for an unplanned transient if the SR were performed with the reactor at power.

System availability during the operating cycle is assured by:

- The instrument lines are seismic category 1 and terminate in instruments that are seismic category 1. The instrumentation piping is composed of quarter-inch piping in the secondary containment that is sized to assure that a postulated failure would limit any offsite exposure to substantially below the standards of 10 CFR Part 100.
- Due to the mechanical nature of the check valves and instrumentation piping system, there are no definable drift components or any time-based conditions that could appreciably change during the operating cycle.
- The licensee's review of surveillance test history did not identify any test failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month operating cycle.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

SR 3.6.1.3.9 Remove and test the explosive squib from each shear isolation valve of the traversing incore probe (TIP) system.

The SR requires that the explosive squib be removed and tested for the shear isolation valve of the TIP system. An in-place functional test is not possible with this design.

System availability during the operating cycle is assured by:

- The replacement charge for the explosive squib is from the same manufactured batch as the one fired or from another batch that has been certified by having one of the batch successfully fired.
- Administrative controls for the explosive charges, such as those that limit shelf life and operating life, are followed.
- SR 3.6.1.3.4 verifies the circuit continuity of the TIP shear isolation valve explosive charge once every 31 days.
- The licensee's review of surveillance test history did not identify any test failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month operating cycle.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

TS 3.6.1.7 Reactor Building-to-Suppression Chamber Vacuum Breakers

SR 3.6.1.7.3 Verify the opening setpoint of each vacuum breaker is  $\leq 0.5$  psid.

This SR ensures that each reactor building-to-suppression chamber vacuum breaker check valve and vacuum breaker butterfly valve is capable of performing its safety function.

System availability during the operating cycle is assured by:

- The vacuum relief system design for the active components has built-in redundancy.
- SR 3.6.1.7.2 requires that each vacuum breaker be functionally tested once every 92 days by cycling each vacuum breaker check valve and butterfly valve. This surveillance ensures that the valves are capable of being cycled and return to the closed position.
- The licensee's review of surveillance test history did not identify any test failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month operating cycle.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

TS 3.6.1.8 Suppression Chamber-to-Drywell Vacuum Breaker

SR 3.6.1.8.3 Verify the opening setpoint of each required vacuum breaker is  $\leq 0.5$  psid.

SR 3.6.1.8.3 verifies the opening setpoint of each suppression chamber-to-drywell vacuum breaker is less than or equal to the specified differential pressure.

System availability during the operating cycle is assured by:

- SR 3.6.1.8.1, which is performed once every 14 days, verifies that each vacuum breaker is closed.
- SR 3.6.1.8.2 requires that each vacuum breaker be functionally tested once every 31 days. This surveillance ensures that the valves are capable of being cycled and return to the closed position.
- The licensee's review of surveillance test history did not identify any test failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month operating cycle.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

TS 3.6.4.1 Secondary Containment

SR 3.6.4.1.3 Verify the secondary containment can be maintained  $\geq 0.25$  inch of vacuum water gauge for 1 hour using one standby gas treatment subsystem at a flow rate of  $\leq 4000$  cfm.

This SR ensures secondary containment boundary integrity by demonstrating that secondary containment vacuum can be maintained.

System availability during the operating cycle is assured by:

- Secondary containment is maintained at a negative pressure during normal plant operation. Any significant degradation to the secondary containment barrier would be detected through loss of vacuum.
- SR 3.6.4.1.1, which is performed once every 24 hours, verifies that the secondary containment vacuum is being maintained at  $\geq 0.1$  inch water gauge.
- Secondary containment structural integrity is maintained through administrative controls which ensure that no significant changes will be made to the secondary containment without proper evaluation.
- The licensee's review of surveillance test history did not identify any test failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month operating cycle.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

TS 3.6.4.2 Secondary Containment Isolation Valves (SCIVs)

SR 3.6.4.2.3 Verify each automatic SCIV actuates to the isolation position on an actual or simulated actuation signal.

SR 3.6.4.2.3 ensures that each SCIV is capable of performing its intended function by actuating to the isolation position on an actual or simulated actuation signal.

System availability during the operating cycle is assured by:

- SR 3.6.4.2.2, which is performed once every 92 days, verifies that the isolation time of each power operated, automatic SCIV is within limits. This surveillance cycles each automatic SCIV and would detect significant degradation affecting valve operation.
- The active components and power supplies of the SCIVs are designed to be single-failure proof.
- The licensee's review of surveillance test history did not identify any test failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month operating cycle.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

TS 3.6.4.3 Standby Gas Treatment (SGT) System

SGT system ensures that radioactive materials that leak from the primary containment into the secondary containment following an accident are filtered and adsorbed prior to being exhausted to the environment.

SR 3.6.4.3.3 Verify each SGT subsystem actuates on an actual or simulated initiation signal.

This SR verifies that each SGT subsystem will actuate on an actual or simulated initiation signal.

System availability during the operating cycle is assured by:

- There are two redundant and independent SGT subsystems such that a single failure will not prevent system operation.
- SR 3.6.4.3.1 is a monthly surveillance that requires each SGT subsystem to be started and operated for  $\geq 10$  hours with heaters operating. This test verifies system operation and would identify significant system problems or failures.
- The licensee's review of surveillance test history did not identify any test failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month operating cycle.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

TS 3.7.2 Diesel Generator Cooling Water (DGCW) System

SR 3.7.2.2 Verify each DGCW pump starts automatically on an actual or simulated initiation signal.

The DGCW System functional test, SR 3.7.2.2 ensures that a system start signal from the associated diesel generator will cause the system to operate as designed, by automatically starting the DGCW pump.

System availability during the operating cycle is assured by:

- Each of the DGCW pumps are tested in accordance with the IST Program to ensure that each subsystem can provide the proper flow against a specified test pressure. This test will detect significant failures of the DGCW system to perform its intended function.
- SR 3.8.1.2, which requires monthly testing of the diesel generators, verifies operation of the DGCW system. This testing will detect significant failures affecting system operation.
- The licensee's review of surveillance test history did not identify any test failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month operating cycle.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

#### TS 3.7.4 Control Room Emergency Ventilation (CREV) System

The CREV system provides a radiologically controlled environment from which the plant can be safely operated following a LOCA. The CREV is designed to maintain the control room emergency zone environment for a 30-day continuous occupancy after a DBA without exceeding dose limits. The CREV System will pressurize the control room emergency zone to about 0.125 inches water gauge to minimize infiltration of air from adjacent zones.

SR 3.7.4.3 Verify the CREV System isolation dampers close on an actual or simulated initiation signal.

SR 3.7.4.4 Verify the CREV System can maintain a positive pressure of  $\geq 0.125$  inches water gauge relative to the adjacent areas during the pressurization mode of operation at a flow rate of  $\leq 2000$  scfm.

SR 3.7.4.3 and 3.7.4.4 ensure that the CREV System is capable of automatic isolation and that the control room emergency zone boundary leakage is within the capacity of the CREV System by demonstrating that the control room emergency zone can be maintained at a positive pressure with respect to adjacent areas when in the emergency isolation/pressurization mode of operation.

System availability during the operating cycle is assured by:

- SR 3.7.4.1, which is conducted once every 31 days, requires the CREV System be operated for  $\geq 10$  hours with the heaters operating. These tests would detect significant failures affecting system operation.
- The actual or simulated isolation signal is equivalent to a logic system functional test. Extension of the logic system functional test has been previously justified.
- The control room emergency zone is maintained at a positive pressure during normal operation. Therefore, any substantial degradation of the boundary will be evident and repairs can be accomplished in a timely manner.
- The licensee's review of surveillance test history did not identify any test failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month operating cycle.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

#### TS 3.7.5 Control Room Emergency Ventilation Air Conditioning (AC) System

The CREV AC system provides a suitable environment for continuous personnel occupancy and ensures the operability of control room equipment and instruments under normal and accident conditions.

SR 3.7.5.1 Verify the Control Room Emergency Ventilation AC System has the capability to remove the assumed heat load.

The SR verifies that the CREV AC System has the capability to remove the assumed heat load. The CREV AC System auto-starts on control room temperature when the CREV System is

operating. Both the CREV and the CREV AC are normally maintained in standby and are operated only for required surveillances.

System availability during the operating cycle is assured by:

- SR 3.7.4.1, which is conducted once every 31 days, requires the CREV System be operated for  $\geq 10$  hours with the heaters operating. The licensee has confirmed that the CREV AC is verified to be operational during the monthly performance of SR 3.7.4.1. These tests would detect significant failures affecting system operation.
- The licensee's review of the surveillance test history did not identify any test failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month operating cycle.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

#### TS 3.8.1 AC Sources - Operating

The unit Class 1E AC Electrical Power Distribution Systems AC sources consist of the offsite power sources, and the onsite standby power sources (diesel generators (DGs) 1, 2, and ½).

The Class 1E unit AC distribution system is, for the most part, divided into redundant load groups (Division 1 and 2), so loss of any one group does not prevent the minimum safety functions from being performed. The exception is that the opposite unit's AC Electrical Power Distribution System powers shared loads (i.e., standby gas treatment subsystem, CREV System (Unit 2 only), and CREV AC System (Unit 2 only)). Although shared by both units, the CREV System and the CREV AC System are single train systems that are powered only from a single Unit 1 motor control center. Each unit's load group has connections to physically independent offsite power sources and a single DG.

The staff's evaluation for SRs 3.8.1.9 through and including 3.8.1.19 have been grouped together.

SR 3.8.1.9 Verify manual transfer of unit power supply from the normal offsite circuit to the alternate offsite circuit.

This SR includes the transfer of each unit auxiliary transformer to the associated unit reserve auxiliary transformer and a verification of the cross tie between the unit's 4160 V ESS buses.

SR 3.8.1.10 Verify each DG rejects a load greater than or equal to its associated single largest post-accident load, and:

- (a.) Following load rejection, the frequency is  $\leq 66.73$  Hz;
- (b.) Within 3 seconds following load rejection, the voltage is  $\geq 3952$  V and  $\leq 4368$  V; and
- (c.) Within 4 seconds following load rejection, the frequency is  $\geq 58.8$  Hz and  $\leq 61.2$  Hz.

This SR demonstrates the DG load response characteristics and capability to reject the largest single load without exceeding predetermined voltage and frequency and while maintaining a specified margin to the overspeed trip.

SR 3.8.1.11 Verify each DG does not trip and voltage is maintained  $\leq 5000$  V during and following a load rejection of  $\geq 2340$  kW and  $\leq 2600$  kW.

This SR ensures proper engine generator load response under the simulated test conditions. This test simulates the loss of the total connected load that the DG experiences following a full load rejection and verifies that the DG does not trip upon loss of the load.

SR 3.8.1.12 Verify on an actual or simulated loss of offsite power signal:

- (a.) De-energization of emergency buses;
- (b.) Load shedding from emergency buses; and
- (c.) DG auto-starts from standby condition and:
  1. Energizes permanently connected loads in  $\leq 10$  seconds,
  2. Maintains steady state voltage  $\geq 3952$  V and  $\leq 4368$  V,
  3. Maintains steady state frequency  $\geq 58.8$  Hz and  $\leq 61.2$  Hz, and
  4. Supplies permanently connected loads for  $\geq 5$  minutes.

This SR verifies all actions encountered from the loss of offsite power, including shedding of the nonessential loads and energization of the emergency buses and respective loads from the DG. It further demonstrates the capability of the DG to automatically achieve the required voltage and frequency within the specified time.

SR 3.8.1.13 Verify on an actual or simulated Emergency Core Cooling System (ECCS) initiation signal each DG auto-starts from standby condition and:

- (a.) In  $\leq 10$  seconds after auto-start achieves voltage  $\geq 3952$  V and frequency  $\geq 58.8$  Hz;
- (b.) Achieves steady state voltage  $\geq 3952$  V and  $\leq 4368$  V and frequency  $\geq 58.8$  Hz and  $\leq 61.2$  Hz;
- (c.) Operates for  $\geq 5$  minutes.

This SR demonstrates that the DG automatically starts and achieves the required voltage and frequency within the specified time (10 seconds) from the design-basis actuation signal (LOCA signal). In addition, the DG is required to maintain proper voltage and frequency limits after steady state is achieved.

SR 3.8.1.14 Verify each DG's automatic trips are bypassed on actual or simulated loss of voltage signal on the emergency bus concurrent with an actual or simulated ECCS initiation signal except:

- (a.) Engine overspeed; and
- (b.) Generator differential current.

This SR demonstrates that each DG non-critical protective trip is bypassed on an actual or simulated ECCS initiation signal and that critical protective functions trip the DG.

- SR 3.8.1.15 Verify each DG operating within the power factor limit operates for  $\geq 24$  hours:
- (a.) For  $\geq 2$  hours loaded  $\geq 2730$  kW and  $\leq 2860$  kW; and
  - (b.) For the remaining hours of the test loaded  $\geq 2340$  kW and  $\leq 2600$  kW.

This SR demonstrates that each DG can start and run continuously at full load capability for an interval of not less than 24 hours, 22 hours of which is at a load equivalent to 90 percent to 100 percent of the continuous rating of the DG and 2 hours of which is at a load equivalent to 105 percent to 110 percent of the continuous rating of the DG.

- SR 3.8.1.16 Verify each DG starts and achieves:
- (a.) In  $\leq 10$  seconds, voltage  $\geq 3952$  V and frequency  $\geq 58.8$  Hz; and
  - (b.) Steady state voltage  $\geq 3952$  V and  $\leq 4368$  V and frequency  $\geq 58.8$  Hz and  $\leq 61.2$  Hz.

This SR demonstrates that the diesel engine can restart from a hot condition, such as subsequent to shutdown from normal surveillances, and achieve the required voltage and frequency within 10 seconds.

- SR 3.8.1.17 Verify each DG:
- (a.) Synchronizes with offsite power source while loaded with emergency loads upon a simulated restoration of offsite power;
  - (b.) Transfers loads to offsite power source; and
  - (c.) Returns to ready-to-load operation.

This SR demonstrates that the manual synchronization and automatic load transfer from the DG to the offsite source can be made and that the DG can be returned to ready to load status when offsite power is restored. It also ensures that the auto-start logic is reset to allow the DG to reload if a subsequent loss of offsite power occurs.

- SR 3.8.1.18 Verify interval between each sequenced load block is  $\geq 90$  percent of the design interval for each load sequence time delay relay.

This SR verifies that the sequence time is  $\geq 90$  percent of the design interval for each load sequence timer. Under accident conditions, loads are sequentially connected to the bus by the time delay relays. The time delay relays control the permissive and starting signals to motor breakers to prevent overloading of the DGs due to high motor starting currents.

- SR 3.8.1.19 Verify, on an actual or simulated loss of offsite power signal in conjunction with an actual or simulated ECCS initiation signal:
- (a.) De-energization of emergency buses;
  - (b.) Load shedding from emergency buses; and
  - (c.) DG auto-starts from standby condition and:
    1. Energizes permanently connected loads in  $\leq 10$  seconds,
    2. Energizes auto-connected emergency loads, including through time delay relays, where applicable,
    3. Maintains steady state voltage  $\geq 3952$  V and  $\leq 4368$  V,
    4. Maintains steady state frequency  $\geq 58.8$  Hz and  $\leq 61.2$  Hz, and
    5. Supplies permanently connected and auto-connected emergency loads for  $\geq 5$  minutes.

This SR demonstrates operation of each DG during a loss-of-offsite power test signal coincident with an ECCS initiation.

AC Source system availability during the operating cycle is assured by:

- SR 3.8.1.2 requires that each DG be tested for operability once every 31 days. This testing, which is not being changed, will provide prompt identification of any substantial DG degradation or failure.
- SR 3.8.1.8 requires that each DG be fast start tested once every 184 days. This test, which is not being changed, will provide prompt identification of any substantial DG degradation or failure.
- DGs are not operated outside of the monthly operability tests in order to minimize wear related degradation.
- DG attributes subject to degradation due to aging, such as fuel oil quality, are subject to its requirements for replenishment and testing.
- An evaluation of known failures did not identify any time-based elements that would invalidate the conclusion that the increased operating cycle will have a small, if any, impact on system reliability.
- The licensee's review of the surveillance test history did not identify any test failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month operating cycle.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

#### TS 3.8.4 DC Sources - Operating

The DC electrical power systems provide the AC emergency power system with control power. They also provide both motive and control power to selected safety-related equipment. DC subsystems provide DC electrical power to inverters, which in turn power the AC essential service buses.

The 250 VDC power sources provide motive power to selected safety related larger DC loads such as DC motor-driven pumps and valves. The Division 1 and Division 2 125 VDC power sources provide both motive and control power to selected safety-related equipment, as well as circuit breaker control power for the non-safety related 4160 switchgear, and all 480 V load centers.

The staff's evaluation for SRs 3.8.4.3 through and including 3.8.4.7 have been grouped together.

- SR 3.8.4.3     Verify battery cells, cell plates and racks show no visual indication of physical damage or abnormal deterioration that could degrade battery performance.
- SR 3.8.4.4     Remove visible corrosion, and verify battery cell to cell and terminal connections are coated with anti-corrosion material.

- SR 3.8.4.5 Verify battery connection resistance is:  
(a.)  $\leq 1.5E-4$  ohm for inter-cell connections; and  
(b.)  $\leq 1.5E-4$  ohm for terminal connections.
- SR 3.8.4.6 Verify each required 125 V battery charger supplies:  
(a.) 250 amps at  $\geq 250$  VDC for  $\geq 4$  hours for the 250 VDC subsystems; and  
(b.) 200 amps at  $\geq 125$  VDC for  $\geq 4$  hours for the 125 VDC subsystems.
- SR 3.8.4.7 Verify battery capacity is adequate to supply, and maintain in OPERABLE status, the required emergency loads for the design duty cycle when subjected to a battery service test.

System availability during the operating cycle is assured by:

- The design, in conjunction with the TS requirements which limit the extent and duration of inoperable DC sources, provides substantial redundancy in DC sources.
- Battery parameters such as float voltage, electrolyte level, and specific gravity are monitored during the operating cycle to verify battery operability and will provide prompt identification of any substantial battery or battery charger degradation or failure. As an example, SR 3.8.4.1, which is performed once every 7 days, verifies that battery terminal voltage on float charge is within limits.
- Batteries are not discharged except for the performance of the operating cycle test demonstrations of operability. Therefore, there is minimal risk of age-related degradation.
- SR 3.8.4.2, which is performed once every 92 days, requires monitoring for visible corrosion at battery terminals and connectors. These examinations will provide prompt identification of any substantial battery degradation.
- The licensee's review of surveillance test history did not identify any test failures that would invalidate the conclusion that the impact, if any, on system availability is minimal from a change to a 24-month operating cycle.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

#### Administrative Controls

##### TS 5.5.2 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable.

The program includes integrated leak test requirements for each system. The frequency of performing these tests is being changed from once per operating cycle to once every 24 months.

System availability during the operating cycle is assured by:

- Most portions of the subject systems included in this program are visually walked down, while the plant is operating, during plant testing, and/or operator/system engineer walkdowns. In addition, housekeeping/safety walkdowns also serve to detect any gross leakage. If leakage is observed from these systems, corrective actions will be taken for repairs.
- Plant radiological surveys will identify any potential sources of leakage. System walkdowns and surveys provide monitoring of the systems at a greater frequency than once per refueling cycle and would identify any significant system degradation or failures.
- The licensee's review of historical maintenance and surveillance data demonstrates that there is no adverse trend that would invalidate the conclusion that the impact on system availability, if any, is minimal from the proposed change.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and, therefore, the change is acceptable.

#### TS 5.5.7 Ventilation Filter Testing Program (VFTP)

The VFTP shall establish the required testing of the engineered safety feature filter ventilation systems. The frequency for filter testing as described in the VFTP for the SGT and CREV systems is being changed from 18 to 24 month intervals.

System availability during the operating cycle is assured by:

- Both the SGT and CREV Systems are normally in standby. Therefore, the systems are not subject to degradation due to plant operation.
- Additional system testing is required if the potential for degradation occurs (i.e., following any structural maintenance on the high-efficiency particulate air (HEPA) filter or charcoal adsorber housings, following painting, fire, or chemical release in any ventilation zone communicating with the systems).
- The licensee's review of historical maintenance and surveillance data demonstrates that there are no failures that would invalidate the conclusion that the impact on system availability, if any, is minimal from the proposed changes.

Based on this information, the staff concludes that the impact of the proposed change on plant safety is small and the proposed change is, therefore, acceptable.

#### ADDITIONAL TS CHANGES AND BEYOND-SCOPE ITEMS

##### Six Hour Delay to Perform SR (ITS 3.3.3.1, DOC L.2 and ITS 3.4.5 DOC L.3)

For the post-accident monitoring (PAM) instrumentation and the RCS leakage detection system (LDS) instrumentation, a note has been added to the SRs allowing a 6-hour delay from entering into the associated Conditions and Required Actions for a channel that is placed in an inoperable status solely for performance of SRs. For the PAM instrumentation, this is only allowed provided the other channel in the associated function is operable. For LDS instrumentation, the allowance only applies provided the other required LDS instrumentation is

operable. The loss of one PAM detection channel or a channel of LDS instrumentation during required testing is acceptable because during these tests another channel is operable to monitor the associated parameter. The short period of time (6 hours) in this condition will have no appreciable impact on risk. Also, upon completion of the Surveillance, or expiration of the 6-hour allowance, the channel must be returned to operable status or the applicable Condition must be entered and Required Actions taken. The staff finds this change to be acceptable.

Deletion of Modes 3 and 4 in RPS Electric Power Monitoring Assembly (EPA) Applicability (ITS 3.3.8.2, DOC L.1)

The operability requirements for the RPS EPAs is changed to delete the requirement for them to be operable in Modes 3 and 4. The EPAs provide a regulated power supply for the RPS instrumentation electrical buses. RPS EPAs are provided to isolate the RPS bus from the motor generator set or an alternate power supply in the event of overvoltage, undervoltage, or underfrequency condition. This system protects the loads connected to the RPS bus against unacceptable voltage and frequency conditions and forms an important part of the primary success path of the essential safety circuits. This change is made to establish consistent requirements between RPS instrumentation (LCO 3.3.1.1) and ITS 3.3.8.2 (RPS Electrical Power Monitoring Assemblies). In addition, conforming changes are made to require channel functional testing prior to entry into Mode 2 from Modes 3 or 4.

The only essential equipment required to be operable in Modes 3 and 4 that are powered from RPS buses are the RPS logic and the scram pilot valve solenoids. With the unit in Mode 3 or 4, all control rods are fully inserted and will remain inserted because the Reactor Mode Switch, while in the Shutdown position, enforces a control rod withdrawal block. Thus, it is not necessary for the EPAs to be operable in Modes 3 and 4. However, ITS 3.10.2 (Single Control Rod Withdrawal—Hot Shutdown) and ITS 3.10.3 (Single Control Rod Withdrawal—Cold Shutdown) provide exceptions to the restrictions on control rod withdrawal in Modes 3 and 4. To address these two exceptions, ITS 3.10.2 and ITS 3.10.3 include operability requirements for RPS instrumentation (ITS 3.3.1.1), control rods (ITS 3.9.5), and EPAs (ITS 3.3.8.2). The staff finds this change to be acceptable because the RPS EPAs will be required to be operable when necessary to support RPS operability.

Replace Required Actions to Trip a Recirculation Pump with Actions to Declare the Recirculation Loop Not in Operation (ITS 3.4.1, DOC L.2)

The CTS requirement to trip a recirculation pump within 2 hours when the speed between pumps is mismatched (i.e., flows mismatched) is replaced with (1) a requirement (ITS 3.4.1 ACTION B) to declare the loop with the low flow "not in operation" if the flows remain mismatched after 2 hours, and (2) a caution to operators for cases where flow mismatches are large. While a shutdown of the loop may be preferred under some conditions, declaring a pump not in operation will ensure the proper actions are taken in accordance with the single loop analysis.

In most instances, flow mismatches can be readily alleviated. However, in cases where large flow mismatches occur, low flow, or reverse flow can occur in the jet pumps of the low flow loop, causing jet pump vibration. If zero or reverse flow is detected, the Bases state the condition should be alleviated by changing pump speeds to reestablish forward flow or by tripping the pump. Should a LOCA occur with one recirculation loop not in operation, the core flow coast

down and resultant core response may not be bounded by the LOCA analyses. Therefore, only a limited time is allowed to declare the low flow loop "not in operation." Once the declaration has been made, the appropriate actions for single loop operation must be taken in accordance with ITS 3.4.1 (CTS 3.6.A.1). It is acceptable to establish the single loop analysis requirements of the LCO as they are applied to the average planar linear heat generation rate (APLHGR) and minimum critical power ratio (MCPR) operating limits and RPS and RBM Allowable Values because this satisfies the initial conditions of the accident analysis; therefore, the staff finds this change acceptable.

Changing the Frequency for Monitoring Primary Containment Sump Flow Rate (ITS 3.4.4, DOC L.1)

CTS 4.6.H.2 requires measurements of primary containment sump flow rate to quantify RCS unidentified leakage, total leakage, and unidentified increase leakage to be made at least once per 8 hours, not to exceed 12 hours. The surveillance frequency has been changed to 12 hours in ITS SR 3.4.4.1. This time interval is consistent with the guidance given in Generic Letter (GL) 88-01, Supplement 1, "NRC Position on Intergranular Stress Corrosion Cracking (IGSCC) in BWR Austenitic Stainless Steel Piping," which found that, "monitoring RCS leakage every 4 hours creates an unnecessary administrative hardship for plant operators. Thus, RCS leakage measurements should be taken at least once per shift, not to exceed 12 hours." This change allows the 25 percent extension specified in ITS 3.0.2 to be applied to the current 12-hour surveillance interval. As such, the maximum interval has been extended from 12 hours to 15 hours. The proposed extension to the surveillance interval is acceptable since the probability of a pipe break occurring in the primary containment during the extension period is small and the vast majority of the surveillances are completed with no indication of excessive RCS operational leakage. Furthermore, the leak detection instrumentation will remain available during the extension period such that excessive RCS leakage will continue to be alarmed in the main control room, and a change in sump flow will continue to be indicated on the drywell sump pump flow integrators. The staff finds a 12-hour surveillance interval to be acceptable and consistent with the guidance in GL 88-01, Supplement 1.

More-Restrictive Shutdown Requirements for LPCI Inoperability (ITS 3.5.1, DOC M.1)

CTS 3.5.A.2 defines the LPCI subsystem as being comprised of four LPCI pumps and a flow path capable of taking suction from the suppression chamber and transferring the water to the reactor vessel. ITS 3.5.1 will define two LPCI subsystems, each consisting of two motor driven pumps, piping, and valves capable of transferring water from the suppression pool to the RPV via the "selected" recirculation loop. CTS 3.5.A Action 2.b, which allows the entire LPCI System to be inoperable for 7 days, has been modified to allow only one LPCI subsystem to be inoperable (ITS 3.5.1, Condition B) or one LPCI pump in each LPCI subsystem to be inoperable (ITS 3.5.1 Condition C) for 7 days, or both LPCI subsystems to be inoperable for 72 hours (ITS 3.5.1 Action D). These changes represent additional restrictions on plant operation. The staff finds these changes to be acceptable.

Change in Number of ADS Valves (ITS 3.5.1 DOC L.1)

The ADS is designed to depressurize the reactor to permit the LPCI or CS subsystem to cool the reactor during a small break LOCA if the HPCI system fails or is unable to maintain required water level in the reactor. The Quad Cities ADS system consists of five valves (four relief

valves and one safety/relief valve). Qualification of the accumulator for the safety/relief valve to perform the ADS function has not been demonstrated, therefore, the safety/relief valve is not credited in the safety analyses.

Only four ADS valves were assumed operable in the Quad Cities LOCA analyses. One ADS valve of the four valves modeled in the LOCA analyses was assumed to fail for the single-failure evaluation resulting in three valve operation credited. The analyses demonstrates that adequate core cooling is provided during small break LOCA and simultaneous battery failure with two of the five ADS valves out-of-service. In order to meet the single-failure criteria, the revised TS requires four ADS valves to be operable. It is specified in the revised TS 3.5.1 Bases that the safety/relief valve can not be used to satisfy the ADS valve operability requirements. This ensures that all four relief valves associated with the ADS system will be required to be operable. The analyses in support of the TS change were performed using approved methods, and the licensee has demonstrated that all applicable acceptance criteria continue to be met with the proposed ADS valve operability requirements. Therefore, the staff finds the change to be acceptable.

Change the Acceptance Criteria for Excess Flow Check Valve (EFCV) Tests (ITS 3.6.1.3, DOC L.7)

The requirement in CTS 4.7.D.4 that each EFCV must check flow has been deleted. ITS 3.6.1.3.8 requires, instead, that EFCVs actuate to their isolation position (i.e., closed) on an actual or simulated instrument line break signal. The requirements for the EFCVs are provided in 10 CFR Part 50, Appendix A, General Design Criteria 55 and 56, and are further detailed in RG 1.11. These state that there should be a high degree of assurance that the EFCVs will close or be closed if the instrument line outside containment is lost during normal reactor operation, or under accident conditions. The Instrument Line Break Analysis in the Quad Cities UFSAR, Section 15.6.2, assumes both the EFCV and the manual block valve are unavailable, i.e., fail to close; and the accident is terminated by cooling down the plant and closing the manual valve after the plant is shutdown and depressurized. Since the actual leakage is not an assumption of the accident analysis (the leakage is assumed to be the maximum allowed through the broken line), the leakage limit criterion (i.e., check flow) has been deleted. Further, the proposed change ensures that the RG 1.11 criterion that there is a high assurance that the EFCVs will close will be met. Therefore, the staff finds the change to be acceptable.

Change in Required Spent Fuel Pool (SFP) Water Level (ITS 3.7.8, DOC M.1)

CTS 3.10.H requires that the SFP water level be maintained at a level of greater than or equal to 33 feet. In the conversion, this TS will be renumbered to ITS 3.7.8. The licensee proposes to modify the requirement for the ITS to maintain the SFP water level at 19 feet over the top of the irradiated fuel. The licensee states that this change results in an increase in the water level by approximately 9 inches. No other changes to the SFP or its support systems, or fuel storage requirements are proposed. The staff finds that this is a more restrictive requirement for fuel movement and is an acceptable modification to the TS.

Change in Voltage During Diesel Generator Tests (ITS 3.8.1, DOC M.5)

Currently, the allowable emergency diesel generator (DG) voltage tolerance in the CTS SRs is  $4160 \pm 420$  volts. The licensee has proposed to change the allowable voltage tolerance to

4160 ± 208 volts. The change will provide more restrictive DG allowable voltage limits (i.e., from ± 10 percent to ± 5 percent) during surveillance testing. The licensee stated that the current voltage tolerance may allow DG operation at the lower end of the voltage limits, which could not support operation of ECCS loads within design voltages. Reducing the DG allowable voltage limits to ± 5 percent will support operation of all required DG loads within the design voltage ranges for ECCS loads. The staff concludes that the change is conservative and acceptable.

#### 4.0 COMMITMENTS RELIED UPON

In reviewing the proposed ITS conversion, the staff has relied upon the licensee's commitment to relocate certain requirements from the CTS to the licensee-controlled documents as described in Table LA, "Removal of Details Matrix," and Table R, "Relocated Specifications," that are attached to this SE. These tables reflect the relocations described in the licensee's submittals on the conversion. The staff requested and the licensee submitted a proposed license condition to make this commitment enforceable (see Section 5.0 of this SE). The proposed license condition is acceptable to the staff, as discussed below.

#### 5.0 LICENSE CONDITIONS

The staff relied upon certain proposed license conditions in approving the ITS conversion for Quad Cities. The licensee proposed the license conditions by letter dated February 28, 2001. The staff modified the requested license conditions in order to more clearly specify that the conditions are tied to this license amendment, and to remove the vernacular of this amendment.

A license condition is included that will enforce the relocation of requirements from the CTS to licensee-controlled documents. The required relocations are provided in Table LA, "Removal of Details Matrix," and Table R, "Relocated Specifications," that are attached to this SE. These relocations shall be completed upon implementation of the ITS.

A four-part license condition is included to define the schedule to begin performing the new and revised SRs after implementation of the ITS. This schedule is:

- For SRs that are new in this amendment, the first performance is due at the end of the first surveillance interval that begins on the date of implementation of this amendment.
- For SRs that existed prior to this amendment whose intervals of performance are being reduced, the first reduced surveillance interval begins upon completion of the first surveillance performed after implementation of this amendment.
- For SRs that existed prior to this amendment that have modified acceptance criteria, the first performance is due at the end of the first surveillance interval that began on the date the surveillance was last performed prior to the implementation of this amendment.
- For SRs that existed prior to this amendment whose intervals of performance are being extended, the first extended surveillance interval begins upon completion of the last surveillance performed prior to implementation of this amendment.

## 6.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Illinois State official was notified of the proposed issuance of the amendments. The State official had no comments.

## 7.0 ENVIRONMENTAL CONSIDERATION

Pursuant to 10 CFR 51.21, 51.32, and 51.35, an Environmental Assessment and Finding of No Significant Impact was published in the *Federal Register* on March 27, 2001 (66 FR 16691). Accordingly, based upon the environmental assessment, the Commission has determined that issuance of this amendment will not have a significant effect on the quality of the human environment.

## 8.0 CONCLUSION

The Quad Cities ITS provide clearer, more readily understandable requirements to ensure safe operation of the plant. The NRC staff concludes that they satisfy the guidance in the Commission's policy statement with regard to the content of TS and conform to the model provided in NUREG-1433 with appropriate modifications for plant-specific considerations. The NRC staff further concludes that the Quad Cities ITS satisfy Section 182a of the Atomic Energy Act, 10 CFR 50.36, and other applicable standards. On this basis, the NRC staff concludes that the proposed Quad Cities ITS are acceptable.

The NRC staff has also reviewed the plant-specific changes to CTS as described in this evaluation. On the basis of the evaluations described herein for each of the changes, the NRC staff concludes that these changes are acceptable.

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner; (2) such activities will be conducted in compliance with the Commission's regulations; and, (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Attachment: Discussion of Change Tables

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TABLE A - ADMINISTRATIVE CHANGES MATRIX  
CHAPTER 1.0 - USE AND APPLICATION

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.1	Editorial changes, reformatting, and revised numbering.	1.1	1.0, 4.3.A.2
A.2	The definitions of CHANNEL, FUEL DESIGN LIMITING RATIO (FDLRX), LIMITING CONTROL ROD PATTERN (LCRP), PHYSICS TESTS, REPORTABLE EVENT, SOURCE CHECK, and TRIP SYSTEM are deleted since specific Specifications referring to them no longer contain their use, or no longer are retained in the Quad Cities 1 and 2 ITS.	N/A	1.0
A.3	Revises the wording for the definitions of CHANNEL CALIBRATION, CHANNEL FUNCTIONAL TEST AND LOGIC SYSTEM FUNCTIONAL TEST to more accurately reflect the intent for OPERABILITY of a channel; i.e., not all channels will have a "required" sensor, alarm, or channel failure trip function, and conversely, some channels may have a "required" display or interlock function. Also, combining the separate definition/requirement for analog and bistable channels, and the phrase "or actual," in reference to the injected signal for the CHANNEL FUNCTIONAL TEST, has been added as an explicit option to the currently required simulated signal.	1.1 CHANNEL CALIBRATION, CHANNEL FUNCTIONAL TEST, and LOGIC SYSTEM FUNCTIONAL TEST definitions	1.0
A.4	Revises the wording for the definition of CHANNEL CALIBRATION to clarify requirements for thermocouples and RTDs. The intent of a CHANNEL CALIBRATION is to adjust the channel output so that the channel responds with known range and accuracy. Most instrument channels contain an adjustable transmitter (sensor) which is also subject to drift. The appropriate calibration at the Frequencies specified in the Quad Cities 1 and 2 ITS would consist of a verification of OPERABILITY of the sensing element and a calibration of the remaining adjustable devices in the channel. Calibration of the adjustable devices in the channel is performed by applying the sensing elements' (RTDs or thermocouples) fixed input/output relationships to the remainder of the channel and making the necessary adjustments to ensure range and accuracy.	1.1 CHANNEL CALIBRATION definition	1.0

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
CHAPTER 1.0 - USE AND APPLICATION

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.5	Incorporates the current definition of CRITICAL POWER RATIO and FRACTION OF LIMITING POWER DENSITY into the proposed definition of MINIMUM CRITICAL POWER RATIO and MAXIMUM FRACTION OF LIMITING POWER DENSITY, respectively.	1.1 MINIMUM CRITICAL POWER RATIO and MAXIMUM FRACTION OF LIMITING POWER DENSITY definitions	1.0
A.6	Deletes the definition of FREQUENCY NOTATION since the abbreviations in Table 1.1 are no longer used; SR Frequencies in the Quad Cities 1 and 2 ITS are directly specified.	N/A	1.0, Table 1.1
A.7	Combines the current definitions for IDENTIFIED LEAKAGE, PRESSURE BOUNDARY LEAKAGE, and UNIDENTIFIED LEAKAGE into one proposed defined term: LEAKAGE.	1.1 LEAKAGE definition	1.0
A.8	Provides clarifications: 1) as specified in the second portion of the current definition of IDENTIFIED LEAKAGE (proposed LEAKAGE definition), the intended leakage is that which occurs into the drywell space (i.e., containment atmosphere); and 2) the "collection systems" specified in the first portion of the definitions are intended to be those for collection of leakages into the drywell space.	1.1 LEAKAGE definition	1.0
A.9	Moves the definition of OFFSITE DOSE CALCULATION MANUAL to ITS 5.5.1.	5.5.1	1.0
A.10	Replaces OPERATIONAL MODE with the ITS definition of MODE. Clarifying statements are added to indicate that defined MODES in ITS Table 1.1-1 apply only when fuel is in the reactor vessel and that reactor vessel head closure bolt tensioning is a parameter.	1.1 MODE definition	1.0
A.11	Deletes the definitions of PRIMARY CONTAINMENT INTEGRITY and SECONDARY CONTAINMENT INTEGRITY; all the requirements are specifically addressed in the LCOs for the Primary Containment and Secondary Containment, along with the remainder of the LCOs in the Containment Systems Section.	N/A	1.0

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
CHAPTER 1.0 - USE AND APPLICATION

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.12	Moves the definition of PROCESS CONTROL PROGRAM to the Administrative Controls Chapter (Chapter 5.0).	5.0	1.0
A.13	Modifies the definition of SHUTDOWN MARGIN to address stuck control rods, consistent with the Quad Cities 1 and 2 CTS requirement found in CTS 4.3.A.2 to account for the worth of a stuck control rod.	1.1 SHUTDOWN MARGIN definition	1.0, 4.3.A.2
A.14	Adds definitions of STAGGERED TEST BASIS and TURBINE BYPASS SYSTEM RESPONSE TIME consistent with their usage throughout the Quad Cities 1 and 2 ITS.	1.1 STAGGERED TEST BASIS and TURBINE BYPASS SYSTEM RESPONSE TIME definitions	N/A
A.15	Moves CTS Table 1.2, footnotes (a), (b), and (c) to LCO requirements in the Special Operations Section.	3.10.1, 3.10.2, 3.10.3	Table 1.2 footnotes (a), (b), (c)
A.16	Deletes CTS Table 1.2, footnote (d), which references Special Test Exceptions 3.12.A, 3.12.B, and 3.12.C.	N/A	Table 1.2 footnote (d)
A.17	The intent of applying the MODE definition only when fuel is in the vessel, as specified in CTS Table 1.2, footnote (c), has been moved to the definition of MODE. In addition, since the vessel head can only be removed if the head closure bolts are less than fully tensioned, there is no purpose in including "or with the head removed."	1.1 MODE definition	Table 1.2 footnote (c)
A.18	Adds Sections 1.2, Logical Connectors, 1.3, Completion Times, and 1.4 Frequency, to the Technical Specifications to aid in the understanding and use of the new format and presentation style, and to establish positions not previously formalized.	1.2, 1.3, 1.4	N/A

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
CHAPTER 2.0 - SAFETY LIMITS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.19	Modifies the definition of REACTOR PROTECTION SYSTEM RESPONSE TIME to allow the associated time to be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured.	1.1 REACTOR PROTECTION SYSTEM RESPONSE TIME definition	1.0
DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.1	Editorial changes, reformatting, and revised wording.	2.0	2.0
A.2	Moves requirements for the Limiting Safety System Settings to ITS Section 3.3.	3.3	2.2
A.3	Deletes the details contained in the Actions of CTS 2.1.A, 2.1.B, 2.1.C, and 2.1.D to comply with the requirements of Specification 6.7, since the ITS format does not include providing cross references. In addition, the reference to Specification 6.7 has been deleted since Specification 6.7 has been deleted from the Technical Specifications.	N/A	2.1.A, 2.1.B, 2.1.C, 2.1.D

**TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.0 - LCO AND SR APPLICABILITY**

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.1	Editorial changes, reformatting, and revised numbering.	3.0	3.0, 4.0
A.2	Renummer the CTS 3.0 series to LCO 3.0.X and the CTS 4.0 series to SR 3.0.X.	3.0	3.0, 4.0
A.3	1) Replaces the phrase "Compliance with...is required" with the phrase "LCOs shall be met;" 2) Changes "OPERATIONAL MODE(s)" to "MODES;" 3) Changes "conditions specified therein" to "specified conditions in the Applicability;" and 4) Changes the phrase "that upon failure to meet the Limiting Conditions for Operation, the associated ACTION requirements shall be met, except as provided in Specification 3.0.E" to "as provided in LCO 3.0.2 and LCO 3.0.7." (LCO 3.0.2 addresses the requirement of meeting the associated ACTIONS when not meeting a Limiting Condition for Operation. LCO 3.0.7 addresses another situation when an LCO requirement is allowed not to be met.)	LCO 3.0.1	3.0.A
A.4	1) Replaces the lead-in sentence "Noncompliance with a Specification shall exist when..." with "Upon discovery of a failure to meet an LCO..."; 2) Changes the phrase "restored" to "met or is no longer applicable;" 3) Changes "time intervals" to "Completion Time(s);" 4) Changes "ACTION requirements" to "Required Action(s);" 5) Adds exception to LCO 3.0.6 due to its inclusion in the Quad Cities 1 and 2 ITS; and 6) Adds the phrase "unless otherwise stated" consistent with current Quad Cities 1 and 2 TS exceptions found in a few LCOs to avoid potential misapplication of those requirements.	LCO 3.0.2	3.0.B
A.5	1) Replaces the phrase "except as provided in the associated ACTION requirements" with "and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS" to cover all potential possibilities that require entry into LCO 3.0.3; 2) Changes "OPERATIONAL MODE" to "MODE or other specified condition;" 3) Revises the times to reach each MODE to include the 1 hour allowed by CTS 3.0.C for initiating the shutdown. Also, the time represents the total time allowed from the entry into LCO 3.0.3, replacing the current presentation where each time is referenced as "the next," or "the subsequent;" 4) Changes the phrase "under the ACTION requirements...failure to meet the Limiting Condition for Operation" to "in accordance with the LCO or ACTIONS, completion of the actions required by LCO 3.0.3 is not required," to specifically state that LCO 3.0.3 actions do not have to be completed; and 5) Changes "This specification is not applicable in OPERATIONAL MODE 4 or 5" to "LCO 3.0.3 is only applicable in MODES 1, 2, and 3."	LCO 3.0.3	3.0.C

**TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.0 - LCO AND SR APPLICABILITY**

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.6	1) Revises the phrase "This Specification shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS." to include "or that are part of a shutdown of the unit;" 2) Adds the sentence "LCO 3.0.4 is only applicable for entry into a MODE or other specified condition in the Applicability in MODES 1, 2, and 3."	LCO 3.0.4	3.0.D
A.7	ITS LCO 3.0.6 is added to provide guidance regarding the appropriate ACTIONS to be taken when a single inoperability (a support system) also results in the inoperability of one or more related systems (supported system(s)).	LCO 3.0.6	N/A
A.8	ITS LCO 3.0.7 is added to provide guidance regarding the meeting of Special Operations LCOs in Section 3.10.	LCO 3.0.7	N/A
A.9	ITS SR 3.0.1 is constructed to more completely present the relationship between Surveillance Requirements and meeting the requirements of the LCO. The second sentence of ITS SR 3.0.1, "Failure to meet a Surveillance, whether such failure is experienced during the performance of the Surveillance or between performances of the Surveillance, shall be failure to meet the LCO," is proposed to clarify existing intent that is not explicitly stated. The concept (editorially rewritten) found in the first sentence of CTS 4.0.C, has been moved to the third sentence of ITS SR 3.0.1; "Failure to perform a Surveillance within the specified Frequency shall be failure to meet the LCO, except as provided in SR 3.0.3." The sentence "Surveillance Requirements do not have to be performed on inoperable equipment" is moved from the last sentence of CTS 4.0.C, to ITS SR 3.0.1. Since all LCOs do not deal exclusively with equipment OPERABILITY, a clarifying phrase is also added: "or variables outside specified limits."	SR 3.0.1	4.0.A, 4.0.C
A.10	"The specified Frequency for each Surveillance Requirement is met if the Surveillance is performed within 1.25 times the interval specified in the Frequency, as measured from the previous performance or as measured from the time a specified condition of the Frequency is met," was added to clearly establish what constituted meeting the specified Frequency of each Surveillance Requirement. Also, the sentence "Exceptions to this Specification are stated in the individual Specifications" is added to acknowledge the explicit use of exceptions in various Surveillances.	SR 3.0.2	4.0.B

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.0 - LCO AND SR APPLICABILITY

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.11	1) Changes "Entry into an OPERATIONAL MODE or other specified applicable condition" to "Entry into a MODE or other specified condition in the Applicability of an LCO."; 2) Rewords "...passage through or to OPERATIONAL MODE(s) as required to comply with ACTION requirements" to "entry into MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit"; and 3) Adds the sentence "SR 3.0.4 is only applicable for entry into a MODE or other specified condition in the Applicability in MODES 1, 2, and 3."	SR 3.0.4	4.0.D
A.12	Moves the technical content of CTS 4.0.E to ITS 5.5.6.	5.5.6	4.0.E
A.13	ITS LCO 3.0.8 and ITS SR 3.0.5 have been added to reflect the use of the LCOs and SRs for dual unit sites.	LCO 3.0.8, SR 3.0.5	N/A

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.1 - REACTIVITY CONTROL SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
3.1.1, SHUTDOWN MARGIN			
A.1	Editorial changes, reformatting, and revised numbering.	3.1.1	3/4.3.A
A.2	Changes the passive CTS 3.3.A Action 2 words of "verify...inserted," to the active ITS 3.1.1 Required Actions C.1 and D.1 "Initiate action to fully insert..."	3.1.1 Required Actions C.1 and D.1	3.3.A Action 2
A.3	Deletes redundant actions of CTS 3.3.A Actions 2 and 3, which require suspension of activities that could reduce the SDM, when the SDM is not within limits in MODES 3, 4, or 5. In MODES 3 and 4, the vessel head is bolted in place, and the only activity that can significantly reduce SHUTDOWN MARGIN (SDM) is control rod withdrawal, for which a Required Action that ensures control rods remain inserted is provided. In MODE 5, the only activities that can affect SDM are CORE ALTERATIONS and control rod withdrawal, for which Required Actions are provided to suspend CORE ALTERATIONS and ensure control rods remain inserted.	N/A	3.3.A Actions 2 and 3
A.4	Enhances presentation by requiring actions to be immediately initiated to restore secondary containment boundary (completing the actions as soon as possible) in lieu of current requirement to establish within 8 hours (initiating the actions as soon as possible).	3.1.1 Required Actions D.2, D.3, D.4, E.3, E.4, and E.5	3.3.A Actions 2 and 3
A.5	Replaces the use of the defined term SECONDARY CONTAINMENT INTEGRITY with the essential elements of that definition.	3.1.1 Required Actions D.2, D.3, D.4, E.3, E.4, and E.5	3.3.A Actions 2 and 3
A.6	Enhances presentation by requiring actions to be immediately initiated to insert all required control rods (completing the actions as soon as possible) in lieu of current requirement to insert the required control rods in 1 hour (initiating the actions as soon as possible).	3.1.1 Required Action E.2	3.3.A Action 3

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.1 - REACTIVITY CONTROL SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.7	A specific completion time for the SDM test is proposed to clarify <u>when</u> "prior to or during the first startup" applies. Most SDM tests are performed as an in-sequence critical and, therefore, 4 hours after reaching criticality is provided in ITS SR 3.1.1.1 as a reasonable time to perform the required calculations and have appropriate verification completed.	SR 3.1.1.1	4.3.A.1
A.8	Replaces the activity referred to as "refueling" with "fuel movement within the reactor pressure vessel or control rod replacement," since the intent of the Surveillance Requirement is to perform the SDM test after in-vessel activities which could have altered SDM.	SR 3.1.1.1	4.3.A.1
A.9	Moves the CTS 4.3.A.2 requirement to perform an SDM test after finding a stuck control rod to ITS 3.1.3.	3.1.3	4.3.A.2
3.1.2, Reactivity Anomalies			
A.1	Editorial changes, reformatting, and revised numbering.	3.1.2	3/4.3.B
A.2	Changes "reactivity equivalence of the difference" to "reactivity difference."	LCO 3.1.2, SR 3.1.2.1	3.3.B, 4.3.B
A.3	Adds a specific time for completing the reactivity anomaly surveillance to clarify <u>when</u> "during the first startup" the test must be performed. This test is performed by comparing the difference between the actual critical control rod configuration to the predicted critical control rod configuration as a function of cycle exposure while at steady state reactor power conditions. Therefore, "24 hours after reaching these conditions" is provided as a reasonable time to perform the required calculations and complete the appropriate verification, meeting the intent of the CTS.	SR 3.1.2.1	4.3.B.1

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.1 - REACTIVITY CONTROL SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
3.1.3, Control Rod OPERABILITY			
A.1	Editorial changes, reformatting, and revised numbering.	3.1.3	4.3.A, 3/4.3.C, 3/4.3.D, 3/4.3.H, 3/4.3.I
A.2	Reorganized the Control Rod OPERABILITY Specification to include all conditions that can affect the ability of the control rods to provide the necessary reactivity insertion.	3.1.3	3/4.3.C
A.3	Adds a Note, "Separate Condition entry is allowed for each control rod," which is consistent with the intent of the CTS.	3.1.3 ACTIONS Note	3.3.C Actions
A.4	Adds a Note that allows for bypassing the RWM, if needed for continued operations. This note is informative in that the RWM may be bypassed at any time, provided the proper ACTIONS of CTS 3.3.L (ITS 3.3.2.1), the RWM Specification, are taken.	3.1.3 Required Actions A.1 and C.1	N/A
A.5	Replaces "being immovable, as a result of excessive friction or mechanical interference, or known to be untrippable" with the term "stuck," since details of potential mechanisms by which control rods may be stuck are not necessary for inclusion within the Condition.	3.1.3 Condition A	3.3.C Action 1, 4.3.A.2
A.6	Deletes redundant phrase exempting SR on inoperable control rods since inoperable control rods are already not required to meet this Surveillance (per CTS 4.0.D).	SR 3.0.1	4.3.C.1
A.7	Surveillance that "cross-references" other Surveillances is deleted since the listed Surveillances are required by other Specifications.	N/A	4.3.C.2
A.8	Deletes redundant provision allowing the directional control valves to be rearmed intermittently.	LCO 3.0.5	3.3.C Actions 1.a.2), 2.b, and 2.c footnote a, 3.3.H Action 1.b footnote b, 3.3.I Action 1.c footnote b

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.1 - REACTIVITY CONTROL SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.9	Moves the SDM allowance to the definition of SDM.	1.1 SHUTDOWN MARGIN definition	4.3.A.2
A.10	Presents the requirement that maximum control rod scram insertion time be $\leq 7$ seconds in SR 3.1.3.4, making it a requirement for control rods to be considered OPERABLE, in lieu of an individual Specification.	SR 3.1.3.4	3.3.D
A.11	Deletes the definition of time zero since it is duplicative of the definition of time zero in other CTS and maintained in footnote (a) to ITS Table 3.1.4-1.	Table 3.1.4-1 footnote (a)	3.3.D
A.12	Adds new SR to require SRs in ITS 3.1.4 to be performed, since CTS 4.3.D, which provides the scram time testing requirements, is addressed in ITS 3.1.4.	SR 3.1.3.4	4.3.D
A.13	Presents the requirement that control rods be coupled to their drive mechanism in SR 3.1.3.5, making it a requirement for control rods to be considered OPERABLE, in lieu of an individual Specification.	SR 3.1.3.5	3.3.H
A.14	Deletes CTS 3.3.H Action 1.a, which specifies the method of restoring coupling integrity to an uncoupled control rod. ITS does not explicitly detail options to "restore...to OPERABLE." This action is always an option, and is implied in the ITS ACTIONS.	LCO 3.0.2	3.3.H Action 1.a
A.15	The separate Specification for control rod position is captured by the requirement that each control rod have at least one control rod position indication in SR 3.1.3.1.	SR 3.1.3.1	3.3.I
A.16	Moves the requirements for control rod position indication during MODE 5 (refueling) to ITS 3.9.4.	3.9.4	3.3.I
3.1.4, Control Rod Scram Times			
A.1	Editorial changes, reformatting, and revised numbering.	3.1.4	4.3.D, 3/4.3.E, 3/4.3.F

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.1 - REACTIVITY CONTROL SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.2	Deletes a redundant provision that Specification 4.0.D is not applicable.	SR 3.0.4	4.3.D.2 footnote a
3.1.5, Control Rod Scram Accumulators			
A.1	Editorial changes, reformatting, and revised numbering.	3.1.5	3/4.3.G
A.2	Moves the control rod scram accumulator OPERABILITY MODE 5 requirements to ITS 3.9.5.	3.9.5	3/4.3.G
A.3	Adds ITS Note, "Separate Condition entry is allowed for each control rod scram accumulator," which is consistent with the intent of the CTS.	3.1.5 ACTIONS Note	3.3.G
A.4	The revised presentation of CTS 3.3.G Action 1.a.1) does not explicitly detail options to "restore...to OPERABLE status," since this action is always an option, and is implied in all Actions.	LCO 3.0.2	3.3.G Action 1.a.1)
A.5	Deletes the "default" action "be in at least HOT SHUTDOWN within the next 12 hours" as there are no circumstances which preclude the possibility of compliance with an ACTION to "Declare the control rod...inoperable."	N/A	3.3.G Action 1.b
A.6	Deletes the conditions which specify when the accumulator Surveillance does not have to be performed (i.e., when the associated control rod is inserted and disarmed or scrammed), since ITS SR 3.0.1 provides the allowance.	SR 3.0.1	4.3.G
A.7	The method for verifying that a control rod drive pump is operating has been changed from inserting one control rod one notch to verifying that charging water header pressure is at least 940 psig. The proposed method for determining charging water header pressure provides added assurance that the charging water pressure is sufficient to insert all control rods, whereas the existing method only assures that one rod can be inserted.	3.1.5 ACTIONS B and C	3.3.G Action 1.c.1)
A.8	CTS 3.3.G Action 1.c is redundant to the Actions of CTS 3.3.C (ITS 3.1.3), and has therefore been deleted.	3.1.3 ACTIONS	3.3.G Action 1.c

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.1 - REACTIVITY CONTROL SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
3.1.6, Rod Pattern Control			
NONE	NONE	NONE	NONE
3.1.7, Standby Liquid Control System			
A.1	Editorial changes, reformatting, and revised numbering.	3.1.7	3/4.4.A
A.2	Deletes the requirement to verify the "power operated or automatic" valves since the only "power operated or automatic" valves in the system is the explosive valve.	N/A	4.4.A.2.c
A.3	Revises the details of CTS 4.4.A.2.b, which identify the available boron concentration to be determined to be 14% to 16.5% by weight, to be within the limits of Figure 3.1.7-1 (SR 3.1.7.5).	SR 3.1.7.5 Figure 3.1.7-1	4.4.A.2.b
3.1.8, SDV Vent and Drain Valves			
A.1	Editorial changes, reformatting, and revised numbering.	3.1.8	3/4.3.K
A.2	Clarifies that the signal used for performing CTS 4.3.K.3.a and 4.3.K.3.b can be an "actual or simulated" signal.	SR 3.1.8.3	N/A
Current Specification 3/4.3.J, Control Rod Drive Housing Support			
NONE	NONE	NONE	NONE
Current Specification 3/4.3.N, Economic Generation Control System			

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.1 - REACTIVITY CONTROL SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
NONE	NONE	NONE	NONE

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.2 - POWER DISTRIBUTION LIMITS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
<b>3.2.1, AVERAGE PLANAR LINEAR HEAT GENERATION RATE</b>			
A.1	Editorial changes, reformatting, and revised renumbering.	3.2.1	3/4.11.A
A.2	Deletes "OPERATIONAL MODE 1" from the Applicability of "OPERATIONAL MODE 1, when THERMAL POWER is greater than or equal to 25% of RATED THERMAL POWER," since with THERMAL POWER $\geq$ 25% RTP, the unit will always be in MODE 1.	N/A	3.11.A
<b>3.2.2, MINIMUM CRITICAL POWER RATIO</b>			
A.1	Editorial changes, reformatting, and revised renumbering.	3.2.2	3/4.11.C
A.2	Deletes "OPERATIONAL MODE 1" from the Applicability of "OPERATIONAL MODE 1, when THERMAL POWER is greater than or equal to 25% of RATED THERMAL POWER," since with THERMAL POWER $\geq$ 25% RTP, the unit will always be in MODE 1.	N/A	3.11.C
<b>3.2.3, LINEAR HEAT GENERATION RATE</b>			
A.1	Editorial changes, reformatting, and revised renumbering.	3.2.3	3/4.11.D
A.2	Deletes "OPERATIONAL MODE 1" from the Applicability of "OPERATIONAL MODE 1, when THERMAL POWER is greater than or equal to 25% of RATED THERMAL POWER," since with THERMAL POWER $\geq$ 25% RTP, the unit will always be in MODE 1.	N/A	3.11.D
<b>3.2.4, AVERAGE POWER RANGE MONITOR GAIN AND SETPOINT</b>			
A.1	Editorial changes, reformatting, and revised renumbering.	3.2.4	3/4.11.B

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.2 - POWER DISTRIBUTION LIMITS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.2	Revises the LCO to provide the details which are specified in the CTS 3.11.B Actions for an allowance to adjust the flow biased APRM setpoints or to adjust each APRM gain when FDLRC or MFLPD/F RTP is greater than 1.0.	3.2.4	3.11.B
A.3	Deletes duplicate details of the FUEL DESIGN LIMITING RATIO FOR CENTERLINE MELT (FDLRC) definition in ITS Section 1.1.	N/A	3.11.B
A.4	Deletes "OPERATIONAL MODE 1" from the Applicability of "OPERATIONAL MODE 1, when THERMAL POWER is greater than or equal to 25% of RATED THERMAL POWER," since with THERMAL POWER $\geq$ 25% RTP, the unit will always be in MODE 1.	N/A	3.11.B
A.5	Revises the reference to the "setpoints" of the APRM Flow Biased Neutron Flux — High trip to "Allowable Value."	3.2.4 ACTION A	3.11.B Action 2

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.3 - INSTRUMENTATION

DOC #	SUMMARY	ITS SECTION	CTS SECTION
3.3.1.1, RPS Instrumentation			
A.1	Editorial changes, reformatting, and revised numbering.	3.3.1.1	3/4.1.A, 2.2
A.2	Adds ITS ACTIONS Note "Separate Condition entry is allowed for each channel" and revises the wording for CTS Actions 1, 2 and 3 ("One or more required channels" and "One or more Functions"), which is consistent with the intent of the CTS.	3.3.1.1 ACTIONS Note 1, 3.3.1.1 ACTIONS A, B, and C	3.1.A Actions
A.3	These changes to CTS 3/4.1.A are provided in the Quad Cities ITS consistent with the Technical Specifications Change Request submitted to the NRC for approval per ComEd letter dated December 27, 1999.	3.3.1.1 ACTIONS A, B, C, and D, Surveillance Requirements Note 2, SR 3.3.1.1.5, SR 3.3.1.1.10, SR 3.3.1.1.11	3/4.1.A
A.4	"RPS trip capability not maintained" replaces the explicit reference to Functional Units 1 through 12 in CTS 3.1.A Actions 1 and 2 have been deleted. Each of these Functional Units are automatically actuated when the parameter exceeds the associated trip setpoint and each of these Functions include four redundant channels and the loss of one channel in each trip system does not result in a loss of function. In addition, the explicit reference in CTS 3.1.A Action 3 to Functional Units 13 or 14 have been deleted, since Functions (Reactor Mode Switch Shutdown Position and Manual Scram) do not include four redundant channels, thus ITS 3.3.1.1 ACTION C (RPS trip capability not maintained) is required when any of the associated channels are found to be inoperable.	N/A	3.1.A Actions 1, 2, and 3
A.5	Moves the CTS Table 3.1.A-1 footnote (g) and CTS Table 4.1.A-1 footnote (m) requirement that the APRM Functional Units 2.a and 2.d be Operable during shutdown margin demonstrations performed per Specification 3.12.B to ITS 3.10.7.	3.10.7	Table 3.1.A-1 footnote (g), Table 4.1.A-1 footnote (m)

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.3 - INSTRUMENTATION

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.6	CTS Table 3.1.A-1 footnote (f) and CTS Table 4.1.A-1 footnote (i) state that the Reactor Vessel Steam Dome Pressure — High Function (Functional Unit 3) is not required to be OPERABLE in MODE 2 when the reactor vessel head is removed per CTS 3.12.A. CTS Table 3.1.A-1 footnote (h) and CTS Table 4.1.A-1 footnote (n) state that the Drywell Pressure — High Function (Functional Unit 7) is not required to be OPERABLE in MODE 2 when PRIMARY CONTAINMENT INTEGRITY is not required in MODE 2 (i.e., when Special Test Exception 3/4.12.A is being used). These notes are deleted from CTS Tables 3.1.A-1 and 4.1.A-1 since the only applicable condition in which these notes would be needed has been deleted.	N/A	Table 3.1.A-1 footnotes (f) and (h), Table 4.1.A-1 footnotes (i) and (n)
A.7	All MSIV channels are required to be OPERABLE to assure a scram with the worst case single failure. In the ITS, each MSIV contact is viewed as a separate channel (a total of 16 channels). Therefore, the minimum number of channels per trip system is more appropriately specified as "8" in Function 5 of ITS Table 3.3.1.1-1.	Table 3.3.1.1-1 Function 5	Table 3.1.A-1 Functional Unit 5
A.8	These changes to CTS 3/4.1.A and 2.2.A are provided in the Quad Cities ITS consistent with the Technical Specifications Change Request submitted to the NRC for approval per ComEd letter dated December 30, 1999.	N/A	3/4.1.A, 2.2.A
A.9	Removes the cross references to the Special Operations LCOs due to the change described in DOC L.4 for ITS 3.3.1.1.	N/A	Table 3.1.A-1 footnote (i), Table 4.1.A-1 footnote (j)
A.10	Replaces the term "Trip Setpoints" with "Allowable Values," since current plant practice uses the Trip Setpoints as the Operability limit (i.e., consistent with the use of the term "Allowable Values" in the ITS). Changes to instrument setpoint values are addressed in other DOCs.	Table 3.3.1.1-1	2.2.A, 2.2.A Action, Table 2.2.A-1
A.11	Enhances presentation by requiring actions to be immediately initiated to restore secondary containment boundary (completing the actions as soon as possible) in lieu of current requirement to establish within 8 hours (initiating the actions as soon as possible).	3.1.1 Required Action H.1	3.1.A.1 Actions 13 and 19

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.3 - INSTRUMENTATION

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.12	Removes the CHANNEL FUNCTIONAL TEST Surveillance Frequency of "S/U" and footnote (c) of CTS Table 4.1.A-1 for Functional Units 1.a and 2.a "within 24 hours before startup, if not performed within the previous 7 days." These notations are redundant to the requirements of proposed SR 3.0.4, which requires the periodic weekly Surveillances to be performed and current prior to entry into the applicable operational conditions.	SR 3.0.4	Table 4.1.A-1 Functional Units 1.a and 2.a Frequency and footnote (c)
A.13	Deletes the daily (D - 24 hours) CHANNEL CHECK Frequency for CTS Table 4.1.A-1 Functional Unit 2.b, since it is already covered by the shiftly (S - 12 hours) CHANNEL CHECK Frequency of Table 4.1.A-1 Functional Unit 2.b.	N/A	4.1.A.1 for Table 4.1.A-1 Functional Unit 2.b
A.14	The CTS Limiting Safety System Settings (Setpoints) Table 2.2.A-1 has been combined with the current RPS Technical Specification (CTS 3/4.1.A). The information in CTS Table 2.2.A-1 is located in ITS Table 3.3.1.1-1.	3.3.1.1, Table 3.3.1.1-1	Table 2.2.A-1, 3/4.A.1
A.15	Modifies the reference point for the Reactor Vessel Water Level - Low Function from top of active fuel to instrument zero.	Table 3.3.1.1-1 Function 4	Table 2.2.A-1 Functional Unit 4
A.16	The requirements in CTS Table 4.1.A-1 footnote (q) have been deleted since the instrument upgrades, referenced in the footnote, for both Units 1 and 2 have been completed.	N/A	Table 4.1.A-1 footnote (q)
3.3.1.2, SRM Instrumentation			
A.1	Editorial changes, reformatting, and revised numbering.	3.3.1.2	3/4.2.G, 3/4.10.B
A.2	CTS requirements to "verify all insertable control rods...inserted," are replaced in ITS 3.3.1.2 Required Action D.1 with an equivalent but more definitive requirement to "Fully insert...."	3.3.1.2 Required Action D.1	3.2.G Action 2

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.3 - INSTRUMENTATION

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.3	Adds a Note to the Surveillance Requirements to provide direction for proper application of the Surveillance Requirements for Technical Specification compliance.	3.3.1.2 Surveillance Requirements Note	N/A
A.4	Adds to the CTS 3.10.B Action the phrase, "except for control rod insertion." CTS and ITS definition of a CORE ALTERATION includes control rod insertion and to comply with the CTS action to suspend CORE ALTERATIONS means to stop any <u>additional</u> CORE ALTERATIONS, but not control rod insertion.	3.3.1.2 ACTION E	3.10.B Action
<b>3.3.2.1, Control Rod Block Instrumentation</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.3.2.1	3/4.2.E, 3/4.3.L, 3/4.3.M
A.2	Replaces the term "Trip Setpoints" with "Allowable Values," since current plant practice uses the Trip Setpoints as the Operability limit (i.e., consistent with the use of the term "Allowable Values" in the ITS). Changes to instrument setpoint values are addressed in other DOCs.	Table 3.3.2.1-1	3.2.E, 3.2.E Action 1, Table 3.2.E-1
A.3	The reference to "OPERATIONAL CONDITION 1, when THERMAL POWER is greater than or equal to 30% of RATED THERMAL POWER" is not used in the ITS. In both the CTS and ITS with THERMAL POWER $\geq$ 30% RTP, the unit will always be in MODE 1 (Operational Condition 1). In addition, CTS Tables 3.2.E-1 and 4.2.E-1 footnotes (e) and (d), respectively and LCO 3.3.M (ITS Table 3.3.2.1-1 Note (a)) have been modified to not require the RBM to be Operable when a peripheral control rod is selected, since this Note explains the RBM design feature which includes an automatic bypass when a peripheral rod is selected.	Table 3.3.2.1-1 Functions 1.a, 1.b, and 1.c, and Note (a)	Tables 3.2.E-1 and 4.2.E-1 Functional Units 1.a, 1.b, and 1.c, including footnotes (e) and (d) respectively, 3.3.M

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.3 - INSTRUMENTATION

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.4	These changes to CTS 3/4.2.E are provided in Quad Cities ITS consistent with the Technical Specifications Change Request submitted to the NRC for approval per ComEd letter dated December 27, 1999.	3.3.2.1 Surveillance Requirements Note 2, SR 3.3.2.1.1	3/4.2.E
3.3.2.2, Feedwater System and Main Turbine High Water Level Trip Instrumentation			
A.1	Editorial changes, reformatting, and revised numbering.	3.3.2.2	3/4.2.J
A.2	Replaces the term "Trip Setpoint" with "Allowable Value," since current plant practice uses the Trip Setpoint as the Operability limit (i.e., consistent with the use of the term "Allowable Value" in the ITS). Changes to instrument setpoint values are addressed in other DOCs.	SR 3.3.2.2.3	3.2.J, 3.2.J Action, Table 3.2.J-1
A.3	Modifies the reference point for the Reactor Vessel Water Level - Low Function from top of active fuel to instrument zero.	SR 3.3.2.2.4	Table 3.2.J-1 Functional Unit
3.3.3.1, Post Accident Monitoring Instrumentation			
A.1	Editorial changes, reformatting, and revised numbering.	3.3.3.1	3/4.2.F
A.2	Adds ITS ACTIONS Note "Separate Condition entry is allowed for each Function," which is consistent with the intent of the CTS.	3.3.3.1 ACTIONS Note 2	3.2.F Actions

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.3 - INSTRUMENTATION

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.3	The Reactor Vessel Water Level instrumentation in CTS Table 3.2.F-1 consists of instruments with different ranges to satisfy Regulatory Guide 1.97 requirements. The different ranges are: "narrow range" covering approximately 82 inches above the top of active fuel to approximately 202 inches above the top of active fuel; and "wide range" covering approximately 202 inches above the top of active fuel to approximately 198 inches below the top of active fuel. Currently, CTS Table 3.2.F-1 only specifies requirements for two channels but does not specify the required ranges. Using the ITS format, the instruments required to cover these ranges are delineated in ITS Table 3.3.3.1-1 as separate line items under Function 2, with each channel consisting of only one instrument. Therefore, ITS Table 3.3.3.1-1 Function 2.a (Wide Range) and Function 2.b (Narrow Range) will each specify requirements for two channels (for a total of 4 channels).	Table 3.3.3.1 Functions 2.a and 2.b	Table 3.2.F-1 Instrumentation 2
A.4	Moves the details concerning the technical content of the Special Report specified in CTS 3.2.F-1 Action 61.b) to ITS 5.6.	5.6	Table 3.2.F-1 Action 61.b
3.3.4.1, ATWS-RPT Instrumentation			
A.1	Editorial changes, reformatting, and revised numbering.	3.3.4.1	3/4.2.C
A.2	Adds ITS ACTIONS Note "Separate Condition entry is allowed for each channel," which is consistent with the intent of the CTS.	3.3.4.1 ACTIONS Note	3.2.C Actions
A.3	These changes to CTS 3/4.2.C are provided in Quad Cities ITS consistent with the Technical Specifications Change Request submitted to the NRC for approval per ComEd letter dated December 27, 1999.	3.3.4.1 Surveillance Requirements Note, SR 3.3.4.1.3	3/4.2.C
A.4	Replaces the term "Trip Setpoints" with "Allowable Values," since current plant practice uses the Trip Setpoints as the Operability limit (i.e., consistent with the use of the term "Allowable Values" in the ITS). Changes to instrument setpoint values are addressed in other DOCs.	SR 3.3.4.1.4	3.2.C, 3.2.C Action, Table 3.2.C-1

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.3 - INSTRUMENTATION

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.5	Modifies the reference point for the Reactor Vessel Water Level - Low Function from top of active fuel to instrument zero.	SR 3.3.4.1.4	Table 3.2.C-1 Functional Unit 1
3.3.5.1, ECCS Instrumentation			
A.1	Editorial changes, reformatting, and revised numbering.	3.3.5.1	3/4.2.B
A.2	Replaces the term "Trip Setpoints" with "Allowable Values," since current plant practice uses the Trip Setpoints as the Operability limit (i.e., consistent with the use of the term "Allowable Values" in the ITS). Changes to instrument setpoint values are addressed in other DOCs.	Table 3.3.5.1-1	3.2.B, 3.2.B Action 1, Table 3.2.B-1
A.3	Adds ITS ACTIONS Note "Separate Condition entry is allowed for each channel," which is consistent with the intent of the CTS.	3.3.5.1 ACTIONS Note	3.2.B Actions
A.4	Modifies the reference point for the Reactor Vessel Water Level - Low Function from top of active fuel to instrument zero.	Table 3.3.5.1-1 Functions 1.a, 2.a, 3.a, 3.c, 4.a, and 5.a	Table 3.2.B-1 Functional Units 1.a, 2.a, 3.a, 3.c, 4.a, and 5.a
A.5	Modifies the reference point for the Condensate Storage Tank—Low Function from gallons to feet and inches plant elevation.	Table 3.3.5.1- 1, Function 3.d	Table 3.2.B-1, Functional Unit 3.c
A.6	CTS Table 3.2.B-1 footnote (f) and CTS Table 4.2.B-1 footnote (d) state that the Drywell Pressure—High Function (Functional Units 1.b, 2.b, 3.b, 4.b, and 5.b) is not required to be OPERABLE when PRIMARY CONTAINMENT INTEGRITY is not required in MODE 2 (i.e., when Special Test Exception 3/4.12.A is being used). These notes are deleted from CTS Tables 3.2.B-1 and 4.2.B-1 since the only applicable condition in which these notes would be needed has been deleted.	N/A	Table 3.2.B-1 footnote (f), Table 4.2.B-1 footnote (d)

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.3 - INSTRUMENTATION

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.7	The detail in CTS Table 3.2.B-1 Functional Unit 3.g, HPCI Manual Initiation, that there is one channel "per system" has been deleted since there is only one HPCI System per unit.	N/A	Table 3.2.B-1 Functional Unit 3.g
A.8	These changes to CTS 3/4.2.B are provided in Quad Cities ITS consistent with the Technical Specifications Change Request submitted to the NRC for approval per ComEd letter dated December 27, 1999.	3.3.5.1 ACTIONS B, C, D, E, F, G, and H, 3.3.5.1 Surveillance Requirements Note 2, SR 3.3.5.1.3, SR 3.3.5.1.4, SR 3.3.5.1.5	3/4.2.B
A.9	Moves the technical content of the loss of power instrumentation requirements of CTS Table 3.2.B-1 Functional Units 6.a and 6.b, including Action 36 and footnotes (e), (g), and (j), and CTS Table 4.2.B-1, Functional Units 5.a and 5.b, including footnote (c), to ITS 3.3.8.1, "Loss of Power Instrumentation."	3.3.8.1	Table 3.2.B-1 Functional Units 6.a and 6.b including Action 36 and footnotes (e), (g), and (j), CTS Table 4.2.B-1, Functional Units 5.a and 5.b, including footnote (c)
A.10	Adds an optional Required Action to allow the HPCI pump suction to be aligned to the suppression pool in lieu of tripping the channel, if a Condensate Storage Tank Level—Low or Suppression Pool Water Level—High channel is inoperable. This allowance manually performs the instrumentation function.	3.3.5.1 Required Action D.2.2	Table 3.2.B-1 Action 35

**TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.3 - INSTRUMENTATION**

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.11	Replaces the CHANNEL FUNCTIONAL TEST of Table 4.2.B-1 Functional Unit 3.g (the HPCI Manual Initiation Function) with a LOGIC SYSTEM FUNCTIONAL TEST in ITS 3.3.5.1, which is a complete test of the logic, including the Manual Initiation switch, and is performed at the same Frequency.	N/A	4.2.B.1 for Table 4.2.B-1 Functional Unit 3.g
A.12	Deletes the specific CHANNEL FUNCTIONAL TEST requirement for Functional Unit 4.c, ADS Initiation Timer, and Functional Unit 4.d, ADS Low Low Level Timer, since the CFT is included in the CTS and ITS definition of CHANNEL CALIBRATION and the CFT and the CHANNEL CALIBRATION are performed at the same Frequency.	N/A	4.2.B.1 for Table 4.2.B-1 Functional Units 4.c and 4.d
<b>3.3.5.2, RCIC System Instrumentation</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.3.5.2	3/4.2.D
A.2	Adds ITS ACTIONS Note "Separate Condition entry is allowed for each channel," which is consistent with the intent of the CTS.	3.3.5.2 ACTIONS Note	3.2.D Actions
A.3	Modifies the reference point for the Reactor Vessel Water Level - Low Function from top of active fuel to instrument zero.	Table 3.3.5.2-1 Functions 1 and 2	Table 3.2.D-1 Functional Units 1 and 2
A.4	These changes to CTS 3/4.2.D are provided in Quad Cities ITS consistent with the Technical Specifications Change Request submitted to the NRC for approval per ComEd letter dated December 27, 1999.	3.3.5.2 ACTIONS B, C, D, and E, 3.3.5.2 Surveillance Requirements Note 2, SR 3.3.5.2.3, SR 3.3.5.2.4	3/4.2.D

**TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.3 - INSTRUMENTATION**

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.5	Adds an optional Required Action to allow the RCIC pump suction to be aligned to the suppression pool in lieu of tripping the channel, if a Condensate Storage Tank Level—Low or Suppression Pool Water Level—High channel is inoperable. This allowance manually performs the instrumentation function.	3.3.5.2 Required Action D.2.2	Table 3.2.D-1 Action 42
A.6	The column title in CTS Table 3.2.D-1 is on a per Function basis rather than the per Trip System basis indicated in CTS Table 3.2.D-1 Actions 41 and 43. All required channels are specified in the column. Therefore, reference to Trip System has been deleted and replaced with Function as indicated in ITS Table 3.3.5.2-1.	Table 3.3.5.2-1	Table 3.2.D-1 Actions 41 and 43
A.7	Replaces the CHANNEL FUNCTIONAL TEST of Table 4.2.D-1 Functional Unit 5 (the RCIC Manual Initiation Function) with a LOGIC SYSTEM FUNCTIONAL TEST in ITS 3.3.5.2, which is a complete test of the logic, including the Manual Initiation switch, and is performed at the same Frequency.	N/A	4.2.D.1 for Table 4.2.D-1 Functional Unit 5
A.8	Replaces the term "Trip Setpoints" with "Allowable Values," since current plant practice uses the Trip Setpoints as the Operability limit (i.e., consistent with the use of the term "Allowable Values" in the ITS). Changes to instrument setpoint values are addressed in other DOCs.	Table 3.3.5.2-1	3.2.D, 3.2.D Action 1, Table 3.2.D-1
A.9	The detail in CTS Table 3.2.D-1 Functional Unit 5, RCIC Manual Initiation, that there is one channel "per system" has been deleted since there is only one RCIC System per unit.	N/A	Table 3.2.D-1 Functional Unit 5
3.3.6.1, Primary Containment Isolation Instrumentation			
A.1	Editorial changes, reformatting, and revised numbering.	3.3.6.1	3/4.2.A
A.2	Adds ITS ACTIONS Note "Separate Condition entry is allowed for each channel," and revises the wording for CTS Action 2 ("One or more channels" and "One or more automatic Functions"), which is consistent with the intent of the CTS.	3.3.6.1 ACTIONS Note and ACTIONS A and B	3.2.A Action 2

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
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DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.3	These changes to CTS 3/4.2.A are provided in Quad Cities ITS consistent with the Technical Specifications Change Request submitted to the NRC for approval per ComEd letter dated December 27, 1999.	3.3.6.1 ACTIONS A, B, and C, 3.3.6.1 Surveillance Requirements Note 2, SR 3.3.6.1.2, SR 3.3.6.1.3	3/4.2.A
A.4	CTS Table 3.2.A-1 footnote (d) and CTS Table 4.2.A-1 footnote (b) state that the Drywell Pressure—High Function (Functional Unit 1.b) is not required to be OPERABLE when PRIMARY CONTAINMENT INTEGRITY is not required in MODE 2 (i.e., when Special Test Exception 3/4.12.A is being used). These notes are deleted from CTS Tables 3.2.A-1 and 4.2.A-1 since the only applicable condition in which these notes would be needed has been deleted.	N/A	Table 3.2.A-1 footnote (d), Table 4.2.A-1 footnote (b)
A.5	Moves the requirements identified in CTS Tables 3.2.A-1 and 4.2.A-1 related to Secondary Containment Isolation and Control Room Emergency Ventilation actuation (as described in footnotes (c), (d), (k), *, and ** to Table 3.2.A-1 and footnotes (b), (c), (d), *, and ** to Table 4.2.A-1) to ITS 3.3.6.2, "Secondary Containment Isolation Instrumentation," and ITS 3.3.7.1, "Control Room Emergency Ventilation System Instrumentation," as applicable.	3.3.6.2, 3.3.7.1	Tables 3.2.A-1 (including footnotes (c), (d), (k), *, and **) and 4.2.A-1 (including footnotes (b), (c), (d), *, and **)
A.6	These changes to CTS 3/4.2.A are provided in the Quad Cities ITS consistent with the Technical Specifications Change Request submitted to the NRC for approval per ComEd letter dated December 30, 1999.	N/A	3/4.2.A
A.7	Replaces the term "Trip Setpoints" with "Allowable Values," since current plant practice uses the Trip Setpoints as the Operability limit (i.e., consistent with the use of the term "Allowable Values" in the ITS). Changes to instrument setpoint values are addressed in other DOCs.	Table 3.3.6.1-1	3.2.A, 3.2.A Action 1, Table 3.2.A-1

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.3 - INSTRUMENTATION

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.8	The CTS action to "declare the affected system inoperable" is deleted since this instruction is essentially a "cross reference" between Technical Specifications.	N/A	Table 3.2.A-1 Action 23
A.9	The requirement in CTS Table 3.2.A-1 footnote (g) that only one trip system is required in MODES 4 and 5 with RHR Shutdown Cooling System integrity maintained has been revised for clarification. The ITS requires one channel per trip system, which is the intent of the requirement.	Table 3.3.6.1-1 Note (b)	Table 3.2.D-1 footnote (g)
A.10	Replaces the CHANNEL FUNCTIONAL TEST of Table 4.2.A-1 Functional Unit 4.a, Standby Liquid Control (SLC) System Initiation, with a LOGIC SYSTEM FUNCTIONAL TEST in ITS 3.3.6.1, which is a complete test of the logic, including the switches, and is performed at the same Frequency.	SR 3.3.6.1.7	Table 4.2.A-1 Functional Unit 4.a
A.11	CTS Table 3.2.A-1 requires Functional Unit 3.e, Main Steam Line (MSL) Tunnel Temperature—High, to have at least 2 channels (of the 4) in each of 2 sets OPERABLE per trip system. In the ITS, this requirement is clarified by replacing the words "2 of 4 in each of 2 sets" with "2 per trip string" such that the requirement is consistent with the terminology used in BWR ISTS, NUREG-1433, Rev. 1, for describing other similar trip logic schemes.	Table 3.3.6.1-1 Function 1.e	Table 3.2.A-1 Functional Unit 3.e
A.12	Modifies the reference point for the Reactor Vessel Water Level - Low and Reactor Vessel Water Level - Low Functions from top of active fuel to instrument zero.	Table 3.3.6.1-1 Functions 1.a, 2.a, 5.b, and 6.b	Table 3.2.A-1 Functional Units 1.a, 3.a, 4.b, and 7.a
3.3.6.2, Secondary Containment Isolation Instrumentation			
A.1	Editorial changes, reformatting, and revised numbering.	3.3.6.2	3/4.2.A, 4.7.P.4.b.2)
A.2	Adds ITS ACTIONS Note "Separate Condition entry is allowed for each channel," and revises the wording for CTS Action 2 ("One or more channels" and "One or more automatic Functions"), which is consistent with the intent of the CTS.	3.3.6.2 ACTIONS Note and ACTIONS A and B	3.2.A Action 2

**TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.3 - INSTRUMENTATION**

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.3	These changes to CTS 3/4.2.A are provided in Quad Cities ITS consistent with the Technical Specifications Change Request submitted to the NRC for approval per ComEd letter dated December 27, 1999.	3.3.6.2 ACTIONS A, B, and C, 3.3.6.2 Surveillance Requirements Note 2, SR 3.3.6.2.2, SR 3.3.6.2.3	3/4.2.A
A.4	The CTS replaces the use of the term SECONDARY CONTAINMENT INTEGRITY with the elements of that term and clarifies the need to isolate SCIVs and start the associated SGT subsystem(s).	3.3.6.2 Required Actions C.1.1 and C.2.1	Table 3.2.A-1 Action 24
A.5	CTS Table 3.2.A-1 footnote (d) and CTS Table 4.2.A-1 footnote (b) state that the Drywell Pressure—High Function (Functional Unit 2.b) is not required to be OPERABLE when PRIMARY CONTAINMENT INTEGRITY is not required in MODE 2 (i.e., when Special Test Exception 3/4.12.A is being used). These notes are deleted from CTS Tables 3.2.A-1 and 4.2.A-1 since the only applicable condition in which these notes would be needed has been deleted.	N/A	Table 3.2.A-1 footnote (d), Table 4.2.A-1 footnote (b)
A.6	Replaces the term "Trip Setpoints" with "Allowable Values," since current plant practice uses the Trip Setpoints as the Operability limit (i.e., consistent with the use of the term "Allowable Values" in the ITS). Changes to instrument setpoint values are addressed in other DOCs.	Table 3.3.6.2-1	3.2.A, 3.2.A Action 1, Table 3.2.A-1
A.7	Modifies the reference point for the Reactor Vessel Water Level - Low Function from top of active fuel to instrument zero.	Table 3.3.6.2-1 Function 1	Table 3.2.A-1 Functional Unit 2.a
<b>3.3.6.3, Relief Valve Instrumentation</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.3.6.3	3/4.6.F

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.3 - INSTRUMENTATION

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.2	Adds a Note to provide direction for proper application of the Surveillance Requirements to ensure Technical Specification compliance, consistent with the intent of the CTS.	3.3.6.3 Surveillance Requirements Note	4.6.F
A.3	Replaces the term "Setpoints" with "Allowable Values," since current plant practice uses the Setpoints as the Operability limit (i.e., consistent with the use of the term "Allowable Values" in the ITS). Changes to instrument setpoint values are addressed in other DOCs.	Table 3.3.6.3-1 Functions 1.a and 2.a	3.6.F
A.4	Deletes the CTS 4.6.F.1.a CHANNEL FUNCTIONAL TEST requirement since it is redundant to the CTS 4.7.F.1.b LOGIC SYSTEM FUNCTIONAL TEST requirement performed at the same Frequency.	SR 3.3.6.3.2	4.6.F.1.a
3.3.7.1, CREV System Isolation Instrumentation			
A.1	Editorial changes, reformatting, and revised numbering.	3.3.7.1	3/4.2.A
A.2	Replaces the term "Trip Setpoints" with "Allowable Values," since current plant practice uses the Trip Setpoints as the Operability limit (i.e., consistent with the use of the term "Allowable Values" in the ITS). Changes to instrument setpoint values are addressed in other DOCs.	Table 3.3.7.1-1	3.2.A, 3.2.A Action 1, Table 3.2.A-1
A.3	Adds ITS ACTIONS Note "Separate Condition entry is allowed for each channel," which is consistent with the intent of the CTS.	3.3.7.1 ACTIONS Note	3.2.A Actions
A.4	These changes to CTS 3/4.2.A are provided in Quad Cities ITS consistent with the Technical Specifications Change Request submitted to the NRC for approval per ComEd letter dated December 27, 1999.	3.3.7.1 ACTIONS A, B, C, and D, 3.3.7.1 Surveillance Requirements Note 2, SR 3.3.7.1.2, SR 3.3.7.1.3	3/4.2.A

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.3 - INSTRUMENTATION

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.5	ITS 3.3.7.1 includes only the requirements for the Control Room Emergency Ventilation System isolation instrumentation. However, CTS Tables 3.2.A-1 and Functional Units 2.a, 2.b, 2.c, and 2.d also provide the secondary containment isolation actuation instrumentation requirements, and CTS Tables 3.2.A-1 and 4.2.A-1 Functional Unit 3.d provides Main Steam Line Isolation actuation instrumentation requirements. The requirements for the isolation requirements of the secondary containment and the main steam isolation valves are retained in ITS 3.3.6.2 and ITS 3.3.6.1, respectively.	3.3.6.1, 3.3.6.2	Tables 3.2.A-1 and 4.2.A-1 Functional Units 2.a, 2.b, 2.c, 2.d, and 3.d
A.6	CTS Table 3.2.A-1 footnote (d) and CTS Table 4.2.A-1 footnote (b) state that the Drywell Pressure—High Function (Functional Unit 2.b) is not required to be OPERABLE when PRIMARY CONTAINMENT INTEGRITY is not required in MODE 2 (i.e., when Special Test Exception 3/4.12.A is being used). These notes are deleted from CTS Tables 3.2.A-1 and 4.2.A-1 since the only applicable condition in which these notes would be needed has been deleted.	N/A	Table 3.2.A-1 footnote (d), Table 4.2.A-1 footnote (b)
A.7	Modifies the reference point for the Reactor Vessel Water Level - Low Function from top of active fuel to instrument zero.	Table 3.3.7.1-1 Function 1	Table 3.2.A-1 Functional Unit 2.a
3.3.7.2, Mechanical Vacuum Pump Trip Instrumentation			
A.1	Editorial changes, reformatting, and revised numbering.	3.3.7.2	3/4.2.L
A.2	These changes to CTS 3/4.2.L are provided in the Quad Cities ITS consistent with the Technical Specifications Change Request submitted to the NRC for approval per ComEd letter dated December 30, 1999.	3.3.7.2	3/4.2.L
A.3	Adds ITS ACTIONS Note "Separate Condition entry is allowed for each channel," which is consistent with the intent of the CTS.	3.3.7.2 ACTIONS Note	3.2.L Actions
A.4	Adds an action to restore the channel to Operable status, since this action is always an option.	3.3.7.2 Required Action A.1	N/A

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.3 - INSTRUMENTATION

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.5	Replaces the term "trip setpoint" with "Allowable Value," since current plant practice uses the Trip Setpoint as the Operability limit (i.e., consistent with the use of the term "Allowable Value" in the ITS). Changes to instrument setpoint values are addressed in other DOCs.	SR 3.3.7.2.4	4.2.L.3
A.6	These changes to CTS 3/4.2.L are provided in Quad Cities ITS consistent with the Technical Specifications Change Request submitted to the NRC for approval per ComEd letter dated December 27, 1999.	SR 3.3.7.2.2	3/4.2.L
A.7	Revises Trip Setpoint/Allowable Value units from normal background measured during full power operation without hydrogen being injected to mR/hr.	SR 3.3.7.2.4	4.2.L.3 including footnote (b)
3.3.8.1, Loss of Power Instrumentation			
A.1	Editorial changes, reformatting, and revised numbering.	3.3.8.1	3/4.2.B
A.2	A new LCO, ITS 3.3.8.1, has been written specifically for the Loss of Power (LOP) Instrumentation. The LOP Function from the current ECCS instrumentation Specification (CTS 3/4.2.B) is incorporated into this LCO. ITS 3.3.8.1 requires the instruments listed in ITS Table 3.3.8.1-1 to be OPERABLE, and the Table has the appropriate Functions from CTS Table 3.2.B-1 listed.	3.3.8.1	3/4.2.B
A.3	Replaces the term "Trip Setpoints" with "Allowable Values," since current plant practice uses the Trip Setpoints as the Operability limit (i.e., consistent with the use of the term "Allowable Values" in the ITS). Changes to instrument setpoint values are addressed in other DOCs.	Table 3.3.8.1-1	3.2.B, 3.2.B Action 1, Table 3.2.B-1
A.4	Adds ITS ACTIONS Note "Separate Condition entry is allowed for each channel," which is consistent with the intent of the CTS.	3.3.8.1 ACTIONS Note	3.2.B Actions
A.5	Deletes references to "take the ACTION required by..." in CTS Table 3.2.B-1 Action 36, since the format of the ITS does not include providing "cross references." The individual Specifications adequately prescribe the Required Actions for inoperable systems, subsystems, trains, components, and devices without such references.	N/A	Table 3.2.B-1 Action 36

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
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DOC #	SUMMARY	ITS SECTION	CTS SECTION
3.3.8.2, RPS Electric Power Monitoring			
A.1	Editorial changes, reformatting, and revised numbering.	3.3.8.2	3/4.9.G
A.2	The revised presentation of CTS 3.9.G Actions 1 and 2 does not explicitly detail options to "restore...to OPERABLE status," since this action is always an option, and is implied in all Actions.	LCO 3.0.2	3.9.G Actions 1 and 2
A.3	A new ACTION is provided that requires a shutdown if the Required Actions of Condition A or B are not met when the unit is in MODE 1 or 2. This action is functionally equivalent to the CTS 3.0.C, which is currently required if CTS 3.9.G Actions 1 and 2 are not met (although CTS 3.0.C does provide an additional 1 hour to commence the shutdown).	3.3.8.2 ACTION C	3.9.G Actions 1 and 2
A.4	Replaces the term "setpoints" with "Allowable Values," since current plant practice uses the setpoints as the Operability limit (i.e., consistent with the use of the term "Allowable Values" in the ITS). Changes to instrument setpoint values are addressed in other DOCs.	SR 3.3.8.2.2	4.9.G.2
Current Specification 3/4.2.H, Explosive Gas Monitoring			
NONE	NONE	NONE	NONE
Current Specification 3/4.2.I, Suppression Chamber and Drywell Spray Actuation			
NONE	NONE	NONE	NONE
Current Specification 3/4.2.K, Toxic Gas Monitoring			
NONE	NONE	NONE	NONE

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.4 - REACTOR COOLANT SYSTEM

DOC #	SUMMARY	ITS SECTION	CTS SECTION
3.4.1, Recirculation Loops Operating			
A.1	Editorial changes, reformatting, and revised numbering.	3.4.1	3/4.6.A, 3/4.6.C
A.2	CTS 3.6.A has been rewritten into two distinct options, with the first option requiring two recirculation loops and the second option only requiring one recirculation loop with the added requirements of CTS 3.6.A ACTIONS 1.b, 1.c and 1.d. Similarly, the Applicability of CTS 3.6.C has been changed from OPERATIONAL MODE(s) 1 and 2 during two loop operation to MODES 1 and 2 (ITS 3.4.1) since the first option in proposed ITS LCO 3.4.1 requires two recirculation loops with match flows to be in operation.	3.4.1, 3.4.1 ACTION C	3.6.A ACTIONS 1.b, 1.c, and 1.d, 3.6.C
A.3	The requirement to increase the MCPR safety limit per CTS 2.1.B when only one recirculation loop is in operation is removed because it is included in ITS Safety Limits. Since the Safety Limit requirement is currently specified as the single loop limit; thus, when the plant is in single loop, the limit applies immediately, and no action is required to be specified in ITS 3.4.1.	N/A	3.6.A Action 1.a
A.4	Deletes the requirement to reduce the Average Power Range Monitor (APRM) Rod Block Trip Setpoints since this function has been relocated to the Technical Requirements Manual. In addition, deletes reference to APRM Flow Biased Neutron Flux Scram and RBM Trip Setpoints since the trip setpoints are an operational detail.	N/A	3.6.A Action 1.c
A.5	Deletes the requirement to restore the recirculation pump speeds to within the limits if they are not within the limits. ITS does not explicitly detail options to "restore...to within the specified limit" when an alternate ACTION is provided that allows continued operation.	3.4.1 ACTION B	3.6.C Action 1
A.6	Deletes CTS 3.6.C Action 2, referencing CTS 3.6.A.1, since the statement only serves as a cross reference.	N/A	3.6.C Action 2
3.4.2, Jet Pumps			
A.1	Editorial changes, reformatting, and revised numbering.	3.4.2	3/4.6.B
DOC #	SUMMARY	ITS SECTION	CTS SECTION

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.4 - REACTOR COOLANT SYSTEM

A.2	Revises the wording in CTS 4.6.B.1 and CTS 4.6.B.2 (ITS SR 3.4.2.1) to require verification that one of the criteria be met, rather than require verification that no two of the conditions exist.	SR 3.4.2.1	4.6.B.1, 4.6.B.2
3.4.3, Safety and Relief Valves			
A.1	Editorial changes, reformatting, and revised numbering.	3.4.3	3/4.6.E, 3/4.6.F
A.2	Revises the organization of the Safety and Relief Valves requirements of CTS 3/4.6.E and CTS 3/4.6.F, respectively, to be included within one Specification in the ITS (ITS 3.4.3).	3.4.3	3/4.6.E, 3/4.6.F
A.3	(Unit 1) Deletes CTS 4.6.E.2 Note c providing a one time extension of the safety valve pressure testing surveillance interval from 18 months to 24 months for Cycle 16 only since the one time extension will have expired prior to ITS implementation and will no longer be applicable.	N/A	4.6.E.2 Note c
A.4	Adds SR 3.4.3.2 to ensure the relief valves open when manually actuated and SR 3.4.3.3 to ensure that the relief valves will actuate on an actual or simulated automatic initiation signal, which are consistent with current testing requirements in CTS 4.5.A.4.a and 4.5.A.4.b.	SR 3.4.3.2, SR 3.4.3.3	N/A
3.4.4, RCS Operational Leakage			
A.1	Editorial changes, reformatting, and revised numbering.	3.4.4	3/4.6.H
A.2	Editorially changes "any 24 hour period" to "the previous 24 hour period."	3.4.4.c, 3.4.4.d	3.6.H.2, 3.6.H.4, 3.6.H Action 3
A.3	Moves the CTS 4.6.H.1 requirement for sampling of primary containment particulate and the associated footnote (a) to ITS 3.4.5.	3.4.5	4.6.H.1
A.4	Adds an option to reduce the leakage to within the limit in lieu of identifying the source as not IGSCC susceptible material, since restoring compliance with the LCO is always an option.	3.4.4 Required Action B.1	N/A

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.4 - REACTOR COOLANT SYSTEM

DOC #	SUMMARY	ITS SECTION	CTS SECTION
3.4.5, RCS Leakage Detection Instrumentation			
A.1	Editorial changes, reformatting, and revised numbering.	3.4.5	3/4.6.G, 4.6.H.1
A.2	Moves CTS 4.6.H.1, which requires sampling the primary containment atmosphere particulate radioactivity at least once every 12 hours to proposed SR 3.4.5.1 requiring a continuous sample which is consistent with current plant practice for meeting CTS 4.6.H.1.	SR 3.4.5.1	4.6.H.1
A.3	Deletes the CTS 3.6.G Action 2 requirement to establish an alternate method of determining drywell floor drain sump flow rates within 8 hours since CTS 4.6.H.2 (proposed ITS SR 3.4.4.1) already requires the determination of drywell floor drain sump flow rate at this specified frequency and 3.6.H (proposed ITS 3.4.5) provides the appropriate ACTIONS for conditions when LEAKAGE cannot be determined. In addition, proposed SR 3.4.4.1 Bases address acceptable methods to determine LEAKAGE.	N/A	3.6.G Action 2
A.4	Adds an Action to explicitly identify that LCO 3.0.3 is required to be entered if all required RCS leakage detection systems are inoperable, which is consistent with the intent of the CTS.	3.4.5 ACTION D	3.6.G, 3.0.C
A.5	Deletes the requirement in CTS 4.6.G.1 to perform the leakage determinations of CTS 4.6.H since it duplicates the requirement of CTS 4.6.H.2 (ITS SR 3.4.4.1).	N/A	4.6.G.1
3.4.6, RCS Specific Activity			
A.1	Editorial changes, reformatting, and revised numbering.	3.4.6	3/4.6.J
3.4.7, RHR Shutdown Cooling System - Hot Shutdown			
A.1	Editorial changes, reformatting, and revised numbering.	3.4.7	3/4.6.O

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.4 - REACTOR COOLANT SYSTEM

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.2	Deletes the detail in CTS 3.6.O that an RHR shutdown cooling subsystem must be capable of circulating reactor coolant since it is duplicative to the requirements in CTS 3.6.O footnote (a) and the definition of OPERABLE-OPERABILITY. In addition, the contents of CTS 3.6.O footnote (a) and 4.6.O are incorporated into a Surveillance Requirement.	SR 3.4.7.1	3.6.O, 3.6.O footnote (a), 4.6.O
A.3	Deletes allowance to remove the RHR shutdown cooling loop from operation during hydrostatic tests since these tests are not performed in MODE 3.	N/A	3.6.O footnote (b)
A.4	Adds ITS Note "Separate Condition entry is allowed for each RHR shutdown cooling subsystem," which is consistent with the intent of the CTS.	3.4.7 ACTIONS Note 2	3.6.O Actions
A.5	Deletes the requirement to demonstrate every 24 hours the OPERABILITY of at least one alternate method capable of decay heat removal for each inoperable RHR shutdown cooling loop. It is unnecessary since the Specification requires that reactor be in MODE 4 within 24 hours (which exits this Specification), and CTS 3.6.P and the ITS 3.4.8 both require the periodic verification of the availability of an alternate decay heat removal method.	N/A	3.6.O Action 1
A.6	Deletes the requirement which allows the unit to maintain reactor coolant temperature as low as practical in lieu of attaining MODE 4, when two SDC subsystems are inoperable and the unit is unable to attain MODE 4.	N/A	3.6.O Action 1 footnote (c)
3.4.8, RHR Shutdown Cooling System - Cold Shutdown			
A.1	Editorial changes, reformatting, and revised numbering.	3.4.8	3/4.6.P
A.2	Deletes the detail in CTS 3.6.P that an RHR shutdown cooling subsystem must be capable of circulating reactor coolant since it is duplicative to the requirements in CTS 3.6.P footnote (a) and the definition of OPERABLE-OPERABILITY. In addition, the contents of CTS 3.6.P footnote (a) and 4.6.P are incorporated into a Surveillance Requirement.	SR 3.4.8.1	3.6.P, 3.6.P footnote (a), 4.6.P
A.3	Not used.	N/A	N/A

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.4 - REACTOR COOLANT SYSTEM

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.4	Adds ITS Note "Separate Condition entry is allowed for each RHR shutdown cooling subsystem" which is consistent with the intent of the CTS.	3.4.8 ACTIONS Note	3.6.P Actions
3.4.9, RCS Pressure and Temperature (P/T) Limits			
A.1	Editorial changes, reformatting, and revised numbering.	3.4.9	3/4.6.D, 3/4.6.K
A.2	Clarifies Actions to "perform an engineering evaluation..." and "determine if the Reactor Coolant System is acceptable for continued operation" with Notes that state the determination that the acceptability of the RCS for continued operation must be completed any time the requirements of the LCO are not met.	3.4.9 Conditions A and C Notes	3.6.K Action 2, 3.6.D Action
A.3	Changes the CTS Action to "restore...within 30 minutes" to "initiate action to restore ...Immediately" for conditions other than MODES 1, 2, and 3, which is consistent with the intent of the CTS.	3.4.9 Required Action C.1	3.6.K Action 1, 3.6.D Action
A.4	Deletes the reactor vessel material specimen Surveillance since it is a duplication of the regulations found in 10 CFR 50 Appendix H.	N/A	4.6.K.3
A.5	Adds Notes to clarify the current intent in CTS 4.6.K.4.a (periodic verification that reactor vessel flange and head flange temperatures are within limits) of allowing entry into the applicable conditions (i.e., $\leq 113^{\circ}\text{F}$ and $\leq 93^{\circ}\text{F}$ ) without having performed these SRs.	SR 3.4.9.6, SR 3.4.9.7	N/A
A.6	Deletes the requirement to verify the reactor vessel and head flange temperatures within 30 minutes prior to tensioning of the head bolting studs, since it is duplicative of ITS SR 3.0.1.	N/A	4.6.K.4.b
A.7	The idle recirculation loop startup requirements have been combined into the RCS Pressure and Temperature Limits Specification, with the words "and the recirculation pump starting temperature requirements" added to the ITS 3.4.9 LCO statement. The actual description of the requirements and the limits are found in the Surveillance Requirements.	3.4.9 LCO	3.6.D

**TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.4 - REACTOR COOLANT SYSTEM**

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.8	Deletes the requirement to monitor the temperature difference between an idle loop and an operating loop, since they are redundant to the loop-to-coolant requirement of CTS 3.6.D.1 (ITS SR 3.4.9.4).	N/A	3.6.D.2
A.9	Deletes the CTS 3.6.K Action 1 detail that the applicable primary system coolant temperature rate of change limit cannot be exceeded while restoring the reactor vessel metal temperature and/or pressure to within the limits. CTS LCO 3.0.A (ITS LCO 3.0.1) requires compliance with the Limiting Conditions for Operation during the Operational Modes or other specified conditions.	N/A	3.6.K Action 1
<b>3.4.10, Reactor Steam Dome Pressure</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.4.10	3/4.6.L
<b>Current Specification 3/4.6.N, Structural Integrity</b>			
NONE	NONE	NONE	NONE

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.5 - ECCS AND RCIC SYSTEM

DOC #	SUMMARY	ITS SECTION	CTS SECTION
3.5.1, ECCS-Operating			
A.1	Editorial changes, reformatting, and revised renumbering.	3.5.1	3/4.5.A
A.2	Deletes footnote (f), which provides a cross reference to CTS 3.9.A, since ITS 3.8.1 Required Action B.2 adequately prescribes the necessary actions when redundant required feature(s) are inoperable.	N/A	3.5.A Actions 2.a and 2.b footnote (f)
A.3	Revises CTS 4.5.A.2.c and 4.5.A.3.b.1) footnote (c) to allow the HPCI flow tests to be performed within 12 hours after adequate reactor steam pressure is available. In addition, CTS 4.5.A.4.b footnote (c) allows the ADS valve actuation test to be deferred until 12 hours after adequate reactor steam pressure is available. Adequate pressure to perform the tests also implies adequate flow must be available to perform the tests.	Note to SR 3.5.1.6, SR 3.5.1.7, and SR 3.5.1.10	4.5.A.2.c, 4.5.A.3.b.1) footnote (c), 4.5.A.4.b footnote (c)
A.4	Deletes CTS 3.5.A Actions 2.b and 2.c, footnote (d), which the unit is to maintain reactor coolant temperature as low as practical, in lieu of attaining MODE 4, when two or more RHR subsystems are inoperable and the unit is unable to attain MODE 4, since it provides unnecessary duplication of the ACTIONS required by ITS 3.4.7 and 3.4.8.	N/A	3.5.A Actions 2.b and 2.c footnote (d)
A.5	Deletes the statements in CTS 3.5.A Actions 1, 2, 3 and 4 that require other ECCS equipment to be OPERABLE ("provided that.."). ITS 3.5.1 ACTION J provides direction for various interrelationships between ECCS subsystems and ADS. The ACTION requires entry into LCO 3.0.3 for various combinations of inoperable components, which is consistent with the present Actions for the same combinations.	3.5.1 ACTION J	3.5.A Actions 1, 2, 3 and 4
3.5.2, ECCS-Shutdown			
A.1	Editorial changes, reformatting, and revised renumbering.	3.5.2	3/4.5.B, 3/4.5.C
A.2	Rewords SRs such that the applicable SRs for low pressure ECCS and for HPCI are presented in the SRs for this Specification, versus referring to the SRs in ITS 3.5.1.	SR 3.5.2.2, SR 3.5.2.3, SR 3.5.2.4	4.5.B

**TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.5 - ECCS AND RCIC SYSTEM**

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.3	Enhances presentation by requiring actions to be immediately initiated to restore secondary containment boundary (completing the actions as soon as possible) in lieu of current requirement to establish within 4 hours (initiating the actions as soon as possible).	3.5.2 Action D	3.5.B Action 2, 3.5.C Action 2
A.4	Replaces the use of the defined term SECONDARY CONTAINMENT INTEGRITY with the essential elements of that definition.	3.5.2 ACTION D	3.5.B Action 2, 3.5.C Action 2
A.5	Removes statement that the ECCS is not required to be OPERABLE provided "that the reactor vessel head is removed, the cavity is flooded," since the other requirements of the note can only be accomplished if the vessel head is removed and the cavity flooded.	N/A	3.5.B footnote (b), 3.5.C footnote (a)
A.6	Moves CTS 3.5.C.1 and associated Applicability, Action 1, and CTS 4.5.C.1 to ITS 3.6.2.2.	3.6.2.2	3.5.C.1, 3.5.C Action 1, 4.5.C.1
A.7	As an enhanced presentation of current intent, deletes CTS 4.5.C.2.b, which requires periodic verification that the specified conditions of Applicability footnote (a) are met when the suppression pool is inoperable.	N/A	4.5.C.2.b
3.5.3, RCIC System			
A.1	Editorial changes, reformatting, and revised renumbering.	3.5.3	3/4.5.D
A.2	Allows deferral of the RCIC flow tests until 12 hours after adequate steam pressure and flow are available. Footnote currently allows deferral until adequate steam pressure is available. Adequate pressure to perform the tests also implies adequate flow must be available to perform the tests.	SR 3.5.3.3, SR 3.5.3.4	4.5.D.2 footnote (a), 4.5.D.3.b footnote (a)

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.6 - CONTAINMENT SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
3.6.1.1, Primary Containment			
A.1	Editorial changes, reformatting, and revised numbering.	3.6.1.1	3/4.7.A, 3.7.K.3, 4.7.K.5
A.2	Replaces the definition of PRIMARY CONTAINMENT INTEGRITY and the references to it in CTS 3/4.7.A with the requirement for primary containment to be OPERABLE, since all the requirements are specifically addressed in ITS 3.6.1.1 for the primary containment along with the remainder of the LCOs in the Primary Containment Section.	3.6.1.1, 3.6.1.2, 3.6.1.3, 3.6.2.1, 3.6.2.2	3/4.7.A
A.3	Deletes the cross reference to CTS 3.12.A, since the format of the ITS does not include providing "cross references."	N/A	3.7.A Applicability footnote (a)
A.4	CTS 4.7.A.2 (including footnote (b)), relating to the position verification of PCIVs, has been moved to ITS 3.6.1.3.	3.6.1.3	4.7.A.2 including footnote (b)
A.5	Deletes Surveillance Requirements 4.7.A.3 and 4.7.A.4, which cross reference to the requirements for the air lock and the suppression chamber. Requirements for the air lock and suppression chamber remain within the ITS; however, providing a cross reference to them only adds confusion when evaluating compliance with Primary Containment OPERABILITY.	N/A	4.7.A.3, 4.7.A.4
A.6	The drywell-to-suppression chamber bypass leakage requirement of CTS 3.7.k.3 is presented as a supporting Surveillance for Primary Containment OPERABILITY.	SR 3.6.1.1.2	3.7.K.3
3.6.1.2, Primary Containment Air Lock			
A.1	Editorial changes, reformatting, and revised numbering.	3.6.1.2	3/4.7.C
A.2	Deletes the cross reference to CTS 3.12.A, since the format of the ITS does not include providing "cross references."	N/A	3.7.C Applicability footnote (a)

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.6 - CONTAINMENT SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.3	A Note is proposed to be added to the ITS to facilitate use and understanding of the intent of the ITS and are consistent with the intent of the CTS. ITS 3.6.1.2 ACTIONS Note 2 requires considering the primary containment inoperable in the event air lock leakage results in the acceptance criteria being not met. In addition, ITS 3.6.1.2 Required Action C.1 will ensure that the primary containment overall leakage is evaluated, against the acceptance criteria, if an air lock is inoperable.	3.6.1.2 ACTIONS Note 2, 3.6.1.2 Required Action C.1	3.7.C Actions
A.4	Adds ITS Required Action Note "Required Actions...are not applicable if...Condition C is entered", recognizing that if both doors in the air lock are inoperable, then an "OPERABLE" door does not exist to be closed (ITS 3.6.1.2 Required Actions A.1, A.2, A.3, B.1, B.2, and B.3 cannot be met).	3.6.1.2 Required Actions A and B Note 1	3.7.C Actions
A.5	The revised presentation of CTS 3.7.C Actions 1.a and 2 do not explicitly detail options to "restore...to OPERABLE status," since this action is always an option, and is implied in all Actions.	LCO 3.0.2	3.7.C Actions 1.a and 2
A.6	The requirement for performing the overall air lock leakage test is a requirement of 10 CFR 50 Appendix J, and this requirement is embodied in ITS SR 3.6.1.2.1. It is possible that the test would not be able to be performed with an inoperable air lock door, and a plant shutdown would be required due to the inability to perform the required Surveillance. However, this restriction on continued operation need not be specified (i.e., CTS 3.7.C Action 1.b is deleted) since it exists inherently as a result of the required Appendix J testing.	SR 3.6.1.2.1	3.7.C Action 1.b
3.6.1.3, Primary Containment Isolation Valves			
A.1	Editorial changes, reformatting, and revised numbering.	3.6.1.3	3/4.7.A, 3/4.7.D, 3/4.6.M, 4.7.A.2 including footnote (b)

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.6 - CONTAINMENT SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.2	Includes requirements for MSIVs in ITS 3.6.1.3, however, does not include requirements for the reactor building - suppression chamber vacuum breakers; they are retained in ITS 3.6.1.7. Therefore, the ITS LCO 3.6.1.3 statement excludes the OPERABILITY of the reactor building - suppression chamber vacuum breakers. In addition, since all requirements of MSIVs are included in ITS 3.6.1.3, the cross reference in CTS 3.7.D Action 1 footnote (b) to MSIVs is excluded.	LCO 3.6.1.3	3.7.D Action 1 footnote (b)
A.3	Adds ITS ACTIONS Note "Separate Condition entry is allowed for each penetration flow path," which is consistent with the intent of the CTS.	3.6.1.3 ACTIONS Note 2	3/4.7.A, 3.7.D Actions, 3.6.M Actions
A.4	Adds ITS ACTIONS Notes to facilitate the use and understanding of the intent for a system made inoperable by inoperable PCIVs; i.e., that the applicable ACTIONS for that system also apply. This requirement is currently located in CTS 3.7.D Action 2.b, but it does not cover all situations. Therefore, ITS 3.6.1.3 ACTIONS Note 3 has been added to cover all situations. ITS 3.6.1.3 ACTIONS Note 4 clarifies that these "systems" include the primary containment.	3.6.1.3 ACTIONS Notes 3 and 4	3.7.D Action 2.b
A.5	CTS 3.7.D Action 1 and the CTS 3.6.M Action do not specify penetrations with one or two isolation valves. However, ITS 3.6.1.3 Condition A applies if the affected penetration has two valves, and only one is inoperable. This inherently ensures maintaining "at least one isolation valve OPERABLE." In the case of containment penetrations designed with only one isolation valve, the system boundary is considered an adequate barrier and the penetration is not considered "open" when the single isolation valve is open.	3.6.1.3 Condition A Condition C	3/4.7.A, 3.7.D Action 1, 3.6.M Action
A.6	The revised presentation of CTS 3.7.D Actions 1.a and 2.a and the CTS 3.6.M Action does not explicitly detail options to "restore...to OPERABLE status," since this action is always an option, and is implied in all Actions.	LCO 3.0.2	3.7.D Actions 1.a and 2.a, 3.6.M Action
A.7	Deletes the phrase "power-operated" from the first part of 4.7.D.2, since the last part of 4.7.D.2 only requires each automatic isolation valve to be verified that it actuates to its isolation position. In addition, deletes the 4.7.D.2 testing requirement exclusion for the traversing in-core probe system explosive isolation valves, since they are not closed on an automatic signal.	N/A	4.7.D.2

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.6 - CONTAINMENT SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.8	Deletes the LCO 3.0.C statement in CTS 3.7.D Action 2 since it is redundant to the "Otherwise..." action. That is, LCO 3.0.C is not applicable anyway since a shutdown action has been provided.	N/A	3.7.D Action 2
A.9	Incorporate the requirements, provisions, actions, and associated restoration times for MSIVs into ITS 3.6.1.3, the primary containment isolation valve Specification.	3.6.1.3	3/4.6.M
3.6.1.4, Drywell Pressure			
A.1	Editorial changes, reformatting, and revised numbering.	3.6.1.4	3/4.7.G
A.2	The requirement in CTS 3.7.G footnote (a), concerning the minimum drywell internal pressure ( $\geq 1.0$ psig) has been deleted, since the requirement in CTS 3.7.H (ITS 3.6.2.5) to maintain differential pressure between the drywell and the suppression chamber $\geq 1.0$ psid is sufficient to minimize the hydrodynamic loads on the torus during the blowdown. Also, CTS 3.7.G Action 1, which provides the actions when the pressure limit required by the footnote is not met, has been deleted.	N/A	LCO 3.7.G footnote (a), 3.7.G Action 1
3.6.1.5, Drywell Air Temperature			
NONE	NONE	NONE	NONE
3.6.1.6, Low Set Relief Valves			
A.1	Editorial changes, reformatting, and revised numbering.	3.6.1.6	3/4.6.F
A.2	CTS 3.6.F includes the OPERABILITY requirements for the relief valves, including the low set relief valve group. In ITS LCO 3.6.1.6, only the two low set relief valves are required to be OPERABLE; the relief valves are covered by ITS 3.4.3.	3.6.1.6	3/4.6.F

**TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.6 - CONTAINMENT SYSTEMS**

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.3	Adds two Surveillance Requirements. ITS SR 3.6.1.6.1 ensures the low set relief valves open when manually actuated, which ensures that the valves and solenoids are functioning properly and that no blockage exists in the lines. ITS SR 3.6.1.6.2 ensures that the low set relief valves will actuate automatically on receipt of specific initiation signals by performance of a system functional test. These new Surveillance Requirements are consistent with current testing requirements in CTS 4.5.A.4.a and b (for ADS) except as modified in the DOCs for ITS 3.5.1, "ECCS — Operating."	SR 3.6.1.6.1, SR 3.6.1.6.2	4.5.A.4.a, 4.5.A.4.b
<b>3.6.1.7, Reactor Building-to-Suppression Chamber Vacuum Breakers</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.6.1.7	3/4.7.F
A.2	Not used.	N/A	N/A
A.3	Note 2 to SR 3.6.1.7.1 has been added to clearly state that the vacuum breakers do not have to be closed when they are performing their intended function, which is to open to relieve vacuum.	SR 3.6.1.7.1 Note 2	4.7.F.1
<b>3.6.1.8, Suppression Chamber-to-Drywell Vacuum Breakers</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.6.1.8	3/4.7.E
A.2	Note 2 to SR 3.6.1.8.1 has been added to clearly state that the vacuum breakers do not have to be closed when they are performing their intended function, which is to open to relieve vacuum.	SR 3.6.1.8.1 Note 2	4.7.E.1
<b>3.6.2.1, Suppression Pool Average Temperature</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.6.2.1	3/4.7.K

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.6 - CONTAINMENT SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.2	CTS 3.7.K.2 appears to require the 95°F and 105°F limits to apply at all times in Operational Mode 1 or 2. However, these limits actually only apply when THERMAL POWER is > 1% RTP. This is shown by CTS 3.7.K.2.b, which states that 110°F is the limit when ≤ 1% RTP. Therefore, the ITS LCO for this limit has been clarified to be at > 1% RTP. Once THERMAL POWER is ≤ 1% RTP, the LCO is met if suppression pool temperature is ≤ 110°F, thus, a shutdown to MODE 3 and MODE 4 is not required, as stated in CTS 3.0.B.	LCO 3.6.2.1.a, LCO 3.6.2.1.b	3.7.K.2, 3.7.K.2.b
A.3	Moves the requirements in CTS 3.7.K.3 and 4.7.K.5, relating to the drywell-to-suppression chamber bypass leakage limit, to ITS 3.6.1.1.	3.6.1.1	3.7.K.3, 4.7.K.5
<b>3.6.2.2, Suppression Pool Water Level</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.6.2.2	3/4.7.K, 3/4.5.C
A.2	Not used.	N/A	N/A
A.3	Moves the requirements in CTS 3.5.C.2, 3.5.C Action 2, and 4.5.C.2, and footnote (a), relating to the suppression pool level requirements while in MODES 4 and 5, to ITS 3.5.2.	3.5.2	LCO 3.5.C.2, 3.5.C Action 2, 4.5.C.2, and footnote (a)
<b>3.6.2.3, RHR Suppression Pool Cooling</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.6.2.3	3/4.7.M
A.2	Not used.		

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.6 - CONTAINMENT SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.3	The CTS requires verification that each suppression pool cooling valve in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position. The CTS recognizes that the suppression pool cooling function is manually actuated and is interpreted that "in the correct position" allows the valves to be in a non-accident position provided they can be realigned to the correct position. In the ITS, the words "in the correct position" mean that the valves must be in the accident position, unless they can be automatically aligned on an accident signal. Thus, for RHR suppression pool cooling, the additional words "or can be aligned to the correct position" have been added to clarify that it is permissible for this systems' valves to be in the non-accident position and still be considered OPERABLE. In addition, since there are no automatic valves for the suppression pool cooling mode, the reference to check automatic valves has been deleted.	SR 3.6.2.3.1	4.7.M.1
3.6.2.4, RHR Suppression Pool Spray			
A.1	Editorial changes, reformatting, and revised numbering.	3.6.2.4	3/4.7.L
A.2	Not used.		
A.3	The CTS requires verification that each suppression pool spray valve in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position. The CTS recognizes that the suppression pool spray function is manually actuated and is interpreted that "in the correct position" allows the valves to be in a non-accident position provided they can be realigned to the correct position. In the ITS, the words "in the correct position" mean that the valves must be in the accident position, unless they can be automatically aligned on an accident signal. Thus, for RHR suppression pool spray, the additional words "or can be aligned to the correct position" have been added to clarify that it is permissible for this systems' valves to be in the non-accident position and still be considered OPERABLE. In addition, since there are no automatic valves for the suppression pool spray mode, the reference to check automatic valves has been deleted.	SR 3.6.2.4.1	4.7.L.1

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.6 - CONTAINMENT SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
3.6.2.5, Drywell-to-Suppression Chamber Differential Pressure			
A.1	Editorial changes, reformatting, and revised numbering.	3.6.2.5	3/4.7.H
A.2	Revises the presentation of the ACTIONS to be consistent with the Applicability. The ITS only requires shutdown to 15% RTP. Below 15% RTP, the Applicability is exited and the ACTIONS are no longer required.	3.6.2.5 ACTION B	3.7.H Action 1
3.6.3.1, Primary Containment Oxygen Concentration			
A.1	Editorial changes, reformatting, and revised numbering.	3.6.3.1	3/4.7.J
A.2	Revises the presentation of the ACTIONS to be consistent with the Applicability. The ITS only requires shutdown to 15% RTP. Below 15% RTP, the Applicability is exited and the ACTIONS are no longer required.	3.6.3.1 ACTION B	3.7.J Action
A.3	Deletes CTS 4.7.J, which requires oxygen concentration in primary containment to be verified within limit prior to entering the Applicability of CTS 3.7.J (within 24 hours after THERMAL POWER is greater than 15% of RTP). This requirement does not need to be repeated as a separate Surveillance Frequency.	SR 3.0.4	4.7.J
3.6.4.1, Secondary Containment			
A.1	Editorial changes, reformatting, and revised numbering.	3.6.4.1	3/4.7.N
A.2	Replaces the definition of SECONDARY CONTAINMENT INTEGRITY and the references to it in CTS 3/4.7.N with the requirement for secondary containment to be OPERABLE, since all the requirements are specifically addressed in the ITS and associated Bases for the Secondary Containment (3.6.4.1), the Secondary Containment Isolation Valves (3.6.4.2), and Standby Gas Treatment System (3.6.4.3).	3.6.4.1, 3.6.4.2, 3.6.4.3	3/4.7.N

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.6 - CONTAINMENT SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.3	Modifies the requirement to verify that one door in each access is closed to require one door in each access opening to be closed. The Quad Cities 1 and 2 design includes more than two doors on some of the accesses, and the current Quad Cities 1 and 2 interpretation of this requirement is that for these accesses, there are multiple access openings, and that each access opening must have at least one door closed.	SR 3.6.4.1.2	4.7.N.2.a
A.4	Moves the requirements in CTS 4.7.N.2.b, relating to the position of secondary containment isolation valves, to ITS 3.6.4.2.	3.6.4.2	4.7.N.2.b
<b>3.6.4.2, Secondary Containment Isolation Valves</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.6.4.2	3/4.7.N, 3/4.7.O, 4.7.N.2.b
A.2	The name and descriptive references to the secondary containment isolation dampers contained in CTS 3.7.O, 4.7.N, and 4.7.O have been generically changed to Secondary Containment Isolation Valves (SCIVs).	3.6.4.2	3/4.7.O, 4.7.N
A.3	Adds ITS ACTIONS Note "Separate Condition entry is allowed for each penetration flow path." Additionally, adds ITS ACTIONS Note that facilitates the use and understanding of the intent to consider the affect of inoperable isolation valves on other systems. For a system made inoperable by inoperable SCIVs the applicable ACTIONS for that system also apply. This is consistent with the intent of the CTS.	3.6.4.2 ACTIONS Notes 2 and 3	3.7.O Action
A.4	The CTS 3.7.O Action does not specify penetrations with one or two isolation valves. However, ITS 3.6.4.2 Condition A only applies if one valve in a penetration is inoperable. This inherently ensures maintaining "at least one isolation valve OPERABLE."	3.6.4.2 Condition A	3.7.O Action
A.5	The revised presentation of the CTS 3.7.O Action does not explicitly detail options to "restore...to OPERABLE status," since this action is always an option, and is implied in all Actions.	LCO 3.0.2	3.7.O Action

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.6 - CONTAINMENT SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
3.6.4.3, Standby Gas Treatment System			
A.1	Editorial changes, reformatting, and revised numbering.	3.6.4.3	3/4.7.P
A.2	Moves the filter testing requirements of CTS 4.7.P.2, 4.7.P.3, 4.7.P.4.a, 4.7.P.4.c, 4.7.P.5 and 4.7.P.6, to ITS 5.5.7. A Surveillance Requirement is added (proposed SR 3.6.4.3.2) to clarify that the tests of the Ventilation Filter Testing Program must also be completed and passed for determining OPERABILITY of the SGT System, which is consistent with the intent of the CTS.	SR 3.6.4.3.2, 5.5.7	4.7.P.2, 4.7.P.3, 4.7.P.4.a, 4.7.P.4.c, 4.7.P.5, 4.7.P.6
A.3	Divides CTS 4.7.P.4.b, which verifies each SGT subsystem starts on the appropriate automatic initiation signals, into two Surveillances. The majority of the instrumentation testing will be performed in SR 3.3.6.2.3, SR 3.3.6.2.4, and SR 3.3.6.2.5, and the actual system functional test portion, which will ensure the SGT System starts on an initiation signal, will be performed as SR 3.6.4.3.3.	SR 3.3.6.2.3, SR 3.3.6.2.4, SR 3.3.6.2.5, SR 3.6.4.3.3	4.7.P.4.b

**TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.7 - PLANT SYSTEMS**

DOC #	SUMMARY	ITS SECTION	CTS SECTION
<b>3.7.1, Residual Heat Removal Service Water System</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.7.1	3/4.8.A
A.2	Adds "or can be aligned to the correct position" in SR 3.7.1.1 to clarify that it is permissible for the RHRSW Systems' valves to be in the non-accident position and still be considered OPERABLE.	SR 3.7.1.1	4.8.A
A.3	Deletes the redundant requirement which allows the unit to maintain reactor coolant temperature as low as practical in lieu of attaining MODE 4, when two or more RHR subsystems are inoperable and the unit is unable to attain MODE 4.	3.7.1 Actions B, D and E	3.8.A Action 1.d footnote (a)
<b>3.7.2, Diesel Generator Cooling Water System</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.7.2	3/4.8.B
A.2	Adds ITS Note, "Separate Condition entry is allowed for each DGCW subsystem," which is consistent with the intent of the CTS.	3.7.2 ACTIONS Note	3.8.B Actions
A.3	Deletes CTS 3.8.B Action statement referencing CTS 3.9.A or 3.9.B, since the statement only serves as a cross reference.	N/A	3.8.B Action
A.4	The CTS requires a verification that each valve in the flow path that is not locked, sealed, or otherwise secured in position, is in its correct position. Since all the valves in the flow path are manual valves the word "manual" has been added.	SR 3.7.2.1	4.8.B.1
<b>3.7.3, Ultimate Heat Sink</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.7.3	3/4.8.C

**TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.7 - PLANT SYSTEMS**

DOC #	SUMMARY	ITS SECTION	CTS SECTION
<b>3.7.4, Control Room Emergency Ventilation System</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.7.4	3/4.8.D
A.2	Moves the filter testing requirements of CTS 4.8.D.3, 4.8.D.4, 4.8.D.5.a, 4.8.D.5.d, 4.8.D.6, and 4.8.D.7, to ITS 5.5.7. Adds a Surveillance Requirement (proposed SR 3.7.4.2) to clarify that the tests of the Ventilation Filter Testing Program must also be completed and passed for determining OPERABILITY of the CREV System, which is consistent with the intent of the CTS.	SR 3.7.4.2, 5.5.7	4.8.D.3, 4.8.D.4, 4.8.D.5.a, 4.8.D.5.d, 4.8.D.6, and 4.8.D.7
<b>3.7.5, Control Room Emergency Ventilation Air Conditioning System</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.7.5	3/4.8.D
A.2	In the ITS, the Control Room Emergency Ventilation and Control Room Emergency Ventilation Air Conditioning Specification has been split into separate Technical Specifications; ITS 3.7.4 for the Control Room Emergency Ventilation (CREV) System and ITS 3.7.5 for the Control Room Emergency Ventilation AC System. Therefore, in ITS 3.7.5, the LCO, Actions, and Surveillance Requirements all refer to the Control Room Emergency Ventilation AC System.	3.7.5	3/4.8.D
<b>3.7.6, Main Condenser Offgas</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.7.6	3/4.8.I
A.2	Converts the units from $\mu\text{Ci}/\text{sec}/\text{MWt}$ to $\mu\text{Ci}/\text{sec}$ , by multiplying CTS limit by the Rated Thermal Power licensing basis.	LCO 3.7.6	3.8.I

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.7 - PLANT SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.3	Clarifies the Applicability by adding the condition of when any main steam line is not isolated, since a main condenser air ejector cannot be placed in service without main steam pressure (i.e., any main steam line not isolated). The ITS Applicability is also consistent with the CTS 3.8.I Action to be in at least STARTUP with the main steam isolation valves closed. In addition, a Required Action is added that requires the isolation of the air ejector within 12 hours to be consistent with the CTS Applicability.	3.7.6 Applicability, 3.7.6 Required Action B.2	3.8.I Applicability footnote (a)
3.7.7, Main Turbine Bypass System			
NONE	NONE	NONE	NONE
3.7.8, Spent Fuel Storage Pool Water Level			
A.1	Editorial changes, reformatting, and revised numbering.	3.7.8	3/4.10.H
A.2	Clarifies that the Applicability is limited to circumstances when irradiated fuel assemblies are being moved in the spent fuel storage pool or when new fuel is being moved in the spent fuel storage pool with irradiated fuel assemblies in the spent fuel storage pool. This is acceptable since the purpose of the LCO is to ensure sufficient water is above the irradiated fuel assemblies to meet the assumptions of a fuel handling accident.	LCO 3.7.8	LCO 3.10.H
3.7.9, Safe Shutdown Makeup Pump System			
A.1	Editorial changes, reformatting, and revised numbering.	3.7.9	3/4.8.J
A.2	Modifies the CTS requirement to be in COLD SHUTDOWN to only require a reduction in reactor steam dome pressure to $\leq 150$ psig in the ITS, since this ITS Required Action places the unit outside the Applicability of the Specification.	3.7.9 Required Action B.2	3.8.J Action 1

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.7 - PLANT SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
Current Specification 3/4.8.E, Flood Protection			
NONE	NONE	NONE	NONE
Current Specification 3/4.8.F, Snubbers			
NONE	NONE	NONE	NONE
Current Specification 3/4.8.G, Sealed Source Contamination			
NONE	NONE	NONE	NONE

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.8 - ELECTRIC POWER SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
3.8.1, AC Sources - Operating			
A.1	Editorial changes, reformatting, and revised numbering.	3.8.1	3/4.9.A
A.2	Moves the details in CTS LCO 3.9.A.2.a relating to the required fuel oil day tank level and in CTS 3.9.A.2.b relating to the bulk fuel oil storage tank level to ITS SR 3.8.1.4.	SR 3.8.1.4	LCO 3.9.A.2.a, LCO 3.9.A.2.b
A.3	Clarifies that a modified DG start involving idling and gradual acceleration to synchronous speed as recommended by the manufacturer may be used, but when modified start procedures are not used, the time, voltage, and frequency tolerance of SR 3.8.1.8 must be met.	SR 3.8.1.2 Note 2	4.9.A.2.c
A.4	CTS 4.9.A.2.c, 4.9.A.2.d, 4.9.A.7, 4.9.A.8.b, 4.9.A.8.c, and 4.9.A.8.h specify requirements for testing of a DG (1/2 diesel generator) that is common to both units. Therefore, a Note is added to the applicable ITS SRs to clearly state the current plant interpretation, i.e., a single test of the common DG at the specified Frequency will satisfy the Surveillance for both units.	SR 3.8.1.2 Note 3, SR 3.8.1.3 Note 5, SR 3.8.1.8 Note 2, SR 3.8.1.10 Note, SR 3.8.1.11 Note 1, SR 3.8.1.15 Note 3, SR 3.8.1.16 Note 3	4.9.A.2.c, 4.9.A.2.d, 4.9.A.7, 4.9.A.8.b, 4.9.A.8.c, 4.9.A.8.h
A.5	Deletes CTS 4.9.A.2.c and 4.9.A.7 footnote (c), which states that CTS 4.9.A.7 (the DG start with a 10 second time requirement) may be substituted for CTS 4.9.A.2.c (the slow start), since it is not necessary.	N/A	4.9.A.2.c and 4.9.A.7 footnote (c)
A.6	Moves the technical content of the fuel oil storage and starting air requirements in CTS 3.9.A Action 7, 4.9.A.2.f, 4.9.A.5, 4.9.A.6, and 4.9.A.10 to ITS 3.8.3.	3.8.3	3.9.A Action 7, 4.9.A.2.f, 4.9.A.5, 4.9.A.6, 4.9.A.10

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.8 - ELECTRIC POWER SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.7	In the event AC Sources are inoperable such that a distribution subsystem were inoperable, ITS LCO 3.0.6 would allow taking only the AC Sources ACTIONS; taking exception to complying with the AC Distribution System ACTIONS. Since the AC Sources ACTIONS may not be sufficiently conservative in this event (an entire division may be without power), specific direction to take appropriate ACTIONS for the Distribution System is added when there is no power for a division.	3.8.1 ACTION D Note	3.9.A Actions
A.8	Deletes CTS 3.9.A Actions 3.b and 6.b footnote (e) detail that a successful test of OPERABILITY per CTS 4.9.A.2.c under this ACTION statement satisfies the diesel generator test requirements of ACTION(s) 1 (one offsite circuit inoperable) or 2 (one DG inoperable), since it is unnecessary. In addition, the reference to Action 1 is incorrect since there are no diesel generator testing requirements with an offsite circuit inoperable.	N/A	3.9.A Actions 3.a and 6.b, footnote (e)
A.9	CTS 4.9.A.7 and 4.9.A.9, footnote (a) and CTS 4.9.A.8.c and 4.9.A.8.h, footnote (d), which allow DG engine pre-lubrication when starting diesel generators, references CTS Surveillance Requirements that define requirements for operating DGs. Therefore, the footnotes have been deleted from these Surveillance Requirements.	N/A	4.9.A.7 and 4.9.A.9 footnote (a), 4.9.A.8.c and 4.9.A.8.h footnote (d)
A.10	CTS 4.9.A.8.c footnote (d) allows momentary transients outside of the load range during the full load reject test. This Note is not needed since the requirement specifies a load range which must be rejected and does not specify any explicit transient requirements for load.	N/A	4.9.A.8.c footnote (d)
A.11	The requirement in CTS 4.9.A.8.d.2) to verify the energization of the auto-connected shutdown loads during the loss of offsite power test has been deleted, since the Quad Cities 1 and 2 design does not include any auto-connected shutdown loads on a loss of offsite power by itself.	N/A	4.9.A.8.d.2)
A.12	With three or more required AC sources inoperable (e.g., two offsite circuits and one DG), ACTIONS would be taken in accordance with ITS 3.8.1, and ITS LCO 3.0.3 entry conditions would not be met. Since CTS 3.9.A does not provide Actions for these conditions, ITS 3.8.1 ACTION G is added to direct entry into ITS LCO 3.0.3, to preserve the existing intent for CTS 3.0.C entry.	3.8.1 ACTION G	3.9.A Actions

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.8 - ELECTRIC POWER SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.13	The requirement of CTS 4.9.A.8.f.2 that auto-connected loads be energized "through the load sequencer" is changed to "including through time delay relays, where applicable." The design does not include a "load sequencer," but includes "time delay relays" for some individual components.	SR 3.8.1.19	4.9.A.8.f.2
3.8.2, AC Sources - Shutdown			
A.1	Editorial changes, reformatting, and revised numbering.	3.8.2	3/4.9.B
A.2	Moves the details in CTS LCO 3.9.B.2.a relating to the required day tank level and in CTS 3.9.B.2.b relating to the bulk fuel storage tank level to ITS SR 3.8.2.1.	SR 3.8.2.1	LCO 3.9.B.2.a, LCO 3.9.B.2.b
A.3	In the event AC Sources are inoperable such that a distribution subsystem were inoperable, ITS LCO 3.0.6 would allow taking only the AC Sources ACTIONS; taking exception to complying with the AC Distribution System ACTIONS. Since the AC Sources ACTIONS may not be sufficiently conservative in this event (e.g., RHR-SDC could be inoperable), specific direction to take appropriate ACTIONS for the Distribution System is added when there is no power for a required division.	3.8.2 ACTION A Note	3.9.B Actions
A.4	For clarity, adds an exception to CTS 4.9.A.9 (ITS SR 3.8.1.20), which is consistent with the intent of the CTS. This Surveillance is currently not required since it ensures all the DGs are OPERABLE (and no more than one DG is required while in MODES 4 and 5 and handling irradiated fuel assemblies in the secondary containment). In addition, two other exceptions have been included for clarity. CTS 4.9.A.1.b (ITS SR 3.8.1.9) is excluded since only one offsite circuit is required to be OPERABLE. ITS SR 3.8.1.21, the added requirement, for the opposite unit power sources, is excluded because the opposite unit's DG is not required to be OPERABLE by LCO 3.8.2.	SR 3.8.2.1	4.9.B

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.8 - ELECTRIC POWER SYSTEMS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
3.8.3, Diesel Fuel Oil and Starting Air			
A.1	Editorial changes, reformatting, and revised numbering.	3.8.3	3.9.A Action 7, 4.9.A.2.f, 4.9.A.5, 4.9.A.6, 4.9.A.10, 4.9.B
A.2	The fuel oil and starting air requirements of CTS 3/4.9.A and 3/4.9.B have been moved to a new ITS LCO 3.8.3. An LCO Statement has been provided requiring fuel oil storage and starting air. The Applicability of this new LCO is "when associated DG is required to be OPERABLE." This covers the current MODES 1, 2, 3, 4, and 5 and fuel handling requirements of CTS 3/4.9.A and 3/4.9.B.	3.8.3	3/4.9.A, 3/4.9.B
A.3	Adds ITS ACTIONS Note "Separate Condition entry is allowed for each DG," which is consistent with the intent of the CTS.	3.8.3 ACTIONS Note	3.9.A Actions, 3.9.B Actions
A.4	Moves the technical content of CTS 4.9.A.5 and 4.9.A.6, which provide the DG fuel oil sampling requirements, to ITS 5.5.9. In addition, adds a Surveillance Requirement to clarify that the tests of the Diesel Fuel Oil Testing Program must also be completed and passed for determining Operability of the DGs.	SR 3.8.3.1, 5.5.9	4.9.A.5, 4.9.A.6
3.8.4, DC Sources - Operating			
A.1	Editorial changes, reformatting, and revised numbering.	3.8.4	3/4.9.C
A.2	Moves the technical content of CTS Table 4.9.C-1 (including CTS 4.9.C.1.a and 4.9.C.2.a) and 3.9.C Actions 4, 5, and 6, the battery cell parameter requirements and CTS 4.9.C.2.c, the average electrolyte temperature requirements to ITS 3.8.6.	3.8.6	3.9.C Actions 4, 5, and 6, 4.9.C.1.a, 4.9.C.2.a, 4.9.C.2.c, Table 4.9.C-1

**TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.8 - ELECTRIC POWER SYSTEMS**

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.3	Not used.	N/A	N/A
A.4	Deletes the explicit requirement in CTS 4.9.C.1.b to verify correct breaker alignment to each battery charger, since the ITS SR 3.8.4.1 requirement to verify battery terminal voltage, on float charge is adequate.	N/A	4.9.C.1.b
A.5	Added the specific battery charger load values that are equivalent to the manufacturer's ratings.	SR 3.8.4.6	4.9.C.3.d
<b>3.8.5, DC Sources - Shutdown</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.8.5	3/4.9.D
A.2	The ITS present the battery hardware components (battery and charger) in the DC Sources LCO (ITS 3.8.5). The battery cell parameters are presented in a separate LCO (ITS 3.8.6).	3.8.5, 3.8.6	3/4.9.D
<b>3.8.6, Battery Cell Parameters</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.8.6	3.9.C Actions 4, 5, and 6, 4.9.C.1.a, 4.9.C.2.a, 4.9.C.2.c, Table 4.9.C-1, 3/4.9.D
A.2	Presents the 250 and 125 VDC battery cell parameters limits in a separate LCO with appropriate ACTIONS and SRs. In addition, the reference in CTS 3.9.C to Table 4.9.C-1 has been replaced with limits since all battery parameters (i.e., average electrolyte temperature) are not specified in the Table. CTS 4.9.D is being deleted since its provisions only reference requirements in CTS 4.9.C, which are contained in ITS 3.8.6.	3.8.6	3/4.9.C, 3/4.9.D

**TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.8 - ELECTRIC POWER SYSTEMS**

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.3	Applicability presented as "when associated DC electrical power subsystem is required to be OPERABLE," covering the current MODES 1, 2, 3, 4, and 5 and fuel handling requirements.	3.8.6 Applicability	3.9.C Applicability, 3.9.D Applicability
A.4	Adds ITS ACTIONS Note "Separate condition entry is allowed for each battery," which is consistent with the intent of the CTS.	3.8.6 ACTIONS Note	3.9.C Actions, 3.9.D Actions
A.5	CTS 3.9.C Action 4 allows the Category A parameters(s) to be not within limits and the battery to be considered OPERABLE, provided the associated battery charger is OPERABLE. The specific requirement for the battery charger has been deleted. Whenever any required DC battery charger is inoperable, entry into the associated actions for the DC sources is required (CTS 3.9.C Action 1 and 2 and ITS 3.8.4 ACTIONS). Therefore, the explicit requirement is not necessary in the ITS.	N/A	3.9.C Action 4
A.6	Adds a specific Condition to explicitly require the battery to be declared inoperable when the temperature is not within limit or when Category A or B limits have not been restored within the applicable time, since this is the obvious intent of the CTS.	3.8.6 ACTION B	3.9.C Actions 4, 5, and 6, 3.9.D Actions
<b>3.8.7, Distribution Systems - Operating</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.8.7	3/4.9.E
A.2	Describes the AC and DC power distribution systems using the designator "Division 1 and Division 2," since these are the actual division designators for the buses listed in CTS LCO 3.9.E (the current detailed listings are relocated to the Bases - see DOC LA.1 for ITS 3.8.7).	LCO 3.8.7	LCO 3.9.E.1, LCO 3.9.E.2
<b>3.8.8, Distribution Systems - Shutdown</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.8.8	3/4.9.F

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.9 - REFUELING OPERATIONS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
3.9.1, Refueling Equipment Interlocks			
A.1	Editorial changes, reformatting, and revised numbering.	3.9.1	3/4.10.A
A.2	Moves the Refuel Position One-Rod-Out Interlock requirements to ITS 3.9.2.	3.9.2	3/4.10.A
A.3	Since one-rod-out interlock requirements are moved to ITS 3.9.2, restrictions on equipment to be used during CORE ALTERATIONS in ITS 3.9.1 are rewritten, where the Applicability addresses the only CORE ALTERATIONS remaining, i.e., fuel movement.	3.9.1	3.10.A
A.4	Lists each actual refuel platform hoist in the Surveillance Requirement of ITS SR 3.9.1.1, versus the CTS requirement for the refuel platform "hoists" fuel loaded interlocks be Operable.	SR 3.9.1.1	3.10.A.2.c
A.5	Changed the Applicability to specify "during in-vessel fuel movement...", as well as specifying the equipment being used "... with equipment associated with interlocks....", currently found in CTS 3.10.A.2.	3.9.1	3.10.A.2
A.6	Moves to ITS 3.10.1 the allowance in the footnote to place the reactor mode switch in the Run or Startup/Hot Standby to test the reactor mode switch interlock functions. Additionally, moves to ITS 3.10.2 and 3.10.3 the Refuel Position Refueling Equipment Interlock requirements for MODES 3 and 4 (as shown in the Applicability of CTS 3.10.A).	3.10.1, 3.10.2, 3.10.3	3.10.A Applicability, 3.10.A footnote (d)
A.7	Deletes Applicability footnote that provides a cross reference to CTS 3.12.A and 3.12.B, since the format of the ITS does not include providing cross references.	N/A	3.10.A footnote (b)
A.8	Deletes the Applicability footnote that states that the reactor shall be maintained in Operational MODE 5 whenever fuel is in the reactor vessel with the vessel head closure bolts less than fully tensioned or with the head removed, since this equipment is an explicit part of the definition of MODE 5.	N/A	3.10.A footnote (c)
3.9.2, Refuel Position One-Rod-Out Interlock			
A.1	Editorial changes, reformatting, and revised numbering.	3.9.2	3/4.10.A

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.9 - REFUELING OPERATIONS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.2	Deletes the requirement that the reactor mode switch shall be in the Shutdown or Refuel position, since it is an explicit part of the definition of MODE 5.	N/A	3.10.A
A.3	Moves the Refueling Equipment Interlock requirements to ITS 3.9.1.	3.9.1	3/4.10.A
A.4	The ITS Applicability reflects the current requirements for the one-rod-out interlock to be Operable in MODE 5 with the reactor mode switch in the refuel position and any control rod withdrawn.	3.9.2	3.10.A.1
A.5	Moves to ITS 3.10.1 the allowance in the footnote to place the reactor mode switch in the Run or Startup/Hot Standby to test the reactor mode switch interlock functions. Additionally, moves to ITS 3.10.2 and 3.10.3 the Refuel Position One-Rod-Out Interlock requirements for MODES 3 and 4 (as shown in the Applicability of CTS 3.10.A).	3.10.1, 3.10.2, 3.10.3	3.10.A Applicability, 3.10.A footnote (d)
A.6	Deletes Applicability footnote that provides a cross reference to CTS 3.12.A and 3.12.B, since the format of the ITS does not include providing cross references.	N/A	3.10.A footnote (b)
A.7	Deletes the Applicability footnote that states that the reactor shall be maintained in Operational MODE 5 whenever fuel is in the reactor vessel with the vessel head closure bolts less than fully tensioned or with the head removed, since this equipment is an explicit part of the definition of MODE 5.	N/A	3.10.A footnote (c)
3.9.3, Control Rod Position			
A.1	Editorial changes, reformatting, and revised numbering.	3.9.3	3/4.10.C
A.2	Deletes footnotes that provides a cross reference to CTS 3.10.I, 3.10.J and 3.12.B since the format of the ITS does not include providing cross references. In addition, the allowances that fuel can be loaded into the core when a rod is withdrawn under control of the reactor mode switch refuel position one-rod-out interlock has been deleted since the interlock will preclude fuel loading with a rod withdrawn.	N/A	3.10.C footnotes (a) and (b), 3.10.C Action, 4.10.C.1.b

**TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.9 - REFUELING OPERATIONS**

DOC #	SUMMARY	ITS SECTION	CTS SECTION
<b>3.9.4, Control Rod Position Indication</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.9.4	3/4.3.I
A.2	Deletes footnote that provides a cross reference to CTS 3.10.I and 3.10.J, since the format of the ITS does not include providing cross references.	N/A	3.3.I footnote (a)
A.3	Adds ITS Note "Separate Condition entry is allowed for each required channel," which is consistent with the intent of the CTS.	3.9.4 ACTIONS Note	3.3.I Action 3
<b>3.9.5, Control Rod OPERABILITY - Refueling</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.9.5	3/4.3.G
A.2	Revises the Operational MODE 5 requirements to say "Each withdrawn control rod shall be OPERABLE," since ITS 3.9.5 includes requirements other than accumulator requirements.	3.9.5	3.3.G
A.3	Deletes footnote that provides a cross reference to CTS 3.10.I and 3.10.J, since the format of the ITS does not include providing cross references.	N/A	3.3.G footnote (a)
A.4	Deletes "unless the control rod is inserted and disarmed or scrammed," since stating the conditions for an exception to performance of the accumulator Surveillance that are equivalent to the Applicability of the LCO is unnecessary.	N/A	4.3.G
A.5	Deletes the action to disarm and the footnote to intermittently rearm the associated directional control valves. During MODE 5 with an accumulator associated with a withdrawn control rod inoperable, the control rod is required to be inserted. Once the control rod is fully inserted, the accumulator is no longer required to be OPERABLE and the entry conditions for the ACTIONS are no longer applicable, thus no additional ACTIONS are required.	N/A	3.3.G Action 2.a and footnote (b)
A.6	Moves, to ITS 3.10.7, the requirements for when more than one control rod is withdrawn with the associated scram accumulators inoperable or no control rod drive pump operating.	3.10.7	3.3.G Action 2.b

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.9 - REFUELING OPERATIONS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
3.9.6, RPV Water Level - Irradiated Fuel			
A.1	Editorial changes, reformatting, and revised numbering.	3.9.6	3/4.10.G
A.2	Moves, to ITS 3.9.7, the requirements for handling new fuel assemblies and control rods.	3.9.7	3/4.10.G
A.3	Deletes "while in OPERATIONAL MODE 5" from the Applicability since the Specification deals only with handling irradiated fuel assemblies, and the only MODE where it is possible to move irradiated fuel assemblies within the reactor pressure vessel is MODE 5.	N/A	3.10.G
3.9.7, RPV Water Level - New Fuel or Control Rods			
A.1	Editorial changes, reformatting, and revised numbering.	3.9.7	3/4.10.G
A.2	Deletes "while in OPERATIONAL MODE 5" from the Applicability since the Specification deals only with handling new fuel assemblies or control rods, and the only MODE where it is possible to move new fuel assemblies or handle control rods within the reactor pressure vessel is MODE 5.	N/A	3.10.G
3.9.8, Residual Heat Removal (RHR) - High Water Level			
A.1	Editorial changes, reformatting, and revised numbering.	3.9.8	3/4.10.K
A.2	Requires only that loading of irradiated fuel assemblies into the reactor pressure vessel be suspended versus CTS requirement that all operations involving an increase in the reactor decay heat load be suspended, since this is the only practical method of increasing the reactor decay heat load.	3.9.8 Required Action B.1	3.10.K Action
A.3	Enhances presentation by requiring actions to be immediately initiated to restore secondary containment boundary (completing the actions as soon as possible) in lieu of current requirement to establish within 4 hours (initiating the actions as soon as possible).	3.9.8 Required Actions B.2, B.3, and B.4	3.10.K Action

**TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.9 - REFUELING OPERATIONS**

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.4	Replaces the use of the defined term SECONDARY CONTAINMENT INTEGRITY with the essential elements of that definition.	3.9.8 Required Actions B.2, B.3, and B.4	3.10.K Action
A.5	Revises CTS 4.10.K to require the verification of each required RHR shutdown cooling subsystem manual and power operated valve in the flow path, that is not locked, sealed or otherwise secured in position, is in the correct position or can be aligned to the correct position. This is consistent with the SER for Amendments 157 (Unit 1) and 153 (Unit 2) since the RHR System and the RHR Service Water System flow can not be throttled sufficiently to maintain constant temperature.	SR 3.9.8.2	4.10.K
<b>3.9.9, Residual Heat Removal (RHR) - Low Water Level</b>			
A.1	Editorial changes, reformatting, and revised numbering.	3.9.9	3/4.10.L
A.2	Revises CTS 4.10.L to require the verification of each required RHR shutdown cooling subsystem manual and power operated valve in the flow path, that is not locked, sealed or otherwise secured in position, is in the correct position or can be aligned to the correct position. This is consistent with the SER for Amendments 157 (Unit 1) and 153 (Unit 2) since the RHR System and the RHR Service Water System flow can not be throttled sufficiently to maintain constant temperature.	SR 3.9.9.2	4.10.L
<b>Current Specification 3/4.10.E, Communications</b>			
NONE	NONE	NONE	NONE

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.10 - SPECIAL OPERATIONS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
3.10.1, Reactor Mode Switch Interlock Testing			
A.1	Editorial changes, reformatting, and revised numbering.	3.10.1	Table 1-2, 3/4.10.A footnote d
3.10.2, Single Control Rod Withdrawal - Hot Shutdown			
A.1	Editorial changes, reformatting, and revised numbering.	3.10.2	Table 1-2, 3/4.10.A
A.2	Revises CTS 3.10.A Action 2 requiring the reactor mode switch to be locked in the Shutdown position when the one-rod-out interlock is inoperable to only require the mode switch to be placed in Shutdown; locking the mode switch in Shutdown is not required since with the mode switch in Shutdown the LCO is no longer applicable.	N/A	3.10.A Action 2
A.3	Replaces the refuel position one-rod-out interlock Surveillances (CTS 4.10.A.1, 4.10.A.2, and 4.10.A.3) with a generic Surveillance Requirement (proposed SR 3.10.2.1) to perform all required Surveillances in accordance with the applicable SRs; in this case, with the SRs of ITS 3.9.2, Refuel Position One-Rod-Out Interlock.	SR 3.10.2.1	4.10.A.1, 4.10.A.2, 4.10.A.3
3.10.3, Single Control Rod Withdrawal - Cold Shutdown			
A.1	Editorial changes, reformatting, and revised numbering.	3.10.3	Table 1-2, 3/4.10.A, 3/4.10.I
A.2	Deletes statements that require compliance with the Specification "until a control rod and associated control rod drive mechanism are reinstalled and the control rod is fully inserted in the core," since such statements are fundamentally true for all Specifications and do not need to be stated in each individual Specification.	N/A	3/4.10.I

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.10 - SPECIAL OPERATIONS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.3	The MODE 4 requirements for SRM OPERABILITY and Surveillance testing are adequate without explicit reference to them, the CTS 3.10.1.2 and 4.10.1.2 references are redundant to the current and proposed requirement, and therefore, have been deleted.	N/A	3.10.1.2, 4.10.1.2
A.4	CTS 3.10.1.3.a and CTS 3.10.1.3.b refer to an exception to the current normal SDM requirements, which requires additional margin for immovable control rods. ITS 3.10.3 does not explicitly include the last half of existing 3.a or any of the existing 3.b, but only identifies that the withdrawn rod is considered to be the "highest worth control rod," which in the CTS definition and in the ITS definition of SHUTDOWN MARGIN is assumed to be fully withdrawn.	3.10.3	3.10.1.3.a, 3.10.1.3.b
A.5	Deletes CTS 3.10.1.4.b and 4.10.1.4.b allowing the four fuel assemblies surrounding the control rod or control rod drive mechanism to be removed from the core and/or reactor vessel to be removed from the core since during MODE 4, the optional requirement of CTS 3.10.1.4.b and 4.10.1.4.b cannot be physically met.	N/A	3.10.1.4.b, 4.10.1.4.b
A.6	Four new Notes have been added for clarity in ITS 3.10.3. The ITS 3.10.3 ACTIONS Note has been added to clarify that the requirement to enter the applicable condition of the affected Specification applies for each of the affected Specifications. ITS 3.10.3 Required Action A.1 Note 1 has been added to clarify that if an affected Specifications ACTIONS state to fully insert all insertable control rods, this includes placing the reactor mode switch in the Shutdown position. ITS 3.10.3 Required Action A.1 Note 2 has been added to clarify that this Required Action is only applicable if the requirement not met is an LCO, since it is written only for an LCO, not a "requirement." ITS SR 3.10.3.2 Note has been added clarifying that if proposed SR 3.10.3.1 is satisfied for ITS 3.10.3.c.1 requirements, then ITS SR 3.10.3.2 is not required to be performed.	3.10.3 ACTIONS Note, 3.10.3 Required Action A.1 Notes 1 and 2, SR 3.10.3.2 Note	N/A
A.7	Separates the CTS 3.10.1 ACTION into two ACTIONS, dependent on whether the affected control rod is insertable or not. ITS 3.10.3 ACTIONS are a more detailed presentation of the existing requirement to "initiate action to satisfy the above requirements."	3.10.3	3.10.1 ACTION
A.8	Replaces the refuel position one-rod-out interlock Surveillances CTS 4.10.A.1, 4.10.A.2, and 4.10.A.3 with a generic Surveillance Requirement (proposed SR 3.10.3.1) to perform all required Surveillances in accordance with the applicable SRs since ITS 3.10.3 requires the refuel position one-rod-out interlock to be OPERABLE in accordance with ITS 3.9.2.	SR 3.10.3.1	4.10.A.1, 4.10.A.2, 4.10.A.3

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.10 - SPECIAL OPERATIONS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.9	Revises CTS 3.10.A Action 2 requiring the reactor mode switch to be locked in the Shutdown position when the one-rod-out interlock is inoperable to only require the mode switch to be placed in Shutdown; locking the mode switch in Shutdown is not required since with the mode switch in Shutdown the LCO is no longer applicable.	N/A	3.10.A Action 2
3.10.4, Single Control Rod Drive Removal - Refueling			
A.1	Editorial changes, reformatting, and revised numbering.	3.10.4	3/4.10.1
A.2	Deletes statements that require compliance with the Specification "until a control rod and associated control rod drive mechanism are reinstalled and the control rod is fully inserted in the core," since such statements are fundamentally true for all Specifications and do not need to be stated in each individual Specification.	N/A	3/4.10.1
A.3	The MODE 5 requirements for SRM OPERABILITY and Surveillance testing are adequate without explicit reference to them, the CTS 3.10.1.2 and 4.10.1.2 references are redundant to the current and proposed requirement, and therefore, have been deleted.	N/A	3.10.1.2, 4.10.1.2
A.4	CTS 3.10.1.3.a and CTS 3.10.1.3.b refer to an exception to the current normal SDM requirements, which requires additional margin for immovable control rods. ITS 3.10.4 does not explicitly include the last half of existing 3.a or any of the existing 3.b, but only identifies that the withdrawn rod is considered to be the "highest worth control rod," which in the CTS definition and in the ITS definition of SHUTDOWN MARGIN is assumed to be fully withdrawn.	3.10.4	3.10.1.3.a, 3.10.1.3.b
A.5	Deletes the explicit allowance of CTS 3.10.1.4.b and 4.10.1.4.b, to remove the four fuel assemblies in lieu of inserting and disarming the control rods in a 5 x 5 array since this can be done provided the requirements of ITS 3.10.5 (CTS 3.10.J) are followed.	N/A	3.10.1.4.b, 4.10.1.4.b
A.6	Added a MODE 5 Applicability requirement in ITS 3.10.4 ("with LCO 3.9.5 not met") that is derived from the intent of CTS 3.10.1, which says "the associated control rod drive mechanism may be removed from ... the reactor pressure vessel..." When the control rod drive mechanism is removed, ITS 3.9.5, which requires all withdrawn control rods to be OPERABLE, is not met.	3.10.4 Applicability	N/A

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.10 - SPECIAL OPERATIONS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.7	Adds an alternative Required Action (which results in effectively exiting this Special Operations LCO and restores operation consistent with normal requirements for failure to meet the LCOs which were suspended by the Special Operations LCO) to initiate action to fully insert all control rods immediately, in lieu of meeting the requirements of the LCO.	3.10.4 Required Action A.2.1	N/A
3.10.5, Multiple Control Rod Withdrawal - Refueling			
A.1	Editorial changes, reformatting, and revised numbering.	3.10.5	3/4.10.J
A.2	Deletes statements that require compliance with the Specification "until all control rods and control rod drive mechanisms are reinstalled and all control rods are inserted in the core," since such statements are fundamentally true for all Specifications and do not need to be stated in each individual Specification.	N/A	3.10.J, 4.10.J.1
A.3	Since the MODE 5 requirements for SRM OPERABILITY and Surveillance testing are adequate without explicit reference to them, the CTS 3.10.J.2 and 4.10.J.1.b references are redundant to the current and proposed requirement, and therefore, have been deleted.	N/A	3.10.J.2, 4.10.J.1.b
A.4	Deletes redundant references, since the current MODE 5 requirements for SHUTDOWN MARGIN (SDM) in CTS 3.10.J.3 and Surveillance testing in CTS 4.10.J.1.c are adequate without explicit reference to them.	N/A	3.10.J.3, 4.10.J.1.c
A.5	Adds a MODE 5 Applicability requirement in ITS 3.10.5 ("with LCO 3.9.3, LCO 3.9.4, or LCO 3.9.5 not met") which is derived from the intent of CTS 3.10.J, which says "Any number of control rods and/or control rod drive mechanisms may be removed from the core and/or reactor pressure vessel..." During the performance of these activities, ITS 3.9.3 (which requires all control rods to be fully inserted), ITS 3.9.4 (which requires each control rod full-in position indication channel for each control rod to be OPERABLE), and ITS 3.9.5 (which requires all withdrawn control rods to be OPERABLE) are not met.	3.10.5	N/A

**TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.10 - SPECIAL OPERATIONS**

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.6	Adds an alternative Required Action (which results in effectively exiting this Special Operations LCO and restores operation consistent with normal requirements for failure to meet the LCOs which were suspended by the Special Operations LCO) to initiate action to fully insert all control rods immediately, in lieu of meeting the requirements of the LCO.	3.10.5 Required Action A.3.1	N/A
3.10.6, Control Rod Testing - Operating			
NONE	NONE	NONE	NONE
3.10.7, SDM Test - Refueling			
A.1	Editorial changes, reformatting, and revised numbering.	3.10.7	3/4.1.A, Table 3.1.A-1, Table 4.1.A-1, 3.3.G, 3.3.H, 3/4.12.B
A.2	Deletes the exceptions in CTS 3.12.B to CTS 3.10.A (ITS 3.9.1 and ITS 3.9.2) and CTS 3.10.C (ITS 3.9.3) since in the ITS the corresponding Specification no longer requires the reactor mode switch to be locked in Refuel at all times while in MODE 5 and since CTS 3.12.B (ITS 3.10.7) precludes all other CORE ALTERATIONS from taking place.	N/A	3.12.B
A.3	Deletes the current explicit reference to MODE 5 requirements in CTS 3.12.B.1 and 4.12.B.1 for SRM OPERABILITY and Surveillance testing since the reference is redundant to the current and proposed requirements.	N/A	3.12.B.1, 4.12.B.1
A.4	The current requirements for control rod coupling in MODE 5 (CTS 3.3.H) are proposed to be delineated as specific restrictions for SDM in MODE 5 (ITS LCO 3.10.7.c), since they are deleted as normal MODE 5 requirements. This change includes an appropriate ACTION (ITS 3.10.7 ACTION A) and Surveillance (proposed SR 3.10.7.5), consistent with those described in ITS 3.1.3, which governs the MODES 1 and 2 control rod coupling requirements.	LCO 3.10.7.c, 3.10.7 ACTION A, SR 3.10.7.5	3.3.H

**TABLE A - ADMINISTRATIVE CHANGES MATRIX  
SECTION 3.10 - SPECIAL OPERATIONS**

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.5	Revises Applicability to clarify actual applicable conditions for the proposed LCO; ITS Applicability now includes "with the reactor mode switch in the Startup/Hot Standby position" since this is the intent of when the LCO is to be used.	3.10.7	3.12.B
A.6	Adds two new Notes in ITS 3.10.7 for clarity. SR 3.10.7.2 Note has been added to CTS 4.12.B.2 clarifying that if proposed SR 3.10.7.3 is satisfied for ITS LCO 3.10.7.b.1 requirements, then proposed SR 3.10.7.2 is not required to be met and proposed SR 3.10.7.3 Note has been added to CTS 4.12.B.2 clarifying that if proposed SR 3.10.7.2 is satisfied for ITS LCO 3.10.7.b.2 requirements, then SR 3.10.7.3 is not required to be met.	SR 3.10.7.2 Note, SR 3.10.7.3 Note	N/A
A.7	Deletes CTS 3.3.G Action 2.b which provides actions if multiple control rod scram accumulators are inoperable in MODE 5 since the multiple, inoperable withdrawn control rod accumulator requirement is already covered by ITS 3.9.5.	N/A	3.3.G Action 2.b
A.8	Includes APRM requirements of CTS 3/4.1.A in equivalent requirements of ITS 3.10.7.	3.10.7	3/4.1.A
A.9	Modifies APRM Mode 2 requirements of CTS Tables 3.1.A-1 (including the Actions and Surveillance Requirements) to equivalent MODE 5 requirements in ITS 3.10.7.	3.10.7	3/4.1.A
A.10	Revises CTS 3/4.1.A provided in the Technical Specifications Change Request submitted to the NRC for approval per ComEd letter, dated December 27, 1999.	3.10.7	3/4.1.A
Current Specification 3/4.12.A, Primary Containment Integrity			
NONE	NONE	NONE	NONE

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
 CHAPTER 4.0 - DESIGN FEATURES

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.1	Editorial changes, reformatting, and revised numbering.	4.0	5.0
A.2	Not used.	N/A	N/A
A.3	Deletes the information that radioactive gaseous effluents and radioactive liquid effluents be located in the OFFSITE DOSE CALCULATION MANUAL.	N/A	5.1.C, 5.1.D

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
CHAPTER 5.0 - ADMINISTRATIVE CONTROLS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
5.1, Responsibility			
A.1	Editorial changes, reformatting, and revised numbering.	5.1	6.1.A, 6.1.B
5.2, Organization			
A.1	Editorial changes, reformatting, and revised numbering.	5.2	6.2.A, 6.2.B
A.2	Replaces the term "health physics" with the equivalent term "radiation protection" and replaces the title of the individual qualified to implement radiation protection procedures from "Radiation Protection Technician" to the generic function "radiation protection technician."	5.2.1.d, 5.2.2.d	6.2.A.4, 6.2.B.4
5.3, Unit Staff Qualifications			
A.1	Editorial changes, reformatting, and revised numbering.	5.3	6.3
A.2	Deletes the details for qualification requirements of the Shift Technical Advisor (STA) position since they are addressed in the "Commission Policy Statement on Engineering Expertise on Shift" specified in ITS 5.2.2.f.	5.2.2.f	6.3
5.4, Procedures			
A.1	Editorial changes, reformatting, and revised numbering.	5.4	6.8.A
A.2	Deletes specific requirements for written procedures to implement the Station Security Plan and the Generating Station Emergency Response Plan since they are also required by 10 CFR 50.54(p) and 10 CFR 50, Appendix E.	N/A	6.8.A.3, 6.8.A.4
A.3	Deletes specific requirement for written procedures for ODCM implementation since it is covered by a more generic item, ITS 5.4.1.d, which requires this activity for all Programs and Manuals.	5.4.1.d	6.8.A.6

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
CHAPTER 5.0 - ADMINISTRATIVE CONTROLS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
5.5, Programs and Manuals			
A.1	Editorial changes, reformatting, and revised numbering.	5.5	1.0, 4.0.E, 4.7.P, 4.8.D, 3/4.8.H, 3/4.8.J, 4.9.A, 6.8, 6.14
A.2	A statement of applicability of SR 3.0.2 has been added to CTS 6.8.D.1 (ITS 5.5.2), a statement of applicability of SR 3.0.3 has been added to CTS 4.0.E (ITS 5.5.6.c), and a statement of applicability of SR 3.0.2 and SR 3.0.3 has been added to CTS 6.8.D.4 (ITS 5.5.4).	5.5.2, 5.5.6.c, 5.5.4	6.8.D.1, 4.0.E, 6.8.D.4
A.3	Revises wording describing the Radioactive Effluent Controls Program to provide clarity.	5.5.4.d, 5.5.4.f	6.8.D.4.d, 6.8.D.4.f
A.4	Deletes the statement that exempts the requirements of CTS 4.0.B from applying to the frequencies specified in the Primary Containment Leakage Rate Testing Program; the statement is redundant since in the ITS, the ITS Section 3.0 requirements only applies to ITS Sections 3.1 through 3.10.	N/A	6.8.D.5
A.5	Deletes redundant restatement that all applicable requirements must be met.	N/A	4.0.E.4
A.6	Places the filter testing requirements for the Standby Gas Treatment System and the Control Room Emergency Ventilation System in a program, with a general program statement added as ITS 5.5.7. A statement of applicability of SR 3.0.2 and SR 3.0.3 is added to clarify that the allowances for Surveillance Frequency extensions do apply, since these SRs are not normally applied to Frequencies identified in the Administrative Controls Chapter.	5.5.7	4.7.P.2, 4.7.P.3, 4.7.P.4, 4.7.P.5, 4.7.P.6, 4.8.D.3, 4.8.D.4, 4.8.D.5, 4.8.D.6, 4.8.D.7
A.7	Revises for clarity the reference to Regulatory Guide 1.52, Revision 2, March 1978 by adding a reference to ANSI/ASME N510-1980 for the in-place charcoal adsorber testing of the Standby Gas Treatment System and Control Room Emergency Ventilation System.	5.5.7	4.7.P.2.a, 4.8.D.3.a

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
CHAPTER 5.0 - ADMINISTRATIVE CONTROLS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.8	Places the Offgas Explosive Mixture requirements in a program, with a general program statement added as ITS 5.5.8. A statement of applicability of SR 3.0.2 and SR 3.0.3 is added to clarify that the allowances for Surveillance Frequency extensions do apply, since these SRs are not normally applied to Frequencies identified in the Administrative Controls Chapter.	5.5.8	3.8.H
A.9	Places the diesel fuel oil testing requirements in a program, with a general program statement added as ITS 5.5.9. A statement of applicability of SR 3.0.2 and SR 3.0.3 is added to clarify that the allowances for Surveillance Frequency extensions do apply, since these SRs are not normally applied to Frequencies identified in the Administrative Controls Chapter.	5.5.9	4.9.A.5, 4.9.A.6
A.10	Clarifies the Inservice Testing Program requirements by adding a frequency definition of "Every 48 months."	5.5.6	4.0.E
A.11	Added statement that the testing of filter trains following painting, fire, or chemical release is only required if the painting, fire, or chemical release could adversely affect the filter bank or charcoal adsorber capability.	5.5.7	4.7.P.2, 4.8.D.3
5.6, Reporting Requirements			
A.1	Editorial changes, reformatting, and revised numbering.	5.6	Table 3.2.F-1, 6.9
A.2	Requires submittal of reports in accordance with 10 CFR 50.4, versus the CTS requirement that reports be submitted to the Regional Office.	5.6	6.9, 6.9.A.5, 6.9.A.6.c, 6.9.B
A.3	Deletes subtitles of reports since each individual report is named rather than grouped under subtitles.	5.6	6.9
A.4	Allows a single report submittal to satisfy the Occupational Radiation Exposure, Annual Radiological Environmental Operating, and Radioactive Effluent Release reporting requirement for both units.	5.6.1, 5.6.2, 5.6.3	6.9.A.2.a, 6.9.A.3, 6.9.A.4
A.5	Adds another name (electronic dosimeter) for a new type of pocket dosimeter currently in use to estimate the whole body doses required to be reported.	5.6.1	6.9.A.2.a

TABLE A - ADMINISTRATIVE CHANGES MATRIX  
CHAPTER 5.0 - ADMINISTRATIVE CONTROLS

DOC #	SUMMARY	ITS SECTION	CTS SECTION
A.6	Deletes the requirement to report the results of specific activity analysis in which the primary coolant exceeded CTS 3.6.J limits, since it is included in the LER requirements to report fuel cladding failures that exceed expected values or that are caused by unexpected factors, i.e., being seriously degraded.	N/A	6.9.A.2.b
A.7	Requires the Radioactive Effluent Release Report submittal to be "in accordance with 10 CFR 50.36a," in lieu of the current requirement to submit the report "prior to April 1 of each year," since compliance with 10 CFR 50 requirements is required by the Quad Cities 1 and 2 Operating Licenses.	5.6.3	6.9.A.4
A.8	Deletes duplicate requirement; i.e., the general statement to submit special reports within the time period specified for each report.	N/A	6.9.B
A.9	Adds a reference to the LHGR limit and the transient linear heat generation rate limit consistent with the limits currently specified in the CORE OPERATING LIMITS REPORT.	5.6.5.a.4	6.9.A.6
5.7, High Radiation Area			
A.1	Editorial changes, reformatting, and revised numbering.	5.7	6.12
A.2	Replaces the term "health physics" with the equivalent term "radiation protection" and replaces the title of the individual qualified to implement radiation protection procedures from "Radiation Protection Technician" to the generic function "radiation protection technician."	5.7.1, 5.7.2	6.12.A footnote (a), 6.12.B
Current Specification 6.4, Training			
NONE	NONE	NONE	NONE

**TABLE A - ADMINISTRATIVE CHANGES MATRIX  
CHAPTER 5.0 - ADMINISTRATIVE CONTROLS**

DOC #	SUMMARY	ITS SECTION	CTS SECTION
Current Specification 6.7, Safety Limit Violation			
A.1	Removes the Safety Limit Violation requirements, as they relate to NRC notification and permission to restart the unit, that are contained in and based upon the requirements located in 10 CFR 50.36(c)(1), 10 CFR 50.72, and 10 CFR 50.73.	N/A	6.7
Current Specification 6.11, Radiation Protection Program			
NONE	NONE	NONE	NONE
Current Specification 6.13, Process Control Program			
NONE	NONE	NONE	NONE