

PMBelCOL PEmails

From: Brian Anderson
Sent: Thursday, August 07, 2008 5:07 PM
To: alsterdis@tva.gov; rgrumbir@gmail.com; pmray@tva.gov; pshastings@duke-energy.com; erg-xl@cox.net; bobhirman@live.com; kslays@duke-energy.com; PMBelCOL PEmails; tespink@tva.gov
Cc: Joseph Sebrosky; Brian Anderson
Subject: RE: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 113 RELATED TO SRP SECTION 10.04.06 FOR THE BELLEFONTE UNITS 3 and 4 COMBINED LICENSE APPLICATION
Attachments: RAI Letter 113 - ML082200717.pdf
Importance: High

[Resending with the attachment.](#)

From: Brian Anderson
Sent: Thursday, August 07, 2008 4:58 PM
To: 'alsterdis@tva.gov'; 'rgrumbir@gmail.com'; 'pmray@tva.gov'; 'pshastings@duke-energy.com'; 'erg-xl@cox.net'; 'bobhirman@live.com'; 'kslays@duke-energy.com'; PMBelCOL PEmails; 'tespink@tva.gov'
Cc: Joseph Sebrosky; Brian Anderson
Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 113 RELATED TO SRP SECTION 10.04.06 FOR THE BELLEFONTE UNITS 3 and 4 COMBINED LICENSE APPLICATION
Importance: High

Attached is RAI Letter No. 113 related to SRP Section 10.04.06 for the Bellefonte Units 3 and 4 combined license application. The ADAMS Accession number is ML082200717.

Brian Anderson
301-415-9967
US Nuclear Regulatory Commission
Office of New Reactors
Project Manager, AP1000 Projects Branch 1

Hearing Identifier: Bellefonte_COL_Public_EX
Email Number: 482

Mail Envelope Properties (CB87FC66F95637428C5E0D066E756B6F7C740F5390)

Subject: RE: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 113 RELATED TO SRP SECTION 10.04.06 FOR THE BELLEFONTE UNITS 3 and 4 COMBINED LICENSE APPLICATION

Sent Date: 8/7/2008 5:07:18 PM

Received Date: 8/7/2008 5:07:19 PM

From: Brian Anderson

Created By: Brian.Anderson@nrc.gov

Recipients:

"Joseph Sebrosky" <Joseph.Sebrosky@nrc.gov>

Tracking Status: None

"Brian Anderson" <Brian.Anderson@nrc.gov>

Tracking Status: None

"alsterdis@tva.gov" <alsterdis@tva.gov>

Tracking Status: None

"rgrumbir@gmail.com" <rgrumbir@gmail.com>

Tracking Status: None

"pmray@tva.gov" <pmray@tva.gov>

Tracking Status: None

"pshastings@duke-energy.com" <pshastings@duke-energy.com>

Tracking Status: None

"erg-xl@cox.net" <erg-xl@cox.net>

Tracking Status: None

"bobhirman@live.com" <bobhirman@live.com>

Tracking Status: None

"kslays@duke-energy.com" <kslays@duke-energy.com>

Tracking Status: None

"PMBelCOL PEmails" <PMBelCOL.PEmails@nrc.gov>

Tracking Status: None

"tespink@tva.gov" <tespink@tva.gov>

Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

| Files | Size | Date & Time |
|----------------------------------|-------------|------------------------|
| MESSAGE | 832 | 8/7/2008 5:07:19 PM |
| RAI Letter 113 - ML082200717.pdf | | 142006 |

Options

Priority: High

Return Notification: No

Reply Requested: No

Sensitivity: Normal

Expiration Date:

Recipients Received:

BellefonteRAIsPEm Resource

From: Brian Anderson
Sent: Thursday, August 07, 2008 4:41 PM
To: BellefonteRAIsPEm Resource
Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 113 RELATED TO SRP SECTION 10.04.06 FOR THE BELLEFONTE UNITS 3 and 4 COMBINED LICENSE APPLICATION
Attachments: BLN-RAI-LTR-113.doc
Importance: High

Hearing Identifier: Bellefonte_COL_RAI_Public
Email Number: 95

Mail Envelope Properties (CB87FC66F95637428C5E0D066E756B6F7C740F5359)

Subject: REQUEST FOR ADDITIONAL INFORMATION LETTER NO. 113 RELATED TO SRP SECTION 10.04.06 FOR THE BELLEFONTE UNITS 3 and 4 COMBINED LICENSE APPLICATION
Sent Date: 8/7/2008 4:41:01 PM
Received Date: 8/7/2008 4:41:02 PM
From: Brian Anderson

Created By: Brian.Anderson@nrc.gov

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

Post Office: HQCLSTR01.nrc.gov

| Files | Size | Date & Time |
|---------------------|-------------|------------------------|
| MESSAGE | 3 | 8/7/2008 4:41:02 PM |
| BLN-RAI-LTR-113.doc | 54778 | |

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

August 7, 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. 113 RELATED TO
SRP SECTION 10.04.06 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 301-415-9967 or you may contact Joesph Sebrosky, the lead project manager for the Bellefonte combined license at 301-415-1132.

Sincerely,

/RA/

Brian C. Anderson, Project Manager
AP1000 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-014
52-015

Enclosure:
Request for Additional Information

CC: see next page

If you have any questions or comments concerning this matter, you may contact me at 301-415-9967 or you may contact Joesph Sebrosky, the lead project manager for the Bellefonte combined license at 301-415-1132.

Sincerely,

/RA/

Brian C. Anderson, Project Manager
 AP1000 Projects Branch 1
 Division of New Reactor Licensing
 Office of New Reactors

Docket Nos. 52-014
 52-015
 eRAI Tracking No. 906

Enclosure:
 Request for Additional Information

Distribution:

| | | |
|------------------------|-----------|----------|
| Public | SCoffin | DTERao |
| RidsNroDnrlNwe1 | TSimms | JPoehler |
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| RidsOgcMailCenter | BHughes | |
| RidsAcrsAcnwMailCenter | MComar | |
| RidsRgn2MailCenter | AHodgdon | |
| JSebrosky | PMoulding | |

NRO-002

| | | | | | |
|--------|---------|--|------------|------------|------------|
| OFFICE | COLP/BC | | NWE1/PM | OGC | NWE1/L-PM |
| NAME | DTERao* | | BAnderson* | PMoulding* | JSebrosky* |
| DATE | 7/25/08 | | 7/25/08 | 7/26/08 | 8/7/08 |

*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: 10.04.06 - Condensate Cleanup System
Application Section: 10.4.7.2.1**

QUESTIONS from Component Integrity, Performance and Testing Branch 1

10.04.06-1

In order to ensure compliance with GDC 14, SRP Section 10.4.6 refers to SRP Section 5.4.2.1, "Steam Generator Materials," for acceptance criteria for secondary water chemistry. SRP Section 5.4.2.1 refers to Branch Technical Position, BTP 5-1, "Monitoring of Secondary Side Water Chemistry in PWR Steam Generator," which states, in part, "The applicant should address how its program meets industry guidelines (e.g., EPRI's Secondary Water Chemistry Guidelines and Nuclear Energy Institute (NEI) 97-06)." BTP 5-1 also indicates that the secondary water chemistry program should control pH. Although consistency with industry guidelines was addressed in the AP1000 DCD, the applicant made the selection of the pH control and oxygen scavenger agents to meet COL information item 10.4.12.2. In FSAR Section 10.4.7.2.1, to address COL information item 10.4.12.2, the applicant identified the oxygen scavenger agents as hydrazine and carbohydrazide, and pH control agents as ammonia/monoethylamine. (Please clarify whether the two pH control agents will be used separately, together, or both.) The EPRI Secondary Water Chemistry Guidelines provide guidance on how pH is to be optimized in conjunction with the selected amine. The EPRI Secondary Water Chemistry Guidelines also recommend a site-specific materials compatibility review for plants implementing advanced amine treatment. Please provide the following information:

How will monoethylamine, or ammonia/monoethylamine be qualified for secondary systems pH control?

10.04.06-2

How will pH in secondary systems be optimized in conjunction with the selected amines?

10.04.06-3

Will the EPRI Secondary Water Chemistry Guidelines be used as guidance with respect to the qualification of the selected pH control agents and the optimization of the pH?