

December 22, 2005

Mr. Mark B. Bezilla
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 1 - REQUEST FOR
ADDITIONAL INFORMATION RELATED TO MARK B-HTP FUEL DESIGN FOR
CYCLE 15 (TAC NO. MC6888)

Dear Mr. Bezilla:

By letter to the Nuclear Regulation Commission dated May 2, 2005, as supplemented by letters dated August 28 and September 15, 2005, FirstEnergy Nuclear Operating Company submitted a license amendment request to support the Mark B-HTP fuel design for Cycle 15.

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, and was forwarded to your staff on November 3, 2005. During a discussion with your staff, it was agreed that you would provide a response 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) 415-3154.

Sincerely,

/RA/

Stephen P. Sands, Project Manager
Plant Licensing Branch III-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-346

Enclosure: As stated

cc w/encl: See next page

December 22, 2005

Mr. Mark B. Bezilla
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 1 - REQUEST FOR
ADDITIONAL INFORMATION RELATED TO MARK B-HTP FUEL DESIGN FOR
CYCLE 15 (TAC NO. MC6888)

Dear Mr. Bezilla:

By letter to the Nuclear Regulation Commission dated May 2, 2005, as supplemented by letters dated August 28 and September 15, 2005, FirstEnergy Nuclear Operating Company submitted a license amendment request to support the Mark B-HTP fuel design for Cycle 15.

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, and was forwarded to your staff on November 3, 2005. During a discussion with your staff, it was agreed that you would provide a response 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) 415-3154.

Sincerely,

/RA/

Stephen P. Sands, Project Manager
Plant Licensing Branch III-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-346

Enclosure: As stated

cc w/encl: See next page

DISTRIBUTION:

PUBLIC	LPLF R/F	RidsNrrDorlLplf
RidsNrrPMSSands	RidsNrrLADClarke	RidsAcrsAcnwMail
RidsOgcRp	RidsRgn3MailCenter	RidsDeEicb
PRebstock	DorlDpr	

ADAMS Accession Number: ML053550016

OFFICE	LPL3-2/PM	LPL3-2/LA	DE/EICB/BC	LPL3-2/BC
NAME	SSands	DClarke	AHowe	MLandau
DATE	12/22/05	12/22/05	12/22/05	12/22/05

OFFICIAL RECORD COPY

REQUEST FOR ADDITIONAL INFORMATION
RELATED TO THE MARK B-HTP FUEL DESIGN FOR CYCLE 15
LICENSE AMENDMENT REQUEST
DAVIS-BESSE NUCLEAR POWER STATION
DOCKET NO. 50-346

By letter to the Nuclear Regulatory Commission (NRC) dated May 2, 2005, as supplemented by letters dated August 28 and September 15, 2005, FirstEnergy Nuclear Operating Company submitted a request for a license amendment to support the Mark B-HTP fuel design for Cycle 15. The NRC staff determined that the following information is needed in order to complete its review:

1. Please provide the uncertainty calculation by which temperature and pressure measurement uncertainties are combined into the composite 30.239 psi "total combined error" and the 10.72 psi M&TE/drift error. Show how the temperature uncertainty is accounted for in the development of the uncertainty associated with the pressure limit corresponding to a measured (as opposed to actual) value of temperature.
2. Through numerous recent discussions and correspondence between the NRC and the Nuclear Energy Institute, it has been established that the following would be appropriate:
 - the *limiting setpoint* should be designated limiting safety system setpoint (LSSS).
 - *as-found setpoint deviation* in excess of some limiting value would result in a need for a positive channel operability assessment and invocation of the plant corrective action program (CAP) before the channel could be declared OPERABLE and returned to service.
 - an *as-found setpoint* in excess of the allowable value (AV) would result in the channel being declared inoperable.

The licensee has asserted that the AV, not the limiting setpoint, is the LSSS. The proposed technical specifications (TS) do not provide any criteria at all by which operability would be assessed, or by which CAP would be invoked. The proposed TS appear to accept any value at all for the as-found setpoint without explicitly invoking any particular consequences other than reset to an acceptable value. Please explain how the proposed TS and the associated testing provide for the assessment of channel operability as required in 10 CFR 50.36, "Technical specifications."

3. The licensee proposes to evaluate the as-found setpoint against the nominal setpoint, rather than against the previous as-left value. Please explain why this does not result in the masking of excessive deviation. It would seem that with an as-left setting on one side of the nominal setpoint and an as-found value on the other, the portion of the setpoint deviation from the as-left setting to the nominal setpoint would be ignored. Please explain how the proposed approach would be sufficiently sensitive and effective in the detection of excessive deviation.

Enclosure

Davis-Besse Nuclear Power Station, Unit 1

cc:

Manager - Regulatory Affairs
FirstEnergy Nuclear Operating Company
Davis-Besse Nuclear Power Station
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

Regional Administrator
U.S. Nuclear Regulatory Commission
801 Warrenville Road
Lisle, IL 60523-4351

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

Barry Allen, Plant Manager
FirstEnergy Nuclear Operating Company
Davis-Besse Nuclear Power Station
5501 North State - Route 2
Oak Harbor, OH 43449-9760

Dennis Clum
Radiological Assistance Section Supervisor
Bureau of Radiation Protection
Ohio Department of Health
P.O. Box 118
Columbus, OH 43266-0118

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

Gary R. Leidich
President and Chief Nuclear Officer
FirstEnergy Nuclear Operating Company
Mail Stop A-GO-19
76 South Main Street
Akron, OH 44308

Joseph J. Hagan
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

David W. Jenkins, Attorney
FirstEnergy Corporation
Mail Stop A-GO-18
76 South Main Street
Akron, OH 44308

Davis-Besse Nuclear Power Station, Unit 1

cc:

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-GHE-107
395 Ghent Road
Akron, OH 44333

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

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