



April 21, 1995

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

Subject: Dresden Nuclear Power Station Units 2 and 3
Quad Cities Nuclear Power Station Units 1 and 2
Response to NRC Staff Request for Additional Information (RAI)
Regarding the Technical Specification Upgrade Program (TSUP)
NRC Docket Nos. 50-237/249 and 50-254/265

- References: (a) J. Stang letter to D. Farrar, dated February 22, 1995.
(b) P. Piet letter to T. Murley, dated December 15, 1993.

In Reference (a), the NRC staff requested additional information from Commonwealth Edison (ComEd) to support the review and approval of ComEd's TSUP project. Regarding TSUP Section 5.0, the NRC requested further evaluation by ComEd concerning the comparison of current requirements and the proposed TSUP requirements. ComEd submitted TSUP Section 5.0, "Design Features," to the NRC staff on December 15, 1993 (Reference (b)). The purpose of this letter is to respond to the NRC staff's RAI for TSUP Section 5.0 and supplement the information previously provided in the Reference (b) submittal. The information provided in this letter provides a comprehensive evaluation between current requirements and those proposed in TSUP and provides discussion demonstrating the acceptability of any apparent deviations. Other portions of ComEd's response to the RAI will be forthcoming under separate cover.

Attachments A and B to this letter provide ComEd's response to Generic Question No. 1 (supplemental significant hazards evaluation for TSUP Section 5.0) and Generic Question No. 2. Our response to Generic Question No. 2 includes supplemental information regarding proposed TSUP Section 5.0 as well as additional information regarding the comparison to current Technical Specifications requirements.

It should be noted that the proposed TSUP Section 5.0 requirements are consistent to and confirm the current safety analysis as described in the UFSAR. Any changes to the UFSAR necessitated by the approval and implementation of TSUP will be incorporated into the UFSAR, where applicable.

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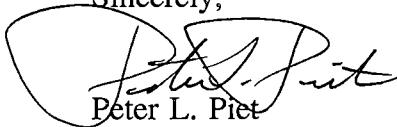
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In order to assist in the review of TSUP Section 5.0, Attachment C to this submittal contains marked-up copies of the current Dresden Unit 2 and Quad Cities Unit 2 Technical Specifications. The mark-ups consist of a cross-reference between current Technical Specification requirements and those proposed in TSUP 5.0. The mark-ups are not intended to replace or supersede the TSUP pages submitted to the NRC staff in Reference (b). As such, these pages have been stamped "For Information Only." In addition, Attachment D to this submittal contains marked-up copies of Section 5.0 of the BWR/4 STS, where applicable. For simplicity, Dresden parameters only have been noted on the mark-ups where plant-specific design information is required. These mark-ups serve as a cross-reference between STS and the proposed TSUP requirements. The mark-ups are not intended to replace or supersede the TSUP pages submitted to the NRC staff in Reference (b). As such, these pages have been stamped "For Information Only."

If there are any questions, please contact this office.

Sincerely,



Peter L. Piet

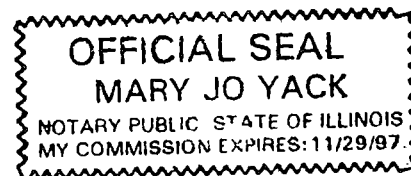
Nuclear Licensing Administrator

Attachments: A - ComEd Response to Generic Question No. 1
 B - ComEd Response to Generic Question No. 2
 C - Marked-Up Current Technical Specification Pages
 D - Marked-Up Draft Revision 4 BWR/4 STS Pages

cc: J. B. Martin, Regional Administrator - RIII
 J. F. Stang, Project Manager - NRR
 R. M. Pulsifer, Project Manager - NRR
 M. N. Leach, Senior Resident Inspector - Dresden
 C. G. Miller, Senior Resident Inspector - Quad Cities
 Office of Nuclear Facility Safety - IDNS

Signed before me on this 21st day,
of April, 1995.

Mary Jo Yack
Notary Public



ATTACHMENT A

ComEd Response to Generic Question No. 1

In response to the NRC staff Request for Additional Information (RAI), the following discussion provides a revised Significant Hazards Consideration for TSUP Section 5.0. The revised evaluation satisfies RAI Generic Question No. 1. NRC Staff Generic Question No. 1 requested the following:

In review of proposed Technical Specification Upgrade Program (TSUP) Sections 3.1, 3.2, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, and 5.0, the No Significant Hazards Consideration for these applications are not completely accurate and the wording used in the evaluations are confusing. The considerations did not take into account the relaxation of the current Technical Specification (TS) requirement with the adoption of the proposed Standard Technical Specifications (STS). In addition, the staff discovered typographical errors in the considerations. The staff requests that Commonwealth Edison Company (ComEd) re-evaluate the No Significant Hazards Consideration for each application covering the sections listed above and supplement the applications by providing an accurate and complete No Significant Hazards Consideration.

The following provides ComEd's revised No Significant Hazards Evaluation for TSUP Section 5.0. ComEd will provide responses to Generic Question No. 1 for other Sections of TSUP under separate transmittal.

TSUP SECTION 5.0
BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION

Commonwealth Edison has evaluated this proposed amendment and determined that it involves no significant hazards consideration. According to 10 CFR 50.92(c), a proposed amendment to an operating license involves no significant hazards consideration if operation of the facility, in accordance with the proposed amendment, would not:

- 1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or
- 2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or
- 3) Involve a significant reduction in a margin of safety.

The proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated because:

In general, the proposed amendment represents the conversion of current requirements to a more generic format, or the addition of requirements which are based on the current safety analysis. Implementation of these changes will provide continued assurance that specified parameters remains within their acceptance limits, and as such, will not significantly increase the probability or consequences of a previously evaluated accident. Some of the proposed changes to the current Technical Specifications (CTS) represent minor curtailments of the current requirements which are based on generic guidance or previously approved provisions for other stations. The proposed amendment for current Dresden and Quad Cities Station's Technical Specifications Section 5.0 represent a minor relaxation of the current requirements, and is based on BWR-STs (NUREG-0123) guidelines or later operating BWR plant's NRC accepted changes. The proposed changes are consistent with the current safety analyses and have been previously determined to represent sufficient requirements for the assurance and reliability of equipment assumed to operate in the safety analysis. Any deviations from CTS or STS requirements do not significantly increase the probability or consequences of any previously evaluated accidents for Dresden or Quad Cities Stations.

Details describing the plant's design are presented in TSUP Section 5.0. There are no Limiting Conditions for Operation (LCO) or Surveillance Requirements (SR) encompassed within TSUP Section 5.0. This information is administrative in nature and consistent to the UFSAR; therefore, the probability of any accident previously evaluated is not increased by the proposed amendment.

Create the possibility of a new or different kind of accident from any previously evaluated because:

In general, the proposed amendment represents the conversion of current requirements to a more generic format, or the addition of requirements which are based on the current safety analysis. Others represent minor relaxations of the current requirements which are based on generic guidance or previously approved provisions for other stations. These changes do not involve revisions to the design of the station. The proposed changes are administrative in nature and do not involve a revision

TSUP SECTION 5.0
BASIS FOR NO SIGNIFICANT HAZARDS CONSIDERATION

in the operation of the station. As such, there are no changes to the current safety analysis. Therefore, the proposed changes will not introduce new failure mechanisms beyond those already considered in the current safety analyses.

The proposed amendment for Dresden and Quad Cities Station's Technical Specifications Section 5.0 is based on BWR-STS guidelines or later operating BWR plants' NRC accepted changes. The proposed amendment has been reviewed for acceptability at the Dresden or Quad Cities Nuclear Power Stations considering similarity of system or component design versus the BWR-STS or later operating BWRs. Any deviations from CTS or BWR-STS requirements do not create the possibility of a new or different kind of accident previously evaluated for Dresden and Quad Cities Stations. No new modes of operation are introduced by the proposed changes. The proposed changes maintain at least the present level of operability, and in some cases are more conservative. Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any previously evaluated.

Involve a significant reduction in the margin of safety because:

In general, the proposed amendment represents the conversion of current requirements to a more generic format, or the addition of requirements which are based on the current safety analysis. Others represent minor curtailments of the current requirements which are based on generic guidance or previously approved provisions for other stations. The proposed amendment to Technical Specification Section 5.0 implements present requirements, or the intent of present requirements in accordance with the guidelines set forth in the STS. Any deviations from CTS or BWR-STS requirements do not significantly reduce the margin of safety for Dresden or Quad Cities Stations. These changes do not involve revisions to the design of the station. The proposed changes are administrative in nature and do not involve a revision in the operation of the station. As such, there are no changes to the current safety analysis. Therefore, the proposed changes will not introduce new failure mechanisms beyond those already considered in the current safety analyses. Therefore, because the proposed changes are administrative in nature, do not involve a revision in the operation of the station and maintains the current design requirements specified in the UFSAR, the proposed changes do not involve a significant reduction in the margin of safety.

ATTACHMENT B

ComEd Response to Generic Question No. 2

TSUP Section 5.0

In response to the NRC staff Request for Additional Information (RAI), the following discussion compares the current Technical Specification (TS) requirements at Dresden (DR) and Quad Cities (QCS) to those proposed in the Technical Specification Upgrade Program (TSUP). This comparison satisfies RAI Generic Question No. 2. NRC Staff Generic Question No. 2 requested the following:

In review of proposed TSUP Sections 3.1, 3.2, 3.3, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, and 5.0, ComEd did not evaluate and provide justification for the relaxations and deviations between current TS requirements and the proposed TS. ComEd has compared only the proposed TS to the STS and provided justification for any deviations. To allow the staff to perform a complete and accurate review of the above proposed TSUP TS sections, please provide supplemental evaluations of any changes or deviations between the current TS and the proposed TS. In addition, for each deviation or relaxation between the current TS and the proposed TS an evaluation should be provided which demonstrates that the proposed TS maintains the current licensing basis as described in the Updated Final Safety Analysis Report.

In response to the above NRC staff question, the following evaluation provides a line-by-line comparison of the current DR and QCS TS requirements to the proposed TSUP requirements and includes ComEd's basis for acceptance of the proposed TSUP Section 5.0 requirements. All deviations from current DR and QCS TS requirements have been evaluated by ComEd and are discussed below. ComEd requests NRC staff review and approval of all previously submitted TSUP sections in order to effectuate a successful and orderly implementation of the program at Dresden and Quad Cities Stations in the near future.

Previous comparisons made between the Draft Revision 4, of the BWR/4 Standard Technical Specifications (STS) and the proposed TSUP submittals have been previously provided to the NRC staff. Some but not all information from the previous TSUP submittals may be included below to provide the best response to the NRC staff's RAI.

1. CTS 5.1 for both Dresden and Quad Cities contains a detailed description of the site geographic location and size. This type of information is currently contained within UFSAR Section 2.1. Proposed TSUP Section 5.1 is based on STS Section 5.1. The addition of information concerning the location of information regarding the radioactive gaseous and liquid effluents is based on the format of the LaSalle County Technical Specifications. Proposed TSUP 5.1.C and 5.1.D appropriately cross-references the Offsite Dose Calculation Manual (ODCM). The ODCM includes the methodology and parameters used in the calculation of offsite dose resulting from radioactive gaseous and liquid effluents. This change from the STS is consistent to Generic Letter 89-01. The exclusion area, the low population zone (as determined in accordance with 10 CFR Part 100) and the site boundary for gaseous and liquid effluents (as recommended in Generic Letter 89-01) are utilized in determining compliance with dose restrictions for the general

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public as determined in accordance with 10CFR Part 20.

The STS "Exclusion Area," map was originally not proposed in TSUP Section 5.1.A. This should remain as an open item, contingent upon its implementation and correction in the TSUP clean-up package.

Proposed TSUP Figures 5.1.B-1 are different for Dresden and Quad Cities. The proposed figures were unclear. This should remain as an open item, contingent upon its implementation and correction in the TSUP clean-up package.

2. Proposed TSUP Section 5.2 incorporates the containment design provisions consistent with STS Section 5.2 that assure that the containment response analyses assumptions remain valid. Current Section 5.4 provides a broader discussion regarding general design parameters by reference to the applicable sections of the Final Safety Analysis Report (FSAR). The CTS FSAR references are obsolete and refer to versions of the FSAR in-place at Dresden and Quad Cities prior to the FSAR re-baselining efforts of 1991-1993. The proposed requirements are consistent with industry practice thus assuring that appropriate controls are in place for the containment configuration, containment design temperature and pressure and the secondary containment. By identifying only the critical design features of configuration, free air and water volumes, design pressure and temperature and the secondary containment free air volume, revisions to other parameters will be adequately controlled by 10CFR 50.59.
3. CTS 5.2 for both Dresden and Quad Cities contains a brief description of the fuel assemblies and control rods. This information is encompassed within proposed TSUP Section 5.3 which is based on STS Section 5.3. TSUP Section 5.3 is proposed to incorporate the reactor core design provisions that assure that the reactor physical content and arrangement does not change. Current Section 5.2 provides similar details, however, Generic Letter 90-02 Supplement 1 is incorporated in proposed TSUP Section 5.3.A to allow limited substitutions in accordance with NRC approved applications. The purpose of this section is to define/describe fuel assemblies at Dresden and Quad Cities Station. Significant changes in bundle designs are reviewed and approved by the NRC staff prior to use. Proposed TSUP 5.3 is consistent to the fuel bundle design features at Dresden and Quad Cities Stations.
4. Proposed TSUP Section 5.4 is based on STS Section 5.4. TSUP Section 5.4 incorporates the reactor coolant system specific design provisions of pressure, temperature and volume. CTS 5.3 only provides a general reference to similar and broader general design parameters listed in the applicable sections of the FSAR. In addition, the CTS FSAR references are obsolete and refer to versions of the FSAR in-place at Dresden and Quad Cities prior to the FSAR re-baselining efforts of 1991-1993. However, CTS requirements are for the reactor vessel only, not the complete reactor coolant system. The proposed

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requirements are consistent to industry practice thus assuring that appropriate controls are in place for the reactor coolant system. By identifying only the specific features such as design pressure and temperature and reactor coolant system volume, revisions to other parameters will be adequately controlled by 10CFR 50.59.

Proposed TSUP Section 5.4 contains an inconsistency in the cross-reference to the UFSAR. The original TSUP was based on an older version of the UFSAR for Dresden. The UFSAR was updated for Dresden on December 30, 1993. This should remain as an open item, contingent upon its implementation and correction in the TSUP clean-up package.

5. STS Section 5.5 is not incorporated within the proposed TSUP package. The STS specification is not proposed since it only refers to items in the Exclusion Area and Unrestricted Area Boundaries map. The STS "Exclusion Area," map was originally not proposed in TSUP Section 5.1.A. The ODCM contains more detailed information, including a description of the meteorological tower location. As previously discussed, the addition of the Exclusion Area map should remain as an open item, contingent upon its implementation and correction in the TSUP clean-up package.
6. TSUP Section 5.6 is proposed to incorporate the fuel storage design provisions consistent to STS Section 5.6 that assures that the spent fuel is appropriately stored and cooled. Current Section 5.5 provides similar design parameters which are modified as necessary to include the information on criticality, drainage and storage of spent fuel. STS incorporates into the Technical Specifications design limits for storage of new fuel for the initial core loading. The CTS requirements associated with the K_{inf}/K_{eff} limits have not fully been retained within TSUP 5.0. This type of information is more appropriately controlled in the UFSAR. K_{inf}/K_{eff} limits are fuel type dependent, which could be cycle dependent and should be contained within the UFSAR. The design of the fuel racks is to ensure a maximum K_{eff} is not exceeded and, thus that the fuel cycle need not be analyzed for such limits. Per STS requirements, TSUP Section 5.6 does not include the specific Surveillance Requirements specified in current Dresden Technical Specification 3.10.G.1 and 3.10.G.2. These surveillances are implicit per the requirements of 10 CFR 50.59 where potential new fuel designs and associated fuel storage rack reactivity limits may constitute an Unreviewed Safety Question thus necessitating NRC staff review and approval prior to their implementation and usage; however such design features are not appropriate for inclusion into the Technical Specifications as evidenced by their exclusion from the BWR-STs and the Improved Standard Technical Specifications (ITS - NUREG-1433). The requirements outlined by current Dresden Technical Specifications 3.10.G.1 and 3.10.G.2 are design parameters more appropriate for inclusion within the UFSAR and will be administratively controlled in owner-controlled documentation.
7. STS Section 5.7, Component Cyclic or Transient Limit, was not adopted in the proposed

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specification. Currently both Dresden and Quad Cities control the thermal cycle limits in the FSAR. Thus, it is proposed that the thermal cycles be retained in the FSAR and not incorporated into the Technical Specifications. This change is also consistent to the requirements outlined in the BWR Improved Standard Technical Specifications.

8. CTS 5.6 includes a discussion of seismic design which is currently incorporated within the UFSAR. This design parameter is considered to be adequately controlled by design change procedures in accordance with 10CFR 50.59 and is not included in the proposed Technical Specifications.