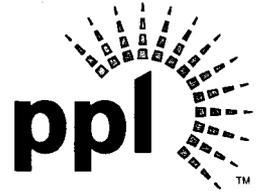


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February 2, 2010

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

**BELL BEND NUCLEAR POWER PLANT  
RESPONSE TO RAI No. 71  
BNP-2010-015      Docket No. 52-039**

References: 1) M. Canova (NRC) to R. Sgarro (PPL Bell Bend, LLC), Bell Bend COLA – Request for Information No. 71 (RAI No. 71) – NARP-3781, e-mail dated January 4, 2010

The purpose of this letter is to respond to the request for additional information (RAI) identified in the referenced NRC correspondence to PPL Bell Bend, LLC (PPL). This RAI addresses Introduction and Interfaces as discussed in Chapter 1 of the Final Safety Analysis Report (FSAR) and submitted in Part 2 of the Bell Bend Nuclear Power Plant (BBNPP) Combined License Application (COLA).

Enclosure 1 provides the response to RAI Question 01-2. The only new regulatory commitment in this letter is to update the BBNPP COLA at a future date.

If you have any questions, please contact the undersigned at 570.802.8102.

*I declare under penalty of perjury that the foregoing is true and correct.*

Executed on February 4, 2010

Respectfully,

  
Rocco R. Sgarro

RRS/k-fw

Enclosure: As stated

DD79  
NRD

cc: (w/o Enclosures)

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Enclosure 1

Response to NRC Request for Additional Information No. 71  
Bell Bend Nuclear Power Plant

**Question 01-2:**

In the BBNPP COLA FSAR table 1.9-1, the BBNPP Quality Assurance Program Description (QAPD) is referenced in identifying exceptions to the listed regulatory guidance documents (in opposition to the site-specific table title). The exception descriptions in this table do not clearly identify the exception being identified.

The QAPD adopts UniStar's approved topical report UN-TR-06-001-A, REV 0, as modified to reflect the BBNPP organization. This QAPD reference does not address the guidance documents listed in the table. Please clarify how conformance to the regulatory guides listed is established, and/or justify any departures/exceptions.

Also, please clarify the relationship of BBNPP's chapter 17 in establishing BBNPP's commitment to, and exceptions from, conformance to these regulatory guides, including those identified in this table.

**Response:**

Conformance with Regulatory Guides (RGs) is established in the U.S. EPR FSAR Section 1.9, "Conformance with Regulatory Criteria", and Table 1.9-2, "U.S. EPR Conformance with Regulatory Guides". U.S. EPR Table 1.9-1, "U.S. EPR Conformance Table Legend", defines the codes used to indicate conformance determinations with the assessment column in Table 1.9-2. Those RGs identified by the Table 1.9-1 designator of "N/A-COL" are to be addressed by the applicant. For each of the line items with a code of "N/A-COL" in U.S. EPR Table 1.9-2, a conformance assessment was performed with the regulatory guidance in Table 1.9-2 of the U.S. EPR FSAR. The results of this assessment are identified in an "Exception Table" in BBNPP FSAR Table 1.9-1. Only those RGs where BBNPP takes an exception to the RG guidance are identified in this Table and the Table does not include those RGs where full conformance was identified. Table 1.9-1 will be revised as shown below to:

- better identify the exemption description,
- clarify the relationship of the BBNPP FSAR Chapter 17 by revising the reference from the Quality Assurance Program Description (QAPD) to the appropriate FSAR Section and
- update a Quality Assurance management position title.

The RGs identified in the U.S. EPR were based on those RGs in effect six months before the docket date of the U.S. EPR Design Certification by AREVA. The docket date of the U.S. EPR Design Certification application was February 25, 2008 and the previous six-month cut-off date was August 25, 2007. The BBNPP FSAR includes a COL Item for an applicant that references the U.S. EPR design certification to review and address conformance with regulatory criteria in effect six months before the docket date of their application. The BBNPP COLA docket date was December 19, 2008 and the previous six month cutoff date was June 19, 2008. This represents a potential window from August 25, 2007 until June 19, 2008 for new or revised RGs to be approved and not included in the U.S. EPR Table 1.9-2. A review of the following RGs was performed for RG issuance or revision during that time window:

- Division 1, Power Reactors
- Division 4, Environmental and Siting
- Division 5, Materials and Plant Protection
- Division 8, Occupational Health

Five Division 1 RGs were identified that were either issued or revised during that time interval:

1. 1.45, "Guidance on Monitoring and Responding to Reactor Coolant System Leakage", Revision 1, May 2008
2. 1.84, "Design, Fabrication, and Materials Code Case Acceptability, ASME Section III", Revision 34, October 2007
3. 1.147, "Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1", Revision 15, October 2007
4. 1.193, "ASME Code Cases Not Approved for Use", Revision 2, October 2007
5. 1.210, "Qualification of Safety-Related Battery Chargers and Inverters for Nuclear Power Plants", Initial issue, June 2008

One Division 4 RG was issued during that time interval:

1. 4.21, "Minimization of Contamination and Radioactive Waste Generation: Life-Cycle Planning", Initial issue, June 2008

None of the four RG revisions were characterized as "N/A-COLA" in the U.S. EPR Table 1.9-2. For the two recently-issued RGs, BBNPP will conform to the guidance provided therein. BBNPP FSAR Section 1.9.1 will be revised to clarify the establishment of conformance and exceptions for the RGs in effect six months prior to the BBNPP COLA docketing date.

Additionally, BBNPP FSAR Section 17.5 will be revised to provide a discussion of the BBNPP QAPD and the relationship to the applicable RGs identified or referenced in FSAR 1.9.1 and FSAR Table 1.9-1 for this FSAR Section.

**COLA Impact:**

BBNPP FSAR Table 1.9-1 will be revised as follows:

**Table 1.9-1-{Conformance with Regulatory Guides}**

Note: BBNPP conforms to applicable Regulatory Guides with the following exceptions:

RG/Rev	Description	Exception Descriptions	Reference
	Division 1 Regulatory Guides		
1.8, R3	Qualification and Training of Personnel for Nuclear Power Plants	<p><del>The Quality Assurance Manager</del> <u>Management Position Responsible for Quality and Performance Improvement</u> will approve the use of an alternative for the formal education and experience requirements for Quality Assurance positions in accordance with the approved Quality Assurance Program Description.</p> <p>The QAPD identified in Section 17.5 is based on <u>NQA-1-1994. Applicable Regulatory Guides supplement and support the QAPD. Commitment to a particular Regulatory Guide does not constitute a commitment to Regulatory Guides or standards that may be referenced therein.</u></p>	<p>FSAR 13.1.3.1</p> <p><u>FSAR 17.5</u></p>

1.28, R3	Quality Assurance Program Requirements	<del>Quality Assurance Program requirements are in accordance with the approved Quality Assurance Program Description. The QAPD identified in Section 17.5 is based on NQA-1-1994. Applicable Regulatory Guides supplement and support the QAPD. Commitment to a particular Regulatory Guide does not constitute a commitment to Regulatory Guides or standards that may be referenced therein.</del>	QAPD <u>FSAR 17.5</u>
1.30, R0	Quality Assurance Requirements for the Installation, Inspection, and Testing of Instrumentation and Electric Equipment	<del>Quality Assurance requirements for the installation, inspection, and testing of instrumentation and electric equipment are in accordance with the approved Quality Assurance Program Description. The QAPD identified in Section 17.5 is based on NQA-1-1994. Applicable Regulatory Guides supplement and support the QAPD. Commitment to a particular Regulatory Guide does not constitute a commitment to Regulatory Guides or standards that may be referenced therein.</del>	QAPD <u>FSAR 17.5</u>
1.33, R2	Quality Assurance Program Requirements (Operation)	<del>Quality Assurance Program Requirements for Operation are in accordance with the approved Quality Assurance Program Description. The QAPD identified in Section 17.5 is based on NQA-1-1994. Applicable Regulatory Guides supplement and support the QAPD. Commitment to a particular Regulatory Guide does not constitute a commitment to Regulatory Guides or standards that may be referenced therein.</del>	QAPD <u>FSAR 17.5</u>
1.38, R2	Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage, Handling of Items for Water-Cooled Nuclear Power Plants	<del>Quality Assurance Program requirements are in accordance with the approved Quality Assurance Program Description. The QAPD identified in Section 17.5 is based on NQA-1-1994. Applicable Regulatory Guides supplement and support the QAPD. Commitment to a particular Regulatory Guide does not constitute a commitment to Regulatory Guides or standards that may be referenced therein.</del>	QAPD <u>FSAR 17.5</u>

1.39, R2	Housekeeping Requirements for Water-Cooled Nuclear Power Plants	<del>Quality Assurance requirements for housekeeping are in accordance with the approved Quality Assurance Program Description. The QAPD identified in Section 17.5 is based on NQA-1-1994. Reference to NQA-1-1983 is replaced by reference to NQA-1-1994.</del>	QAPD FSAR 17.5
1.94, R1	Quality Assurance Program Requirements for Installation, Inspection and Testing of Structural Concrete and Structural Steel During the Construction Phase of Nuclear Power Plants	<del>Quality Assurance Program Requirements for installation, inspection and testing of structural concrete and structural steel during the construction phase of nuclear power plants are in accordance with the approved Quality Assurance Program Description. The QAPD identified in Section 17.5 is based on NQA-1-1994. Applicable Regulatory Guides supplement and support the QAPD. Commitment to a particular Regulatory Guide does not constitute a commitment to Regulatory Guides or standards that may be referenced therein.</del>	QAPD FSAR 17.5
1.116, R0	Quality Assurance Requirements for Installation, Inspection, and Testing of Mechanical Equipment and Systems	<del>Quality Assurance Program Requirements for installation, inspection and testing of mechanical equipment and systems are in accordance with the approved Quality Assurance Program Description. The QAPD identified in Section 17.5 is based on NQA-1-1994. Applicable Regulatory Guides supplement and support the QAPD. Commitment to a particular Regulatory Guide does not constitute a commitment to Regulatory Guides or standards that may be referenced therein.</del>	QAPD FSAR 17.5

BBNPP FSAR Section 1.9.1 will be revised as follows:

### 1.9.1 CONFORMANCE WITH REGULATORY GUIDES

Site-specific assessment of conformance with the regulatory guidance identified with a code of "N/A-COL" in Table 1.9-2 of the U.S. EPR FSAR was performed. Those Regulatory Guides guidance for which the facility takes exception are identified in Table 1.9-1. The document and section that address the exceptions are also provided in Table 1.9-1. No exceptions are taken to other applicable Regulatory Guides included in U.S. EPR FSAR Table 1.9-2.

{In addition to the review of the Regulatory Guides identified in U.S. EPR Table 1.9-2, Regulatory Guides in Divisions 1, 4, 5 and 8 were reviewed from the time period six months prior to the docket date of the U.S. EPR Design Certification Document (U.S. EPR FSAR) until six months prior to the docket date of the BBNPP COLA. This review identified an additional six RGs that were revised or issued between the six month cutoff date prior to docketing of the U.S. EPR FSAR and the docket date of the BBNPP COLA.

Five Division 1 RGs were identified that were either issued or revised during that time interval:

- 1.45, "Guidance on Monitoring and Responding to Reactor Coolant System Leakage", Revision 1, May 2008
- 1.84, "Design, Fabrication, and Materials Code Case Acceptability, ASME Section III", Revision 34, October 2007
- 1.147, "Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1", Revision 15, October 2007
- 1.193, "ASME Code Cases Not Approved for Use", Revision 2, October 2007
- 1.210, "Qualification of Safety-Related Battery Chargers and Inverters for Nuclear Power Plants", Initial issue, June 2008

One Division 4 RG was issued during that time interval:

- 4.21, "Minimization of Contamination and Radioactive Waste Generation: Life-Cycle Planning", Initial issue, June 2008

BBNPP does not take exception to any of the six newly issued or revised Regulatory Guidance documents. BBNPP conforms to the Regulatory Guidance identified in U.S. EPR Table 1.9-2 characterized as "N/A-COL" and the additional six Regulatory Guides and Revisions listed above. The only exceptions to those applicable RGs for BBNPP are identified in BBNPP FSAR Table 1.9-1.}

BBNPP FSAR 17.5.1 will be revised as follows:

#### **17.5.1 QA PROGRAM RESPONSIBILITIES**

The Bell Bend QAPD is submitted in Part 11 of this COL Application. The Bell Bend QAPD is applicable to the siting, design, fabrication, construction (including pre-operational testing), operation (including testing), maintenance and modification of the facility. The Bell Bend QAPD conforms to the criteria established in 10 CFR 50, Appendix B, (CFR, 2008a). PPL Bell Bend, LLC commits to implement the:

- ◆ Basic Requirements and Supplements of ANSI/NQA-1-1994, "Quality Assurance Requirements for Nuclear Facility Applications," (ANSI, 1994) as described in the QAPD.
- ◆ Specific subparts of NQA-1-1994, as described in the QAPD.

The Bell Bend QAPD conforms to the Regulatory Guides governing quality assurance identified or referenced in FSAR Section 1.9.1 with the exceptions taken as noted in FSAR Table 1.9-1. These Regulatory Guides are addressed in the Bell Bend QAPD, Section U.