

BellBendCOLPEM Resource

From: Canova, Michael
Sent: Friday, June 08, 2012 11:34 AM
To: Sgarro, Rocco R; 'melanie.Frailer@unistarnuclear.com'; Woodring, Kathryn L; Kirkwood, Jon K
Cc: BellBendCOL Resource; Segala, John; Clark, Phyllis; Stutzcage, Edward; Sampson, Michele; Goldin, Laura
Subject: Bell Bend COLA - Draft Request for Information No. 116 (RAI No. 116) - RPAC 6473
Attachments: DRAFT RAI Letter 116 RPAC 6473.doc

Attached is DRAFT RAI No. [116](#) for the Bell Bend COL Application. Please contact me at your earliest convenience to identify whether you need a clarifying conference call prior to issuance of this RAI.

During the call, a schedule for response submittal will also need to be established

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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Application Revision 3

DRAFT

6/8/2012

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

SRP Section: 12.03-12.04 - Radiation Protection Design Features
Application Section: FSAR Section 12.3

QUESTIONS for Radiation Protection & Accident Consequences Branch (RPAC)

Request for Additional Information No. 6473

12.03-12.04-4

10 CFR 20.1301 requires that the total effective dose equivalent to individual members of the public does not exceed 100 mrem/year.

10 CFR 20.1201 requires that the total effective dose equivalent to workers does not exceed 5 rem/year.

COL Item 12.3.5.1 states that, "A COL applicant that references the U.S. EPR design certification will provide site specific information on estimated annual doses to construction workers in a new unit construction area as a result of radiation from onsite radiation sources from the existing operating plant(s). This information will include bases, models, assumptions, and input parameters associated with these annual doses."

In response to COL Item 12.3.5.1, the Applicant provided estimated dose rate information for Bell Bend construction workers who may be exposed to radiation sources from the nearby Susquehanna Steam Electric Station, Units 1 and 2 (SSES) during construction of Bell Bend. The collective dose to construction workers during the estimated period of construction (2012 to 2017) is identified in FSAR Table 12.3-14. The estimated total dose rate to workers is estimated to be 6.18 person-rem. The Applicant determined that one of the sources of radiation to construction workers from SSES was the independent spent fuel storage installation (ISFSI) at SSES. The expected construction period for Bell Bend, identified in FSAR Revision 3, Chapter 12, is from 2012 to 2017. Since the loading of the ISFSI increases over time, the ISFSI dose rate contribution to the construction worker also increases, and will be greatest at the end of this time period (2017). However, the current estimated completion date of plant construction provided in Part 1, Section 1.4 "Requested Licenses and Authorized Uses", of Revision 3 of the Bell Bend Application is December 2018. Please update the construction worker dose estimates in FSAR Section 12.3.5 to include construction worker dose rate information for the new estimated plant construction period. If the December 2018 estimate for completion of plant construction is no longer accurate please provide the updated estimated completion date for plant construction and update the construction worker dose rate estimates accordingly, or provide bounding dose rate information, assuming a full ISFSI.