

50-237

CECO

DRESDEN 2

PROPOSED CHANGE TO TECH SPECS RE TECH  
SPECS UPGRADE PROGRAM

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ATTACHMENT 1

EXECUTIVE SUMMARY

Technical Specification 3/4.7

"CONTAINMENT SYSTEMS"

## EXECUTIVE SUMMARY

The Dresden Technical Specification Upgrade Program (TSUP) was conceptualized in response to lessons learned from the Diagnostic Evaluation Team inspection and the frequent need for Technical Specification interpretations. A comparison study of the Standard Technical Specifications (STS), later operating plant's Technical Specifications provisions and Quad Cities Technical Specifications was performed prior to the Dresden TSUP effort. The study identified potential improvements in clarifying requirements and requirements which are no longer consistent with current industry practices. The Dresden TSUP will enhance the Quad Cities TSUP currently under review by the NRC. As a result of the inconsistencies in the Quad Cities submittal compared to the Standard Technical Specifications (STS), Dresden's submittal will more closely follow the provisions of STS and in conjunction, Quad Cities will amend their submittal so that Quad Cities and Dresden are identical within equipment and plant design. The format for the Dresden TSUP will remain as a two column layout for human factors considerations. Additionally, chapter organizations will remain essentially unchanged.

The TSUP is not intended to be a complete adoption for the STS. Overall, the Dresden custom Technical Specifications provide for the safe operation of the plant and therefore, only an upgrade is deemed necessary.

In response to an NRC recommendation, Quad Cities combined the Unit 1 and Unit 2 Technical Specifications into one document. The Dresden Unit 2 and Unit 3 Technical Specifications will also be combined into one document. To accomplish the combination of the Units' Technical Specification, a comparison of the Unit 2 and Unit 3 Technical Specification was performed to identify any technical differences. The technical differences are identified in the proposed amendment package for each section.

The TSUP was identified as a station top priority and is currently contained in the Dresden Management Action Plan (DMAP). The TSUP goal is to provide a better tool to station personnel to implement their responsibilities and to ensure Dresden Station is operated in accordance with current industry practices. The improved Technical Specifications provide for enhanced operation of the plant. The program improves the operator's ability to use the Technical Specifications by more clearly defining the Limiting Conditions for Operation and required actions. The most significant improvement to the specifications is the addition of equipment operability requirements during shutdown conditions.

**EXECUTIVE SUMMARY**  
(continued)  
**PROPOSED CHANGES TO TECHNICAL SPECIFICATION**  
**SECTION 3/4.7, "CONTAINMENT SYSTEMS"**

The proposed changes delete the present Objective statement and provides Applicability statements within each specification in accordance with STS guidelines. The proposed Applicability statements included the Operating Modes or other conditions for which the LCO must be satisfied. An STS type of format is proposed which retains the present two column format.

Specification 3/4.7 has been reordered and new titles have been added based on STS arrangements and nomenclature. Some sections have moved to the appropriate STS section.

A. Primary Containment Integrity

Proposed Specification 3/4.7.A has been titled "Primary Containment Integrity" and is an addition to, and a rewrite of, existing specifications. Proposed Actions and Surveillances are changed to match STS guidelines and format. Reference to STS Table 3.6.3-1 has been eliminated per the guidance of GL 91-08.

B. Primary Containment Leakage

Proposed Specification 3/4.7.B, "Primary Containment Leakage", is an addition to, and a rewrite of, existing specifications. Proposed Actions and Surveillances are changed to match STS guidelines and format and do not remove any major requirements from the current specifications. Minor deviations from STS guidelines exist because: 1) the guidelines set forth in GL 91-08; 2) reduced pressure tests are not used at Dresden or Quad Cities; 3) several of the STS SR's are not applicable to the Dresden and Quad Cities design.

C. Primary Containment Air Locks

Proposed Specification 3/4.7.C, "Primary Containment Air Locks", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS guidelines and format and do not remove any major requirements from the current specifications.

D. Primary Containment Isolation Valves

Proposed Specification 3/4.7.D, "Primary Containment Isolation Valves", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format. Several changes proposed that deviate from STS guidelines are based upon the guidelines outlined in GL 91-08 (Table 3.6.3-1 has been deleted) and GL 87-09.

E. Suppression Chamber - Drywell Vacuum Breakers

Proposed Specification 3/4.7.E, "Suppression Chamber - Drywell Vacuum Breakers", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format. The STS content has been revised to reflect the design of the vacuum breakers at Dresden and Quad Cities. The proposed specifications are partially based on the current LaSalle specifications which reflect a similar design.

F. Reactor Building - Suppression Chamber Vacuum Breakers

Proposed Specification 3/4.7.F, "Reactor Building - Suppression Chamber Vacuum Breakers", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format. The AOT for inoperable suppression chamber vacuum breakers has been maintained at 7 days (STS guidelines specify 72 hours) per current Dresden and Quad Cities specifications.

G. Drywell Internal Pressure

Proposed Specification 3/4.7.G, "Drywell Internal Pressure", is an addition to specifications. Proposed Actions and Surveillances match the STS guidelines and format with additions to account for plant specific minimum pressure requirements.

H. Drywell-Suppression Chamber Differential Pressure

Proposed Specification 3/4.7.H, "Drywell-Suppression Chamber Differential Pressure", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format.

I. Primary Containment Nitrogen Purge System

Proposed Specification 3/4.7.R, "Primary Containment Nitrogen Purge System", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format for systems and applications applicable to both Dresden and Quad Cities Stations.

J. Primary Containment Oxygen Concentration

Proposed Specification 3/4.7.J, "Primary Containment Oxygen Concentration", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format for systems and applications applicable to both Dresden and Quad Cities Stations.

K. Suppression Chamber

Proposed Specification 3/4.7.K, "Suppression Chamber", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format for systems and applications applicable to both Dresden and Quad Cities Stations. The AOT for Post-Accident Monitoring instrumentation is maintained at 48 hours as a deviation from STS guidelines and maintains

consistency to current requirements. Torus temperature requirements have been clarified as committed to by Dresden Station during a late 1991 Enforcement Conference.

L. Suppression Chamber and Drywell Spray

Proposed Specification 3/4.7.L, "Suppression Chamber and Drywell Spray", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format. The AOT for an inoperable suppression chamber and/or drywell spray loop being inoperable has been maintained at 30 days (STS guidelines specify 7 days) per current specifications.

M. Suppression Pool Cooling

Proposed Specification 3/4.7.M, "Suppression Pool Cooling", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format. The AOT for an inoperable suppression pool cooling loop being inoperable has been maintained at 7 days (STS guidelines specify 72 hours) per current specifications.

N. Secondary Containment Integrity

Proposed Specification 3/4.7.N "SECONDARY CONTAINMENT INTEGRITY", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format for systems and applications applicable to both Dresden and Quad Cities Stations.

O. Secondary Containment Automatic Isolation Dampers

Proposed Specification 3/4.7.O, "Secondary Containment Automatic Isolation Dampers", is an addition to existing specifications. Proposed Actions and Surveillances match the STS type format for systems and applications applicable to both Dresden and Quad Cities Stations. Several changes proposed that deviate from STS guidelines are based upon the guidelines outlined in GL 91-08 (Table 3.6.5.2-1 has been deleted) and GL 91-04.

P. Standby Gas Treatment System

Proposed Specification 3/4.7.P, "Standby Gas Treatment System", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format for systems and applications applicable to both Dresden and Quad Cities Stations. Proposed Actions 2 and 3 are based upon precedence (Limerick) for shared SGTS systems as applicable to Dresden and Quad Cities. Another deviation from STS guidelines is that the proposed specification does not include acceptance criteria in some surveillance requirements and is based upon precedence from the LaSalle County Technical Specifications.

BASES

The proposed changes to the 3/4.7 Bases are made to support the changes proposed to the individual specifications.

ATTACHMENT 2

**DESCRIPTION OF CHANGES**

Technical Specification 3/4.7

"CONTAINMENT SYSTEMS"

## ATTACHMENT 2

### DESCRIPTION OF AMENDMENT REQUEST

The changes proposed in this amendment request are made to 1) improve the understanding and usability of the present technical specifications, 2) incorporate technical improvements, and 3) include some provisions from later operating BWR plants.

#### GENERIC CHANGES

The present Dresden and Quad Cities technical specifications contain Applicability and Objective statements at the beginning of most sections. These statements are generic in nature and do not provide any useful information to the user of the technical specifications. The proposed change will delete the Objective statement and provide Applicability statements within each specification similar to the STS. The proposed Applicability statement to be included in each specification will include the Reactor Operational Modes or other conditions for which the LCO must be satisfied.

The STS action provisions which delineate a specification 3.0.4 exception are not incorporated into the proposed specifications. The incorporation of the Generic Letter 87-09 change to the STS specification 3.0.4 (Dresden and Quad Cities proposed 3.0.D specification) requires that each action be independently evaluated for applicability of the new specification. These evaluations are provided in Attachment 7.

#### Description and Bases for the Proposed Changes

##### A. Primary Containment Integrity

1. Proposed Specification 3/4.7.A has been titled "Primary Containment Integrity" and is an addition to, and a rewrite of, existing specifications. Proposed Actions and Surveillances are changed to match STS guidelines and format. The proposed amendment request ensures that the release of radioactive materials from the containment atmosphere is restricted to the leakage paths and rates assumed in the plant accident analyses. The proposed requirements will limit site boundary radiation doses to within the limits of 10CFR Part 100 during accident conditions.
2. Reference to STS Table 3.6.3-1 (and existing Table 3.7.1 for Dresden, Table 3.7-1 for Quad Cities) has been eliminated per the guidance of GL 91-08. This change does not reduce the requirements to maintain Primary Containment Integrity. The specific list of Primary Containment Isolation Valves or plant-specific component lists shall be maintained external to the Technical Specifications. Such a change is consistent with the safety analysis in place for Dresden and Quad Cities and does not reduce the margin of safety for both stations.

## ATTACHMENT 2

### B. Primary Containment Leakage

1. Proposed Specification 3/4.7.B, "Primary Containment Leakage", is an addition to, and a rewrite of, existing specifications. Proposed Actions and Surveillances are changed to match STS guidelines and format and do not remove any major requirements from the current specifications. The proposed amendment for primary containment leakage rates ensures that the total containment leakage volume will not exceed the value assumed in the accident analyses at the peak accident pressure of 48 psig. The measured overall integrated leakage rate is further limited to less than or equal to 0.75 La during performance of the periodic tests to account for possible degradation of the containment leakage barriers between leakage tests. The surveillance testing for measuring leakage rates is consistent with the requirements of Appendix J of 10CFR Part 50 with the exception of an exemption granted for MSIV leak rate testing.
2. A minor deviation from STS guidelines (STS 3.6.1.2.a.2) has been proposed because reduced pressure tests are not used at Dresden or Quad Cities. The proposed specifications that require an overall integrated leakage rate of a specified amount is consistent with current Technical Specification requirements at Dresden and Quad Cities and maintains the design basis of the sites; therefore, the margin of safety is not reduced by proposed TSUP 3.7.B.
3. Reference to STS Table 3.6.3-1 has been eliminated per the guidance of GL 91-08. This change does not reduce the requirements to maintain Primary Containment Integrity. The specific list of Primary Containment Isolation Valves or plant-specific component lists shall be maintained external to the Technical Specifications. Such a change is consistent with the safety analysis in place for Dresden and Quad Cities and does not reduce the margin of safety for both stations.
4. The current primary containment leakage design basis for Dresden and Quad Cities does not require hydrostatic testing of primary containment penetrations (STS Section 3.6.1.2.d). Therefore, the proposed amendment does not include this requirement because it is not applicable to either site; therefore, the current margin of safety is not reduced by proposed TSUP Section 3.7.B.
5. The Action Statements have been revised from STS guidelines to be consistent with the proposed Limiting Conditions for Operation (LCO). The STS Action Statement is only a duplication of Specification 4.0.D requirements and has been deleted. Since only Type B and C testing can be performed during the applicable operational modes, an Action Statement is proposed for identifying nonconforming Type B & C leakage rates during operation above 200°F. The allowed outage time is consistent with the primary containment integrity specification and provides a specific Action for this condition which prevents unnecessary entry into proposed Specification 3.0.C. The proposed TSUP Action statement is consistent or more conservative than existing Technical Specification requirements; therefore, the

## ATTACHMENT 2

current margin of safety is not reduced by the proposed Action statement for TSUP 3.7.B.

6. The reference to ANSI N45.4-1972 has been deleted per the precedent of Calvert Cliffs. The specific ANSI requirements for primary containment leakage rate testing are outlined in 10 CFR Part 50, Appendix J. 10 CFR 50, Appendix J includes additional references; repeating each reference is unnecessary in the Technical Specifications. Proposed TSUP SR 4.7.B is consistent or more conservative than existing Technical Specification requirements; therefore, the current margin of safety is not reduced by proposed TSUP SR 4.7.B.
7. Proposed TSUP 4.7.B.1 does not adopt the STS requirement (STS 4.6.1.2.a) to perform Type A testing at intervals of  $40 \pm 10$  months. The wording of "approximately equal intervals" is based upon the current wording, the precedence of a recent Calvert Cliffs Technical Specification revision, and consistency with the requirements outlined in 10 CFR 50, Appendix J. The proposed change is consistent to current Technical Specification requirements and is not a reduction in the current margin of safety.
8. The proposed amendment does not adopt the specific option of gas injection for the Type A test verification method. This option is not used at either Dresden or Quad Cities. Dresden and Quad Cities do utilize gas bleed techniques; therefore, proposed TSUP SR 4.7.B.3.c is consistent to or more conservative than current Technical Specification requirements. The proposed changes ensure existent plant safety margins are maintained.
9. The proposed amendment (TSUP 4.7.B.4.a) request does not include specific reference to an Operability statement. Proposed Surveillance Requirement 4.7.B.4.a requires compliance with the air lock specification and is consistent with the current plant safety analysis and existing Technical Specification requirements. There is no direct connection to air lock operability for meeting primary containment integrity requirements since only one air lock door provides a sufficient barrier to minimize leakage. Therefore, the proposed amendment does not reduce the existent margin of safety at Dresden and Quad Cities.
10. The proposed amendment request includes the appropriate testing pressure for MSIV's (TSUP 4.7.B.4.b) to clarify acceptance criteria. The proposed deviation is consistent with the plant design, is consistent to or more conservative than existent Technical Specifications, reflects the NRC approved exemption for reduced pressure testing, and maintains the safety margin for both Dresden and Quad Cities Stations.
11. Proposed SR 4.7.B.4.c maintains the current requirements for bolted double-gasketed seals and is consistent with the current design basis for both Dresden and Quad Cities Stations. Proposed TSUP SR 4.7.B.4.c is consistent to

## ATTACHMENT 2

the existing Technical Specification requirements; therefore, there is no reduction in the margin of safety at Dresden and Quad Cities.

12. The guidelines specified in STS Sections 4.6.1.2.d.3, 4.6.1.2.d.4, 4.6.1.2.d.5, 4.6.1.2.d.6, 4.6.1.2.e, 4.6.1.2.f, 4.6.1.2.g, 4.6.1.2.h, 4.6.1.2.i, 4.6.1.2.j, 4.6.1.2.k, and their associated footnote '\*\*' have not been incorporated due to plant specific design limitations. At Dresden and Quad Cities, there are no penetrations that are continuously monitored, fluid sealed or hydrostatically tested, nor do purge valves use resilient seals. STS Section 4.6.1.2.l has been partially included where applicable to Dresden and Quad Cities' design. The proposed amendment does not adopt the specific frequency to perform Type A testing at intervals of  $40 \pm 10$  months. The proposed change is based upon the current specifications and precedent as approved for the Calvert Cliffs Technical Specifications, and is consistent with the requirements of 10 CFR Part 50, Appendix J. The proposed SR is consistent to the existent site Technical Specification requirements; therefore, the margin of safety is not reduced by the proposed amendment request.

### C. Primary Containment Air Locks

1. Proposed Specification 3/4.7.C, "Primary Containment Air Locks", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS guidelines and format and do not remove any major requirements from the current specifications. The proposed amendment ensures that primary containment integrity is maintained and that the leakage rates are maintained consistent with the accident analysis for each site.
2. Proposed TSUP Section 3.7.C, Action 1 has been modified to include Footnote (b) as proposed in CECO's June 1, 1992 submittal. This change is based upon industry precedence and allows a small AOT (1 hour per year). This change is more conservative than current Technical Specification requirements at Dresden and Quad Cities which do not clearly delineate any specific limitations. The proposed change (6/1/92 submittal) and TSUP change provides clear guidance and direction to station personnel than current station requirements; therefore, the proposed change enhances the safe operation of the station by placing stricter guidance and/or controls on plant operation.
3. TSUP Section 3.7.C, Actions 2 and 3 are additions and clarifications to the STS guidelines to provide a specific Action and allowed outage time for an inoperable air lock door interlock mechanism. The proposed Actions are based on similar Actions approved for Perry Nuclear Power Plant and is included in CECO's June 1, 1992 Airlock Technical Specification submittal; therefore, the proposed change enhances the safe operation of the station by placing stricter guidance and/or controls on plant operation.

## ATTACHMENT 2

4. Proposed TSUP Sections 4.7.C.1.a, 4.7.C.1.c and 4.7.C.2 deviate from STS guidelines consistent with, and as discussed in, CECo's June 1, 1992 submittal. The proposed amendment (TSUP and 6/1/92) is consistent to or more conservative than existing requirements as it more clearly delineates additional restrictions and/or requirements; therefore, the margin of safety is not reduced by the proposed amendment.

### D. Primary Containment Isolation Valves

1. Proposed Specification 3/4.7.D, "Primary Containment Isolation Valves", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format. The proposed amendment ensures that the containment atmosphere will be isolated from the outside environment in the event of a release of radioactive material to the containment atmosphere or pressurization of the containment.
2. Several changes proposed that deviate from STS guidelines are based upon the guidelines outlined in GL 91-08 (for example, STS Table 3.6.3-1; Dresden current Table 3.7.1; Quad Cities current Table 3.7-1 has been deleted) and GL 87-09. In addition, "during shutdown" has been deleted from Surveillance Requirement 4.7.D.2 per Generic Letter 91-04. SRs 4.7.D.1 and 4.7.D.2 has been modified to assure that it is clear that the subject surveillance requirements apply to "power-operated or automatic" isolation valves.
3. Note (a) wording has been modified for clarity to remove ambiguous reference to PCIVs and is consistent to current practices at Dresden and Quad Cities.

Note (b) is proposed to clarify STS guidelines to prevent a conflict of the Action allowed outage times for MSIVs (TSUP 3.6.M) and primary containment isolation valves (TSUP 3.7.D). Both specifications, 3.7.D and 3.6.M, are applicable to MSIVs. However, the MSIV specific (3/4.6) takes precedence. The proposed specification is consistent to the existent Technical Specifications and is not a reduction in the margin of safety for Dresden and Quad Cities.

4. Proposed Specification 4.7.D.2 has been modified as proposed in Generic Letters 91-08 and 91-04 to delete the references to the deleted isolation valve table and the requirement to conduct the tests while shutdown, respectively. Also incorporated in this surveillance is an exception for the traversing in-core probe (TIP) isolation valves since they are surveilled in accordance with 4.7.D.5. This deviation from STS guidelines is consistent or more conservative than existing requirements; therefore, the current margin of safety has not been reduced by the proposed change.

## ATTACHMENT 2

5. Proposed TSUP Specification 4.7.D.4 does not include the specific differential pressure acceptance criterion for the excess flow check valves. No single specific differential pressure is applicable for these valves at Dresden and Quad Cities. The proposed specification is based on the format of the current LaSalle Technical Specification which similarly does not include such an acceptance criterion. The proposed specification is consistent to or more conservative than existing Technical Specification requirements and therefore, does not reduce the margin of safety.
6. Current Specifications 3.7.D.4, 3.7.D.5, 3.7.D.6 for Dresden and Quad Cities (also 4.7.D.1.d, 4.7.D.3 and 4.7.D.4 for Dresden only) have not been included with the proposed specifications. These requirements were originally included due to Environmental Qualification concerns. Based upon STS guidelines and industry precedence, these requirements are no longer appropriate for inclusion in the Technical Specifications.

### E. Suppression Chamber - Drywell Vacuum Breakers

1. Proposed Specification 3/4.7.E, "Suppression Chamber - Drywell Vacuum Breakers", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format. The proposed amendment ensures that the suppression chamber-to-drywell vacuum breakers relieves vacuum in the drywell thus assuring that the safety analysis for differential pressure is not exceeded.
2. The STS limiting condition for operation has been revised to reflect the plant specific safety analysis and design at Dresden and Quad Cities. As indicated in the current Technical Specifications, not all of the installed vacuum breakers are required to provide sufficient pressure protection. TSUP Section 3.7.E, Action 1 has been similarly revised. The proposed change is consistent to or more conservative than existing Technical Specification requirements; therefore, the proposed amendment is not a reduction in the margin of safety.
3. TSUP Section 3.7.E, Action 2 revises STS guidelines to reflect the plant specific design which provides single vacuum breakers rather than a pair in series. The 4 hour allowed time (v. 2 hours in STS) to close the open vacuum breaker is based on the current LaSalle Technical Specification which similarly provides 4 hours to close an open vacuum breaker line. Four hours is considered the minimum necessary to safely plan and complete the manual valve cycling necessary to close the vacuum breaker which is in a high radiation area.
4. TSUP Section 3.7.E, Action 3 similarly revises STS guidelines at Dresden Station, based on the current LaSalle specifications to reflect the single vacuum breaker in each line with dual position indications. STS requirements have been included (3.6.4.1.c.2) where appropriate. The Quad Cities design precludes incorporation of

## ATTACHMENT 2

these requirements as position indication is inaccessible. For Quad Cities, STS open 3.6.f.1, Action c.2 has been adopted as TSUP Section 3.7.E, Action 3. The proposed specification is consistent to the existent Quad Cities Technical Specification and does not reduce the margin of safety.

5. Proposed TSUP SR 4.7.E.2.a revises STS guidelines (4.6.4.1.b) from within 2 hours to within 12 hours of demonstrating operability of a suppression chamber - drywell vacuum breaker following discharge of steam to the suppression chamber. 12 hours provides a reasonable time limit (approximately one shift) to perform this surveillance. This STS deviation is consistent to the Improved Technical Specification which completely eliminated the requirement. The proposed amendment is more conservative than existing requirements and does not reduce the margin of safety.
6. Proposed TSUP SR 4.7.E.2.c.1 provides a minor clarification to STS guidelines (STS 4.6.3.1.b.3). The proposed change clarifies STS ambiguities and is consistent to existing requirements; therefore, the margin of safety is not reduced.
7. Proposed TSUP Surveillance 4.7.E.2.c.3 is consistent to STS guidelines (STS 4.6.4.1.b.3.c) and retained from the current specifications at Dresden and Quad Cities. The proposed STS deviation does not reduce the margin of safety.

### F. Reactor Building - Suppression Chamber Vacuum Breakers

1. Proposed Specification 3/4.7.F, "Reactor Building - Suppression Chamber Vacuum Breakers", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format. The proposed amendment ensures that the reactor building to suppression chamber vacuum breakers relieves vacuum when the primary containment depressurizes below reactor building pressure, thus assuring that the safety analysis for differential pressure is not exceeded.
2. The Actions for inoperable suppression chamber vacuum breakers revises STS guidelines (STS 3.6.4.2, Action a) to reflect requirements for an inoperable "line." This deviation is necessary to prevent a conflict with the primary containment isolation valve Action (TSUP 3.7.D) for an inoperable open isolation valve (which in this case is also a vacuum breaker.) TSUP Specification 3.7.D requires closure of the penetration (the vacuum breaker line) within 4 hours by deactivation of the other closed vacuum breaker. Such deactivation renders the second vacuum breaker in the line inoperable and, since there is no STS Action for both vacuum breakers inoperable, would require entry into Specification 3.0.C and a subsequent shutdown. Revising the Action to "line" applicability prevents the unnecessary shutdown without decreasing safety since one inoperable closed vacuum breaker completely defeats the "line" function. The proposed amendment is consistent to

## ATTACHMENT 2

or more conservative than existing requirements and does not reduce the margin of safety.

3. The allowed outage time for an inoperable vacuum breaker has been maintained at 7 days (STS guidelines specify 72 hours) per current Dresden and Quad Cities specifications. This is consistent to similar containment system requirements when one of a set of redundant components is inoperable. This deviation is also consistent to the guidelines specified in the Improved Technical Specifications. Therefore, because the current Technical Specification requirements are maintained, there is no reduction in the margin of safety.
4. The STS surveillance requirement to conduct a visual inspection of the vacuum breaker has not been adopted. Such an inspection is not currently required and would provide no useful information related to the capability of the vacuum breaker to perform its safety functions. Visual inspections are covered by 10 CFR 50, Appendix J requirements prior to leak rate testing. The proposed specification are consistent to the guidelines provided in the Improved Technical Specifications. Therefore, there is no significant reduction in the margin of safety.
5. SR 4.7.F.2.a for Reactor Building -Suppression Chamber Vacuum Breakers, as proposed requires cycling of the vacuum breaker and verification of the vacuum breaker indication every 31 days. Current Technical Specification 4.7.A.3.a requires verification of vacuum breaker operation and setpoint once per 3 months. The Improved Technical Specifications (ITS) specify a 92 day frequency for this surveillance. CECO proposes to retain the 92 day frequency from its current TS; therefore, there is no reduction in the margin of safety by this proposed deviation from STS guidelines.

### G. Drywell Internal Pressure

1. Proposed Specification 3/4.7.G, "Drywell Internal Pressure", is an addition to existing specifications. Proposed Actions and Surveillances are changed to match STS guidelines and format. Plant specific limits for drywell internal pressure have been included where appropriate. The proposed limitations on drywell internal pressure ensures that the containment peak pressure does not exceed the design pressure during the DBA. The limit for drywell pressure is consistent with the safety analysis. Suppression chamber pressure limits are not included since they are controlled by the differential pressure requirements.
2. Minimum pressure requirements to ensure that the external pressure differential does not exceed the design maximum external pressure differential are not required due to vacuum breaker design. Since the reactor building to suppression chamber vacuum breakers open at a setpoint of 0.5 psid and the suppression chamber to drywell vacuum breakers also open at a setpoint of 0.5 psid, the maximum possible external pressure differential is less than the design pressure. The proposed TSUP

## ATTACHMENT 2

Section 3.7.G, are consistent to existing Technical Specification requirements; therefore, the margin of safety has not been reduced.

3. Proposed TSUP Section 3.7.G, Note (a) provides a specific increase in the lower limit for the drywell during operation above 15% of rated thermal power due to assumptions made in the hydrodynamic loading analysis performed for both stations. However, the note also retains a four hour exception to provide for surveillances which affect the drywell pressure. This specific increase is also reflected in proposed TSUP Section 3.7.G, Action 1 which retains the current Technical Specification 24 hour allowed outage time approved for differential pressure relaxation. Therefore, the proposed Technical Specification is consistent to existing Technical Specification requirements and does not reduce the margin of safety.

### H. Drywell-Suppression Chamber Differential Pressure

1. Proposed Specification 3.7.H, "Drywell-Suppression Chamber Differential Pressure", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format. The proposed amendment ensures that in the event of a LOCA, the drywell-to-suppression chamber differential pressure is maintained.
2. TSUP Section 3.7.H, Action 1 retains the current TS 24 hour allowed outage time and revises the shutdown action requirements to match the applicability of the specification. Since the applicability begins at 15% of rated thermal power, the Action only requires that the plant reduce power below 15%. This deviation from STS guidelines (STS 3.6.2.4.c) is consistent to the guidelines provided in the Improved Technical Specifications. Because the proposed TSUP section is consistent to or more conservative than existing requirements, there is no reduction in the margin of safety.
3. TSUP Section 3.7.H, Actions 2, 3 and 4 and Surveillance 4.7.H.2 are written to reflect a single differential pressure instrumentation channel and the use of both drywell and suppression chamber pressure instrument channels to determine the differential pressure. Guidance provided in the Improved Technical Specifications recommends deletion of the STS SRs. Because the proposed TSUP amendment is consistent to or more conservative than existing requirements, there is no reduction in the margin of safety.
4. TSUP Surveillance 4.7.H.2 does not adopt the inclusion of a low differential pressure alarm setpoint since no such alarm is provided in the plant design. The proposed TSUP requirements are consistent to existing TS requirements; therefore, there is no reduction in the margin of safety.

## ATTACHMENT 2

5. SR 4.7.H.2.b for the drywell-suppression  $\Delta P$  indication requires a CHANNEL FUNCTIONAL TEST every 31 days. Since this specification encompasses indication only (not alarms, trips, or actuation of equipment, the CHANNEL FUNCTIONAL TEST is considered redundant to the CHANNEL CHECK, which is performed every 24 hours.

### I. Primary Containment Nitrogen Purge System

1. Proposed Specification 3/4.7.I, "Primary Containment Nitrogen Purge System", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format for systems and applications applicable to both Dresden and Quad Cities Stations. The proposed amendment requires availability of the nitrogen purge system to control combustible gas concentrations within the primary containment at or below the flammability limits following a postulated LOCA.
2. Proposed TSUP Specification 4.7.I.1.a includes nitrogen tank level requirements as compared to STS guidelines which specify volume (gallons) requirements. The proposed specification is consistent with the existing design of the system at Dresden and Quad Cities and is consistent with the safety analysis for both sites. Storage tank level requirements are a quantifiable measure as compared to STS guidelines which specify design basis requirements - immeasurable as a SR. The proposed requirements meet the intent of STS guidance, are consistent to or more conservative than existing TS requirements, and therefore, do not reduce the current safety margins at Dresden and Quad Cities.

LCO and SR's for the Primary Containment Nitrogen System have been revised such that the equipment required operable is further defined by specifying the ability to inert and make-up nitrogen to the containment if it is required. The proposed amendment is modeled after the STS provisions for an ACAD systems. The proposed amendment ensures that an operable flow path is available to fulfill the combustible control function.

### J. Primary Containment Oxygen Concentration

1. Proposed TSUP Specification 3/4.7.J, "Primary Containment Oxygen Concentration", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format for systems and applications applicable to both Dresden and Quad Cities Stations. The proposed amendment ensures that the primary containment oxygen concentration is maintained within the specified limits when primary containment is inerted.

## ATTACHMENT 2

2. In TSUP Section 3.7.J, the Action retains the current TS 24 hour allowed outage time and revises the shutdown action requirements to match the applicability of the specification. Since the applicability begins at 15% of rated thermal power, the Action only requires that the plant reduce power below 15%. This deviation from STS guidelines (STS 3.6.6.4) is consistent to the guidelines provided in the Improved Technical Specifications. Because the proposed TS specification is consistent to or more conservative than existing requirements, there is no reduction in the margin of safety.
3. The STS Note \* is not adopted since the Special Test Exception (STE) it references is not applicable to Dresden or Quad Cities Stations. These STEs are only applicable to initial plant startup programs (N/A to Dresden and Quad Cities).

### K. Suppression Chamber

1. Proposed Specification 3/4.7.K, "Suppression Chamber", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format for systems and applications applicable to both Dresden and Quad Cities Stations. The proposed specifications ensure that the primary containment pressure will not exceed the design pressure during primary system blowdown from full operating pressure. Torus temperature requirements have been clarified as committed to by Dresden Station during an Enforcement Conference in Region III during late 1991.
2. Proposed TSUP Section 3.7.K does not include values for volume. Level values are measurable quantities more appropriate as a surveillance requirement for demonstrating operability. The requirements specify only pool levels equivalent to the required pool water volumes. The changes are consistent to or more conservative than the current safety analyses and TS for both Dresden and Quad Cities and do not reduce the margin of safety.
3. TSUP Section 3.7.K, Actions 2 and 3 are written to require only actions that put the plant in a condition which complies with the specification or for which the specification is not applicable. In particular, once the plant is below 1% power, either the plant conditions comply with the specification or the temperature is above 110°F and another Action applies. Further shutdown should not be required. Proposed TSUP 3.7.K, Actions 2 and 3 are consistent to the guidelines outlined in the Improved Technical Specifications.
4. TSUP Section 3.7.K, Action 5 has been supplemented to identify the location for the pressure reading. This change clarifies ambiguities associated with the STS guidelines (STS 3.6.2.1, Action b.3) and is consistent to or more conservative than existing TS requirements.

## ATTACHMENT 2

The proposed deviations from STS guidelines are based upon precedence from the Improved Technical Specifications. Dresden's existing Technical Specifications do not provide action requirements for inoperable temperature elements for the suppression pool in the Primary Containment provisions. Actions requirements for Suppression pool temperature monitoring are provided within the proposed upgrade to Accident Monitoring Instrumentation Table 3.2.F-1. ITS has not retain STS action provisions for temperature monitoring elements; therefore, the action requirements and surveillance requirements for suppression pool temperature elements are deleted from the upgrade to the Containment Systems provisions.

5. The AOT in TSUP Section 3.7.K, Action 7 is retained from the current TS at 48 hours as a deviation from STS guidelines (STS 3.6.2.1, Action d) consistent with the AOT for this same instrumentation as used for Post-Accident Monitoring. The changes are consistent with the current safety analyses and TS for both Dresden and Quad Cities and do not reduce the margin of safety. In addition, these requirements have been eliminated in the Improved Technical Specifications.
6. STS Action e has not been included in the proposed amendment request as this requirement is a duplication of proposed Specification 4.0.D. The proposed changes are consistent to ITS which eliminated STS Action e. The proposed TSUP requirements are consistent to or more conservative than existing TS requirements and in some cases add additional restrictions; therefore the proposed TSUP section does not reduce the margin of safety at Dresden and Quad Cities.
7. TSUP Surveillances 4.7.K.2.c and 4.7.K.6 have been revised to reflect the specific wording of the corresponding limiting conditions for operation. The proposed TSUP requirements are consistent to or more conservative than existing TS requirements and in some cases add additional restrictions; therefore the proposed TSUP SRs do not reduce the margin of safety at Dresden and Quad Cities.

### L. Suppression Chamber and Drywell Spray

1. Proposed Specification 3/4.7.L, "Suppression Chamber and Drywell Spray", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format. The proposed amendment ensures that following a DBA, the suppression chamber and drywell spray systems remove heat from the suppression chamber and drywell airspace. The suppression chamber is designed to absorb the sudden input of heat from the primary system from a DBA or a rapid depressurization of the reactor pressure vessel through safety or relief valves. The proposed amendment ensures these systems are reliably maintained and available to perform their specified functions.

## ATTACHMENT 2

2. The current TS 30 day allowable outage time (AOT) for having a spray loop inoperable is inconsistent with the AOT's for containment spray loops in the STS as well as ITS. Therefore, the 30 day AOT has been changed to 7 days.
3. The proposed LCO's differ from STS guidelines for RHR requirements due to plant design limitations at Dresden Station (there is no RHR system). The proposed requirements are consistent with STS guidelines and are consistent with the safety analysis and design basis of the stations. Dresden uses LPCI as the shutdown cooling system in place of Quad Cities RHR system.

The ACTION requirement to proposed Specification 3.7.L is revised to assure that unrestricted continued operation is not permitted, or interpreted to be permitted with one suppression chamber spray loop operable in one electrical division and the operable drywell spray loop is in the other division.

4. STS surveillance requirement 4.6.2.2.c is not adopted since the spray systems at Dresden and Quad Cities are manual systems and do not automatically actuate. In addition, the STS SR 4.6.2.2.b has not been included due to system design constraints which would risk damage to plant equipment. Flow through the containment spray sparger is not required because of the potential equipment damage which could be done by spraying in the containment.
5. STS note \* is not adopted at Dresden Station since the system used for this function is not related to the ability to achieve cold shutdown. This note is applicable and adopted for Quad Cities.

### M. Suppression Pool Cooling

1. Proposed Specification 3/4.7.M, "Suppression Pool Cooling", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format. The proposed amendment ensures that following an accident, the suppression pool cooling system removes heat that the suppression pool absorbs from the primary system and long term, continues to absorb residual heat generated by fuel in the reactor core.
2. For TSUP 3.7.M, Action 1, the AOT for an inoperable suppression pool cooling loop being inoperable has been maintained at 7 days (STS guidelines specify 72 hours) per current Dresden and Quad Cities specifications. This AOT is different from STS guidelines and is based upon the AOTs for the supported systems. At Quad Cities, RHRSW supports the Containment Cooling and Containment Spray systems (not ECCS room coolers). The AOTs for each of these systems is seven (7) days which is consistent with the ITS guidelines; therefore, the margin of safety is not reduced by proposed TSUP 3.7.M, Action 1.

## ATTACHMENT 2

3. Proposed TSUP Surveillance 4.7.M.2 is written to require that pump flow be evaluated under the inservice test (IST) program. Dresden and Quad Cities' current TS require a three-pump run to demonstrate operability. The IST Program provide the only single pump flow rates available. The proposed wording is consistent to STS guidelines and does not reduce the margin of safety to the plant.
4. STS note \* is not adopted for Dresden since the system used for this function is not related to the ability to achieve cold shutdown. This note is applicable and adopted for Quad Cities.

### N. Secondary Containment Integrity

1. Proposed Specification 3/4.7.N "SECONDARY CONTAINMENT INTEGRITY", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format for systems and applications applicable to both Dresden and Quad Cities Stations. The proposed amendment ensure that the function of secondary containment integrity is maintained - isolating and containing fission products that may escape from primary containment following a DBA or a fuel handling accident.
2. Proposed TSUP footnote (a) has been included based upon the precedence set forth in the LaSalle County Technical Specifications. This exception to Secondary Containment Integrity allows a one-hour AOT due to an inoperable reactor building ventilation system.
3. STS Surveillance 4.6.5.1.b.1 is not adopted since this verification of blow-off panels would require routine entry into a high radiation area. However, the vacuum required by surveillance 4.7.N.1 would not be possible unless the hatches and blow-off panels were in place. This proposed specification is consistent with the current LaSalle specifications and does not reduce the current plant safety margins.
4. The STS surveillances in 4.6.5.1.c are revised in TSUP 4.7.N.3 to retain provisions for a calm wind test and do not include drawdown times since such drawdown times are not assumed in the safety analysis. Therefore the proposed TSUP requirements do not reduce the current plant safety margins.

### O. Secondary Containment Automatic Isolation Dampers

1. Proposed Specification 3/4.7.O, "Secondary Containment Automatic Isolation Dampers", is an addition to existing specifications. Proposed Actions and Surveillances match the STS type format for systems and applications applicable to both Dresden and Quad Cities Stations. The proposed amendment ensures that the function of secondary containment automatic isolation dampers, in combination with other accident mitigation systems limit fission product release during and

## ATTACHMENT 2

following a postulated DBA such that offsite radiation exposures are maintained within the requirements of 10 CFR 100.

2. Several changes proposed that deviate from STS guidelines are based upon the guidelines outlined in GL 91-08 (STS Table 3.6.5.2-1 has been deleted) and GL 91-04 (deleted "during shutdown"). There is currently no corresponding table for secondary containment automatic isolation dampers in the current Dresden or Quad Cities Technical Specifications.
3. Isolation times are not adopted for the limiting condition for operation or the surveillance requirements since no specific reactor building ventilation system isolation times are assumed in the safety analysis. The proposed TSUP LCO is also consistent to ITS guidelines which relocate the requirements outside of the TS. Therefore, plant safety margin is maintained by proposed TSUP 3/4.7.O.

### P. Standby Gas Treatment System

1. Proposed Specification 3/4.7.P, "Standby Gas Treatment System", is a rewrite of existing specifications. Proposed Actions and Surveillances are changed to match STS type format for systems and applications applicable to both Dresden and Quad Cities Stations. The proposed amendment ensures that the function of the SGTS is maintained thus ensuring that radioactive materials that leak from the primary containment into the secondary containment following a DBA are filtered and adsorbed prior to exhausting to the environment - below the limits specified in 10CFR Part 100.
2. Proposed Actions 2 and 3 are based upon precedent (Limerick) for shared SGTS systems as applicable to Dresden and Quad Cities. These requirements (as documented in CECO's 1/8/93 TS submittal for Dresden and Quad Cities) are consistent with the safety analysis for Dresden and Quad Cities and increases plant safety when compared to the current requirements in place at Dresden and Quad Cities Stations.
3. Proposed TSUP Section 3/7.P, Action 4 is retained from current specifications for both trains of the standby gas treatment system. Retaining this Action ensures appropriate actions are initiated but prevents entry into TSUP Specification 3.0.D. This proposed deviation is consistent to current requirements and does not reduce the safety margin as it relates to SBGTS.
4. Another deviation from STS guidelines (proposed Sections 4.7.P.2.a, 4.7.P.2.b, 4.7.P.5, and 4.7.P.6) does not include acceptance criteria in some surveillance requirements and is based upon precedence from the LaSalle County Technical Specifications. These requirements are consistent with the safety analysis for

## ATTACHMENT 2

Dresden and Quad Cities and increases plant safety when compared to the current requirements in place at Dresden and Quad Cities Stations. The proposed surveillances are consistent with CECo's 1/8/93 TS submittal on this topic.

5. Proposed TSUP SR 4.7.P.1 revises STS 4.6.5.3.a acceptance criteria from 'operable' to 'operating' as discussed in CECo's 1/8/93 TS submittal for both Dresden and Quad Cities. The proposed changes clarifies the acceptance criteria concerning the purpose of the monthly surveillance. The purpose of the monthly surveillance is to reduce the buildup of moisture on the HEPA filters and charcoal adsorbers; not to detect degradation of the heater (once per cycle operability demonstrations is sufficient). The proposed deviation provides an unambiguous and efficient method to verify acceptability of the monthly surveillance, and eliminated unnecessary performance of the once per cycle operability demonstration, currently performed monthly.
6. Proposed TSUP SR 4.7.P.3 deviates from STS 4.6.5.3.c guidelines regarding SBGT service usage requirements. The proposed TSUP requirement extends the interval from 720 hours to 1440 hours. Available test data indicates that the SR could be consistently met for consecutive periods, thereby justifying the lower frequency of testing. These requirements have been previously discussed in CECo's 1/8/93 TS submittal.
7. STS 4.6.5.3.d.3 guidelines for SBGTS filter cooling bypass dampers is not applicable to the SBGTS design at Dresden and Quad Cities. These requirements are not contained in Dresden and Quad Cities' current TS; therefore, there is no impact on the current safety margin by not including STS 4.6.5.3.d.3 in TSUP 4.7.P.
8. Proposed TSUP SR 4.7.P.4.c allows a voltage correction and rated kW value and an acceptance range. This clarification has been added due to the system design of SBGTS and more clearly defines acceptance criteria for the system. The proposed TSUP SR is consistent to CECo's 1/8/93 submittal by enhancing plant safety with the addition of clearer operability requirements for SBGTS heaters.

### Q. Other Changes

1. STS Section 3/4.6.1.4 has not been adopted as the Dresden and Quad Cities plant designs do not include MSIV leakage control systems.
2. Optional STS Section 3/4.6.1.5 has not been adopted at Dresden and Quad Cities Stations. The TSUP project maintains the current requirements which do not include requirements for Primary Containment Structural Integrity.
3. STS Section 3/4.6.1.7 has not been adopted at Dresden and Quad Cities Stations. The TSUP project maintains the current requirements which do not include requirements for drywell average air temperature. Initial drywell temperature was

## ATTACHMENT 2

determined to be insignificant with regard to accident response as documented in the March 1989 Drywell Temperature Event Evaluation.

4. STS Section 3/4.6.1.8 has not been adopted at Dresden and Quad Cities Stations. The TSUP project maintains the current requirements which do not include specific requirements for purge system isolation valves. These valves are qualified to close for both Dresden and Quad Cities and sufficient limiting conditions for operation are provided in the specification for primary containment isolation valves.
5. Optional STS Section 3/4.6.1.9 has not been adopted at Dresden and Quad Cities Stations. The proposed TSUP project maintains the current requirements which do not include requirements for Primary Containment Penetration Pressurization Systems.
6. Optional STS Section 3/4.6.6.1 has not been adopted at Dresden and Quad Cities Stations because there are no recombiners as part of the plant design. The proposed TSUP project maintains the current requirements which do not include requirements for Hydrogen Recombiner Systems at Dresden and Quad Cities Stations.
7. STS Section 3/4.6.6.3 has not been adopted as the Dresden and Quad Cities plant designs do not include a separate Drywell Hydrogen Mixing system.

### Summary and Schedule

The proposed changes to both the Dresden and Quad Cities Station Technical Specifications have been reviewed and approved by the On-Site Review in accordance with controlled Station Procedures. Commonwealth Edison has reviewed these proposed amendments in accordance with 10 CFR 50.92(c) and determined that no significant hazards consideration exist. This evaluation is documented in Attachment 6. It is requested that the proposed amendment be approved no later than December 31, 1993 and made effective upon completion of the entire Technical Specification Upgrade Program (TSUP).