

January 27, 2000

Mr. John K. Wood  
Vice President - Nuclear, Perry  
FirstEnergy Nuclear Operating Company  
P.O. Box 97, A200  
Perry, OH 44081

SUBJECT: PERRY NUCLEAR POWER PLANT, UNIT 1 - REQUEST FOR ADDITIONAL  
INFORMATION RELATED TO LICENSE AMENDMENT REQUESTING  
24-MONTH FUEL CYCLE (TAC NO. MA5930)

Dear Mr. Wood:

The staff is continuing its review of your application dated June 17, 1999 (PY-CEI/NRR-2398L), regarding implementation of a 24-month fuel cycle. As a result of this review, the staff has identified a number of areas associated with DC power systems requiring further clarification. Items requiring further clarification are identified in the Enclosure.

The need to provide the additional information and the agreement of the Perry staff to comply with this request were discussed with members of your staff on December 14, 1999.

Sincerely,

*/RA/*

Douglas V. Pickett, Sr. Project Manager, Section 2  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-440

Enclosure: As stated

cc w/encl: See next page

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REQUEST FOR ADDITIONAL INFORMATION

TECHNICAL SPECIFICATION CHANGES TO SUPPORT 24-MONTH OPERATING CYCLE

PERRY NUCLEAR POWER PLANT, UNIT 1

DOCKET NO. 50-440

1. Your application of June 17, 1999, requested that the frequency of the following Technical Specification (TS) Surveillance Requirements (SRs) be extended from once every 18 months to once every 24 months:

SR 3.8.4.3 Visual examination of battery cells, cell plates, and racks for signs of physical damage or abnormal deterioration

SR 3.8.4.4 Removal of visible corrosion and verification that battery cell to cell and terminal connections are coated with anti-corrosion material

SR 3.8.4.5 Verification of battery connection resistances

During a telecon held with your staff on December 14, 1999, the staff voiced concern over the proposed extension between surveillances and noted that these surveillances can be conducted during power operation and are not necessarily linked to the overall proposal to implement a 24 month fuel cycle. Your staff indicated that, in addition to the required TS SRs, weekly and quarterly surveillances are conducted that could provide early identification of abnormal deterioration or corrosion. Your staff also stated that Perry is unique in that the Unit 2 batteries are maintained operable and serve as a backup set of batteries.

Please provide a description of the weekly and quarterly surveillances, how they supplement the TS SRs, their tracking system, and the change control process. In addition, provide clarification of how the Unit 2 batteries are handled pursuant to the TS.

2. TS SR 3.8.4.7, performance of the battery service test, has no mode restrictions. Please explain how this SR is conducted during power operation.
3. Your application of June 17, 1999, proposed that the frequency of SR 3.8.4.7, performance of the battery service test, be extended from once every 18 months to once every 24 months. Note 1 of SR 3.8.4.7 permits performance of a battery performance discharge test in lieu of the battery service test once every 60 months.

Enclosure

During the telecon of December 14, 1999, the staff voiced concern over the proposed extension between surveillances and noted that if a performance discharge test is substituted as allowed by Note 1 to SR 3.8.4.7, a four year period could elapse between performance of successive battery service tests. The staff questioned whether the performance discharge test envelops the battery service test and noted that NUREG-1434, Revision 1, "Standard Technical Specifications for General Electric Plants BWR/6," substitutes a modified performance discharge test for the performance discharge test for Note 1 to SR 3.8.4.7. The modified performance discharge test, as defined in IEEE-Std-450-1995, is a test, in the as-found condition, of a battery's ability to provide a high-rate, short-duration load (usually the highest rate of the duty cycle) that will confirm the battery's ability to meet the critical period of the load duty cycle, in addition to determining its percentage of rate capacity.

Provide justification that the performance discharge test envelops either the battery service test or the calculated battery load profile.

J. Wood  
FirstEnergy Nuclear Operating Company

Perry Nuclear Power Plant, Units 1 and 2

cc:

Mary E. O'Reilly  
FirstEnergy Corporation  
76 South Main St.  
Akron, OH 44308

James R. Williams, Executive Director  
Ohio Emergency Management Agency  
2855 West Dublin Granville Road  
Columbus, OH 43235-7150

Resident Inspector's Office  
U.S. Nuclear Regulatory Commission  
P.O. Box 331  
Perry, OH 44081-0331

Mayor, Village of Perry  
P.O. Box 100  
Perry, OH 44081-0100

Regional Administrator, Region III  
U.S. Nuclear Regulatory Commission  
801 Warrenville Road  
Lisle, IL 60532-4531

Radiological Health Program  
Ohio Department of Health  
P.O. Box 118  
Columbus, OH 43266-0118

Sue Hiatt  
OCRE Interim Representative  
8275 Munson  
Mentor, OH 44060

Ohio Environmental Protection  
Agency  
DERR--Compliance Unit  
ATTN: Mr. Zack A. Clayton  
P.O. Box 1049  
Columbus, OH 43266-0149

Gregory A. Dunn  
Manager - Regulatory Affairs  
FirstEnergy Nuclear Operating Company  
Perry Nuclear Power Plant  
P.O. Box 97, A210  
Perry, OH 44081

Chairman  
Perry Township Board of Trustees  
3750 Center Road, Box 65  
Perry, OH 44081

William R. Kanda, Jr., Plant Manager  
FirstEnergy Nuclear Operating Company  
Perry Nuclear Power Plant  
P.O. Box 97, SB306  
Perry, OH 44081

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

Mayor, Village of North Perry  
North Perry Village Hall  
4778 Lockwood Road  
North Perry Village, OH 44081

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