

BellBendCOLPEm Resource

From: Canova, Michael
Sent: Tuesday, August 11, 2009 10:16 AM
To: Sgarro, Rocco R; BBNPP@pplweb.com; jennifer.mcqueeney@unistarnuclear.com; Katie.Thurstin@unistarnuclear.com; j freels
Cc: BellBendCOL Resource; Clark, Theresa; Mrowca, Lynn; Chowdhury, Prosanta; Weisman, Robert
Subject: Bell Bend COLA - Request for Information No. 42 (RAI No. 42)- SPLA - 3106
Attachments: Letter 42 - RAI 3106 Final SPLA.pdf

Attached is RAI No.42 for the Bell Bend COL Application. You are requested to respond to this request within 30 days. Response 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: 281

Mail Envelope Properties (D9892A42664D3D4690E88C2F48D7C08E20ECD8BC0A)

Subject: Bell Bend COLA - Request for Information No. 42 (RAI No. 42)- SPLA - 3106
Sent Date: 8/11/2009 10:16:17 AM
Received Date: 8/11/2009 10:16:18 AM
From: Canova, Michael

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Files	Size	Date & Time
MESSAGE	565	8/11/2009 10:16:18 AM
Letter 42 - RAI 3106 Final SPLA.pdf		18556

Options

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

Request for Additional Information No. 42

8/11/2009

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."