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December 21, 2012

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

BELL BEND NUCLEAR POWER PLANT
RESPONSE TO RAI 118 QUESTION 13.03-52
BNP-2012-300 Docket No. 52-039

References: 1) M. Canova (NRC) to R. R. Sgarro (PPL Bell Bend, LLC), Bell Bend COLA – Request for Information Final Letter No. 118 (RAI No. 118) – 6496, 6503, 6524, email dated June 21, 2012

2) BNP-2012-185, R.R. Sgarro (PPL Bell Bend, LLC) to U.S. NRC, "Schedule Information for Response to RAI 118 Question 13.03-52," dated August 3, 2012

The purpose of this letter is to provide the final PPL Bell Bend, LLC (PPL) response to Request for Additional Information (RAI) No. 118 (Reference 1). Reference 2 indicated that PPL would provide a response to RAI No. 118, Question 13.03-52, on or before December 21, 2012. RAI No. 118 Question 13.03-52 addresses the Emergency Planning System submitted as Part 5 of the Bell Bend Nuclear Power Plant (BBNPP) Combined License Application (COLA). The Enclosure provides our response to RAI No. 118 Question 13.03-52 including revised COLA content. The revised COLA content will be included in a future revision of the BBNPP COLA.

The future revision of the COLA is the only new regulatory commitment in this correspondence.

Should you have questions, please contact the undersigned at 610.774.7552.

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

Executed on December 21, 2012.

Respectfully,

Rocco R. Sgarro

RRS/kw

Enclosure: As Stated.

AX45
D102
NRO

cc: W/ Enclosure

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Enclosure

Response to RAI No. 118, Question 13.03-52

RAI No. 118

Question 13.03-52

Related to Fukushima Task Force Recommendation 9.3

The NRC staff requests that you address provisions for enhancing emergency preparedness as it relates to staffing and communications associated with Recommendation 9.3 outlined in Enclosure 5 of the March 12, 2012 letter "Request for information pursuant to Title 10 of the *Code of Federal Regulations* 50.54(f) regarding Recommendations 2.1, 2.3, and 9.3, of the near-term task force review of insights from the Fukushima Dai-Ichi accident." (ML12053A340).

Response

PPL Bell Bend, LLC (PPL) is incorporating Combined License (COL) Item 13.3-2 into the Bell Bend Nuclear Power Plant (BBNPP) Combined License Application (COLA) as a License Condition in COLA Part 10, Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) and ITAAC Closure. COL Item 13.3-2 was provided by AREVA NP in their response to U.S. EPR FSAR RAI 549, Question 13.03-8[1].

The response to COL Item 13.3-2 addresses provisions to be taken to enhance emergency preparedness related to staffing and communications per Recommendation 9.3, provided in the NRC March 12, 2012 letter (ML12053A340) to licensees and construction permit holders. Additionally, this response addresses the proposed solution contained in the NRC final response provided by Emergency Preparedness Frequently Asked Question (EPFAQ) 2012-004 (ML12333A282).

The current regulatory environment is one best described as "in transition." A new emergency planning rule is currently being implemented by the industry with some aspects of the new rule not required to be fully implemented for several years. Industry-developed staffing assessment guidance (NEI 10-05 and NEI 12-01) will be utilized. An Advance Notice of Proposed Rulemaking (based on the Fukushima Task Force Report), published in April 2012, describes additional considerations for rulemaking that may significantly affect emergency response facility requirements. Current licensees are implementing the orders issued as a result of Fukushima and will acquire empirical data, generate lessons learned, and identify efficiencies beneficial to subsequent emergency response facility implementation.

The actions identified in the COL Item 13.3-2 response will allow for a more efficient assessment and implementation of corrective actions identified as a result of the Fukushima events. Performing assessments after regulatory guidance has been established and after reviewing lessons learned, allows for a more efficient, regulatory compliant result. In addition, this approach allows for consideration of improvements in technology as part of the assessment of communications capabilities.

The actions identified in the COL Item 13.3-2 response require PPL to perform an assessment of on-site and augmented staffing capability that satisfies regulatory requirements for response to a single-unit event at least two years prior to scheduled initial fuel load. The two year

[1] AREVA NP Response to U.S. EPR Standard Design Certification RAI No. 549 (6524), FSAR Ch. 13 - NEW PHASE 4 RAI - Fukushima, Supplement 1, dated September 14, 2012

timeframe is sufficient to address additional staffing needs and/or organizational changes that may be identified in the assessment (e.g., hiring and training of new employees, changes to the emergency response organization, etc.) prior to the full participation exercise and subsequent initial fuel loading. The application of 2 years in Table 13.4-1 in this response replaces the RAI No. 111 Question 13.03-40 response provided in PPL letter number BNP-2012-128, dated May 25, 2012.

Additionally, the actions identified in the COL Item 13.3-2 response require PPL to perform an assessment of the on-site and off-site communications systems at least two years prior to scheduled initial fuel load, but allows for the performance and implementation as soon as the regulatory environment stabilizes. The communications assessment will likely be accomplished at an earlier date (pending rule making and regulatory guidance development) to support equipment procurement and installation, development and training of the emergency response organization, and performance of the full participation exercise. Corrective actions from the assessment shall be identified and implemented at least 180 days prior to the scheduled initial fuel load. The timeframe of 180 days prior to scheduled initial fuel load for completion of the corrective actions is also consistent with the completion milestones for program implementation described in Chapter 13 of the BBNPP Final Safety Analysis Report.

COLA Impact

COLA Part 2, FSAR Table 1.6-1 has been revised as follows:

Table 1.6-1 – {Reports Referenced}

Report No.	Title/Revision	Date Submitted to the NRC	FSAR Section
...			
NEI 12-01	Guideline for Assessing Beyond Design Basis Accident Response Staffing and Communications Capabilities, Revision 0	May 2012	13.3
...			

COLA Part 2, FSAR Table 1.8-2 has been revised as follows:

Table 1.8-2 – FSAR Sections that Address COL Items

Item No.	Description	Section
...		
13.3-2	A COL applicant that references the U.S. EPR design certification will address the requested information in Fukushima Recommendation 9.3 regarding Emergency Preparedness Communications and Staffing, as outlined in Enclosure 5 of the request for additional information, pursuant to the 10 CFR 50.54(f) letter dated March 12, 2012 (ML12053A340).	13.3
...		

COLA Part 2, FSAR Section 13.3 has been revised as follows:

13.3 EMERGENCY PLANNING

This section of the U.S. EPR FSAR is incorporated by reference with the following supplements.

The U.S. EPR FSAR includes the following COL Item in Section 13.3:

> A COL applicant that references the U.S. EPR design certification will provide a site-specific emergency plan in accordance with 10 CFR 50.47 and 10 CFR 50 Appendix E.

This COL Item is addressed as follows:

A comprehensive Emergency Plan is provided in COLA Part 5. The schedule for emergency planning implementation is provided in Table 13.4-1.

The U.S. EPR FSAR includes the following COL Item in Section 13.3:

> A COL applicant that references the U.S. EPR design certification will address the requested information in Fukushima Recommendation 9.3 regarding Emergency Preparedness Communications and Staffing, as outlined in Enclosure 5 of the request for additional information, pursuant to the 10 CFR 50.54(f) letter dated March 12, 2012 (ML12053A340).

This COL Item is addressed as follows:

At least two (2) years prior to scheduled initial fuel load, the licensee shall have performed an assessment of the on-site and augmented staffing capability to satisfy the regulatory requirements for response to a single-unit event. The staffing assessment will be performed in accordance with NEI 12-01 (NEI, 2012), "Guideline for Assessing Beyond Design Basis Accident Response Staffing and Communications Capabilities," or other NRC endorsed guidance in effect six months prior to commencement of the assessment.

At least two (2) years prior to scheduled initial fuel load, the licensee shall revise the Emergency Plan to include the following:

- Incorporation of corrective actions identified in the staffing assessment described above.

- Identification of how the augmented staff will be notified given degraded communications capabilities.

At least two (2) years prior to scheduled initial fuel load, the licensee shall have performed an assessment of on-site and off-site communications systems and equipment required during an emergency event to ensure communications capabilities can be maintained during prolonged station blackout conditions. The communications

capability assessment will be performed in accordance with NEI 12-01 or other NRC approved guidance in effect six months prior to commencement of the assessment.

At least one hundred eighty (180) days prior to scheduled initial fuel load, the licensee shall complete implementation of corrective actions identified in the communications capability assessment described above, including any related emergency plan and implementing procedure changes and associated training.

13.3.1 References

NEI, 2012. NEI 12-01, Guideline for Assessing Beyond Design Basis Accident Response Staffing and Communications Capabilities, Revision 0, Nuclear Energy Institute, May 2012.

13.4 OPERATIONAL PROGRAM IMPLEMENTATION

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

Item	Program Title	Source (Required By)	FSAR Section	Implementation Milestones	Requirements
....					
14	Emergency Plan (portions applicable to non-exempt sources and SNM)	10 CFR 50.47; 10 CFR 50, App. E 10 CFR 30.32 10 CFR 40.31	13.3	Full participation exercise conducted within 2 years of scheduled date for initial fuel load Onsite exercise conducted within one year of scheduled date for initial fuel load Detailed implementing procedures submitted no less than 180 days prior to scheduled date for initial fuel load A detailed analysis demonstrating that on-shift personnel assigned emergency plan implementation functions are not assigned responsibilities that would prevent the timely performance of their assigned functions as specified in the emergency plan submitted no less than ~~180 days~~ 2 years prior to scheduled date for initial fuel load Prior to initial receipt of byproduct, source, or special nuclear materials (excluding Exempt Quantities as described in 10 CFR 30.18)	10 CFR Part 50, Appendix E, Section IV. F.2a(ii) 10 CFR Part 50, Appendix E, Section IV. F.2a(ii) 10 CFR Part 50 Appendix E Section V 10 CFR 30.32(a) 10 CFR 40.31(a) 10 CFR Part 50, Appendix E, Section IV.A.9

COLA Part 10, ITAAC has been revised as follows (only the impacted portions are shown):

COL Item 11.5-3 in Section 11.5.2

{ PPL Bell Bend, LLC (PPL)} will develop PERMSS subsystem's LLDs or detection sensitivities, and setpoints (alarms and process termination/diversion) for liquid and gaseous process radiation monitoring equipment not covered by the ODCM based on plant and site specific conditions and operating characteristics of each installed radiation monitoring subsystem prior to initial fuel load.

COL Item 13.3-2 in Section 13.3

At least two (2) years prior to scheduled initial fuel load, the licensee shall have performed an assessment of the on-site and augmented staffing capability to satisfy the regulatory requirements for response to a single-unit event. The staffing assessment will be performed in accordance with NEI 12-01, "Guideline for Assessing Beyond Design Basis Accident Response Staffing and Communications Capabilities," or other NRC endorsed guidance in effect six months prior to commencement of the assessment.

At least two (2) years prior to scheduled initial fuel load, the licensee shall revise the Emergency Plan to include the following:

- Incorporation of corrective actions identified in the staffing assessment described above.

- Identification of how the augmented staff will be notified given degraded communications capabilities.

At least two (2) years prior to scheduled initial fuel load, the licensee shall have performed an assessment of on-site and off-site communications systems and equipment required during an emergency event to ensure communications capabilities can be maintained during prolonged station blackout conditions. The communications capability assessment will be performed in accordance with NEI 12-01 or other NRC approved guidance in effect six months prior to commencement of the assessment.

At least one hundred eighty (180) days prior to scheduled initial fuel load, the licensee shall complete implementation of corrective actions identified in the communications capability assessment described above, including any related emergency plan and implementing procedure changes and associated training.

COL Item 14.2-2 in Section 14.2.11

{ PPL Bell Bend, LLC (PPL)} shall develop a test program that considers the components identified in FSAR Section 14.2.11 and shall provide copies of approved test procedures to the NRC at least 60 days prior to their scheduled performance date.

COLA Part 11D, NEI References, will be revised to include NEI 12-01, Guideline for Assessing Beyond Design Basis Accident Response Staffing and Communications Capabilities, Revision 0.