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February 2, 2010

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Washington, DC 20555-0001

**BELL BEND NUCLEAR POWER PLANT
RESPONSE FOR RAI No. 67
BNP-2010-016 Docket No. 52-039**

Reference: 1) M. Canova (NRC) to R. Sgarro (PPL Bell Bend, LLC), Bell Bend COLA – Request for Information No. 67(RAI No. 67) –CQVP-3767, e-mail dated January 4, 2010

The purpose of this letter is to respond to the request for additional information (RAI) identified in the NRC correspondence to PPL Bell Bend, LLC (PPL) (Reference 1). This RAI addresses the Quality Assurance Program Description-Design Certification, Early Site Permit and New License Applications, as discussed in Chapter 17 of the Final Safety Analysis Report (FSAR) and submitted in Part 2 of the Bell Bend Nuclear Power (BBNPP) Plant Combined License Application (COLA).

Enclosure 1 provides our responses to RAI Question 17.5-7 and Question 17.5-8.


The only new regulatory commitment contained in this letter is to update the BBNPP COLA at a later 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 2, 2010

Respectfully,


Rocco R. Sgarro

RRS/kw

Enclosure: As stated

DOT9
NRW

cc: (w/o Enclosures)

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Enclosure 1

Response to NRC Request for Additional Information No. 67
Bell Bend Nuclear Power Plant

Question 17.5-7:

Bell Bend, Revision 0, "Quality Assurance Program Description," describes how the quality assurance requirements of Appendix B to 10 CFR Part 50 will be implemented. The regulatory guides identified below provide methods acceptable to the staff for describing in the QAPD how the subject requirements of Appendix B to 10 CFR Part 50 will be met. Bell Bend QAPD should commit to these regulatory guides or provide justification of any proposed alternatives. Exceptions to methods described by these regulatory positions should be explicitly addressed in the Bell Bend QAPD with justification with detail sufficient for the staff to evaluate compliance with the requirements of Appendix B to 10 CFR Part 50. Further, Bell Bend QAPD should be revised to clarify that changes to regulatory commitments described in the QAPD or incorporated by reference are subject to the change process defined by 10 CFR 50.54(a).

- a. RG 1.8, Rev. 3, May 2000, "Qualification and Training of Personnel for Nuclear Power Plants" This regulatory guide provides guidance acceptable to the NRC staff for complying with the personnel training and qualification requirements of 10 CFR Part 50, Section 50.120f. RG 1.8, Rev. 3 finds ANSI/ANS-3.1-1993 subject to the Regulatory Position established in Section C to provide an acceptable method for meeting requirements for training and qualification of nuclear power plant personnel. Section C exceptions include conditions applicable to personnel performing activities within the scope of the quality assurance program described in NEI 06-14A.
- b. RG 1.28, Rev. 3, August 1985, "Quality Assurance Program Requirements (Design and Construction)" This regulatory guide describes a method acceptable to the NRC staff for complying with the provisions of Appendix B to 10 CFR Part 50 with regard to establishing and implementing the requisite quality assurance program for the design and construction of nuclear power plants. RG 1.28, Rev. 3 finds NQA-1-1983 subject to the Regulatory Position established in Section C to provide an acceptable method for use in implementing the requirements of Appendix B to 10 CFR Part 50 during the design and construction phase.
- c. RG 1.33, Rev. 2, February 1978, "Quality Assurance Program Requirements (Operations)" This regulatory guide describes a method acceptable to the NRC staff for complying with the provisions of Appendix B with regard to overall quality assurance program requirements for the operation of nuclear power plants. RG 1.33 finds ANSI N18.7- 1976/ANS 3.2 to provide an acceptable basis for overall quality assurance compliance with Appendix B to 10 CFR Part 50 subject to the Regulatory Position established in Section C.

Response:

The BBNPP QAPD will be revised to commit to adhering to Regulatory Guides 1.8, 1.28 and 1.33. PPL Bell Bend, LLC (PPL) will implement and comply with the Regulatory Guides in accordance with NQA-1-1994. PPL will be revising the QAPD to align with NEI 06-14, Quality Assurance Program Description, upon issuance of a Safety Evaluation Report (SER) on Revision 7.

BBNPP QAPD Section U text will be modified to include these Regulatory Guides and the noted exception. Additionally, Regulatory Guide 1.39, Revision 2, "Housekeeping Requirements for Water-Cooled Nuclear Plants" will also be added to BBNPP QAPD, Section U.

The BBNPP Quality Assurance Program Description (QAPD) and FSAR Section 17.5.1 will be revised to identify that changes to regulatory commitments described in the QAPD or incorporated by reference in the approved QAPD are subject to the change process defined in 10 CFR 50.54(a) as shown below:

COLA Impact:

The BBNPP QAPD Section U, QA Program Commitments, will be revised as shown:

SECTION U

QA PROGRAM COMMITMENTS

Regulatory Guides (RG)/Generic Letters (GL)

- a. RG 1.8, Revision 3, "Qualification and Training of Personnel for Nuclear Power Plants"
- b. RG 1.26, Revision 4, "Quality Group Classifications and Standards for Water-, Steam-, and Radioactive-Waste-Containing Components of Nuclear Power Plants"
- c. RG 1.28, Revision 3, "Quality Assurance Program Requirements (Design and Construction)"
- d. RG 1.29, Revision 4, "Seismic Design Classification"
- e. RG 1.33, Revision 2, "Quality Assurance Program Requirements (Operations)"
- f. RG 1.37, Revision 1, "Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components of Water-Cooled Nuclear Power Plants"
- g. RG 1.39, Revision 2, "Housekeeping Requirements for Water-Cooled Nuclear Plants"
- h. GL 88-18, 10/20/88, "Plant Record Storage on Optical Disks"
- i. GL 89-02, 3/21/89, "Actions to Improve the Detection of Counterfeit and Fraudulently Marked Products"
- j. GL 91-05, 4/9/91, "Licensee Commercial-Grade Dedication Programs"

The BBNPP QAPD, Appendix 1 will be revised as shown below:

APPENDIX 1

PROVISIONS FOR CHANGE

Any changes that reduce commitments described in the QAPD or that are incorporated by reference in the approved QAPD, including those commitments that affect the QA Level requirements in this QAPD, will be submitted to the NRC for review and approval prior to implementation as required by 10 CFR 50.54(a)(3) and 10 CFR 50.55(f)(4). Changes that do not reduce commitments will be submitted in accordance with 10 CFR 50.54(a) and 10 CFR 50.55(f)(4), as applicable.

The BBNPP FSAR Section 17.5.1, QA Program Responsibilities, will be revised as shown below:

17.5.1 QA PROGRAM RESPONSIBILITIES

Changes to the QAPD are accomplished in accordance with 10 CFR 50.54(a)(3) and 10 CFR 50.55(f)(4).

Question 17.5-8:

In the Bell Bend FSAR, Section 17.5.1, the applicant states that the Bell Bend QAPD is submitted as Part 11 of the COL application and that the QAPD is applicable to the siting, design, fabrication, construction (including pre-operational testing), operation (including testing), maintenance and modification of the facility. Accordingly, the staff requests that the applicant (1) provide a clear statement in the FSAR as to when the QA program described in the Bell Bend QAPD (Part 11 of the application) will be implemented, and (2) add Bell Bend QAPD in Section 17.5.4, References, since the QAPD must be included or referenced in the FSAR.

Response:

The BBNPP QAPD is modeled after the UniStar Nuclear Energy Quality Assurance Program Description (Topical Report No.UN-TR-06-001-A) Revision 0, which was issued a Final Safety Evaluation on March 14, 2007 (ML070610261). The BBNPP QAPD was submitted as an integral part of the BBNPP Combined Operating License Application (COLA) on December 10, 2008 (ML082880580). For the purpose of the BBNPP QAPD, activities occurring prior to the commencement of initial fuel loading are considered "construction phase" activities. Those activities that occur once initial fuel loading has commenced are referred to as "operations and/or operational phase" activities. The PPL Bell Bend QAPD, as submitted in the COLA, was approved by PPL Bell Bend, LLC for the construction phase activities on October 8, 2009. The Operations Phase elements of the QAPD will be implemented no later than 30 days prior to the scheduled date for the initial loading of fuel.

The BBNPP FSAR, Sections 17.5.1 and 17.5.2, and the BBNPP QAPD, Introduction, will be revised to provide a statement that identifies that during the construction phase, procedures, instructions and drawings that control BBNPP quality-related activities will be developed and approved prior to the commencement of those activities.

FSAR Table 13.4-1, Operational Programs Required by NRC Regulations and Program Implementation, will be revised to clarify when the BBNPP QAPD will be implemented for the Operations Phase.

BBNPP FSAR Section 17.5.4 will be revised to add the Bell Bend QAPD as a referenced document in the FSAR.

COLA Impact:

The BBNPP FSAR will be revised as follows:

BBNPP FSAR Section 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.

For the purpose of this QAPD, activities occurring prior to the commencement of initial fuel loading are considered "construction phase" activities. Those activities that occur once initial fuel loading has commenced are referred to as "operations and/or operational phase" activities. The Operations Phase elements of the QAPD will be implemented no later than 30 days prior to the initial loading of fuel.

The QAPD will be identified in FSAR Table 13.4-1, "Operational Programs Required by NRC Regulations and Program Implementation", or its equivalent.

The BBNPP QAPD is defined by the NRC approved regulatory documents that describe the Quality Assurance Program elements, as referenced above, as well as the associated implementing documents. Procedures, instructions and drawings that control BBNPP quality-related activities will be developed and approved prior to the commencement of those activities.

BBNPP FSAR Section 17.5.2 will be revised as follows:

17.5.2 SRP SECTION 17.5 AND THE QA PROGRAM DESCRIPTION

{The Bell Bend QA Program is applicable to the ~~sitting~~ siting, design, fabrication, construction (including pre-operational testing), operation (including testing), maintenance and modification to the facility.

For the purpose of this QAPD, activities occurring prior to the commencement of initial fuel loading are considered "construction phase" activities. Those activities that occur once initial fuel loading has commenced are referred to as "operations and/or operational phase" activities. The Operations Phase elements of the QAPD will be implemented no later than 30 days prior to the initial loading of fuel.

The QAPD will be identified in FSAR Table 13.4-1, "Operational Programs Required by NRC Regulations and Program Implementation", or its equivalent.

The BBNPP QAPD is defined by the NRC approved regulatory documents that describe the Quality Assurance Program elements as well as the associated implementing documents. Procedures, instructions and drawings that control BBNPP quality-related activities will be developed and approved prior to the commencement of those activities.

The Bell Bend QAPD is provided in Part 11a of this COL Application}.

BBNPP FSAR Section 17.5.4 will be revised as follows:

17.5.4 REFERENCES

PPL Bell Bend, LLC, COLA Part 11a. Quality Assurance Program Description, Bell Bend QAPD.

The BBNPP QAPD, Introduction, will be revised as follows:

INTRODUCTION

Exceptions or alternatives to these documents are delineated in Table 1.

The Bell Bend Nuclear Power Plant (BBNPP) QA Program described herein covers siting, design, fabrication, construction (including pre-operational testing), operation (including testing), maintenance and modification to the facility.

For the purpose of this QAPD, activities occurring prior to the commencement of initial fuel loading are considered "construction phase" activities. Those activities that occur once initial fuel loading has commenced are referred to as "operations and/or operational phase" activities. The Operations Phase elements of the QAPD will be implemented no later than 30 days prior to the ~~scheduled dated~~ for the initial loading of fuel.

The QAPD will be identified in FSAR Table 13.4-1, "Operational Programs Required by NRC Regulations and Program Implementation", or its equivalent.

The BBNPP QAPD is defined by the NRC approved regulatory documents that describe the Quality Assurance Program elements, as referenced above, as well as the associated implementing documents. Procedures, instructions and drawings that control BBNPP quality-related activities will be developed and approved prior to the commencement of those activities.

~~The Bell Bend QA Program described herein covers siting, design, fabrication, construction (including pre-operational testing), operation (including testing), maintenance and modification to the facility.~~

This Quality Assurance Program Description (QAPD) describes the requirements to be applied to those safety-related structures, systems and components, (SSCs) and related activities that have been designated Quality Assurance (QA) Level 1 and to the nonsafety-related structures, systems and components, which are determined to be QA Level 2.

BBNPP FSAR Table 13.4-1 will be revised as follows:

Table 13.4-1-{Operational Programs Required by NRC Regulations and Program Implementation}

Item	Program Title	Source (Required By)	FSAR Section	Implementation Milestones	Requirements
16	Quality Assurance Program -Operation	10 CFR 50.54(a); 10 CFR Part 50, App. A (GDC 1); 10CFR Part 50, App.B	17.5 <u>Note 1</u>	Implemented (Note 2) <u>30 days prior to scheduled date for initial loading of fuel</u>	N/A Note 2 <u>10 CFR 50.54(a)(1)</u>

Note 1 The corresponding U.S. EPR FSAR sections are incorporated by reference and include additional information regarding these programs.

~~Note 2 The PPL Bell Bend, LLC QAPD (PPL Bell Bend LLC, COLA Part 11a) cover all phases of the facility's life, including design, construction, and operation.~~