# July 29, 2005

LICENSEE: FirstEnergy Nuclear Operating Company (FENOC)

FACILITY: Beaver Valley Power Station, Unit No. 1 (BVPS-1)

SUBJECT: SUMMARY OF JULY 11, 2005, CATEGORY 1 MEETING WITH FENOC

TO DISCUSS THE BVPS-1 STEAM GENERATOR (SG)

REPLACEMENT LICENSE AMENDMENT REQUEST (LAR), DATED APRIL 13, 2005, AGENCYWIDE DOCUMENTS ACCESS AND MANAGEMENT SYSTEM (ADAMS) ACCESSION NO. ML051080573

On July 11, 2005, a public meeting was held between the U.S. Nuclear Regulatory Commission (NRC), and representatives of FENOC, the licensee for BVPS-1 and 2, and its contractors, Westinghouse Electric Company and Stone & Webster Engineering Corporation, at the NRC headquarters located at One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The purpose of the meeting was to discuss the licensee's April 13, 2005, SG replacement LAR and its relationship to other pending LARs and to provide an overview of the licensee's proposed project approach and schedule considerations. A member of the Pennsylvania Bureau of Radiation Protection, Mr. Lawrence Ryan, was also in attendance as was a reporter, Mr. Daniel Horne, representing McGraw-Hill. A list of attendees is provided in Enclosure 1. The licensee's slides used during the presentation can be found in ADAMS at ML051930356. Enclosure 2 contains a draft request for additional information (RAI) discussed with the licensee during the meeting. A formal RAI will be sent to the licensee in order to obtain a docketed response to the questions. Members of the public who were present chose not to fill out NRC Public Meeting Feedback forms which were available and offered no comments at the conclusion of the business portion of the meeting.

The licensee provided a background discussion of the replacement SG LAR and an overview of the supporting technical information including key assumptions made. The licensee also discussed changes to the technical specifications (TSs) and other non-TS changes to the licensing basis for BVPS-1 which require NRC approval, including selective implementation of an alternative source term for certain SG-related design-basis accidents and transients. The licensee also discussed the interrelationship of RAI responses to NRC staff questions issued with respect to the licensee's pending extended power uprate (EPU) LAR and included a discussion of Table 2 of Enclosure 4 of the April 13, 2005, LAR. Table 2 lists all of the Licensing Report Sections of the EPU LAR and identifies those needed to support the TS changes requested in the replacement SG LAR. The NRC staff has issued 2 RAIs, dated March 11, 2005 (ML050630062) and May 05, 2005 (ML051160069), related to the EPU LAR to which the licensee has responded by letters dated May 26, 2005 (ML051530376), and July 8, 2005 (ML051940561), and a third RAI, June 30, 2005 (ML051740309) to which the licensee

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301-415-1402 tgc@nrc.gov FENOC - 2 -

has not yet responded. Many of these RAI responses contained information applicable to both the replacement SG LAR and the EPU LAR. At the end of the technical discussions the staff thanked the licensee for its help in understanding the replacement SG LAR and agreed to consider a future public meeting to discuss the licensee's RAI responses. The meeting was then adjourned.

Please direct any inquiries or requests for information related to this meeting to Mr. Timothy G. Colburn, Senior Project Manager, at 301-415-1402.

# /RA/

Timothy G. Colburn, Senior Project Manager, Section 1
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-334

Enclosures: 1. List of Attendees

2. Draft RAI

cc w/encls: See next page

FENOC - 2 -

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#### ACCESSION NUMBER: ML051950010

OFFICE	PDI-1/PM	PDI-2/LA	SPSB/SC	PDI-1/SC
NAME	TColburn	MO'Brien	RDennig	RLaufer
DATE	7/25/05	7/26/05	7/27/05	7/28/05

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# LIST OF ATTENDEES

# **CATEGORY 1 MEETING**

#### WITH FIRSTENERGY NUCLEAR OPERATING COMPANY (FENOC), ET AL.

# LICENSE AMENDMENT APPLICATION FOR

# STEAM GENERATOR REPLACEMENT

#### FOR BEAVER VALLEY POWER STATION, UNIT NO. 1 (BVPS-1)

# JULY 11, 2005, 9:00 AM-3:00 PM

#### **NAME ORGANIZATION** 1. T. Colburn **NRC** 2. M. Barillas **NRC** 3. Y. Diaz **NRC** 4. J. Hayes NRC 5. L. Brown **NRC** 6. F. Orr **NRC** 7. N. Salgado **NRC** 8. S. Rhow **NRC** 9. J. Uhle **NRC** 10. G. Halnon **FENOC** 11. H. Hegrat **FENOC** 12. M. Testa **FENOC** 13. K. Frederick **FENOC** 14. S. Sarver **FENOC** 15. C. Keller **FENOC** 16. B. Murtaugh **FENOC** 17. M. Manoleras **FENOC** 18. J. Maracek **FENOC** 19. S. Ferguson Stone & Webster 20. R. Kemper Westinghouse 21. R. Surman Westinghouse 22. J. DeBlasio Westinghouse 23. L. Ryan Pennsylvania Bureau of Radiation Protection

McGraw-Hill

24. K. Horner

# DRAFT REQUEST FOR ADDITIONAL INFORMATION (RAI) BEAVER VALLEY POWER STATION, UNIT NO. 1

# REPLACEMENT STEAM GENERATOR (RSG) LICENSE AMENDMENT REQUEST (LAR)

#### Table of Affected Technical Specifications

The staff presumes that there needs to be a new definition of dose equivalent <sup>131</sup>I since the doses will now be calculated as TEDE (total effective dose equivalent).

# 5.4 Steam Generator Tube Rupture (SGTR)

- 1. Is the licensee incorporating the single-failure criterial of Appendix A to 10 CFR Part 50 into this RSG LAR?
- 2. Has the licensee confirmed that break flow and steam releases will only occur from the faulted SG during the 30 minutes following the tube rupture or is that an assumption?
- 3. Is it assumed or has it been verified that plant cooldown and steam releases from the intact SG cease at eight hours following the SGTR?

## 5.11 Radiological Analysis

- 1. What is the basis for assuming a 30-minute purge of the control room envelope (CRE) following the completion of the accident sequence and are there procedures directing the operators to take such actions (Pg 5-225)?
- 2. It is stated that the control room shielding design is based upon the loss-of-cooling accident (LOCA) because the LOCA represents the worst case design-basis accident (DBA) relative to radioactivity releases. Does the LOCA represent the worst shine dose to the control room operators of any DBA (Pg 5-231)?
- 3. There appears to be no value assumed for inleakage into the CRE during the period that the CRE is operating in its normal mode of operation. In addition, the tracer gas tests performed did not include the inleakage characteristics while the normal control room ventilation system was operating. In addition, the ventilation filter testing program (VFTP) contains no testing criteria for the normal ventilation system. There needs to be testing criteria since the normal ventilation system is now part of the response to an accident. Is there emergency power to the normal ventilation system and to the recirculation system? If not, can you assume that they are operating in the event of a LOOP (Table 5.11.9-3)?
- 4. What is the basis for assuming that the iodine spike will occur for only four hours (Tables 5.11.9-4A, 5.11.9-5A and 5.11.9-9)?

- 5. What is the basis for assuming that the faulted SG will be isolated in 30 minutes (Table 5.11.9-5)?
- 6. What is the basis for assumed particulate carry-over fraction in the SG (Table 5.11.9-6)?
- 7. What is the basis for not performing either the Loss-of-AC Power event or the small line break outside containment at 21  $\mu$ Ci dose equivalent <sup>131</sup>I (Table 5.11.9-7)?
- 8. What letdown demineralizer flow rate and removal efficiency were assumed in the determination of the release rate for the iodine spiking for the main steam line break (MSLB) and SGTR accidents?

# Meteorology

- 1. Which of the control room (CR) X/Q values in Tables 5.11.9-2A&B are associated with each of the design-basis accidents in the dose assessment?
- 2. Why are MSLB/AEJ (air ejector) CR X/Q values applicable for releases from BVPS-1, but apparently not from BVPS-2?
- 3. What licensing action document approved the 1996-generated exclusion area boundary and low population zone X/Q values referenced in a prior LAR dated June 5, 2002, presented in the BVPS-1 and 2 UFSARs, and used in the dose assessments for this LAR?

CC:

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