



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

January 9, 2009

10 CFR 52.79

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

In the Matter of)
Tennessee Valley Authority)

Docket No. 52-014 and 52-015

**BELLEFONTE COMBINED LICENSE APPLICATION – RESPONSE TO REQUEST FOR
ADDITIONAL INFORMATION – REGIONAL CLIMATOLOGY**

- References:
- 1) Letter from Joseph Sebrosky (NRC) to Andrea L. Sterdis (TVA), Request for Additional Information Letter No. 096 Related to SRP Section 02.03.03 for the Bellefonte Units 3 and 4 Combined License Application, dated August 4, 2008
 - 2) Letter from Andrea L. Sterdis (TVA) to Document Control Desk (NRC), Response to Request for Additional Information – Onsite Meteorological Measurements, dated September 3, 2008.

This letter provides the Tennessee Valley Authority’s (TVA) supplemental response to the Nuclear Regulatory Commission’s (NRC) request for additional information (RAI) item 02.03.03-03 included in reference 1. This revised response is submitted as requested by NRC following verbal clarifications of the requested information.

A response to the NRC request in the Reference 1 letter is addressed in the enclosure which also identifies any associated changes to be made in a future revision of the BLN application.

If you should have any questions, please contact Thomas Spink at 1101 Market Street, LP5A, Chattanooga, Tennessee 37402-2801, by telephone at (423) 751-7062, or via email at tespink@tva.gov.

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

Executed on this 9th day of Jan, 2009.

Andrea L. Sterdis
Manager, New Nuclear Licensing and Industry Affairs
Nuclear Generation Development & Construction

Enclosure
cc: See Page 2

DOBS
NRC

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cc: (w/ Enclosures)

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J. M. Sebrosky, NRC/HQ
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M. C. Kray, NuStart
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C. R. Pierce, SNC
R. Reister, DOE/PM
L. Reyes, NRC/RII
T. Simms, NRC/HQ

Enclosure
TVA letter dated January 9, 2009
RAI Responses

Responses to NRC Request for Additional Information letter No.096 dated August 4, 2008
(3 pages, including this list)

Subject: Onsite Meteorological Measurements in the Final Safety Analysis Report

<u>RAI Number</u>	<u>Date of TVA Response</u>
02.03.03-02	September 3, 2008
02.03.03-03	September 3, 2008 – Revised by this letter – see following pages
02.03.03-04	September 3, 2008
02.03.03-05	September 3, 2008 and September 29, 2008

Associated Additional Attachments / Enclosures

Pages Included

None

Enclosure
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RAI Responses

NRC Letter Dated: August 4, 2008
NRC Review of Final Safety Analysis Report
NRC RAI NUMBER: 02.03.03-03

Regulatory Guide 1.23 specifies a sampling rate of 5 seconds for digital meteorological data. Please justify the 60-second sampling rate used for temperature and dew point measurements as indicated in the BLN FSAR.

BLN RAI ID: 2571

BLN RESPONSE:

When the BLN meteorological monitoring program was established, Revision 1 of Regulatory Guide 1.23 had not been issued and Revision 0 of Regulatory Guide 1.23 did not provide guidance on this issue. Therefore, the meteorological monitoring program was based on ANSI/ANS-3.11-2005 guidance. Section 5.2 of ANSI/ANS-3.11-2005 states:

For digital data acquisition systems, averaged values should be calculated using at least 30 samples at intervals no longer than 60 s spaced equally over not less than a 10-min period.

The once per minute sampling satisfies this guidance. Revision 1 of Regulatory Guide 1.23 was issued in March 2007, after data collection for the BLN COL had begun. The change to a 5-second sampling interval was delayed until after the second year of data was collected to avoid compromising the data set by using two different sampling intervals. Plans are in place to implement a change from the current once per minute sampling rate to a 5-second sampling rate. This conversion will be completed at least one year before fuel load.

The response is **PLANT-SPECIFIC**.

ASSOCIATED BLN COL APPLICATION TEXT CHANGES:

1. COL Part 2, FSAR, Appendix 1AA will be revised from:

Reg. Guide 1.23, Rev. 1, 3/07 – Meteorological Monitoring Programs for Nuclear Power Plants

General Conforms

To read:

Reg. Guide 1.23, Rev. 1, 3/07 – Meteorological Monitoring Programs for Nuclear Power Plants

General Exception Sampling interval for temperature and dew point during siting activities based on guidance in effect at the beginning of the program.

General Conforms Plant operations phase program will conform.

2. COL Part 2, FSAR Subsection 2.3.3.2.2.1, Data Acquisition, will be revised from:

Meteorological sensor outputs are sampled at the following rates: horizontal wind direction and wind speed, every five seconds (720 per hour); temperature and dewpoint, every minute (60 per hour); rainfall, every 15 minutes (4 per hour). Each piece of data is checked to verify that it is between the minimum and maximum instrument limits. Data outside of specified limits is considered invalid and treated as missing.

Enclosure
TVA letter dated January 9, 2009
RAI Responses

To read:

Meteorological sensor outputs are sampled at the following rates: horizontal wind direction and wind speed, every five seconds (720 per hour); temperature and dewpoint, every minute (60 per hour); rainfall, every 15 minutes (4 per hour). The temperature and dewpoint sampling interval will be changed to a five second sampling rate at least one year before fuel load. Each piece of data is checked to verify that it is between the minimum and maximum instrument limits. Data outside of specified limits is considered invalid and treated as missing.

ATTACHMENTS:

None