

October 3, 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, as supplemented by letter dated September 18, 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 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 September 19, 2007, it was agreed that you would provide a response within 30 days.

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

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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, 7th 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

DOCKET NO. 50-346

In reviewing the FirstEnergy Nuclear Operating Company' (FENOC') submittal dated April 12, 2007, related to the license amendment request (LAR) to increase the maximum power level from 2772 megawatts thermal (MWt) to 2817 MWt, for the Davis-Besse Nuclear Power Station, Unit No. 1 (DBNPS), the NRC staff has determined that the following information is needed in order to complete its review:

The LAR proposes to change to the maximum power limit in the DBNPS facility operating license, NPF-3, from 2772 MWt to 2817 MWt. The proposed power uprate is a Measurement Uncertainty Recapture (MUR) using a Caldon Leading Edge Flowmeter (LEFM) CheckPlus system to support an approximate 1.6 percent power increase. This will permit the recovery of approximately 45 MWt by using more accurate Caldon instrumentation to calculate core power production. The currently installed flow instruments will continue to provide inputs to other indication and control systems. The NRC staff has the following request for additional information regarding the LAR:

1. Demonstrate compliance with Title 10 of the *Code of Regulations* (10 CFR) Part 50, Section 10 CFR 50.36(c)(2) and (c)(3) for plant operating conditions when the LEFM cannot perform its specified support function in performing the calorimetric heat balance.

The LAR revises the High Flux trip setpoint Allowable Value in technical specification (TS) Table 2.2-1 to include a setpoint change related to operating at 2817 MWt. Regulation 10 CFR 50.36(c)(2) specifies that when a limiting condition for operation (LCO) is not met, the plant must be shutdown or follow any remedial action permitted by the TSs. Regulation 10 CFR 50.36(c)(3) specifies that surveillance requirements assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits and that the LCO will be met. The proposed LAR TS changes do not specify TS required actions that must be followed if the LEFM inputs to the calorimetric heat balance are not available for meeting surveillance requirements to demonstrate the LCO is met.

Further, Regulatory Issue Summary 2002-03, A Guidance on the Content of Measurement Uncertainty Recapture Power Uprate Applications, Attachment 2, "Evaluation of Feedback Received During the Public Workshop on August 23, 2001 (Arranged by Guidance Section)," provides the following guidance:

I.5. What should a licensee do when the instrument is out of service?

NRC staff approvals of topical reports for the feedwater measurement technique identify what information is appropriate for addressing this comment (typically included as the first criterion). Therefore, this information is covered by Items I.1.C. and I.1.D. of the draft guidance. However, as a result of this comment, the NRC staff has modified Section I. to provide more explicit guidance in this area.

Specifically, a licensee should propose an allowed outage time for the instrument, similar to the allowed outage times contained in the technical specifications for other equipment. If an approved allowed outage time is exceeded, the licensee should reduce the power level of the plant to ensure that it appropriately accounts for the uncertainty in the instrumentation being relied upon. Item I.1.G. and H. of the guidance now address the staff's information needs for this case. (Emphasis added)

Therefore, the licensee must describe what TS(s) should be created or modified to address the requirements of 10 CFR 50.36(c)(2), including Required Actions and Completion Times, or state why no additional changes are needed for the TSs when the LEFM low uncertainty inputs are not available for the heat balance calorimetric algorithm.