

## PMBelCOL PEmails

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**From:** Joseph Sebrosky  
**Sent:** Monday, August 04, 2008 12:53 PM  
**To:** 'andrea sterdis'; 'bob Hirman'; 'Eddie R Grant'; 'Hastings, Peter S'; 'Kim Slays'; 'Ray, Phillip M'; 'rgrumbir@gmail.com'  
**Cc:** Stephanie Coffin; Patrick Moulding; Ann Hodgdon; BelCol Resource; RidsNroDnrlNwe1 Resource; RidsNroLAKGoldstein Resource; RidsOgcMailCenter Resource; RidsRgn2MailCenter Resource; RidsAcrcAcnw\_MailCTR Resource; Brian Anderson; Brian Hughes; Christian Araguas; Joseph Sebrosky; Manny Comar; Tanya Simms; Charles Cox; Brad Harvey; Leta Brown; Thomas Galletta  
**Subject:** REQUEST FOR ADDITIONAL INFORMATION LETTER NUMBER 096 RELATED TO SRP SECTION 2.3.3 FOR THE BELLEFONTE UNITS 3 and 4 COMBINED LICENSE  
**Attachments:** BLN-RAI-LTR-96.pdf

To All,

Attached is RAI letter No.096 related to SRP Section 2.3.3 for the Bellefonte Units 3 and 4. The ADAMS Accession number is ML082170318.

Joe Sebrosky  
Project Manager  
NRO/DNRL/NWE1  
US NRC  
301-415-1132

**Hearing Identifier:** Bellefonte\_COL\_Public\_EX  
**Email Number:** 785

**Mail Envelope Properties** (C4A4C9A16294FB4CBA5A36312D05FFAC0A9CFEA6E8)

**Subject:** REQUEST FOR ADDITIONAL INFORMATION LETTER NUMBER 096  
RELATED TO SRP SECTION 2.3.3 FOR THE BELLEFONTE UNITS 3 and 4 COMBINED LICENSE  
**Sent Date:** 8/4/2008 12:53:12 PM  
**Received Date:** 8/4/2008 12:53:15 PM  
**From:** Joseph Sebrosky

**Created By:** Joseph.Sebrosky@nrc.gov

**Recipients:**

"Stephanie Coffin" <Stephanie.Coffin@nrc.gov>  
Tracking Status: None  
"Patrick Moulding" <Patrick.Moulding@nrc.gov>  
Tracking Status: None  
"Ann Hodgdon" <Ann.Hodgdon@nrc.gov>  
Tracking Status: None  
"BelCol Resource" <BelCol.Resource@nrc.gov>  
Tracking Status: None  
"RidsNroDnrlNwe1 Resource" <RidsNroDnrlNwe1.Resource@nrc.gov>  
Tracking Status: None  
"RidsNroLAKGoldstein Resource" <RidsNroLAKGoldstein.Resource@nrc.gov>  
Tracking Status: None  
"RidsOgcMailCenter Resource" <RidsOgcMailCenter.Resource@nrc.gov>  
Tracking Status: None  
"RidsRgn2MailCenter Resource" <RidsRgn2MailCenter.Resource@nrc.gov>  
Tracking Status: None  
"RidsAcrcAcnw\_MailCTR Resource" <RidsAcrcAcnw\_MailCTR.Resource@nrc.gov>  
Tracking Status: None  
"Brian Anderson" <Brian.Anderson@nrc.gov>  
Tracking Status: None  
"Brian Hughes" <Brian.Hughes@nrc.gov>  
Tracking Status: None  
"Christian Araguas" <Christian.Araguas@nrc.gov>  
Tracking Status: None  
"Joseph Sebrosky" <Joseph.Sebrosky@nrc.gov>  
Tracking Status: None  
"Manny Comar" <Manny.Comar@nrc.gov>  
Tracking Status: None  
"Tanya Simms" <Tanya.Simms@nrc.gov>  
Tracking Status: None  
"Charles Cox" <Charles.Cox@nrc.gov>  
Tracking Status: None  
"Brad Harvey" <Brad.Harvey@nrc.gov>  
Tracking Status: None  
"Leta Brown" <Leta.Brown@nrc.gov>  
Tracking Status: None  
"Thomas Galletta" <Thomas.Galletta@nrc.gov>  
Tracking Status: None  
"andrea sterdis" <alsterdis@tva.gov>  
Tracking Status: None

"bob Hirman" <bobhirman@live.com>  
Tracking Status: None  
"Eddie R Grant" <erg-xl@cox.net>  
Tracking Status: None  
"Hastings, Peter S" <pshastings@duke-energy.com>  
Tracking Status: None  
"Kim Slays" <Kslays@duke-energy.com>  
Tracking Status: None  
"Ray, Phillip M" <pmray@tva.gov>  
Tracking Status: None  
"rgrumbir@gmail.com" <rgrumbir@gmail.com>  
Tracking Status: None

**Post Office:** HQCLSTR02.nrc.gov

| <b>Files</b>       | <b>Size</b> | <b>Date &amp; Time</b> |
|--------------------|-------------|------------------------|
| MESSAGE            | 246         | 8/4/2008 12:53:15 PM   |
| BLN-RAI-LTR-96.pdf | 175843      |                        |

**Options**  
**Priority:** Standard  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**

## **BellefonteRAIsPEm Resource**

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**From:** Joseph Sebrosky  
**Sent:** Monday, August 04, 2008 11:15 AM  
**To:** BellefonteRAIsPEm Resource  
**Subject:** REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 096 RELATED TO SRP  
SECTION 2.3.3 FOR THE BELLEFONTE UNITS 3 and 4 COMBINED LICENSE  
APPLICATION  
**Attachments:** BLN-RAI-LTR-096.doc

**Hearing Identifier:** Bellefonte\_COL\_RAI\_Public  
**Email Number:** 77

**Mail Envelope Properties** (C4A4C9A16294FB4CBA5A36312D05FFAC0A9CF8F273)

**Subject:** REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 096 RELATED TO  
SRP SECTION 2.3.3 FOR THE BELLEFONTE UNITS 3 and 4 COMBINED LICENSE APPLICATION  
**Sent Date:** 8/4/2008 11:14:37 AM  
**Received Date:** 8/4/2008 11:15:30 AM  
**From:** Joseph Sebrosky

**Created By:** Joseph.Sebrosky@nrc.gov

**Recipients:**  
"BellefonteRAIsPEm Resource" <BellefonteRAIsPEm.Resource@nrc.gov>  
Tracking Status: None

**Post Office:** HQCLSTR02.nrc.gov

| Files               | Size  | Date & Time          |
|---------------------|-------|----------------------|
| MESSAGE             | 3     | 8/4/2008 11:15:30 AM |
| BLN-RAI-LTR-096.doc | 54894 |                      |

**Options**  
**Priority:** Standard  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**

August 4, 2008

Ms. Andrea L. Sterdis  
Manager, Nuclear Licensing & Industry Affairs  
Nuclear Generation Development & Construction  
Tennessee Valley Authority  
1101 Market Street  
Chattanooga, Tennessee 37402-2801

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 096 RELATED TO  
SRP SECTION 2.3.3 FOR THE BELLEFONTE UNITS 3 and 4 COMBINED  
LICENSE APPLICATION

Dear Ms. Sterdis:

By letter dated October 30, 2007, as supplemented by letters dated November 2, 2007, January 8, 2008 and January 14, 2008, Tennessee Valley Authority (TVA) submitted its application to the U. S. Nuclear Regulatory Commission (NRC) for a combined license (COL) for two AP1000 advance passive pressurized water reactors pursuant to 10 CFR Part 52. The NRC staff is performing a detailed review of this application to enable the staff to reach a conclusion on the safety of the proposed application.

The NRC staff has identified that additional information is needed to continue portions of the review. The staff's request for additional information (RAI) is contained in the enclosure to this letter.

To support the review schedule, you are requested to respond within 30 days of the date of this letter. If changes are needed to the final safety analysis report, the staff requests that the RAI response include the proposed wording changes.

If you have any questions or comments concerning this matter, you may contact me at 301-415-1132.

Sincerely,

***/RA/***

Joseph M. Sebrosky, Senior Project Manager  
AP1000 Projects Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

Docket Nos. 52-014  
52-015

eRAI Tracking No. 414

Enclosure:  
Request for Additional Information

CC: see next page

If you have any questions or comments concerning this matter, you may contact me at 301-415-1132.

Sincerely,

**/RA/**

Joseph M. Sebrosky, Senior Project Manager  
AP1000 Projects Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

Docket Nos. 52-014  
52-015

eRAI Tracking No. 414

Enclosure:  
Request for Additional Information

Distribution:

|                        |           |           |
|------------------------|-----------|-----------|
| Public                 | CCox      | BHughes   |
| RidsNroDnrlNwe1        | SCoffin   | MComar    |
| RidsNroLAKGoldstein    | TSimms    | AHodgdon  |
| RidsOgcMailCenter      | RJoshi    | LBrown    |
| RidsAcrcAcnwMailCenter | PMoulding | TGalletta |
| RidsRgn2MailCenter     |           |           |
| JSebrosky              |           |           |

NRO-002

|        |           |          |  |           |            |
|--------|-----------|----------|--|-----------|------------|
| OFFICE | RSAC*     | RSAC/BC* |  | OGC       | NWE1/L-PM  |
| NAME   | TGalletta | CCox     |  | AHodgdon* | JSebrosky* |
| DATE   | 6/17/08   | 6/17/08  |  | 6/29/08   | 8/4/08     |

\*Approval captured electronically in the electronic RAI system.

**OFFICIAL RECORD COPY**

**Request for Additional Information**  
**Bellefonte Units 3 and 4**  
**Tennessee Valley Authority**  
**Docket No. 52-014 and 52-015**  
**SRP Section: 02.03.03 - Onsite Meteorological Measurements Programs**  
**Application Section: 2.3.3**

**QUESTIONS from the Siting and Accident Consequences Branch**

02.03.03-2

Regulatory Guide 1.206 states that the Onsite Meteorological Measurements Program description should include a site map showing tower location with respect to manmade structures, topographic features, and other site features that may influence site meteorological measurements and should indicate distances to nearby obstructions to flow in each downwind sector. Please provide such a map.

02.03.03-3

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.

02.03.03-4

Regulatory Guide 1.206 states that RG 1.23 contains guidance on acceptable onsite meteorological programs and any deviations from the guidance provided in RG 1.23 should be identified and justified. BLN FSAR 2.3.3 stated that most equipment is calibrated or replaced at least every six months of service. Please identify and justify any deviations.

02.03.03-5

Submit an electronic copy of the complete 2-year BNL hourly meteorological database. Also submit an appendix to the FSAR containing the following derived from the second year of BNL hourly meteorological data:

- (1) joint frequency distributions of wind speed, wind direction, and atmospheric stability for both the lower and upper levels
- (2) atmospheric dispersion and deposition factors presented in FSAR Sections 2.3.4 and 2.3.5.

This appendix should also demonstrate how representative the first year of data is of long-term conditions at the site. If the appendix cannot show that the two years of meteorological data are compatible (e.g., there are substantial differences in atmospheric dispersion and deposition factors between the two years of data) and the first year of data is shown to be non-conservative, revise the atmospheric dispersion and deposition factors presented in FSAR Sections 2.3.4 and 2.3.5 using the second year of meteorological data.

*SRP 2.3.3 states COL applicants should provide at least two consecutive annual cycles (and preferably 3 or more whole years) of onsite meteorological data with the COL application, including the most recent 1-year period. If two years of onsite meteorological data are not available at the time the application is filed, the staff expects that the COL applicant will provide*

Enclosure

*at least one annual cycle of meteorological data collected onsite with the application. These data should be used by the applicant to calculate (1) the short-term atmospheric dispersion estimates for accident releases discussed in SRP Section 2.3.4 and (2) the long-term atmospheric dispersion estimates for routine releases discussed in SRP Section 2.3.5. The applicant should continue to monitor the data and submit the complete 2-year data set when it has collected all the data. This supplemental submittal should also include a reanalysis of the Section 2.3.4 and 2.3.5 atmospheric dispersion estimates based on the complete 2-year data set.*