

## BellBendCOLPEm Resource

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**From:** Canova, Michael  
**Sent:** Tuesday, April 05, 2011 12:01 PM  
**To:** BellBendCOL Resource  
**Subject:** FW: Bell Bend COLA - FINAL Request for Information No. 98 (RAI No. 98)- EEB 4876  
**Attachments:** Final RAI Letter 98 - EEB 4876.doc

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**From:** Canova, Michael  
**Sent:** Friday, September 03, 2010 10:44 AM  
**To:** 'Sgarro, Rocco R'; 'BBNPP@pplweb.com'; 'Freels, James'; 'melanie.Frailer@unistarnuclear.com'  
**Cc:** Colaccino, Joseph  
**Subject:** Bell Bend COLA - FINAL Request for Information No. 98 (RAI No. 98)- EEB 4876

Attached is RAI No. 98 for the Bell Bend COL Application. [Per our discussion on 9/2/2010](#), we understand that you [have no questions on this RAI and that this RAI IS plot-plan change related](#). You are requested to respond [by October 8/2010](#). If additional time is required to respond, please inform me of your proposed schedule 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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EEB 4876  
**Sent Date:** 4/5/2011 12:00:32 PM  
**Received Date:** 4/5/2011 12:00:34 PM  
**From:** Canova, Michael

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

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

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

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Final RAI Letter 98 - EEB 4876.doc		31226

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Request for Additional Information No. 98  
Application Revision 2

9/3/2010

Bell Bend  
PPL Bell Bend LLC.  
Docket No. 52-039  
SRP Section: 08.02 - Offsite Power System  
Application Section: 8.2

QUESTIONS for Electrical Engineering Branch (EEB)

08.02-10

**Supplemental RAI Question 08.02-9 S1**

In RAI No. 36, Question 08.02-9, the staff requested that the applicant expand FSAR Section 8.2.2.5 for compliance with GDC 18, for the testing and inspection of the offsite system for 500 kV switchyard grounding and lightning protection systems based on the guidance in RG 1.204. On December 9, 2009, the applicant responded that the PPL EU ground grid design and testing are in accordance with IEEE Std 80-2000, that PPL EU's lightning protection design utilizes the IEEE 998-1996 rolling sphere method for protection, and that BBNPP FSAR Section 8.2.2.5 and Section 8.2.3 (for reference to IEEE, 2000c and IEEE, 1996b) will be updated accordingly.

In U.S. EPR FSAR, Section 8.2.1.1 refers to 8.3.1.3.5 for Surge and Lightning Protection. Section 8.3.1.3.5 references IEEE 665-1995 "IEEE Guide for Generating Station Grounding", IEEE Std. 666-1991 "IEEE Design Guide for Electrical Power Service Systems for Generating Stations", IEEE Std. C62.23 "IEEE Application Guide for Surge Protection of Electrical generating Plants", and IEEE Std. 1050, "IEEE Guide for Instrumentation and Control Equipment grounding in Generating Stations." These four references, taken together, are endorsed by RG 1.204. The Bell Bend FSAR and RAI response do not mention the above references as applicable.

To ensure that offsite power for 500 kV switchyard grounding and lightning protection systems at Bell Bend meet the requirements of GDC 18, the staff requests the applicant to confirm that the four above references will be followed for testing and inspection of the offsite system for switchyard grounding and lightning protection systems, in accordance with the guidance in RG 1.204, or provide justification supporting an alternate means of meeting GDC 18.