

## BellBendCOLPEm Resource

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**From:** Canova, Michael  
**Sent:** Monday, November 02, 2009 10:30 AM  
**To:** 'Sgarro, Rocco R'; 'BBNPP@pplweb.com'; Freels, James; 'melanie.Frailer@unistarnuclear.com'; 'Jacqueline.bell@unistarnuclear.com'  
**Cc:** BellBendCOL Resource; Colaccino, Joseph; Som, Swagata; Jenkins, Ronaldo; Steckel, James  
**Subject:** Bell Bend COLA - Request for Information No.s 48 and 50 and (RAI No. 48 and 50)- EEB - 2833 and 34354  
**Attachments:** Letter 50 - RAI 3454 EEB.pdf; Letter 48 - RAI 2833 EEB.pdf

Attached is RAI No.s [48 and 50 and](#) for the Bell Bend COL Application. You are requested to respond to this request by December 14, 2009. 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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**Received Date:** 11/2/2009 10:30:00 AM  
**From:** Canova, Michael

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

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Tracking Status: None

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Letter 50 - RAI 3454 EEB.pdf	13208	
Letter 48 - RAI 2833 EEB.pdf	20291	

**Options**

**Priority:** Standard

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**Recipients Received:**

Request for Additional Information No. 50

11/2/2009

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)

08.03.01-6

Section 8.3.1:

Cathodic Protection (CP) is not addressed for preventive measure of buried carbon steel piping from corrosion. Provide a description of cathodic protection design and method for site-specific buried piping, as applicable, identifying the industry standards which will be followed for design, installation and surveillance.

Section 8.3.1:

Electric Heat tracing system is not addressed for providing electric heating where temperature above ambient is required for system operation and freeze protection for site-specific outdoor service components and warming of process fluids (either indoor or outdoor), as applicable. Please identify the industry standards which will be followed for design and installation of electric heat tracing.

Request for Additional Information No. 48

10/27/2009

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

SRP Section: 14.03.06 - Electrical Systems - Inspections, Tests, Analyses, and Acceptance Criteria  
Application Section: 14.3.6

QUESTIONS for Electrical Engineering Branch (EEB)

14.03.06-1

Part 10 "ITAAC & ITAAC Closure":

Table 2.4-24, "Off-site Power System ITAAC," of the Bell Bend NPP FSAR addresses the interface requirements of U.S. EPR FSAR Section 2.5.5.

Interface requirement 5.4 of U.S. EPR FSAR Tier 1 Section 2.5.5 requires verification that the transmission system will not subject the reactor coolant pumps (RCPs) to a sustained frequency decay of greater than 3.5 Hz/second. FSAR Table 2.4-24 does not include an ITAAC to verify that the frequency decay at the bus supplying the RCPs will meet this criterion. Please provide an ITAAC to verify that this criterion is met or justify an alternative.

14.03.06-2

Part 10 "ITAAC & ITAAC Closure":

Table 2.4-26, "Class 1E Emergency Power Supply Components for Site-Specific System ITAAC," item 4 of the Bell Bend NPP FSAR, addresses site-specific Class 1E systems associated with the Emergency Service Water Emergency Makeup System (ESWEMS). Since these site-specific ESWEMS systems will be an integral part of the Bell Bend NPP Class 1E electrical system, confirm that all site-specific inspections, tests and analyses are to be conducted in accordance with the generic requirements of U.S. EPR FSAR Tier 1 for the Class 1E emergency Power Supply System (i.e., analysis described in item 5.11 of Table 2.5.1-3, U.S. EPR FSAR Tier 1) and incorporated in Appendix B to Part 10, Section 2.1 of Bell Bend NPP ITAAC.

14.03.06-3

FSAR Chapter 14, Verification Program, Table 14.3-3 – Interface Requirements Screening Summary, Item 4.9 states that Interface requirements for the lightning protection and grounding system are provided in Section 2.5.8 of Tier 1 of the U.S. EPR FSAR. Item 4.9 of Table 14.3-3 also indicates that Section 8.3 incorporates the U. S. EPR lightning protection and grounding system by reference.

Section 2.5.8 of Tier 1 does not currently address offsite power/switchyard system grounding and lightning protection systems. In Request for Information (RAI) question 14.03.06-34 on US EPR (RAI 275), the NRC staff has requested that the US EPR FSAR include an interface requirement to address this matter.

Neither Table 14.3-3 nor FSAR Section 8.3 (Onsite Power Systems) addresses offsite power/switchyard grounding and lightning protection systems as an ITAAC. Confirm that offsite power system/switchyard grounding and lightning protection system are selected for ITAAC or justify an alternative.