

## BellBendCOLPEm Resource

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**From:** Canova, Michael  
**Sent:** Thursday, December 03, 2009 2:45 PM  
**To:** Canova, Michael; 'Sgarro, Rocco R'; 'BBNPP@pplweb.com'; 'Freels, James'; 'melanie.Frailer@unistarnuclear.com'; 'Jacqueline.bell@unistarnuclear.com'  
**Cc:** BellBendCOL Resource; Temple, Jeffrey; Williams, Kevin; Chowdhury, Prosanta  
**Subject:** RE: Bell Bend COLA - Request for Information No. 70 (RAI No. 70)- NSIR-DPR-LB - 3576  
**Attachments:** Letter 70 - RAI 3576 NSIR-DPR-LB.PDF

### Revision to Cover Mailing

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**From:** Canova, Michael  
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**Cc:** BellBendCOL Resource  
**Subject:** RE: Bell Bend COLA - Request for Information No. 70 (RAI No. 70)- NSIR-DPR-LB - 3576

Attached is RAI No.s 70 for the Bell Bend COL Application. Based on [our discussion of 11/30/2009](#) we understand you have no questions on this RAI. You are requested to respond to this request on or before January 25, 2009. If additional time is required to respond, please inform me of your proposed schedule to respond at 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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Request for Additional Information No. 70

12/2/2009

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

SRP Section: 13.03 - Emergency Planning  
Application Section: Part 5, Emergency Planning

QUESTIONS for Licensing and Inspection Branch (NSIR/DPR/LIB) (EP)

**13.03-15**

SITE-1: Assignment of Responsibilities (Organizational Control)

Basis: 10 CFR 50.47(b)(1), Planning Standard A; 10 CFR 50, Appendix E.III., Appendix E.IV.A.8;  
NUREG-0654/FEMA-REP-1, Evaluation Criterion A.1, 2, 3, 4

SRP ACCEPTANCE CRITERIA: Requirements A and B; Acceptance Criteria 1 and 2.

- A-1. Figure A-2, "Agency Response Organization Interrelationships," provides a block diagram of responding organizations, but the diagram does not include the EPA, Columbia County Department of Public Safety, and Luzerne County Emergency Management Agency which are described in the section. The Department of Health, State Police, Agriculture/Fish & Wildlife, hospitals, fire department, medical support, municipal, and local law enforcement appear in Figure A-2, but are not discussed.
- A. Discuss whether the EPA should be shown in Figure A-2. Revise Figure A-2 as appropriate.
  - B. Discuss the roles and responsibilities of State agencies in Section II.A.1.a.2. Revise the Emergency Plan as appropriate.
  - C. Identify the Columbia County Department of Public Safety and Luzerne County Emergency Management Agency in Figure A-2 of the Emergency Plan.
  - D. Identify and provide details on the hospitals, fire departments, medical support, municipal and local law enforcement in Section II.A.1.a. of the Emergency Plan.
- A-2. Section II.A.1.a.2, "Commonwealth Agencies," describes the functional response actions for PEMA, but the title is needed of the responsible individual in charge of emergency response at PEMA. The Department of Environmental Protection / Bureau of Radiological Protection (DEP/BRP) is described, but the title of the specific individual at DEP/BRP in charge of emergency response is not identified.
- A. Identify the individual, by title or position, who is responsible for emergency response for PEMA. Include this information in the Emergency Plan.
  - B. Identify the individual, by title or position, who is responsible for emergency response at DEP/BRP. Include this information in the Emergency Plan.
- A-3. The letters of agreement in Appendix 3, "Letters of Agreement (Certification Letters)," do not address the specific guidance topics, such as concept of operations, emergency measures, implementation criteria, or information exchange arrangements. Provide complete copies of

letters of agreement with signature pages for organizations identified in Appendix 3 to show that these agreements identify emergency measures to be provided, implementation criteria, and information exchange arrangements.

- A.4 Part II, Chapter A, section 2) of the BBNPP EP states that the Commonwealth has developed the Pennsylvania Emergency Plan. Section A.2.a states that Pennsylvania has developed a “Radiological Emergency Response Plan.” The COL applicant submitted portions of the “Pennsylvania Emergency Operations Plan” with its application. Please identify which title is the correct title of the state/Commonwealth plan.
- A.-5 Section 1.b. sub paragraph e) is titled “Essential elements of the 50-mile Plume Exposure emergency plans.” Clarify if this paragraph refers to the 10 mile Plume Exposure EPZ or to the 50 mile Ingestion Exposure pathway EPZ.
- A-6 In section 1.a.2 the BBNPP EP states that the Department of Environmental Protection/Bureau of Radiological Protection (DEP/BRP) operates their own EOC however there is no discussion about the role of this EOC. Provide information regarding the role of and any interfaces between the onsite EOF and the DEP/BRP EOC.

### 13.03-16

SITE-2: On-site Emergency Organization

Basis: 10 CFR 50, Appendix E.IV.A: 1, 2, 4, 5; NUREG-0654/FEMA-REP-1, Evaluation Criterion B1 through 9

SRP ACCEPTANCE CRITERIA: Requirements A and B; Acceptance Criteria 1 and 2.

- B-1. Section II.B.7, “Corporate Emergency Response Organization,” states that corporate management personnel are part of the Offsite ERO and the Emergency Public Information Organization, but does not mention headquarters personnel sent to augment the Emergency Onsite Organization. Provide details on headquarters personnel by position and function to be performed who are available to augment the ERO. Include this information in the Emergency Plan.
- B-2 Section II.B.7, “Corporate Emergency Response Organization,” states that the applicant will provide necessary company resources to aid the site but does not identify these other employees with special qualifications. Section II.B.8, “Industry/Private Support Organizations,” identifies industry and private support organizations, and Section II.B.9, “Supplemental Emergency Assistance to the ERO,” refers to agreements with outside support agencies, but does not provide a description of their special qualifications. Provide details on other employees and non-employees and their special qualifications by position and function that may be called upon for assistance during emergencies. Include this information in the Emergency Plan.
- B-3 The final responsibility discussed in Section II.B.5.b for the Environmental Assessment Director and the Radiological Assessment Coordinator, states that release and dose assessment data are provided upon request to Emergency Public Information personnel and the HPN Communicator. Section II.B.5.b, however, states that the HPN Communicator obtains release and dose assessment data from the Radiological Assessment Director and Monitoring

Team data from the Environmental Assessment Director. Clarify who is responsible for providing release and dose assessment data to Emergency Public Information personnel and the HPN Communicator - the Environmental Assessment Director, the Radiological Assessment Coordinator, or both. Include this information in the Emergency Plan.

- B-4 Figure B-1c, "Emergency Offsite Organization," shows the Security Coordinator reporting to the Administrative Support Manager; however, the responsibilities of the Security Coordinator are not discussed in the Emergency Offsite Organization. Describe the responsibilities of the Security Coordinator, shown in Figure B-1c, for the Emergency Offsite Organization. Include this information in the Emergency Plan.
- B-5 Section II.B.5.c, "Public Information Emergency Response Organization," describes the positional responsibilities for the Emergency Public Information Center, including the Public Information Liaison, Public Information Director, and Radiological Advisor. Discuss whether Figure B-1d should show the Public Information Liaison, Technical Advisor, or Radiological Advisor positions. Revise Figure B-1d as appropriate.
- B-6 Section II.B.5.c describes the JIC Administrative Manager. Clarify whether the Administrative Support Manager shown in Figure B-1d is the JIC Administrative Manager described in Section II.B.5.c. Include this information in the Emergency Plan.
- B-7 Section B.5.14, "Operations Support Center Director," states that the OSC Director coordinates with the OSC Operations Lead to dispatch Operations personnel; however, the position of OSC Operations Lead is not described in Section B. Clarify whether the "OSC Operations Lead" is the same position as the "OSC Leads" or describe the position and responsibilities of the OSC Operations Lead. Include this information in the Emergency Plan.
- B-8 Table B-1a of the Site Annex identifies the minimum shift staffing for fire fighting per the station fire protection plan. Provide a discussion regarding the specific team make up of the Fire Brigade, including any collateral duties for each team member. Discuss how the Fire Brigade, with on-shift staffing, will be able to perform collateral duties if an emergency situation were to arise that warranted activation of the emergency response organization and the fire brigade simultaneously.
- B-9 Table B-1a of the Site Annex identifies several minimum staffing positions with footnotes indicating that these positions may be performed by shift personnel assigned other functions. For each of the following positions, identify specifically who will be assigned the associated functions and provide a discussion of their respective collateral duties, including their ability to perform multiple roles with potentially competing priorities during an emergency: mechanical maintenance, electrical/instrumentation and control, plant personnel for first aid and rescue, radiation protection personnel.
- B-10 Authorities, responsibilities and duties are discussed for each position of the plant ERO, but there was no discussion related to the use of digital

Instrumentation and Controls (I&C) and Information Technology. Provide an explanation of how the ERO staffing levels are adequate to respond to issues related to the use of digital I&C and information technology in the plant, including those in the initial stages of an accident that requires expertise to deal with issues in the I&C service center.

### **13.03-17**

SITE-3: Emergency Response Support and Resources

Basis: 10 CFR 50.47(b)(3), Planning Standard C; Appendix E, IV.A.6;7; NUREG-0654/FEMA-REP Evaluation Criterion C.1, C.2, C.3, C.4.

SRP ACCEPTANCE CRITERIA: Requirement A and B; Acceptance Criterion 1, 2

C-1 Section C.1 states assistance is available from Federal agencies in accordance with the "National Response Plan" (NRP); however, the NRP has been superseded by the "National Response Framework." Change NRP references to National Response Framework, as appropriate.

C-2 Section C.3, "Radiological Laboratories," refers to additional facilities that are available for counting and analyzing radiological samples to supplement the onsite radiological laboratory; however, the specific laboratories and their expected availability are not provided. Identify the specific laboratories and their capabilities, and describe their expected availability. Include this information in the Emergency Plan.

### **13.03-18**

SITE-4 Emergency Action Levels

(Basis: 10 CFR 52.79(a)(21), 10 CFR 50.47(b)(4), Section IV.B of Appendix E to 10 CFR Part 50)

RAI # 38 has already been provided to the applicant.

### **13.03-19**

SITE-5: Notification Methods and Procedures

Basis: 10 CFR 50.47(b)(5); Planning Standard E., 10 CFR 50, Appendix E.IV.D.1, 10 CFR 50, Appendix E.IV.D.3, 10 CFR 50.72(a)(3), 10 CFR 50.72(c)(3), NUREG-0654/FEMA-REP-1, Evaluation Criterion E.1,2,3,4,5,6,7

SRP ACCEPTANCE CRITERIA: Requirement A, B, C, D, E, F Acceptance Criterion 1-31

- E-1. The BBNPP Emergency Plan does not describe the existing Alert and Notification System (ANS) developed for the Susquehanna Steam Electric Station (SSES) nuclear power station. However the BBNPP Emergency Plan (EP) indicates that it plans to take credit for use of the existing system. Provide a description of the existing Alert and Notification System, including its component parts (e.g. sirens, tone alert radios, other methods) in the BBNPP Emergency Plan.
- E-2. Section E, "Notification Methods and Procedures," paragraph 2.b. states a notification will be initiated to cognizant Commonwealth/local government agencies as soon as possible but within one hour of the termination of an event classification, or entry into Recovery Phase. Identify the officials of State and local government agencies, by title and agency, who will be notified. Include this information in the Emergency Plan.

### **13.03-20**

**SITE-6: Emergency Communications**

Basis: 10 CFR 50.47(b)(6), Planning Standard F; 10 CFR, Appendix E. IV.E.9; 10 CFR 50, Appendix E. IV.E.9; Generic Letter 91-14; 10 CFR 50.72(a)(4); NUREG 0654/FEMA-REP1; Evaluation Criterion F.1, F.2, F.3.

SRP ACCEPTANCE CRITERIA: Requirements A, B, F; Acceptance Criteria 1, 2, 6, 12, 23, 29, 30.

- F-1. Section II.F.1, "Communications/Notifications," describes multiple backup communication systems including commercial cell phones, the Public Address System, site radios and pagers. Describe the availability of backup power for onsite and offsite communication systems, and include this information in the Emergency Plan.
- F-2. Section II.F.1, "NRC Communications (ENS and HPN)," states that the ENS, the ERDS, and HPN are separate telephone lines dedicated for communications with the NRC at BBNPP, but other communication links are not described. Describe the availability of the RSCL, PMCL, MCL, and LAN communications systems between BBNPP and NRC. Include this information in the Emergency Plan.
- F-3. Figure F-1 of Section F of the BBNPP EP shows initial emergency notification is from the EOF to the state warning point. Other sections of the BBNPP EP state that the initial emergency notification is from the Control Room to the state warning point. Clarify the information on this figure or explain why this figure is acceptable.

**13.03-21**

**SITE-7: Public Information**

Basis: 10 CFR 50.47(b)(7); 10 CFR 50, Appendix E.IV.D.2; NUREG-0654/FEMA-REP-1, Evaluation Criterion G.1, G.2, G.3, G.4, G.5

SRP ACCEPTANCE CRITERIA: Requirements A and B; Acceptance Criteria 1 and 2

- G-1. Section G.3, "Media Accommodations," states that a Joint Information Center (JIC) has been designated.
  - A. Provide the location of the JIC. Include this information in the Emergency Plan.
  - B. Describe the capacity of the JIC and its ability to accommodate media, site, Federal, Commonwealth, and local personnel. Include this information in the Emergency Plan.
- G-2. Section G.3, "Media Accommodations," states that the Emergency Operations Facility (EOF) can accommodate personnel and news media staff if necessary. Provide the physical location of the EOF and the number of news media personnel that can be accommodated if necessary. Include this information in the Emergency Plan.
- G-3. Section G.4, "Coordination of Public Information," states that rumors or misinformation are identified by media/rumor control monitors who respond to public and news media calls and monitor media reports. Identify the responsible individuals by title for providing media/rumor control monitors. Include this information in the Emergency Plan.
- G-4. Section G.4, "Coordination of Public Information," addresses rumor control. Discuss whether established coordinated arrangements between various emergency response organizations are in place for dealing with rumors once they have been identified. Provide this information in the

## Emergency Plan.

### 13.03-22

#### SITE 8: Emergency Facilities and Equipment

Basis: 10 CFR 50.47(b)(8), Planning Standard H; 10 CFR 50, Appendix E.IV.E.1 through 3; 10 CFR 52.79(a)(17), Three Mile Island Requirements; Appendix E.IV.E.4; Appendix E.IV.E.8; Appendix E.VI Emergency Response Data System; Appendix E.VI. Maintaining Emergency Response Data System; 10 CFR 50.34(f)(2)(xxv); 10 CFR 50, Appendix E.IV.G.; Supplement 1 to NUREG-0737, "Clarification of TMI Action Plan Requirements," NUREG-0654/FEMA-REP-1, Evaluation Criterion H1 through H12 SRP ACCEPTANCE CRITERIA: Requirements A and B; Acceptance Criteria 1, 2, 4, 5, 12, 25, and 26

- H-1. Section 12.3.4.2.3, "Control Room Airborne Radioactivity Monitoring System," of the U.S. EPR Final Safety Analysis Report, states that the Main Control Room (MCR) envelope (MCR, TSC and MCR heating, ventilation, and air conditioning (HVAC) room) is normally supplied with fresh unfiltered air and that airborne radioactivity monitoring instrumentation is provided for the MCR to monitor for airborne radioactivity following a radioactive release. Discuss whether the TSC has continuous indications of radiation dose rates and airborne radioactivity concentrations inside the TSC when occupied during an emergency, whether from permanent or portable instrumentation. Include this information in the Emergency Plan.
- H-2. The TSC has process information and control system (PICS) workstations that provide primary SPDS display for TSC personnel. Discuss how the TSC data system will provide at least 2 hours of pre-event and 12 hours of post-event data, consistent with NUREG-0696. Include this information in the Emergency Plan.
- H-3 Security is not addressed in Section H.2 for the EOF. Discuss whether the EOF is provided with industrial security to maintain its readiness when it is idle and to exclude unauthorized personnel when it is activated. Include this information in the Emergency Plan.
- H-4 Section 2, "Statement of Intent," of the BBNPP Impact to SSES Emergency Preparedness Program Evaluation, states that BBNPP plans to take credit for the use of the existing SSES EOF. However, the location of and features of the EOF are not identified in the BBNPP Emergency Plan or in the Unit Specific Annex.
- A. Discuss the location of the existing EOF and how it meets the radiation protection features described in Table 1 of NUREG-0737 Supplement 1. Include this information in the Emergency Plan.
- B. The environmental controls in the existing building in which the EOF is located are not identified. Discuss whether the existing EOF has environmental controls to provide room air temperature, humidity and cleanliness appropriate for personnel and equipment. Include this information in the Emergency Plan.
- C. Section H.2, "Emergency Operations Facility (EOF)," does not describe permanent or portable radiological monitoring equipment available in the EOF that provides continuous indications of radiation dose rates and airborne radioactivity concentrations inside the EOF. Describe the permanent or portable radiological monitoring equipment available in the EOF that provides continuous indications of radiation dose rates and airborne radioactivity concentrations inside the EOF. Include this information in the Emergency Plan.



- H-5 Clarify whether the Emergency Offsite Facility, listed in Section 5.b.2, is the same as the Emergency Operations Facility and include that information in the Emergency Plan.
- H-6 In Table B-1b, the augmentation time is 90 minutes for EOF personnel, based on optimum travel conditions, while Table 2 NUREG-0737, Supplement 1 lists 30 and 60 minute augmentation times. Discuss how the 90 minute augmentation time for EOF staffing meets the goal of 30 and 60 minutes in Table 2 NUREG-0737, Supplement 1, and the guidance in NUREG-0696, Section 2.3, "Staffing and Training," which states that the EOF shall achieve full functional operation within 1 hour. Include this information in the Emergency Plan.
- H-7 Discuss how the EOF data storage and collection system will provide at least 2 hours of pre-event and 12 hours of post-event data, consistent with section 4.7 of NUREG-0696. Include this information in the Emergency Plan.
- H-8 Section H.5.c.2, "Safety Parameter Display System (SPDS)," states that the SPDS displays plant parameters relevant to the operational safety status in the Control Room; however, the reliability of the alternate computer system is not described. Describe how the alternate computer system used in the EOF for displaying the SPDS parameters meets the same reliable design for data indications and associated circuitry as the SPDS. Include this information in the Emergency Plan.
- H-9 Section F.1.5, "Emergency Response Data System (ERDS)," states that the ERDS will supply the NRC with selected plant data on a near real time basis; however, information is needed regarding whether ERDS will be tested quarterly in accordance with 10 CFR 50 Appendix E requirements. Clarify whether Emergency Response Data System (ERDS) will be tested quarterly. Include this information in the Emergency Plan.
- H-10 Section H.2, "Emergency Operations Facility (EOF)," states that the EOF has equipment to gather and display data needed to analyze and exchange information on plant conditions. Discuss whether the Emergency Operations Facility (EOF) data system unavailability is less than 0.01 percent during all plant conditions above cold shutdown, as discussed in NUREG 0696. Include this information in the Emergency Plan.

**13.03-23**

SITE-9: Accident Assessment

Basis: 10 CFR 50.47(b)(9), Planning Standard I.; 10 CFR 50, Appendix E.IV.B; 10 CFR 52.79(a)(17), Three Mile Island Requirements; NUREG-0654/FEMA-REP-1, Evaluation Criterion I.1 through I.11; Supplement 1 to NUREG-0737, Section 6.1.b - Control Room Post-accident sampling capability

SRP ACCEPTANCE CRITERIA: Requirement A; Acceptance Criteria 1, 4, 5, 25, and 27  
10 CFR 50.47(b)(9);

- I-1. Details regarding the Emergency Planning related instrumentation required for emergency classification, dose assessment, and post-accident sampling and analysis are not present. Provide measurements and indication details of Type A, B, C, D, E variables listed in RG 1.97. Include this information in the Emergency Plan.

**13.03-24**

SITE-10: Protective Response

Basis: 10 CFR 50.47(b)(10); Planning Standard J., 10 CFR 50, Appendix E.IV; NUREG-0654/FEMA-REP-1, Evaluation Criterion J.1; Evaluation Criterion J.2; Evaluation Criterion J.1 through 12; RIS 2003-12, "Clarification of NRC Guidance for Modifying Protective Actions."  
SRP ACCEPTANCE CRITERIA: Requirements A and B; Acceptance Criteria 1 and 2

- J-1. Locations are identified where people might be expected to be present outside the Protected Area but within the Owner Controlled Area and provisions are established for notification of personnel within these areas. However, information is needed on the methods for notifying persons in these areas. Additional information is also needed regarding the time to notify persons outside the protected area but within owner controlled areas.
  - A. Describe the process for warning people offsite but within the Owner Controlled Area, Include this information in the Emergency Plan.
  - B. Provide the time to notify persons outside the protected area but within owner controlled areas. Include this information in the Emergency Plan.
  
- J-2. The site has identified locations that serve as Assembly Areas and offsite assembly locations for non-essential personnel when they are not instructed to proceed home. Page J-2 states, "The specific locations of these areas are provide locations or located in the BBNPP Annex." It appears a word is missing from the sentence.
  - A. Describe the offsite locations and provide letters of agreement if these locations are not under site control. Include this information in the Emergency Plan.
  - B. Complete the sentence in the Emergency Plan on page J-2 that states, "The specific locations of these areas are provide locations or located in the BBNPP Annex." Include this information in the Emergency Plan.
  
- J-3. Section J.2, "Evacuation Locations," states personal transportation will normally be used and established evacuation routes will be followed, and personnel without transportation will be identified and provided transportation. Describe how transportation to those personnel without private transportation will be provided. Include this information in the Emergency Plan.
  
- J-4. Section J.5 states that " all personnel within the affected unit protected area shall be accounted for..." Information is needed on the process for accounting for individuals and the process for continuously accounting for individuals.
  - A. Describe the process to account for individuals and include this information in the Emergency Plan.
  - B. Describe the process for continuously accounting for individuals once they have been identified, and include this information in the Emergency Plan.
  
- J-5. Sheltering and evacuation are identified as protective actions, but KI is not discussed. Describe the process for determining when KI may be considered as a PAR or part of a PAR, and include this information in the Emergency Plan.

- J-6. Provide additional maps in the Emergency Plan that identify pre-selected radiological sampling and monitoring points, site evacuation routes, and EPZ population distribution. Include this information in the Emergency Plan.
- J-7. Section J.8 of the BBNPP Emergency Plan states that “ETEs for the evacuation of the plume exposure EPZ are in Appendix 5.” However Appendix 5 “Evacuation Time Estimates” of the BBNPP EP does not contain any ETE information, but refers the reader to a separate document. Information is needed regarding how the ETE is used in the decision to recommend an evacuation PAR. Describe how the ETE is used in the determination of the PAR and include this information in the Emergency Plan. Describe what information from the ETE study will be included in Appendix 5 of the BBNPP Emergency Plan.

### **13.03-25**

SITE-11: Radiological Exposure Control

Basis: 10 CFR 50.47(b)(11); Planning Standard K., 10 CFR 50, Appendix E (none), NUREG-0654/FEMA-REP-1; Evaluation Criterion K.1 through 7.

SRP ACCEPTANCE CRITERIA: Requirements A and B; Acceptance Criteria 1 and 2

K-1 Section 12.5, “Operational Radiation Protection Program,” of the FSAR incorporates by reference NEI 07-03, “Generic FSAR Template Guidance for Radiation Protection Program Description,” Revision 3; however, Revision 3 is not the latest revision of NEI 07-03. Discuss and justify why the latest revision of NEI 07-03, “Generic FSAR Template Guidance for Radiation Protection Program Description,” is not referenced. Include this information in the Emergency Plan.

### **13.03-26**

SITE-12: Medical and Public Health Support

No RAIs identified

### **13.03-27**

SITE-13: Recovery and Reentry Planning and Post-accident Operations

No RAIs identified

### 13.03-28

SITE-14: Exercises and Drills

Basis: 10 CFR 50.47(b)(14); Planning Standard N, 10 CFR 50, Appendix E.IV.F.2., NUREG-0654/FEMA-REP-1; Evaluation Criterion N.1 through N.5.

SRP ACCEPTANCE CRITERIA: Requirements A and B; Acceptance Criteria 1 and 2

N-1. Section N.1.c states that exercises are conducted to ensure that all major elements of the Emergency Plan and preparedness program are demonstrated at least once in each six-year period and under various weather conditions; however, information is needed regarding exercises being varied from exercise to exercise and some exercises being unannounced. Describe the variation of exercises and discuss whether some exercises will be unannounced. Include this information in the Emergency Plan.

### 13.03-29

SITE-15: Radiological Emergency Training

Basis: 10 CFR 50.47(b)(15); Planning Standard O., 10 CFR 50, Appendix E.IV. F.1, Appendix E.IV. F.2.g; NUREG-0654/FEMA-REP-1, Evaluation Criterion O.1. through 5.

SRP ACCEPTANCE CRITERIA: Requirements A and B; Acceptance Criteria 1 and 2

O-1. Section O.3, "First Aid Response," states that selected personnel are trained in accordance with the applicant approved First Aid program; however, information is needed regarding whether first aid training provided by the program is equivalent to Red Cross "first responder" training. Clarify whether first aid training is equivalent to Red Cross "first responder" training and include this information in the Emergency Plan.

### 13.03-30

SITE-16: Responsibility for Planning Effort: Development, Periodic Review, and Distribution of Emergency Plan.

No RAIs identified

### 13.03-31

SITE 17 – Hostile Action Based (HAB) review

Basis: 10 CFR 52.79 (a) (41); Contents of applications; technical information in final safety analysis report, 10 CFR 50.54 (hh)(1)

SRP ACCEPTANCE CRITERIA: Requirement G; Acceptance Criteria 30

Q-1 The BBNPP Emergency Plan, in Section J, and the BBNPP Site Specific Annex in Section 5 describe site evacuation methods used to protect onsite staff. However, other protective actions that should be considered in a hostile action based event in accordance with NRC Interim Compensatory Measures of Commission Orders of February 25, 2002, are not discussed in either plan. Actions such as in-plant sheltering, dispersal of key personnel to areas that can be defended by security forces and staging of ERO staff in alternate facilities are

not discussed as protective actions. Revise the Plan to discuss these onsite protective actions, or explain why they are not needed.

- Q-2 Discuss if the BBNPP Emergency Plan reflects the effect on the plant from a security event that causes damage to a nearby facility.
- Q-3 In accordance with the Interim Compensatory Measures order of February 25, 2002, discuss in the Emergency Plan if onsite staffing, facilities and procedures are adequate to respond to a hostile action based event.
- Q-4 In accordance with the Interim Compensatory Measures order of February 25, 2002, discuss measures to provide more timely notification to the NRC in a security based event.

### 13.03-32

SITE 19- Inspections, Tests, Analyses and Acceptance Criteria (ITAAC)

Basis: 10 CFR 52.80 (a).

SRP ACCEPTANCE CRITERIA: Requirement E; Acceptance Criteria 23

- S-1 Part 10 ITAAC – COL application table 2.3-1, “Emergency Planning ITAAC” provides acceptance criteria for planning standard 5.0: “Emergency Facilities and Equipment”. Acceptance criterion 5.1.8. states “The BBNPP US EPR OSC communications capabilities are addressed by Acceptance Criterion 3.1.1. The staff is unable to locate a discussion of the OSC in that criterion. Provide that discussion in Table 2.3-1.
- S-2 EP-ITAAC are required by 10 CFR 52.80(a) and are discussed in Part 10, “ITAAC,” of the Bell Bend COL application. Specifically, EP-ITAAC Acceptance Criterion 14.1.1 in Table C.II.1.B1 of Regulatory Guide (RG) 1.206 addresses the need for the COL applicant to identify exercise objectives and acceptance criteria. Simply listing broad exercise topics such as “Notification” or “Emergency Communications” does not address exercise objectives and associated acceptance criteria called for in EP-ITAAC Acceptance Criteria 14.1.1. A smaller set of EP-ITAAC are acceptable if the COL application contains information that fully addresses emergency preparedness requirements associated with any of the generic ITAAC contained in Table C.II.1-B1 of RG-1.206 which is not all inclusive, or exclusive of other ITAAC an applicant may propose.

An example of exercise objectives and associated acceptance criteria for a full participation exercise that has been found acceptable by the NRC staff can be found in Sections 13.3.5, “VEGP Unit 3 ITAAC,” and 13.3.6, “VEGP Unit 4 ITAAC,” of NUREG-1923, “Safety Evaluation Report for an Early Site Permit (ESP) at the Vogtle Electric Generating Plant (VEGP) ESP Site,” dated July 2009. See ADAMS ML092290650.

Revise Acceptance Criterion 8.1.1 in Table 2.3-1 of the COL application by providing exercise objectives and associated acceptance criteria, or explain why objectives and acceptance criteria are not required for each of the Planning Standards in Table C.II.1.B-1 of RG 1.206. If the example identified

above is followed, the exercise objectives and acceptance criteria should be modified for the Bell Bend site.

- S-3 Part 10, ITAAC, in Table 2.3-1, "Emergency Planning ITAAC," acceptance criteria 6.3.1 ends with the words "for various radiological conditions." Consistent with RG 1.206 and the corresponding EP program element in Table 2.3-1, the correct acceptance criteria wording should end with "for various meteorological conditions." Revise Table 2.3-1 accordingly.
- S-4 NRC Regulatory Guide (RG) 1.206, Appendix C.II.1-B, Table C.II.1-B1, "Emergency Planning – Generic Inspection, Test, Analysis, and Acceptance Criteria (EP-ITAAC)," acceptance criterion 8.2.4 for Planning Standard 8.0, "Emergency Facilities and Equipment," states, "The EOF has the means to acquire, display and evaluate radiological, meteorological, and plant system data pertinent to determining offsite protective measures." In Part 10 of the COL application, "Proposed License Conditions (Including ITAAC)," Table 2.3-1 "Emergency Planning ITAAC," Planning Standard 5.0, "Emergency Facilities and Equipment," Acceptance Criterion 5.2.1.3 states, "The BBNPP EOF's plant information system can retrieve and display the radiological meteorological plant system data for the parameters specified in the BBNPP US EPR Technical Bases manual and ITAAC Acceptance Criterion 1.1.1.." Clarify the capability of the EOF consistent with the associated ITAAC Acceptance Criterion in NRC RG 1.206, or explain why it is not required.
- S-5 Table C.II.1-B1, "Emergency Planning – Generic Inspection, Test, Analysis, and Acceptance Criteria (EP-ITAAC)," in Appendix C.II.1-B, "Development Guidance for Emergency Planning ITAAC," to RG 1.206 contains the generic EP-ITAAC table. The table includes 17 Planning Standards and the accompanying EP Program Elements, Inspection, Tests, Analysis, and Acceptance Criteria. The COL application EP-ITAAC Table 2.3-1 does not address eight of the generic ITAAC Planning Standards. The following generic ITAAC Planning Standards are not addressed in the format recommended by RG 1.206:
1. Assignment of Responsibility-Organizational Control--10 CFR 50.47(b)(1)
  2. Onsite Emergency Organization--10 CFR 50.47(b)(2)
  3. Emergency Response Support and Resources--10 CFR 50.47(b)(3)
  4. Radiological Exposure Control--10 CFR 50.47(b)(11)
  5. Medical and Public Health Support--10 CFR 50.47(b)(12)
  6. Recovery and Reentry Planning and Post-Accident Operations --10 CFR 50.47(b)(13)
  7. Radiological Emergency Response Training--10 CFR 50.47(b)(15)
  8. Responsibility for Planning Effort: Development, Periodic Review, and Distribution of Emergency Plans --10 CFR 50.47(b)(16)

Discuss why ITAAC were not developed for the above Planning Standards, and/or propose appropriate ITAAC in a format consistent with RG 1.206, table C.II.I.B1.

- S-6 The document entitled “BBNPP IMPACT TO SSES EMERGENCY PREPAREDNESS PROGRAM EVALUATION” states on page 11C-3:

“Siting of the BBNPP will require modification of the Emergency Planning Zone (EPZ), however no changes to the ANS are expected to be necessary....However a study will be conducted to determine if additional sirens will be necessary. If required, new sirens will be installed and tested prior to initial low power testing.”

Include this applicant commitment in table 2.3-1 “Emergency Planning ITAAC” for BBNPP, including the provision of new EPZ maps that depict any changes, and the commitment to conduct a siren coverage study, or explain why it is not necessary.

- S-7 The document entitled “BBNPP IMPACT TO SSES EMERGENCY PREPAREDNESS PROGRAM EVALUATION” states on page 11C-2:

“A drill requiring mobilization and response activities of both EROs will be conducted prior to operation of BBNPP to demonstrate the ability of all utility emergency facilities to support a concurrent event.”

Include this applicant commitment in the ITAAC table 2.3-1 “Emergency Planning ITAAC” for BBNPP, or explain why it is not necessary.

### 13.03-33

SITE 20 – Final Safety Analysis Report (FSAR) review

Basis: 10 CFR 52.79 (a), Appendix E of 10 CFR Part 50

- FS-1 The BBNPP FSAR, in section 2.1.3.4. of Chapter 2, notes that BBNPP has developed a “Radioactive Emergency Plan.” Explain if this document is the same as the BBNPP Emergency Plan and BBNPP EP Annex.

- FS-2 FSAR Section 2.2.2.7.2, “AIRCRAFT” states that the applicant is waiting for FAA flight data regarding military route UR 707. The staff cannot completely evaluate the potential impact of offsite events such as an airplane crash on the site until more information is received. Discuss when the licensee believes this information will be provided. Also describe the probable impact of flight data for this military route on the plants design and emergency preparedness measures to be taken in the event of an aircraft accident.

- FS-3 The staff is unable to locate in Part 5 of the Bell Bend Nuclear Power Plant COL an evaluation that compares the Emergency Plan to the acceptance criteria for

Emergency Planning in Section 13.3 of the Standard Review Plan (SRP) Rev. 3, dated March 2007 (NUREG 0800) as required by 10 CFR 52.79 (a)(41). The US EPR FSAR, in section 1.9.2. of Chapter 1, states that the site specific assessment is located in Table 1-2 of ANP-10292 (AREVA, 2007). This document was not provided with the application submitted by PPL Bell Bend, LLC, and a document printed in 2007 may not contain site specific assessments of a COL submitted in late 2008. Provide this information in the COL or explain why it is not required.