

March 13, 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 NOS. M97983 AND M97984)

Dear Ms. Johnson:

By letter dated February 17, 1997, Commonwealth Edison Company (ComEd) requested that the NRC review and approve an application for an amendment relating to a Technical Specification (TS) change and an Unreviewed Safety Question (USQ). The TS change and the USQ involved the resolution of issues related to providing adequate net positive suction head (NPSH) for the Emergency Core Cooling System (ECCS) pumps at the Dresden Station. The staff has reviewed the license amendment and supporting documentation and discovered information must be provided to allow the NRC staff to complete its review. To expedite the NRC staff review, ComEd should provide the responses to the enclosed request for additional information (RAI) as soon as possible.

Any questions 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

NRC FILE CENTER COPY

DISTRIBUTION:

~~Docket File~~

J. Roe, JWR
J. Stang, JFS2
P. Hiland, RIII

PUBLIC
E. Adensam, EGA1
OGC, 015B18
C. Moore

PDIII-2 r/f
R. Capra, RAC1
ACRS, T1E26

1/1
DF01

Document Name: G:\CMNTJR\DRESDEN\DR97983.LTR

OFC	PM/PD/IIA-2 e	LA:PDIII-2 e	D:PDIII-2
NAME	JSTANG:nt	CMOORE	RCAPRA p
DATE	3/13/97	3/12/97	3/13/97

9703140136 970313
PDR ADOCK 05000237
P PDR

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

INPUT PARAMETERS USED IN ANS 5.1 DECAY HEAT MODEL,

USED FOR CONTAINMENT PRESSURE AND TEMPERATURE RESPONSE ANALYSIS

FOR DRESDEN STATION

DOCKET NOS. 50-237 AND 50-249

1. Provide and justify the values for the following ANS 5.1 input parameters. Those values with an (*) next to them have already been provided to the staff; however, the value chosen should be justified.
 - a. Q (total recoverable energy) (MeV/fission)
 - b. δQ (one standard deviation of recoverable energy, Q) (MeV/fission)
 - c. P (total power from fissioning of one nuclide) (MeV/sec)
 - d. δP (one standard deviation of power, P, from fissioning of nuclide) (MeV/sec)
 - e. Fractional fission product power for: U235, U238, Pu239 and Pu241 (neutron capture in fission products)
 - *f. R-factor (the actinide production multiplier)
 - *g. G-factor (a decay heat multiplier to account for the effect of neutron capture in fission products)
 - *h. Si (a multiplier applied to the G-factor equation) (fissions per initial fissile atom)
 - *i. Power history (length of full-power operation before shutdown)
2. Specify how the length of time at full power operation before shutdown was estimated, and confirm that this value is 1.26 years, as specified in reference 32, "Letter to S. Mintz to J. Nash, Review of NRC Information Notice 96-39, February 7, 1997," of your February 17, 1997, license amendment request. Why was a value 1.26 years chosen for the time at full power, versus 3.4 years. Comment on the differences between using 1.26 years versus 3.4 years.
3. Page 47 of your February 17, 1997, submittal states that ANS 5.1-1979 decay heat was used "without adders." The staff has typically required an uncertainty of two standard deviations (2-sigma) when using the ANS 5.1-1979 model. Justify that your use of the ANS 5.1 model for decay heat is conservative by showing that at least two standard deviations of confidence in the decay heat is provided. Ratio versus time of the decay calculated with ANS 5.1 relative to May-Witt, ANS 5.1 with a 1-sigma uncertainty added relative to May-Witt, and ANS 5.1 with a 2-sigma uncertainty added relative to May-Witt, would be particularly helpful.

ENCLOSURE