



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

Docket File  
TSC3  
50-237/249

January 15, 1997

Ms. Irene Johnson, Acting Manager  
Nuclear Regulatory Services  
Commonwealth Edison Company  
Executive Towers West III  
1400 Opus Place, Suite 500  
Downers Grove, IL 60515

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION (TAC NO. M97696)

Dear Ms. Johnson:

By letter dated January 13, 1997, Commonwealth Edison Company (ComEd) requested that the Nuclear Regulatory Commission review and approve a Technical Specification (TS) change and an Unreviewed Safety Question (USQ) license amendment pursuant to 10 CFR 50.90. The TS change and the USQ involved the resolution of issues, discovered by ComEd, related to providing adequate net positive suction head (NPSH) for the Emergency Core Cooling System (ECCS) pumps at the Dresden Station. The resolution of these issues is required before the resumption of power operation for Dresden, Unit 3. Therefore, ComEd has requested that the license amendment be processed on an emergency basis. The staff has reviewed the license amendment and supporting documentation and discovered that a significant amount of additional information must be provided to allow the NRC staff to complete its review. Enclosed is a request for additional information (RAI). To expedite the NRC staff review, ComEd should provide the responses to the RAI as soon as possible. In addition, ComEd should plan on meeting with the NRC staff to discuss the response to the RAI and resolve any additional issues that may arise during the NRC staff review of the license amendment.

Most of the information being requested in the RAI was previously discussed with ComEd on January 10, 1997, during a telephone conference call. During the call, the NRC technical staff clearly stated the supporting information that would have to be included in the proposed license amendment to allow the staff to be able to approve the resolution of the USQ and the proposed TS change on an expedited basis.

In addition, the amendment was not submitted under oath or affirmation as required by 10 CFR 50.30(b). It is required that ComEd resubmit the license amendment according to 10 CFR 50.30 under oath or affirmation and include all the additional information requested in the RAI.

NRC FILE CENTER COPY

9701210418 970115  
PDR ADOCK 05000237  
F PDR

DFOI 1/1  
AA

Ms. I. Johnson

- 2 -

Any question concerning the RAI or other issues related to the license amendment please contact me at (301) 415-1345.

Sincerely,

Original signed by:

John F. Stang, Senior Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

Docket Nos. 50-237 and 50-249

Enclosure: RAI

cc w/encl: See next page

DISTRIBUTION:

Docket File PUBLIC  
PDIII-2 r/f J. Roe, JWR  
E. Adensam, EGA1 R. Capra, RAC1  
J. Stang, JFS2 OGC, 015B18  
ACRS, TIE26 P. Hiland, RIII  
C. Moore J. Lyons  
R. Wessman C. Berlinger

Document Name: G:\CMNT\JR\DRESDEN\DR97696.LTR

OFC	PM:PDIII-2	LA:PDIII-2	D:PDIII-2	(A)BC:SRXB	BC:EMEB	BC:SCSB
NAME	JSTANG	CMOORE	RCAPRA	JLYONS	RWESSMAN	CBERLINGER
DATE	1/15/97	1/15/97	1/15/97	1/15/97	1/15/97	1/15/97

C=COPY E= COVER & ENCLOSURE N= NO COPY  
OFFICIAL RECORD COPY

I. Johnson  
Commonwealth Edison Company

Dresden Nuclear Power Station  
Unit Nos. 2 and 3

cc:

Michael I. Miller, Esquire  
Sidley and Austin  
One First National Plaza  
Chicago, Illinois 60603

Site Vice President  
Dresden Nuclear Power Station  
6500 North Dresden Road  
Morris, Illinois 60450-9765

Station Manager  
Dresden Nuclear Power Station  
6500 North Dresden Road  
Morris, Illinois 60450-9765

U.S. Nuclear Regulatory Commission  
Resident Inspectors Office  
Dresden Station  
6500 North Dresden Road  
Morris, Illinois 60450-9766

Regional Administrator  
U.S. NRC, Region III  
801 Warrenville Road  
Lisle, Illinois 60532-4351

Illinois Department of Nuclear Safety  
Office of Nuclear Facility Safety  
1035 Outer Park Drive  
Springfield, Illinois 62704

Chairman  
Grundy County Board  
Administration Building  
1320 Union Street  
Morris, Illinois 60450

Document Control Desk-Licensing  
Commonwealth Edison Company  
1400 Opus Place, Suite 400  
Downers Grove, Illinois 60515

REQUEST FOR ADDITIONAL INFORMATION  
CONCERNING THE EMERGENCY LICENSE AMENDMENT RELATED TO  
THE ISSUE OF PROVIDING ADEQUATE NET POSITIVE SUCTION  
HEAD TO THE EMERGENCY CORE COOLING PUMPS  
DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3  
DOCKET NOS. 50-237 AND 50-249

1. Provide the detailed Net Positive Suction Head (NPSH) calculation which supports the proposed license amendment. Provide, for each Emergency Core Cooling System (ECCS) pump, the NPSH required and at what flowrate it was determined. Specify if this is runout flow for the pump. Specify the NPSH available for each ECCS pump. Specify both of these quantities as function of time. The response should consider changes in suppression pool temperature and containment pressure with time. The response should also include all assumptions and the initial plant conditions used in the NPSH calculation.
2. The proposed license amendment estimated that cavitation of the ECCS pumps would reduce flow by 100 gpm per pump. Provide information that supports this amount of degradation. The staff is also concerned with air ingestion in the ECCS pumps. Provide details on the amount of air ingestion in the pumps and the resultant degradation of pump head during cavitation.
3. Provide justification of the existence of containment over pressure following a design basis accident by one of the following methods.
  - a. A comparison to a similar designed facility where the use of containment over pressure has been reviewed and approved by the NRC staff.
  - b. Provide a Dresden specific calculation using a code or methodology which has been reviewed and approved by the NRC staff or with a code the staff has approved for a similar facility and situation which exists at the Dresden Station.

Provide all assumptions and initial plant conditions in the response. In addition, provide a comparison of the above calculation to the containment pressure and temperature response results provided in the proposed amendment using the SUPERHEX code.

4. In the resubmitted license amendment be specific in any pressure given as to whether it is absolute or gauge.

ENCLOSURE

5. The proposed license amendment stated that a new 10 CFR 50.46 report was being prepared to be submitted to the NRC. Provide the details of the peak clad temperature (PCT) changes and how the PCT changes affect the proposed license amendment. In addition, provide affirmation and the details on how the requirements of 10 CFR 50.46 are met in relation to the proposed license amendment.
6. Provide a detailed safety evaluation (SE) which justifies the proposed changes to the TS and the justification for the change in the design basis as it related to the Unreviewed Safety Question. The SE should explain, in detail, the change in the facility which required a 10 CFR 50.59 evaluation and how a USQ was determined to exist. The SE should also show how the proposed changes to the TS restore NPSH margin for the ECCS pumps and the justification for the design basis change to the Dresden facility.