Commonwealth Edison
72 West Adams Street, Chicago, Illinois
Address Reply to: Post Office Box 767
Chicago, Illinois 60690 - 0767

May 4, 1989

Dr. Thomas E. Murley, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Dresden Nuclear Power Station Units 2 and 3
Supplement to Proposed Amendment on ECCS and
SBGT Multiple Testing Technical Specifications
NRC Docket Nos. 50-237 and 50-249

Reference: Letter from J.A. Silady to T.E. Murley dated
December 21, 1988

Dr. Murley:

The referenced letter and its four attachments supported a proposed amendment of the Dresden Units 2 and 3 Technical Specification provisions for testing other systems or subsystems of the Emergency Core Cooling System (ECCS) or Standby Gas Treatment System (SBGT) when one system or subsystem in inoperable.

As a result of the preliminary review by your Staff, Commonwealth Edison agreed to supplement the proposed amendment as follows:

(a) Clarification of the wording in the footnote to proposed Table 4.5.1 concerning HPCI surveillance requirements.

(b) Clarification of how the proposed amendment meets the intent of Standardized Technical Specification (STS) Section 4.5.1 provisions related to ECCS line "keep fill" requirements and valve position verifications.

These issues are addressed in Attachment 1 (Description of the Table 4.5.1 Footnote Revision) and Attachment 2 (Comparison to STS Section 4.5.1).

In the process of performing this review, two additional changes were identified as desirable; one which is administrative and one which adds further consistency with STS. These supplemental items are addressed in Attachment 3 (Description of Other Proposed Changes).

Attachment 4 is a brief summary of the proposed changes to the Technical Specification pages affected by this supplemental request. Attachment 5 contains the affected pages which have been marked-up as CECo proposes to amend them.

A001

The supplemental changes have been reviewed and approved by both On-Site and Off-Site Review in accordance with Commonwealth Edison Company procedures. We have reviewed these proposed changes in accordance with 10 CFR 50.92(c) and determined that no significant hazards consideration exists. This evaluation is documented in Attachment 6.

Attachment 7, which is provided for convenient reference only, are the pages of STS Section 4.5.1.

Commonwealth Edison is notifying the State of Illinois of our supplemental application for this amendment by transmitting a copy of this letter and its attachments to the designated State Official.

Please direct any questions you may have concerning this matter to this office.

Very truly yours,

J. A. Silady
Nuclear Licensing Administrator

lm

Attachments 1: Description of the Table 4.5.1. Footnote Revision
2: Comparison to STS Section 4.5.1
3: Description of Other Proposed Changes
4: Summary of Proposed Supplemental Changes
5: Proposed Supplemental Changes
6: Significant Hazards Evaluation
7: STS Section 4.5.1 Pages (for reference only)

cc: A.B. Davis - Regional Administrator, RIII
S.G. DuPont - NRC Senior Resident Inspector, Dresden
B.L. Siegel - Project Manager - NRR
D.R. Hoffman - Excel Services
M.C. Parker - State of Illinois (IDNS)

SUBSCRIBED AND SWORN to before me this 4th day of May, 1989

Notary Public

"OFFICIAL SEAL"
LELIA F. MAYO
Notary Public, State of Illinois
My Commission Expires 4/25/93

0109T

ATTACHMENT 1

DESCRIPTION OF TABLE 4.5.1 - FOOTNOTE REVISION

In their preliminary review of the December 21, 1989 submittal the NRC identfiied the need for revision of a footnote in the surveillance requirements for the HPCI system. The previous amendment request introduced new Table 4.5.1 which specified the surveillance requirements for the HPCI system. The "*" footnote was appended to proposed SR 4.5.C.3 and 4.5.C.4 in anticipation of the implementation of the STS blanket LCO applicability Section 3/4.0. One restrictive section of the blanket LCO applicability is Specification 3.0.4 (Dresden proposed new Specification 3.0.D) which does not allow mode changes or plant condition changes to other modes or conditions unless the equipment necessary for operation in the new mode or condition is operable. STS SR 4.0.4 (Dresden proposed new SR 4.0.D) requires the necessary surveillances to be performed to ensure 3.0.4 is adhered to. Some systems either through plant design or by design basis cannot be tested until the plant operational condition or mode has been entered which requires the untested system operable for sustained safe operation. To test these systems, an exception to STS SR 4.0.4. is therefore necessary.

The "*" footnote in previously proposed Table 4.5.1 stated "The provisions of Specification 4.0.D are not applicable provided the surveillance is performed within 12 hours after reactor steam pressure is adequate to perform the test." This footnote provided the necessary test exception for the performance of HPCI surveillances but its wording presumed prior approval of another element of the Dresden Technical Specification Improvement Program Action Plan, i.e., implementation of an STS type of Section 3/4.0. This submittal therefore generalizes the footnote to read "Entry into the Startup/Hot Standby mode is permitted provided that the required testing is successfully completed within 12 hours after reactor steam pressure is adequate to perform the test." This change will eliminate any reference to Section 4.0.D while meeting the intent of STS SR 4.0.4 and also maintaining adequate assurance of system operability. An additional footnote will be added to read "Entry into the RUN mode is permitted provided that the required testing is successfully completed within 12 hours after reactor steam pressure is adequate to perform the test." This additional footnote is necessary to clarify that 1) the 12 hour clock resets after a successful low pressure test and, 2) entry into the RUN mode is allowed to perform the high pressure test. To meet the intent of STS Specification 3.0.4, a new LCO action statement must be introduced. Proposed action statement 3.5.C.2.b will ensure that reactor operation does not continue when the HPCI system is unavailable during startup. The proposed action statements are shown in the revised technical specification page changes (Attachment 5).

ATTACHMENT 2

COMPARISON TO STS SECTION 4.5.1

The purpose of the Multiple Testing amendment request was to remove excessive system testing requirements for ECCS and SBGT while maintaining adequate assurance of system operability needed for successful accident mitigation. The Standard Technical Specifications (STS) were used as a guideline in the formulation of an acceptable amendment. However, the ECCS section of the STS contains additional Surveillance Requirements (SR) which were not included in Dresden's original amendment request. Specifically, the ECCS "keep fill" and valve position verifications were questioned during the NRC Staff's preliminary review. To completely address this issue, a comparison between the existing amendment request and the requirements of STS Section 4.5.1 is made below.

A. ECCS Keep Fill and Valve Position Checks

Section 4.5.1.a of the STS requires at least once per 31 days for the HPCI, LPCI, and HPCS systems:

1. Verifying that the system piping from the pump discharge valve to the system isolation valve is filled with water.

2. Performance of a CHANNEL FUNCTIONAL TEST of the:

   (a) Discharge line "keep filled" (pressure) (pump failure) alarm instrumentation, and

   (b) header delta P instrumentation.

3. Verification that each valve, manual, power operated or automatic, in the flow path that is not locked, sealed or otherwise secure in position, is in its correct position.

STS SR 4.5.1.a.1. is equivalent to Dresden TS SRs 4.5.H.1, 2, and 3. The LPCI and CS systems are vented prior to the pump operability tests which are performed once every 31 days. The HPCI system discharge piping is filled with water when the suction is aligned with condensate storage tanks. Should the system suction require realignment to the suppression pool, the discharge piping would be vented prior to each pump operability test. Venting of this system, when aligned to the suppression pool, is required once per 31 days per SR 4.5.H.3. Therefore no revisions to the existing SRs or the pending amendment request are required to meet the intent of STS Specification 4.5.1.a.1.

STS SR 4.5.1.a.2 requires a channel functional test of the "keep filled" system low pressure (pump failure) alarm. Current Dresden SR 4.5.H.4 requires a monthly functional test and quarterly calibration of the "keep filled" system low pressure alarm. The header delta P instrumentation for Core Spray system is checked, functionally tested, and calibrated in accordance with existing SR 4.5.A.1.e. Revisions to the existing SRs or the pending amendment request are therefore not needed to meet the intent of STS SR 4.5.1.a.2.

STS SR 4.5.1.a.3 requires verification of the correct positions of ECCS flow path valves on a monthly basis. Although there is no SR within either the existing TS or the proposed amendment request which requires such checks per se, Dresden accomplishes the intent of this SR by performing monthly MOV and Pump operability tests for the HPCI, CS and LPCI systems. These tests are required by current Dresden SRs 4.5.C.2, 4.5.A.1 and 4.5.A.3 respectively. In addition, appropriate valve position checks are performed procedurally every shift. As a result, revisions to the existing SRs or the amendment request will not be required to meet the intent of STS SR 4.5.1.a.3.

B. Other STS Provisions Related to ECCS Testing

STS SR 4.5.1.b describes the ECCS pump testing requirements as taken from Section XI of the ASME Boiler and Pressure Vessel Code. Existing Sections 4.5.A.1.d, 4.5.A.3, and proposed Section 4.5.C.3 meet the intent of STS Specification 4.5.1.b.

STS SR 4.5.1.c.1 requires each ECCS system to undergo a complete system functional test which includes automatic actuation and associated valve repositioning. Existing SRs 4.5.A.1.a for LPCI and CS, and proposed SR 4.5.C.5 for HPCI meet the intent of the subject STS specification.

STS SR 4.5.1.c.2.a requires channel calibration of the ECCS "keep filled" system low pressure instrument. Existing SR 4.5.H.4 meets the intent of STS SR 4.5.1.c.2.

STS SR 4.5.1.c.2.b requires channel calibration of the header delta P instrumentation every 18 months. This SR is only applicable to the Dresden CS system. Existing SR 4.5.A.1.e specifies that the CS header delta P instrument is checked daily, and functionally tested and calibrated on a quarterly basis. The existing SR exceeds the requirements of STS SR 4.5.1.c.2.b.

STS SR 4.5.1.c.3 requires that the automatic suction transfer from the condensate storage tank to the suppression pool for the HPCS system be testing once every 18 months. This function is accomplished for the Dresden HPCI system in support of the logic test, which is performed every 18 months. Therefore revisions to the existing SRs or the amendment request will not be required.

STS SR 4.5.1.d.1 requires the ADS to undergo a system functional test which includes a simulated automatic actuation. Existing SR 4.5.D.1.a meets the intent of the subject STS SR. STS SR 4.5.1.d.2 requires a manual test of each ADS valve at adequate reactor pressure. This test must show a corresponding reduction in steam flow or turbine control valve closure. Existing SR 4.5.D.1.b meets the intent of STS SR 4.5.1.d.1.

C. Summary of STS Comparison

Based on the comparison above, the Dresden SRs meet or exceed the intent of STS SR 4.5.1 where applicable. The valve position verification as described in STS SR 4.5.1.a.3 is performed at the beginning of every shift per station procedures. Pump and MOV operability tests are performed on a monthly basis for the ECCS pump systems per existing Tech. Specs. If one ECCS system is found inoperable, a maximum of 7 hours may pass before all of the unsecured ECCS flow path valve positions are verified per routine procedures. It should be noted that one enhancement related to CCSW was identified in performing this supplemental STS comparison. This additional change is described in Attachment 3 and adds further consistency with STS.

ATTACHMENT 3

DESCRIPTION OF OTHER PROPOSED CHANGES

PROPOSED CHANGE FOR FURTHER CONSISTENCY WITH STS

The Dresden Containment Cooling Service Water (CCSW) system is similar in function to the RHRSW system at STS plants. The operability of the RHRSW system is assured by the performance of a surveillance similar to STS SR 4.5.1.a.3 (monthly valve checklist). No pump operability surveillance is specified in the STS for RHRSW. The CCSW pumps and MOVs are tested on a quarterly basis. To assure CCSW system readiness, Dresden proposes to add a surveillance requirement similar to STS SR 4.5.1.a.3 for the CCSW system as shown in Attachment 5.

SECTION 3/4.5.G - ADMINISTRATIVE CHANGE

The final change to the pending amendment request is purely administrative. During review of Technical Specification Section 3/4.5, Section 3/4.5.G was found not to exist in either the Unit 2 or the Unit 3 Technical Specifications due to previous amendments. Section 3/4.5.G will be added with the words "not used" inserted in the appropriate text as shown in Attachment 5.

ATTACHMENT 4

SUMMARY OF SUPPLEMENTAL

TECHNICAL SPECIFICATION

PAGE CHANGES

(1) DPR-19 and DPR-25 Page 3/4.5-5

Add new SR under paragraph 4.5.B.1.c for CCSW.

(2) DPR-19 and DPR-25 Proposed Table 4.5.1

Add a second "*" after "psig" in paragraph 4.5.C.3.

Change the "*" footnote to read "Entry into the Startup/Hot Standby Mode is permitted provided that the required testing is successfully completed within 12 hours after reactor steam pressure is adequate to perform the test."

Add a second footnote to read "Entry into the Run mode is permitted provided that the required testing is successfully completed within 12 hours after reactor steam pressure is adequate to perform the test."

(3) DPR-19 and DPR-25 Page 3/4.5-7

Renumber paragraph 3.5.C.2 to 3.5.C.2.a.

Add paragraph 3.5.C.2.b.

(4) DPR-19 and DPR-25 Page 3/4.5-13

Insert "G. Not used" above paragraphs 3.5.H and 4.5.H.

(5) DPR-19 Page B3/4.5-33 and DPR-25 Page B3/4.5-34

Remove "G." from the right margin. Place "G. Not used" above paragraph 3.5.H

ATTACHMENT 5

PROPOSED SUPPLEMENTAL CHANGES TO THE
TECHNICAL SPECIFICATION PAGES

NOTE: The pages of this attachment supersede the corresponding pages proposed in the referenced submittal of December 21, 1988.

Other deletions or additions which are not affected by this supplement are contained in Attachment 1 of the referenced original amendment request.

0109T