Commonwealth Edison Company
Dresden Generating Sta
6500 North Dresden Road
Morris, IL 60450
Tel 815-942-2920



February 19, 1997

JSPLTR 97-0036

U. S. Nuclear Regulatory Commission

Attn: Document Control Desk

Washington, DC 20555

SUBJECT:

Dresden Nuclear Power Station Units 2 and 3

Request for Amendment to Facility Operating Licenses DPR-19 and

DPR-25, Appendix A, Technical Specifications (TS),

Changes to Technical Specification 3/4.9.C "D. C. Sources - Operating", 3/4.9.D "D. C. Sources - Shutdown", 3/4.9.E

"Distribution - Operating", and 3/4.9.F "Distribution - Shutdown."

NRC Docket Nos. 50-237 and 50-249

Reference:

Letter JSPLTR 97-0033 dated February 17, 1997, from J. Stephen Perry,

ComEd, to U.S. Nuclear Regulatory Commission, Request for Amendment

to Facility Operating Licenses DPR-19 and DPR-25, Appendix A,

Technical Specifications (TS),

Changes to Technical Specification 3/4.9.C "D. C. Sources - Operating", 3/4.9.D "D. C. Sources - Shutdown", 3/4.9.E

"Distribution - Operating", and 3/4.9.F "Distribution - Shutdown."

By the reference letter, ComEd submitted a Request for Amendment to Facility Operating Licenses DPR-19 and DPR-25, Appendix A, Technical Specifications (TS). Several pages of the attachment to the reference were inadvertently omitted from the submittal. By this letter ComEd re-resubmits the Request for Amendment to Facility Operating Licenses DPR-19 and DPR-25, Appendix A, Technical Specifications (TS) to supersede the reference letter in its entirety.

Pursuant to 10 CFR 50.90, ComEd proposes to amend Appendix A, Technical Specifications 3/4.9.C "D. C. Sources - Operating", 3/4.9.D "D. C. Sources - Shutdown", 3/4.9.E "Distribution - Operating", and 3/4.9.F "Distribution - Shutdown" of Facility Operating Licenses DPR-19 and DPR-25. The purpose of this amendment request is to relocate the 24/48 Vdc batteries, chargers, and distribution systems from Technical Specifications to licensee administrative control.

9702210109 970219 PDR ADDCK 05000237 PDR AU01/,

At Dresden the Unit 3 Division I and II Analog Trip System (ATS) loads and the Unit 2 Division I ATS loads are currently supplied by the 24/48 Vdc system, while the Unit 2 Division II loads are supplied by the 125 Vdc safety related system. During the upcoming D3R14 outage, the DC supply to the Unit 3 Division I and II ATS loads will be switched to the safety related 125 Vdc system. The re-powering of the ATS loads will be performed under the station modification program and in accordance with 10 CFR 50.59. The Dresden Unit 2 Division I ATS loads will continue to be supplied by the Unit 2 2A 24/48 Vdc batteries, chargers, and distribution systems until the next refueling outage.

ComEd proposes to relocate the requirements for the 24/48 Vdc batteries, chargers and distribution system to licensee control. First, applicable to the removal of the Unit 3 ATS loads from the batteries is that, with no safety related loads, the batteries will no longer meet the criteria in the NRC's final policy statement specified for 10 CFR 50.36. It should be noted that ComEd will implement the approved license amendment and relocate the requirements of the 24/48 Vdc batteries, chargers, and distribution system during D3R14 when the reactor core is off loaded, when the plant is in a mode where the ATS requirements are not applicable, and prior to returning to Mode 5. The Standby Gas Treatment System flow instrumentation which is required during movement of irradiated fuel is supplied by the Unit 2 2A 24/48 Vdc or the 2B-1 125 VDC system which will be available.

Second applicable to the Unit 2 2A 24/48 Vdc batteries is that Technical Specification requirements which define operability for the batteries are redundant. Such requirements can be relocated to licensee control using guidance recommended by the BWROG of the use of OPERABLE/OPERABILITY as a basis for conversion of battery requirements to the NRC Improved Technical Specifications (NUREG 1433) format.

These changes are based on NRC Administrative Letter 96-04 "Efficient Adoption of Improved Standard Technical Specifications." The changes are patterned after allowances provided in NUREG 1433, Revision 1 which specify the requirements for DC Sources and battery parameters. These changes are also patterned after ComEd's Quad Cities station which incorporated a similar change during TSUP implementation. The Quad Cities removal of the 24/48 Vdc system from the Quad Cities Technical Specifications was approved by the NRC in a Safety Evaluation Report dated September 18, 1995.

The proposed Technical Specification Amendment is subdivided as follows:

- 1. Attachment A gives a description and safety analysis of the proposed changes.
- 2. Attachment B includes the proposed changes to the Technical Specifications pages, including marked-up versions of the current pages.
- Attachment C describes ComEd's evaluation performed in accordance with 10 CFR 50.92 (c), which confirms that no significant hazards consideration is involved. In addition, ComEd's Environmental Assessment Applicability Review is included.

This proposed Technical Specification amendment has been reviewed and approved by ComEd On-Site and Off-Site Review in accordance with ComEd procedures.

Approval of this amendment will provide Dresden control of the 24/48 Vdc batteries and will achieve consistency between ComEd's Dresden and Quad Cities stations. ComEd requests NRC approval of this request no later than April 9, 1997, with the amendment to be effective immediately upon issuance and to be implemented when the reactor core is off loaded, when the plant is in a mode where the ATS requirements are not applicable, and prior to returning to Mode 5. The April 9, 1997, request is based on providing work scheduling flexibility during the upcoming refueling outage.

To the best of my knowledge and belief, the statements contained above are true and correct. In some respect these statements are not based on my personal knowledge, but obtained information furnished by other Commonwealth Edison employees, contractor employees, and consultants. Such information has been reviewed in accordance with company practice, and I believe it to be reliable.

ComEd is notifying the State of Illinois of this application for 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 submittal to this office.

Sincerely,

JStephen Perry

Vice President Dresden Station

Subscribed and Sworn to before me

on this _

day of

elvinsu 19

Notary Public

OFFICIAL SEAL
SHERRY L BUTTERFIELD
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES:05/23/00

Attachments:

- A. Description and Safety Analysis of the Proposed Changes
- B. Marked-Up Technical Specification Pages
- C. Evaluation of Significant Hazards Considerations and Environmental Assessment Applicability Review

USNRC February 19, 1997

cc: A. Bill Beach, Regional Administrator - RIII

J. Hopkins, Senior Resident Inspector - Dresden

J. F. Stang, Project Manager - NRR Office of Nuclear Facility Safety - IDNS

Description of the Proposed Change

ComEd proposes to remove the 24/48 volt batteries, chargers, and distribution system from the Dresden Technical Specifications and to relocate those requirements to licensee administrative control. On relocation to licensee control, those requirements would be under the provisions of 10 CFR 50.59. The proposed change will affect Technical Specifications for the DC sources required for operation (3.9.C), the DC sources required for shutdown (3.9.D), the distribution systems required for operation (3.9.E), the distribution systems required during shutdown (3.9.F) and the associated surveillance requirements for the respective operating condition.

The proposed change will;

- 1. Delete Technical Specification 3.9.C.3.
- 2. Delete the 24/48 volt batteries from Action Statement # 1 of TS 3.9.C.
- 3. Delete reference to the 24/48 volt batteries in the surveillance requirements for DC Sources required during operation.
- 4. Delete the total battery terminal voltage of \geq 26.0 in TS 4.9.C.1.b.
- 5. Delete the discharge battery terminal voltage of 21.7 and the battery overcharge voltage of 30 from TS 4.3.C.2.
- 6. Delete Technical Specification 3.9.D.3.
- 7. Delete Technical Specification 3.9.E.5 (this includes items 3.9.E.5.a and 3.9.E.5.b).
- 8. Delete Technical Specification 3.9.F.4 (this includes items 3.9.F.4.a and 3.9.F.4.b).

Description and Bases of the Current Technical Specification Requirement

Technical Specification 3.9.C.3 requires that, in modes 1, 2 or 3, two unit 24/48 volt batteries, each with a full capacity charger be operable. The batteries must have the identified operating parameters within the limits of TS Table 4.9.C-1. In the event that one of the 24/48 batteries or chargers is not operable, the inoperable equipment is to be returned to operable status within 2 hours. If the battery or charger cannot be returned to operable status within the two hour time limit, then the plant must be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

The requirement for two batteries and associated chargers of Technical Specification 3.9.C is based on the Technical Specification 3/4.1.A requirement of two reactor protection trip channels being available during operation. The 24/48 volt batteries and charger currently provide power to the Analog Trip System (ATS). During normal operation, the DC electrical loads are powered from the battery chargers with batteries floating on the system. In the event of loss of normal power, the loads from the 24/48 volt system are automatically powered from the batteries.

The surveillance requirements for the 24/48 Vdc batteries and chargers during operation are listed in 4.9.C. The 24/48 Vdc batteries and chargers are required to operate within the parameters listed in Table 4.9.C-1. Additionally, the 24/48 Vdc batteries and chargers must meet total battery terminal voltage requirements during the different conditions and at the frequencies listed in 4.9.C. The batteries and chargers are also subject to visual inspections, terminal resistance measurements, and electrolyte temperature limits.

The surveillance requirements of 4.9 C ensure that each connected cell has sufficient capacity to perform its intended function in the event of loss of normal power. The requirements to verify the battery terminal voltage while on float charge assures the battery charging system is operable. The values are based on the nominal battery design voltage and are consistent with the initial voltages assumed in the battery sizing calculations. Visual inspections, terminal resistance and temperature surveillance requirements are based on ensuring the general condition of the 24/48 volt batteries.

Technical Specification 3.9.D.3, applicable in modes 4 and 5, requires that one unit 24/48 volt battery and charger be operable when handling irradiated fuel. If either the battery or charger is inoperable, then all CORE ALTERATIONS must be suspended, all handling of irradiated fuel in the secondary containment must be suspended, and all operations with potential for draining the reactor vessel must be suspended.

The requirement for one 24/48 volt battery and associated charger when in modes 4 and 5, when handling irradiated fuel, or when performing operations with the potential for draining the reactor vessel are based on ensuring the instrumentation and control systems used for monitoring and control of operations are available for these evolutions. The surveillance requirements for the batteries and chargers during shutdown conditions are the same as for operations.

Technical Specification 3.9.E.5 requires that both the A and B distribution busses be energized during modes 1, 2, or 3. Technical Specification 3.9.F.4 requires that either the A or B bus be energized when in modes 4 or 5. The requirements of 3.9.E during operation ensures a supply to safety related equipment required for safe shutdown and mitigation and control of accidents. The requirements of 3.9.F ensure that during modes 4 and 5 the facility has sufficient power for instrumentation and control during evolutions which occur during these modes.

Description of the Need and Bases for Amending the Technical Specifications

Relocation of the 24/48Vdc system requirements from the Technical Specifications to station administrative control will provide additional flexibility to station operations and remove unnecessary battery requirements from the Dresden Technical Specifications.

Dresden Unit 3 Division I and II ATS loads are supplied by the 24/48 Vdc system. By plant modification, under 10CFR50.59, Dresden Unit 3 will repower the Division I and II ATS loads from the safety related 125 Vdc system. Removal of the ATS loads from the Unit 3 24/48 Vdc system removes the only loads required for safe shutdown and the batteries, chargers and distribution system will no longer satisfy the criteria for inclusion in the Technical Specifications as specified by the NRC's Final Policy Statement specified for 10 CFR 50.36. The relocation of the requirements for the Unit 3 24/48 Vdc system and implementation of the amendment request is proposed when the reactor core is off loaded, when the plant is in a mode where the ATS requirements are not applicable, and prior to returning to Mode 5. The Standby Gas Treatment System flow instrumentation which is required during movement of irradiated fuel is supplied by the Unit 2 2A 24/48 Vdc or the 2B-1 125 VDC system which will be available.

On July 22, 1993, the NRC issued a Final Policy Statement specified for 10 CFR 50.36. The policy statement established the criteria for items required to be included into the Technical Specifications. The criteria, as applied to the Unit 3 24/48 Vdc system shows that the batteries, chargers, and distribution system do not comprise instrumentation, systems, components, process variables, design features or operating restrictions:

- 1. Used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary;
- 2. Used as an initial condition of a Design Basis Accident or Transient Analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier;
- 3. Used as part of the primary success path and which functions or actuates to mitigate a Design Basis Accident or Transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier;

4. Which operating experiences or probabilistic safety assessment has shown to be significant to public health and safety.

The requirements of TS 3/4.9.C and 3 /4.9.D, 3/4.9.E, and 3/4.9.F as applied to the Unit 3 24/48 Vdc batteries, chargers, and distribution system can be relocated to station administrative control. For those loads which will remain on the Unit 3 24/48 Vdc batteries, unavailability of the Unit 3 24/48 Vdc system will cause those instruments to fail in a conservative condition and annunciate their failure within the main control room or locally.

Dresden Unit 2 Division I ATS are supplied by the 24/48 Vdc batteries, the Division II ATS loads are supplied by the safety related 125 Vdc batteries. The Unit 2 Division I ATS loads will remain supplied by the 24/48 Vdc system until the next refueling outage in Unit 2. Although the Unit 2 Division I loads will remain on the 24/48 Vdc system until the next refueling outage for Unit 2 ComEd proposes to also relocate their current TS requirements to licensee administrative control. ComEd's basis for this proposal is based on guidance put forth by the BWROG on the use of the definition of OPERABLE/OPERABILITY when converting to the NRC's improved Technical Specifications. This position is recommended by the BWROG in conversion of the battery requirements from a plant's Technical Specification to the ITS section on batteries (ITS section 3.8). The Unit 2 2A 24/48 Vdc system provides a support function the Unit 2 Division I ATS loads. The Unit 2 Division I ATS loads are safety related and provide protection and mitigation functions, however the instruments of Unit 2 Division I are already governed by their own existing Technical Specifications. The Unit 2 2A 24/48 Vdc battery loads are shown in the attached table. Although, the batteries themselves do not provide any protection or mitigation functions they are a support function that provides attendant power to components which are required to provide protection and mitigation functions.

The High Pressure Coolant Injection (HPCI) isolations functions provided by the Low Reactor Pressure or the High Steam Flow functions are governed by Technical Specifications 3/4.2. The scram functions provided by the Intermediate Range Monitor (IRM) are governed by Technical Specification 3/4.1. The availability of the 24/48 Vdc system directly affects the operability of these instruments as defined by the Technical Specification definition of OPERABLE/OPERABILITY. Unavailability of the Unit 2 2A 24/48 Vdc supplies causes the functions or instruments in ATS Division I to become inoperable placing them in the Limiting Condition for Operation specific to those functions. Maintaining Technical Specification 3/4.9.C through 3/4.9.F for the Unit 2 2A 24/48 Vdc system is redundant since the safety related loads for which the Unit 2 2A 24/48 Vdc is a support function are already governed by their own technical specifications. The BWROG guidance for converting a plant's battery requirements in Technical Specifications to the ITS is applicable to Dresden's Unit 2 2A Vdc system conversion to the format of the ITS.

The remaining Unit 2 loads supplied by the 24/48 Vdc system (listed in the table) are not required for safe shutdown nor are governed by other specific Technical Specifications. For those loads, unavailability of the 24/48 Vdc system will cause those instruments to fail in a conservative condition and annunciate their failure within the main control room or locally.

2A 24/48 volt battery load	Failure Mode upon loss of Battery	Operator Awareness
1 Panel 902-36 IRM ch. 11, 12, 13, 14	will generate 1/2 scram in all modes except run.	panel 902-5, windows A-5, C-5, C-10
2 Panel 902-36 SRM ch. 21 & 22	will generate full scram when shorting links are removed, which occurs only during certain refueling operations	panel 902-5, windows A-4, C-4, E-4, B-12
3 Panel 902-5 LPRM display lights	indicating lights unavailable	loss of downscale indication in shutdown mode
4 Process Rad Monitor	Stack Gas Monitor INOP and DOWNSCALE indication on panel 923-7. Operator may select alternate power supply by positioning panel switch for U2/3 CHMNY RAD MON PWR SPLY SELECT	panel 923-7, window B-6, U2/3 Chimney Gas monitor trouble
5 Process Rad. Monitor	loss of power to linear rad. monitor 1705-06 (902-10) signals to Off Gas level recorder 1705-14 (902-2) fail downscale	no alarms or trips associated with these failures.
6 Process Rad. Monitor	loss of power to HOLD UP OFF GAS TO STACK CIRCUITRY, will result in isolation of Off Gas and may require Ops. to enter DOA 3300-02, Loss of Condenser Vacuum	panel 902-54, window A-5, Press Drain Tank Outlet Valve Closed panel 902-54, window D-8, Off Gas to Stack Valve Closed
7 Panel 2202-73A Analog Trip Sys U2 Div I 2/3 SBGT A Trn Flow Htr Cont. /B Trn Init U2 LPCI Loop I Hdr. Min. Flow Valve Cont. U2 Rx Low Wtr. SCRAM & Isol. ** U2 HPCI Steam Line Low Rx Press. Isol. U2 HPCI Steam Line Low Rx Press. Isol. U2 HPCI Steam Line High Flow Isol. U2 Rx Wide Range Pressure	ATS instruments fail downscale	panel 902-4, window G-20, Analog Trip Sys. Div. I 2202-73A Trouble
8 Scram Inst. Volume D/P Level Switches ** note- this instumentation on 2202-73B	will generate 1/2 scram in RPS channel A	panel 902-5, window A-14, Channel A/B Instrument Volume Level Hi

ATTACHMENT B Marked-Up Technical Specification Pages

LICENSE DPR-19/25

Remove	Insert
3/4.9-12	3/4.9-12
3/4.9-16	3/4.9-16
3/4.9-18	3/4.9-18
3/4.9-20	3/4.9-20