50-237 CEC DRESDEN 2

QUAD-CITIES TECHNICAL SPECIFICATIONS
UPGRADE PROGRAM SECTION 3.8/4.8

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ATTACHMENT 1

EXECUTIVE SUMMARY

Technical Specification 3/4.8

"PLANT 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 3/4.8, "PLANT 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 3/4.8 has been reordered and new titles have been added based on STS arrangements and nomenclature. Some sections have moved to the appropriate STS section. Generic Letter 89-01 implementation is also incorporated into these proposed specifications.

Proposed specifications 3/4.8.A, 3/4.8.F and 3/4.8.G are revisions to current specifications. The proposed specifications implement STS Applicability, Actions and Surveillance Requirements.

Proposed specifications 3/4.8.B, 3/4.8.C and 3/4.8.E are new specifications for both Dresden and Quad Cities. The proposed specifications are based on the STS provisions implementing the current plant design.

Proposed Specification 3/4.8.D is a new specification for Dresden and a modification to existing specifications for Quad Cities. The proposed specification is based on STS provisions and current plant design.

Proposed Specifications 3/4.8.H and 3/4.8.I, and 3/4.8.J for Dresden, are retained from the current specifications based on the provisions approved by the NRC in Generic Letter 89-01 with some minor revisions from the STS to accommodate plant specifics. Other current Technical Specifications containing radiological effluent requirements have been relocated to the Offsite Dose Calculation Manual in accordance with the guidelines provided in Generic Letter 89-01.

ATTACHMENT 2

DESCRIPTION OF CHANGES

Technical Specification 3/4.8

"PLANT 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 due to 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). These provisions require 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. Containment Cooling Service Water System (Dresden)
Residual Heat Removal Service Water System (Quad Cities)

1. Proposed Specification 3/4.8.A has been retitled "Containment Cooling Service Water System" for Dresden and "Residual Heat Removal Service Water System" for Quad Cities and is an addition to, and a rewrite of, existing specifications. Proposed Actions and Surveillances are changed to match STS guidelines and format. The STS Bases for TS 3/4.7.1.1 indicate that the "RHR Service Water System" is intended to provide requirements for the service water system providing cooling water to the residual heat removal system, the ECCS if appropriate for the plant design, and for other safety related equipment (for Dresden and Quad Cities, the other safety related equipment includes the control room emergency filtration system refrigeration units.)

2. The LCO and Actions for Dresden in Operational Modes 4 and 5 related to shutdown cooling and ECCS support are not adopted from the STS because the CCSW system does not interact with the Shutdown Cooling System which provides the residual heat removal function for Dresden, nor is it required to support the Emergency Core Cooling Systems (ECCS) which are required to be operable in these modes, because of design differences. The STS note '*' has been included for Quad Cities. The proposed requirements are either more limiting or conservative then current TS requirement; therefore, the safety margin for Dresden and Quad Cities has not been reduced.

3. Proposed Specification 3.8.A, Action 1.c defines the allowable outage time (AOT) for one RHRSW subsystem inoperable (7 days). This AOT is different than STS (72 hours), and is based upon the AOTs for the supported systems. The Quad Cities RHRSW supports the Containment Cooling and Containment Spray systems (not ECCS room coolers). The current AOTs for each of these systems is 7 days, which is also consistent with ITS requirements for the Containment Cooling and Containment Spray systems.

4. The current requirements for flood protection of the Dresden CCSW vault and the Quad Cities RHRSW vault have been relocated from the Technical Specifications to administrative controls. In addition, flood protection requirements for the condensate pump rooms and the low pressure ECCS doors have been removed from the current Technical Specification requirements. These types of requirements are consistently necessary throughout the industry but are not STS requirements and are typically not included in the Technical Specifications except through the OPERABILITY requirements.

5. STS surveillance 4.7.1.1.b is not adopted since these systems at Dresden and Quad Cities are manual and do not automatically actuate on any test signals. Therefore, the proposed TSUP 4.8.A section is consistent to current TS requirements.

B. Diesel Generator Cooling Water System

1. Proposed Specification 3/4.8.B has been retitled "Diesel Generator Cooling Water System" and is a new specification for both Dresden and Quad Cities. The STS Bases for TS 3/4.7.1.2 indicate that the "Plant Service Water System" is intended to provide requirements for the service water system providing cooling water to the diesel generators, the ECCS if appropriate for the plant design, and for other safety related equipment (for Dresden, no other safety related equipment is cooled by this system).

2. The proposed Applicability for TSUP 3/4.8.B is consistent to the current requirement in place at LaSalle County. Current requirement for DGCWP are implied in EDG operability. STS 3/4.7.1.2 is designed for a complete safety-related plant Service Water System. The DGCWS is the one safety related service water system at Dresden and Quad Cities. Therefore, the proposed LaSalle Technical Specification were used as a model for Dresden and Quad Cities. Because proposed changes add additional restrictions, there is an increase in the margin of safety by the proposed TSUP 3/4.8.B when compared to current TS requirements.

3. The STS LCO and Actions are proposed to be replaced with those of LaSalle since the system design is similar to LaSalle's in that the system is not required to support the Emergency Core Cooling Systems (ECCS) or other safety related equipment, except for the emergency diesel generator. The proposed Dresden and Quad Cities specifications will ensure the appropriate controls are in place to provide cooling water for the diesel generators. STS 3.7.1.2 Actions a.1 and a.2

are not appropriate and are not adopted since the system contains only one pump per subsystem. STS Surveillance Requirement 4.7.1.2.b is not adopted since the system valves do not automatically actuate.

C. Ultimate Heat Sink

1. Proposed Specification 3/4.8.C has been retitled "Ultimate Heat Sink" and is a new specification for both Dresden and Quad Cities. Proposed Actions and Surveillances are added to the specifications in accordance with STS guidelines.

2. The STS surveillance (SR 4.7.1.3.b and 4.7.1.3.c) associated with cooling towers are not adopted because neither Dresden nor Quad Cities have cooling towers. Therefore, there is no reduction in the margin of safety by the proposed changes.

3. As stated in Attachment 2, Section B.1, proposed TSUP 3.8.C has been been modified (deviation from STS guidelines) based on the DGCWS being the only safety related service water system at Dresden and Quad Cities. STS guidelines specify RHRSW. The proposed deviation from STS guidance is consistent to the requirements proposed in TSUP 3.8.B.

4. The proposed modification to STS note '*' adds additional restrictions; therefore, the proposed deviation is more sonservative than STS guidelines and serves to increase plant safety.

ATTACHMENT 2

D. Control Room Emergency Filtration System

1. Proposed Specification 3/4.8.D has been retitled "Control Room Emergency Filtration System" and is a new specification for Dresden but is a rewrite of existing specification for Quad Cities. Proposed Actions and Surveillances are added to the specifications in accordance with STS guidelines. Each of these provisions is consistent with the January 1, 1993 CECo submittal on this subject.

2. The proposed LCO and Surveillance Requirements maintain the current requirement for only a single system since the approved design contains only one train designed to fulfill the requirements. The "Applicability" is limited to Modes 1, 2, and 3, and '*' based upon current Technical Specification applicability and ITS applicability requirements. The footnote defining "*" is enhanced from STS requirements to maintain uniformity with Technical Specification 3/4.8.A.

3. The proposed LCO maintains the current allowed outage time of 14 days that is contained within the Quad Cities Technical Specification. This requirement was submitted for Dresden Station as part of a dual station (Dresden and Quad Cities Stations) proposed Technical Specification amendment on January 8, 1993.

4. The acceptance criteria for proposed surveillance 4.8.D.1 Specification is based upon the maximum temperature criteria for equipment functional reliability, with sufficient margin to ensure reliable human performance. This surveillance was submitted for Dresden and Quad Cities Stations as part of a dual station proposed Technical Specification amendment on January 8, 1993.

5. Proposed surveillance 4.8.D.2 revises the acceptance criteria for the monthly CREF surveillance to require 10 hours of operation with the heaters operating. This proposed revision was previously submitted for Dresden and Quad Cities Stations as part of a dual station proposed Technical Specification amendment on January 8, 1993. The proposed revision clarifies the purpose of heater operation during the monthly surveillance. The purpose of heater operation during the surveillance is to reduce the build-up of moisture on the HEPA filters and charcoal adsorbers, not to detect degradation of the heater. The once-per-cycle operability demonstration ensures operability of the heater.

6. Proposed surveillances 4.8.D.3.b and 4.8.D.4 define the acceptance criteria for required testing of the air filtration unit (AFU) charcoal adsorber as 0.50% methyl iodide concentration. STS requires 0.175%. The proposed limit has been discussed with members of the NRC in a Technical Meeting in August 1989 and was subsequently submitted for Dresden and Quad Cities Stations as part of a dual station proposed Technical Specification amendment on January 8, 1993. The acceptance criteria for the remaining charcoal adsorber and HEPA filter test surveillances (4.8.D.3.a, 4.8.D.6, and 4.8.D.7) are consistent with STS requirements.

7. Proposed surveillance 4.8.D.4 utilizes a 1440 hour service usage testing requirement (STS = 720) based on historical test results showing excellent results for consecutive testing intervals. The proposed 1440 hour service usage interval maintains the current requirements contained within the Quad Cities Technical Specifications. This proposed surveillance frequency was previously submitted for Dresden Station as part of a dual station (Dresden and Quad Cities) proposed Technical Specification amendment on January 8, 1993.

8. Proposed surveillance 4.8.D.5.b does not include automatic isolation mode actuation requirements for Dresden Station. The Dresden design does not incorporate an automatic isolation function. For Quad Cities, the proposed surveillance contains the requirement for verification of automatic isolation upon simulated automatic isolation signal.

9. Proposed surveillance 4.8.D.5.c does not include automatic pressurization mode requirements. The Dresden and Quad Cities design does not incorporate an automatic initiation function. The system is manually initiated.

10. The STS surveillance for the CREFS AFU heater has been supplemented to retain current plant specific provisions for voltage variations at the bus. This proposed revision was previously submitted for Dresden and Quad Cities Stations as part of a dual station proposed Technical Specification amendment on January 8, 1993.

E. Flood Protection

1. Proposed Specification 3/4.8.E has been retitled "Flood Protection" and is a new specification for both Dresden and Quad Cities. Proposed Actions and Surveillances are added to the specifications in accordance with STS guidelines and current flood protection procedures. The proposed TSUP section is consistent to the current TS requirements and maintains the current safety margin for Dresden and Quad Cities.

F. Snubbers

1. Proposed Specification 3/4.8.F has been retitled "Snubbers" and is an addition to, and a rewrite of, existing specifications. Proposed Actions and Surveillances are changed to match STS guidelines and format. Some minor wording changes are proposed for clarity.

2. The STS was modified to adopt the snubber requirements approved in the Perry Technical Specifications. The proposed specifications were developed based on the modifications made to STS. In addition, the proposed specifications include the provisions approved by the NRC in Generic Letters 84-13 and 90-09. STS surveillance 4.7.4.d footnotes '*' and '#', Table 3.7.5-2 are also not adopted due to GL 90-09.

3. STS surveillance 4.7.4.f.2, and Table 3.7.5-1 were not adopted because Dresden and Quad Cities have removed all hydraulic snubbers from their design.

G. Sealed Source Contamination

1. Proposed Specification 3/4.8.G has been retitled "Sealed Source Contamination" and is an addition to, and a rewrite of, existing specifications. Proposed Actions and Surveillances are changed to match STS guidelines.

2. STS surveillance 4.7.6.3 is proposed as an action statement to be consistent with other proposed specifications for reporting requirements.

3. The STS wording of "sealed sources and fission detectors" has been consistently shortened to "sealed sources" since fission detectors are considered to be sealed sources by the LCO. This consideration is also reflected in the Bases.

H. Off-gas Explosive Mixture

I. Main Condenser Off-gas Activity

1. The addition of the statement "after 30 minutes decay" in LCO 3.8.I has been added to be consistent to current Technical Specification requirements (TS 3.8.A in the current TS). The proposed deviation is consistent to current plant design and is not a reduction in the margin of safety for Dresden and Quad Cities Station.

2. The addition of footnote "(a)" for Operational Modes 2 and 3 and addition of footnote "(b)" in TSUP 4.8.I.2.b has been added to ensure consistency to current plant requirements. The proposed change is consistent to current plant requirements and does not reduce the margin of safety for Dresden and Quad Cities Station.

3. STS 3.11.2.2, Actions have been modified in TSUP 3.8.I to be 8 hours (as opposed to 6 hours in STS). The proposed change is consistent to other action requirements and provides a reasonable time period to perform the required actions. The deviation from STS guidance is inconsequential and does not reduce the safety margin (current TS 3.8.A for Dresden requires action to HOT STANDBY within 12 hours).

J. Liquid Holdup Tanks (Dresden only)

1. Proposed Specifications 3/4.8.H through 3/4.8.J have been retitled "Off-gas Explosive Mixture," "Main Condenser Off-gas Activity" and "Liquid Holdup Tanks," respectively, and are a modifications of current specifications based on the provisions provided in Generic Letter 89-01.

2. The proposed specifications are identical to the Technical Specifications implementing Generic Letter 89-01 recently approved for LaSalle County Station except that Quad Cities has no outdoor liquid holdup tanks and this specification is not proposed for Quad Cities.

3. Implementation of Generic Letter 89-01 resulted in the deletion of Specifications 3.8.A.1 through 5, 3.8.B, 3.8.E, 3.8.F, and 3.8.G for Dresden Station. For Quad Cities the deleted Specifications include: 3.8.A.1 through 3.8.A.4, 3.8.B, 3.8.D, 3.8.E, 3.8.F and 3.8.G. The proposed deletions are made in accordance with the guidance provided in Generic Letter 89-01.

J. Safe Shutdown Makeup Pumps (Quad Cities only)

1. A new section, Section 3/4.8.J, "Safe Shutdown Makeup Pump," is being added to the Quad Cities TSUP package per the requirements of GL 86-10 and GL 88-12. These requirements are not applicable to the Dresden Station design.

L. Other Changes

1. Current Specification 3.8.C, "Mechanical Vacuum Pump," for both Dresden and Quad Cities was relocated to proposed Specification 3.2.A in accordance with STS guidelines.

2. Appropriate changes to the 3/4.8 Bases are also proposed to support the changes proposed for the individual specifications.