

August 31, 2007

Mr. Mark B. Bezilla  
Site Vice President  
FirstEnergy Nuclear Operating Company  
Davis-Besse Nuclear Power Station  
Mail Stop A-DB-3080  
5501 North State Route 2  
Oak Harbor, OH 43449-9760

SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1 - REQUEST FOR  
ADDITIONAL INFORMATION RELATED TO MEASUREMENT UNCERTAINTY  
RECAPTURE POWER UPRATE (TAC NO. MD5240)

Dear Mr. Bezilla:

By letter to the Nuclear Regulatory Commission (NRC) dated April 12, 2007, FirstEnergy Nuclear Operating Company submitted a request to make the operating license and technical specification changes necessary to allow an increase of approximately 1.63 percent in the rated thermal power output, for the Davis-Besse Nuclear Power Station, Unit No. 1.

The NRC staff is reviewing your submittal and has determined that additional information is required to complete the review. The specific information requested is addressed in the enclosure to this letter. During a discussion with your staff on August 28, 2007, it was agreed that you would provide a response within 30 days from the date of this letter.

The NRC staff considers that timely responses to requests for additional information help ensure sufficient time is available for staff review and contribute toward the NRC's goal of efficient and effective use of staff resources. If circumstances result in the need to revise the requested response date, please contact me at (301) 415-4037.

Sincerely,

*/RA/*

Thomas J. Wengert, Project Manager  
Plant Licensing Branch III-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-346

Enclosure:  
Request for Additional Information

cc w/encl: See next page

Mr. Mark B. Bezilla  
Site Vice President  
FirstEnergy Nuclear Operating Company  
Davis-Besse Nuclear Power Station  
Mail Stop A-DB-3080  
5501 North State Route 2  
Oak Harbor, OH 43449-9760

August 31, 2007

SUBJECT: DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1 - REQUEST FOR  
ADDITIONAL INFORMATION RELATED TO MEASUREMENT UNCERTAINTY  
RECAPTURE POWER UPRATE (TAC NO. MD5240)

Dear Mr. Bezilla:

By letter to the Nuclear Regulatory Commission (NRC) dated April 12, 2007, FirstEnergy Nuclear Operating Company submitted a request to make the operating license and technical specification changes necessary to allow an increase of approximately 1.63 percent in the rated thermal power output, for the Davis-Besse Nuclear Power Station, Unit No. 1.

The NRC staff is reviewing your submittal and has determined that additional information is required to complete the review. The specific information requested is addressed in the enclosure to this letter. During a discussion with your staff on August 28, 2007, it was agreed that you would provide a response within 30 days from the date of this letter.

The NRC staff considers that timely responses to requests for additional information help ensure sufficient time is available for staff review and contribute toward the NRC's goal of efficient and effective use of staff resources. If circumstances result in the need to revise the requested response date, please contact me at (301) 415-4037.

Sincerely,

**/RA/**

Thomas J. Wengert, Project Manager  
Plant Licensing Branch III-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-346

Enclosure:

Request for Additional Information

cc w/encl: See next page

DISTRIBUTION:

PUBLIC

RidsNrrPMTWengert

RidsOgcRp

KMartin, NRR

RidsNrrDeEicb

LPL3-2 R/F

RidsNrrLAEWhitt

RidsRgn3MailCenter

IAhmed, NRR

RidsNrrDorlLpl3-2

RidsAcrsAcnwMailCenter

RidsNrrDorlDpr

RidsNrrDirslolb

ADAMS Accession Number: **ML072410041**

**NRR-088**

OFFICE	LPL3-2/PM	LPL3-2/LA	LPL3-2/BC
NAME	TWengert	EWhitt (THarris for)	RGibbs
DATE	8/31/07	8/31/07	8/31/07

OFFICIAL RECORD COPY

Davis-Besse Nuclear Power Station, Unit No. 1

cc:

Manager, Site Regulatory Compliance  
FirstEnergy Nuclear Operating Company  
Davis-Besse Nuclear Power Station  
Mail Stop A-DB-3065  
5501 North State Route 2  
Oak Harbor, OH 43449-9760

Director, Ohio Department of Commerce  
Division of Industrial Compliance  
Bureau of Operations & Maintenance  
6606 Tussing Road  
P.O. Box 4009  
Reynoldsburg, OH 43068-9009

Resident Inspector  
U.S. Nuclear Regulatory Commission  
5503 North State Route 2  
Oak Harbor, OH 43449-9760

Stephen Helmer  
Supervisor, Technical Support Section  
Bureau of Radiation Protection  
Ohio Department of Health  
35 East Chestnut Street, 7<sup>th</sup> Floor  
Columbus, OH 43215

Carol O'Claire, Chief, Radiological Branch  
Ohio Emergency Management Agency  
2855 West Dublin Granville Road  
Columbus, OH 43235-2206

Zack A. Clayton  
DERR  
Ohio Environmental Protection Agency  
P.O. Box 1049  
Columbus, OH 43266-0149

State of Ohio  
Public Utilities Commission  
180 East Broad Street  
Columbus, OH 43266-0573

Attorney General  
Office of Attorney General  
30 East Broad Street  
Columbus, OH 43216

President, Board of County  
Commissioners of Ottawa County  
Port Clinton, OH 43252

President, Board of County  
Commissioners of Lucas County  
One Government Center, Suite 800  
Toledo, OH 43604-6506

The Honorable Dennis J. Kucinich  
United States House of Representatives  
Washington, D.C. 20515

The Honorable Dennis J. Kucinich  
United States House of Representatives  
14400 Detroit Avenue  
Lakewood, OH 44107

Joseph J. Hagan  
President and Chief Nuclear Officer  
FirstEnergy Nuclear Operating Company  
Mail Stop A-GO-14  
76 South Main Street  
Akron, OH 44308

David W. Jenkins, Attorney  
FirstEnergy Corporation  
Mail Stop A-GO-15  
76 South Main Street  
Akron, OH 44308

Danny L. Pace  
Senior Vice President, Fleet Engineering  
FirstEnergy Nuclear Operating Company  
Mail Stop A-GO-14  
76 South Main Street  
Akron, OH 44308

Manager, Fleet Licensing  
FirstEnergy Nuclear Operating Company  
Mail Stop A-GO-2  
76 South Main Street  
Akron, OH 44308

Davis-Besse Nuclear Power Station, Unit 1

cc:

Director, Fleet Regulatory Affairs  
FirstEnergy Nuclear Operating Company  
Mail Stop A-GO-2  
76 South Main Street  
Akron, OH 44308

Jeannie M. Rinckel  
Vice President, Fleet Oversight  
FirstEnergy Nuclear Operating Company  
Mail Stop A-GO-14  
76 South Main Street  
Akron, OH 44308

Richard Anderson  
Vice President, Nuclear Support  
FirstEnergy Nuclear Operating Company  
Mail Stop A-GO-14  
76 South Main Street  
Akron, OH 44308

James H. Lash  
Senior Vice President of Operations  
and Chief Operating Officer  
FirstEnergy Nuclear Operating Company  
Mail Stop A-GO-14  
76 South Main Street  
Akron, OH 44308

REQUEST FOR ADDITIONAL INFORMATION

DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO.1

PROPOSED MEASUREMENT UNCERTAINTY RECAPTURE POWER UPRATE

DOCKET NO. 50-346

In reviewing the FirstEnergy Nuclear Operating Company's (FENOC's) submittal dated April 12, 2007, related to the license amendment request to increase the maximum power level from 2772 MWt to 2817 MWt, for the Davis-Besse Nuclear Power Station, Unit No. 1, the NRC staff has determined that the following information is needed in order to complete its review. Note that Questions 1 through 4 refer to Section VII of Regulatory Issue Summary (RIS) 2002-03, "Guidance on the Content of Measurement Uncertainty Recapture Power Uprate Applications."

1. Operator Actions (RIS 2002-03 Section VII.1)
  - a. Identify which operator actions will require additional time to perform. Provide the time periods currently required to complete these operator actions and the times that will be required subsequent to the implementation of the proposed measurement uncertainty recapture (MUR) power uprate.
  - b. Have any available time periods for significant operator actions been reduced for accident scenarios and events, such as anticipated transients without scram, due to the MUR power uprate? If so, describe how the new available times were validated.
2. Emergency and Abnormal Operating Procedures (RIS 2002-03 Section VII.2.A)
  - a. Describe any changes to operator actions in the emergency operating procedures and abnormal operating procedures required as a result of the MUR power uprate and how these changes will be integrated into the operator training program.
3. Control Room Controls, Displays (Including the Safety Parameter Display System), and Alarms (RIS 2002-03 Section VII.2.B)
  - a. Identify how much margin the operators will have to maintain the increased power production heat transfer within the prescribed parameters.
  - b. Describe the changes that will be made to the in-core monitoring system (IMS). Describe how you have verified that the proposed software changes to the IMS will not have any adverse effects on the operators. Are there potential software changes that could introduce false indications in the control room indicators? Will the plant specific simulator require further modifications to account for the changes that will be made to the plant computer software?
  - c. The submittal stated that the amount of time the operators must control the cooldown of the reactor coolant system will increase due to the increase of decay heat. Identify the increase in the amount of time that the operators will need to control the cooldown.

- d. Describe how the operators will be notified of self-diagnosed errors with the Caldon leading edge flowmeter in the event that the new control room alarm is either inoperable or fails to alert the operators.
4. Control Room Plant Reference Simulator (RIS 2002-03 Section VII.2.C)
  - a. Describe how the plant simulator's fidelity will be verified after the MUR power uprate-related modifications are made.
5. Confirm that the correct calculated value of the flow measurement uncertainty includes uncertainty for the actual location of transducers within the housing as identified in Camaron Customer Information Bulletin 125, Revision 0, dated April 23, 2007.