

## BellBendCOLPEm Resource

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**From:** Canova, Michael  
**Sent:** Thursday, July 30, 2009 12:40 PM  
**To:** Sgarro, Rocco R; BBNPP@pplweb.com; jennifer.mcqueeney@unistarnuclear.com; Katie.Thurstin@unistarnuclear.com  
**Cc:** Clark, Theresa; Mrowca, Lynn; Chowdhury, Prosanta; BellBendCOL Resource; Colaccino, Joseph  
**Subject:** RE: Bell Bend COLA - Draft Request for Information No. 42 (RAI No. 42)- SPLA - 3106  
**Attachments:** Letter 42 - RAI 3106 SPLA.DOC

The title line of this message has been corrected to carry the correct NRC internal reference number only. No other change has occurred.

Mike Canova

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**From:** Canova, Michael  
**Sent:** Thursday, July 30, 2009 12:33 PM  
**To:** 'Sgarro, Rocco R'; 'BBNPP@pplweb.com'; 'jennifer.mcqueeney@unistarnuclear.com'; 'Katie.Thurstin@unistarnuclear.com'  
**Cc:** Clark, Theresa; Mrowca, Lynn; Chowdhury, Prosanta; BellBendCOL Resource; Colaccino, Joseph  
**Subject:** RE: Bell Bend COLA - Draft Request for Information No. 42 (RAI No. 42)- SPLA - 2604

Attachment provided

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**From:** Canova, Michael  
**Sent:** Thursday, July 30, 2009 12:29 PM  
**To:** 'Sgarro, Rocco R'; 'BBNPP@pplweb.com'; 'jennifer.mcqueeney@unistarnuclear.com'; 'Katie.Thurstin@unistarnuclear.com'  
**Cc:** Clark, Theresa; Mrowca, Lynn; Chowdhury, Prosanta; BellBendCOL Resource; Colaccino, Joseph  
**Subject:** Bell Bend COLA - Draft Request for Information No. 42 (RAI No. 42)- SPLA - 2604

Attached is DRAFT RAI No. 42 for the Bell Bend COL Application. You have ten working days to review this request and to decide whether you need a conference call to discuss it. Please notify me of your decision in this regard.

After the call, or after ten days, the RAI will be finalized and sent to you. You will then have 30 days to respond. These durations are factored into your review schedule. If additional time is required to respond, please inform me of your proposed schedule to respond at your earliest opportunity.

If you have any questions, please contact me.

*Michael A. Canova*

Project Manager - Bell Bend COL Application  
Docket 52-039  
EPR Project Branch  
Division of New Reactor Licensing  
Office of New Reactors  
301-415-0737

**Hearing Identifier:** BellBend\_COL\_Public  
**Email Number:** 164

**Mail Envelope Properties** (D9892A42664D3D4690E88C2F48D7C08E20EBA231E6)

**Subject:** RE: Bell Bend COLA - Draft Request for Information No. 42 (RAI No. 42)- SPLA  
- 3106  
**Sent Date:** 7/30/2009 12:40:19 PM  
**Received Date:** 7/30/2009 12:40:21 PM  
**From:** Canova, Michael

**Created By:** Michael.Canova@nrc.gov

**Recipients:**

"Clark, Theresa" <Theresa.Clark@nrc.gov>  
Tracking Status: None  
"Mrowca, Lynn" <Lynn.Mrowca@nrc.gov>  
Tracking Status: None  
"Chowdhury, Prosanta" <Prosanta.Chowdhury@nrc.gov>  
Tracking Status: None  
"BellBendCOL Resource" <BellBendCOL.Resource@nrc.gov>  
Tracking Status: None  
"Colaccino, Joseph" <Joseph.Colaccino@nrc.gov>  
Tracking Status: None  
"Sgarro, Rocco R" <rrsgarro@pplweb.com>  
Tracking Status: None  
"BBNPP@pplweb.com" <BBNPP@pplweb.com>  
Tracking Status: None  
"jennifer.mcqueeney@unistarnuclear.com" <jennifer.mcqueeney@unistarnuclear.com>  
Tracking Status: None  
"Katie.Thurstin@unistarnuclear.com" <Katie.Thurstin@unistarnuclear.com>  
Tracking Status: None

**Post Office:** HQCLSTR01.nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	1740	7/30/2009 12:40:21 PM
Letter 42 - RAI 3106 SPLA.DOC		28666

**Options**

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

Request for Additional Information No. 42

7/30/2009

Bell Bend  
PPL Bell Bend LLC.  
Docket No. 52-039

SRP Section: 19 - Probabilistic Risk Assessment and Severe Accident Evaluation  
Application Section: 19.1.4.1

QUESTIONS for PRA Licensing, Operations Support and Maintenance Branch 1 (AP1000/EPR Projects) (SPLA)

19-20

(Follow-up to Question 19-2) The applicant's response to Question 19-2 (RAI 4; response dated June 5, 2009) provides additional information on the derivation of the failure frequency and probability for the circulating water system (CWS) and normal heat sink (NHS), represented by the undeveloped event "SUP UHS NS." Based on the response, the undeveloped event has a failure frequency of  $1E-2$  per year and a failure probability of  $2.8E-5$  over a 24-hour mission time. Final Safety Analysis Report (FSAR) Section 10.4.5.2.1 indicates that the CWS has four 25-percent trains. The failure data provided in NUREG/CR-6928 indicates that the probability of a motor-driven pump failing to run over a 24-hour mission time may be as high as  $1E-4$ . Therefore, the staff needs additional information to justify that the "SUP UHS NS" failure probability bounds all failures of the CWS and NHS.

- a. Provide additional information regarding major assumptions about the system design, the number of failed trains that will cause an initiating event or failure of the mitigating function, and associated failure probabilities
- b. Demonstrate that the failure probabilities of the plant-specific CWS and NHS are appropriately represented by the undeveloped event "SUP UHS NS."