



Tennessee Valley Authority, 1101 Market Street, LP 5A, Chattanooga, Tennessee 37402-2801

June 2, 2008

10 CFR 52.79

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

In the Matter of) Docket Numbers 52-014 and 52-015
Tennessee Valley Authority)

NUCLEAR REGULATORY COMMISSION (NRC) – BELLEFONTE NUCLEAR PLANT (BLN) – RESPONSE TO NRC INFORMATION NEEDS RELATED TO TERRESTRIAL AND AQUATIC ECOLOGY

Reference: Letter from Ashok Bhatnagar (TVA) to Mr. R. William Borchardt (NRC), “Application for Combined License for BLN Units 3 and 4,” dated October 30, 2007

The purpose of this letter is to provide responses to the NRC Terrestrial and Aquatic Ecology information needs that were identified by the NRC reviewers during the Environmental Report (ER) site audit conducted at the Tennessee Valley Authority’s (TVA) Bellefonte Nuclear Plant Units 3 and 4 (BLN) site during the week of March 31 through April 4, 2008.

By the referenced letter, TVA submitted an application for a combined license for two AP1000 advanced passive pressurized-water reactors at the BLN site. Included in the review of a combined license application (COLA) is a week-long environmental site audit during which the NRC staff tours the proposed plant site and environs and reviews the applicable documents that support the information provided in the ER. At the April 4, 2008 exit meeting for the BLN site audit, the NRC staff provided a list of information that was determined to be necessary to complete the review of the ER.

The NRC Information Needs list includes 26 items related to review of the Terrestrial Ecology (TE) and 31 items related to the Aquatic Ecology (AQ) material in the BLN ER. These information needs are identified as TE-01 through TE-26 and AQ-01 through

DO85
NRO

AQ-31. The two enclosures to this letter provide the TVA response to four of the TE (Enclosure 1) and 19 of the AQ (Enclosure 2) Information Needs. The resolution to the remainder of the TE and AQ Information Needs are discussed below. Where practical and appropriate, similar comments are addressed with a combined, concise response.

Enclosure 1 - Terrestrial Ecology

Enclosure 1 provides the TVA response to four NRC information needs related to terrestrial ecology (TE-20, TE-21, TE-22, and TE-26). Sixteen (16) of the 26 TE information needs were addressed to the staff's satisfaction at the BLN site audit during the week of March 31 through April 4, 2008, and are not addressed in this letter. The remaining six TE information needs will be resolved with the completion of a BLN site survey of threatened and endangered species, which is planned for mid-June 2008. In addition to performing a survey for Price's potato-bean and Morefield's leather flower (TE-8), the June site survey will also address information needs related to shrub-scrub species composition (TE-3), native grass stands (TE-5), mixed hardwood forested wetland cover types (TE-6), emergent wetlands (TE-7), and Indiana bat roosting habitat (TE-12). TVA will submit the survey results and the responses to these remaining NRC information items by July 3, 2008.

There are no changes to the BLN ER as a result of the TE information needs addressed in Enclosure 1. Attachments A through C of Enclosure 1 provide the documents that are identified in the BLN responses to the TE information needs addressed by this letter.

Enclosure 2 - Aquatic Ecology

Enclosure 2 provides the TVA response to 16 NRC information needs related to aquatic ecology. Twelve (12) of the 31 AQ information needs were addressed to the staff's satisfaction at the BLN site audit during the week of March 31 through April 4, 2008, and are not addressed in this letter. The responses to two of the remaining information needs (AQ-4 and AQ-30) will result in the submittal of several large reports. In order to expedite the processing of the 16 AQ information needs responded to in this submittal, the responses to AQ-4 and AQ-30 will be submitted under separate cover. The letter and accompanying documentation providing the responses to these two information needs is expected to be submitted within one week of this letter. The final information need on this subject, AQ-23, requests information on the expected need to dredge the intake canal. Because the information requested by this information need is similar to that requested under Hydrology information need H-41, the response to AQ-23 will be included with the responses to the Hydrology information needs. The letter providing the responses to the Hydrology information needs is expected to be submitted within two weeks of this letter.

Document Control Desk

Page 3

June 2, 2008

The combined response to information needs AQ-1 and AQ-13 includes changes to the BLN ER. New ER text is provided in underlined blue text, as indicated in Enclosure 2. Attachments A through F of Enclosure 2 provide the documents that are identified in the BLN responses to the AQ information needs addressed by this letter.

If there are any questions regarding this application, please contact Phillip Ray at 1101 Market Street, LP 5A, Chattanooga, Tennessee 37402-2801, by telephone at (423) 751-7030, or via email at pmray@tva.gov.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on this 2nd day of June, 2008.



Andrea L. Sterdis

Manager, New Nuclear Licensing and Industry Affairs
Nuclear Generation Development & Construction

Enclosure 1 and Attachments A - C:

- A. Foraging Ecology of the Endangered Gray Bat (*Myotis grisescens*) at Guntersville Reservoir, Alabama, 1995
- B. Tennessee Valley Authority, Environmental Auditing Procedure, EP&R-SDP-5.7, Rev. 0003, December 15, 2005
- C. Tennessee Valley Authority, TVA Heritage Resources Review Process for TVA Transmission Rights-of-Way Vegetation Maintenance, Line and Pole Maintenance, and New Transmission Line Construction

Enclosure 2 and Attachments A – F:

- A. Tennessee Valley Authority, Preoperational Assessment of Water Quality and Biological Resources of Guntersville Reservoir in the Vicinity of Bellefonte Nuclear Plant, 1974-1984
- B. 18 CFR 1304.208, Shoreline Stabilization on TVA-Owned Residential Access Shoreland
- C. Tennessee Valley Authority, Form TVA 17416[5-2005], General and Standard Conditions, Section 26a and Land Use
- D. Tennessee Valley Authority, Environmental Stewardship and Policy, Widows Creek Plant A & B, NPDES Permit No. AL0003875 316(b) Monitoring Program, Fish Impingement at Widows Creek Fossil Plants A & B during 2005 through 2007
- E. Tennessee Valley Authority, TVA's Reservoir Ecological Health Monitoring Function
- F. Tennessee Valley Authority, TVA's "Table 3. Fish Collected in Monthly Netting Electrofishing Samples at the Hartsville Site, September 1992 Through January 1993," in Environmental Assessment and finding of No Significant Impact- Hartsville Nuclear Plant Site, Trousdale and Smith Counties, Tennessee, Transfer of TVA Property for Industrial Park, 2002.
- G. Tennessee Valley Authority, Aquatic Monitoring and Management, Results of Fish Community Monitoring in the Vicinity of Gallatin Fossil Plant During Autumn 2007 in Support of a Continued 316(a) Thermal Variance, April 2008

cc (Enclosures and Attachments):

M. A. Hood, NRC/HQ
R.B. Clary, SCE&G
E. Cummings, Westinghouse
S. P. Frantz, Morgan Lewis
M.W.Gettler, FP&L
R.C. Grumbir, NuStart
P. S. Hastings, NuStart
P. Hinnenkamp, Entergy
R.H. Kitchen, PGN
M.C Kray, NuStart
D. Lindgren, Westinghouse
G.D.Miller, PG&N
G. Serviere, EDF/INA
G.A Zinke, NuStart

cc (w/o Enclosures and Attachments):

M.P. Cazaubon, NuStart
A.M Monroe, SCE&G
J. D. Peralta, NRC/NRO/DCIP/CQVP
C. R Pierce, SNC
R. Register, DOE/PM
L. Reyes, NRC/RII