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
Cc:	BellBendCOL Resource; Weisman, Robert; Steckel, James; Som, Swagata; Jenkins, Ronaldo
Subject:	Bell Bend COLA - Request for Information Nos. 33 and 41 (RAI No. 33, RAI No. 41)- EEB - 2793 and 2690
Attachments:	Letter 33 - RAI 2793 EEB.pdf; Letter 41 - RAI 2690 FINAL EEB.pdf

Attached are RAI Nos.33 and 41for 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

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From: Canova, Michael

Created By: Michael.Canova@nrc.gov

Recipients:
"BellBendCOL Resource" <BellBendCOL.Resource@nrc.gov>
Tracking Status: None
"Weisman, Robert" <Robert.Weisman@nrc.gov>
Tracking Status: None
"Steckel, James" <James.Steckel@nrc.gov>
Tracking Status: None
"Som, Swagata" <Swagata.Som@nrc.gov>
Tracking Status: None
"Jenkins, Ronaldo" <Ronaldo.Jenkins@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

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MESSAGE	563	8/11/2009 10:15:51 AM
Letter 33 - RAI 2793 EEB.pdf	20943	
Letter 41 - RAI 2690 FINAL EEB.pdf	13758	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
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Request for Additional Information No. 33

8/11/2009

Bell Bend
PPL Bell Bend LLC.
Docket No. 52-039
SRP Section: 08.03.01 - AC Power Systems (Onsite)
Application Section: 8.3.1

QUESTIONS for Electrical Engineering Branch (EEB)

08.03.01-1

FSAR Figure 8.3-1, Emergency Power Supply System (EPSS) Single Line Diagram, appears to contain a typographical error. Clarify whether this figure shows two 30 BDT02 transformers (EATs), as labeled, or whether it should label one as 30BDT01 and the other as 30BDT02.

08.03.01-2

FSAR Section 8.3.1.1.1, "Emergency Power Supply System," states that: "The EPSS distribution equipment for the [Essential Service Water Emergency Make-up System] ESWEMS is located in the Seismic Category ESWEMS Pumphouse."

Identify the seismic category (i.e. Seismic Category I) referred to in this section of the FSAR.

08.03.01-3

FSAR Section 8.3.1.1.3, Electric Circuit Protection & Coordination, indicates that 'No departures or supplements' have been made. However, at BBNPP FSAR Section 8.2.2.4, page 8-13, the Applicant states that "The design of the on-load tap changers for each [emergency auxiliary transformer] EAT will ensure that the downstream EPSS 6.9 kV buses will have sufficient voltage to preclude degraded voltage protection……as described in the Section 8.3.1.1.3". Confirm if this reference to "Section 8.3.1.1.3" pertains to the U.S. EPR Design Control Document or the Bell Bend Nuclear Power Plant (BBNPP) FSAR.

08.03.01-4

FSAR Section 8.3.1.1.8, Raceway and Cable Routing, states that the safety related EPSS distribution equipment for the ESWEMS are located in applicable division of the Seismic Category I ESWEMS Pumphouse.

Confirm whether the U.S. EPR FSAR (DCD) is incorporated by reference for the raceway & cable routing design, including load group segregation and other design

aspects for the safety related ESWEMS electrical power distribution system and electrical equipment room.

08.03.01-5

Regarding FSAR Section 8.3.1.3, Electrical Power System Calculation and Distribution System Studies for AC Systems:

Confirm that electrical power system calculations and studies will include the site-specific ESWEMS system with safety related equipment to analyze the plant AC distribution system.

Regarding the grounding & lightning protection system, at BBNPP, the Applicant states that the U.S. EPR FSAR Figure 8.3-4, Typical Station Grounding Grid, is applicable for Bell Bend.

(1) Describe the site-specific integrated grounding plan that includes the 500 kV BBNPP switchyard.

(2) Describe the connection interface between the switchyard and the power block grounding.

(3) In addition, provide an ITAAC to inspect for appropriate site-specific lightning protection and grounding features for the offsite power/500 kV switchyard at BBNPP.

Request for Additional Information No. 41

8/10/2009

Bell Bend
PPL Bell Bend LLC.
Docket No. 52-039
SRP Section: 08.04 - Station Blackout
Application Section: 8.4

QUESTIONS for Electrical Engineering Branch (EEB)

08.04-1

Section 8.4.2.6 of the Bell Bend Nuclear Power Plant (NPP) Final Safety Analysis Report (FSAR) indicates that Bell Bend NPP utilizes the coping analysis in Section 8.4.2.6 of the U.S. EPR FSAR. The last paragraph of Section 8.4.2.6.1 of the U.S. EPR FSAR, states that "For the EPR, this results in a worst-case duration of eight hours. Subsequent refinement of site-specific data may result in a site-specific reduction to four or two hours."

The Station Blackout (SBO) rule (10 CFR 50.63a) requires that each COL applicant demonstrate the capability to withstand and recover from an SBO condition within a specified duration. Bell Bend incorporates the U.S. EPR Design certification which identifies its conformance to Regulatory Guide 1.155, Station Blackout in section 8.4. The specified station blackout duration shall be based on the four factors listed in 10 CFR 50.63a.

(1) Please identify the site-specific specified duration and recovery of a station blackout at Bell Bend NPP.
(2) If the specified duration for a specified station blackout at Bell Bend NPP is other than 8 hours, please indicate the coping duration; and
(3) Clarify the site-specific data involved in any reduction of the duration of the station blackout. Regulatory Guide 1.155, Station Blackout (August 1988).

The specific information required to be added to the FSAR for this issue is identified in 50.63(c)(1).