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July 30, 2012

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

**BELL BEND NUCLEAR POWER PLANT
RESPONSE TO RAI NO. 115 QUESTIONS
09.02.05-28 AND 09.02.05-34 AND
SCHEDULE INFORMATION
BNP-2012-184 Docket No. 52-039**

Reference: 1) M. Canova (NRC) to R. R. Sgarro (PPL Bell Bend, LLC), Bell Bend COLA – Final Request for Information No. 115 (RAI No. 115) – BPTS 6436, email dated June 11, 2012

The purpose of this letter is to respond to the Request for Additional Information (RAI) identified in Reference 1. This RAI addresses Ultimate Heat Sink as discussed in in FSAR Section 9.2.5 of the Bell Bend Nuclear Power Plant (BBNPP) Combined License Application (COLA).

The enclosure provides our response to RAI No. 115, Questions 09.02.05-28 and 09.02.05-34, which includes revised COLA content. The revised COLA content will be included in a future revision of the BBNPP COLA.

PPL requires additional time to provide responses to RAI 115 Questions: 09.02.05-18 through 09.02.05-27, and 09.02.05-29 through 09.02.05-33. The schedule for the responses or date to provide a schedule are as listed in the below table.

RAI 115, Questions 09.02.05-32 and -33 address Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) as submitted in Part 10 of the BBNPP COLA. The below scheduled submittal date is contingent upon successful completion of the presently on-going discussions, between AREVA and the NRC, to determine acceptable ITAAC format and wording.

The only new commitments in this letter are to provide responses or a schedule for response as listed in the below table on or before the date shown and to provide a future revision of the COLA.


<u>RAI 115 Question</u>	<u>Response Date</u>
09.02.05-18 through 09.02.05-26	September 24,2012
09.02.05-27	August 31,2012 (schedule will be provided)
09.02.05-29	February 15, 2013
09.02.05-30 through 09.02.05-31	September 24,2012
09.02.05-32 and -33	October 15, 2012

DIDZ
NRD

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.

Respectfully,

A handwritten signature in black ink, appearing to read "Rocco R. Sgarro", written over the printed name.

Rocco R. Sgarro

RRS/kw

Enclosure: As stated

cc: (w/ Enclosure)

Mr. Michael Canova
Project Manager
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11555 Rockville Pike
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(w/o Enclosure)

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Enclosure

Response to RAI No. 115,
Questions 09.02.05-28 and 09.02.05-34

RAI No. 115**Question 09.02.05-28**

Follow-up to RAI Letter# 84 (3990) Question 09.02.05-4 part 7.

The staff's evaluation of the applicant's response and FSAR markup related to blowdown determined that clarification is needed related to the new drawings provided as FSAR markup shown on Figure 9.2-12, "EWS Blowdown Line."

Specially, the applicant should address the following in the FSAR:

- Safety-related to nonsafety-related boundaries should be added to Figure 9.2-12 clearly identifying the site specific design and certified design boundaries.
- Normal ESW strainer debris removal pipe appears to be missing from Figure 9.2- 12.

Response

This scoping boundary and the debris removal pipe have been added to FSAR Figure 9.2-12. They already exist on Figures 9.2-13, 9.2-14, and 9.2.1-1, but have been included in Figure 9.2-12 for reference.

COLA Impact

FSAR Section 9.2.5.1, Figure 9.2-12 and Figure 9.2-14 will be revised as follows in a future revision of the COLA:

9.2.5.1 Design Basis

A COL Applicant that references the U.S. EPR FSAR design certification will provide site specific design information corresponding to U.S. EPR FSAR Figure 9.2.5-2 [[Conceptual Site-Specific UHS Systems]].

The conceptual design information is addressed as follows:

{The BBNPP site-specific revision to U.S. EPR FSAR Figure 9.2.5-2 [[Conceptual Site Specific UHS Systems]] is BBNPP FSAR Figure 9.2-14 Ultimate Heat Sink Systems.

For BBNPP, the ESWEMS performs the function of the Ultimate Heat Sink (UHS) Makeup System. The ESWEMS is schematically represented in Figure 9.2-3.

Figure 9.2-12 {ESWS Blowdown Line}

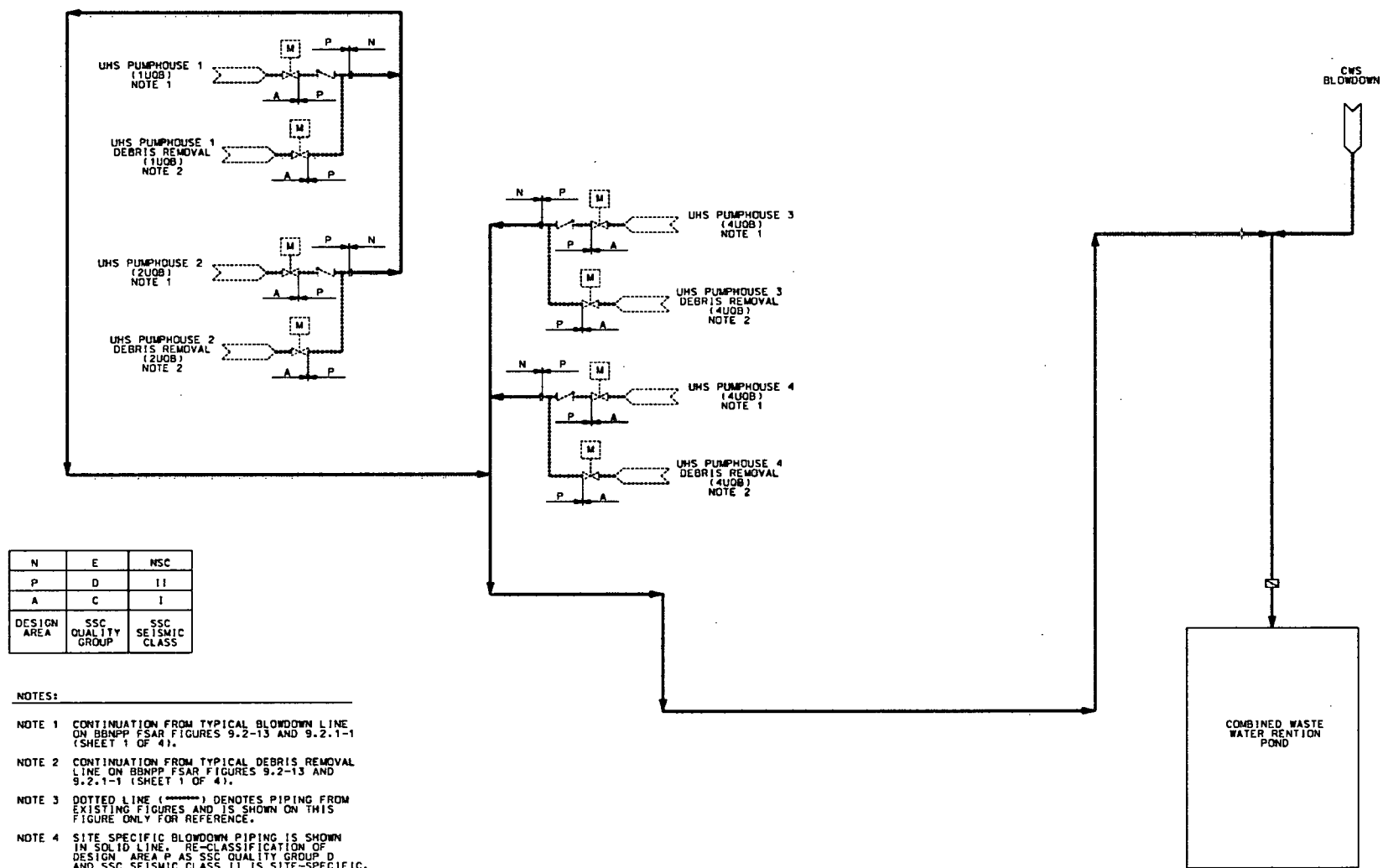
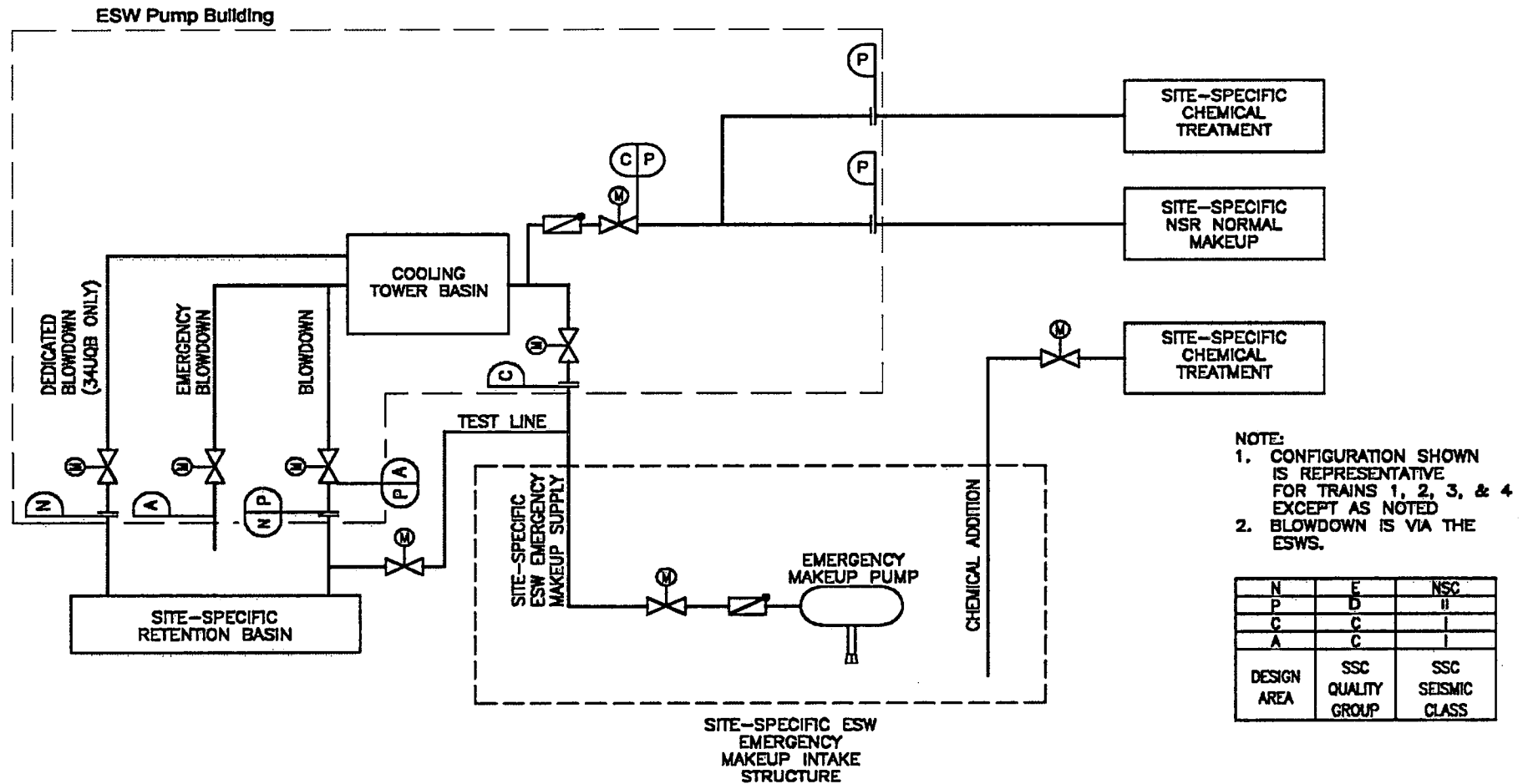


Figure 9.2-14 {Ultimate Heat Sink Systems}



Question 09.02.05-34

Means must be provided for monitoring effluent discharge paths and the plant environs for radioactivity that may be released in accordance with GDC 64 requirements. Also, 10 CFR 52.79(a)(45) and 10 CFR 20.1406 require COL applicants to describe the facility design and procedures for operation that will minimize contamination of the facility and the environment.

According to Standard Review Plan (SRP) Section 9.2.1, the staff must verify that provisions are provided to detect and control leakage of radioactive contamination into and out of the ESWS, which is part of the UHS and the UHS blowdown. The UHS blowdown is a release point to the environment from the ESWS/UHS. The design is considered to be acceptable by the staff if the UHS/ESWS drawings show that radiation monitors are provided for components that are susceptible to leakage, and if the components that are susceptible to leakage can be isolated. However, the staff noted that FSAR Section 9.2.5 does not include radiation monitors in the system design and the NRC regulations in this regard have not been addressed. Therefore, additional information needs to be included in Tier 2 FSAR Section 9.2.5 to address this issue.

Response

The response to U.S. EPR Design Certification Application RAI 345, Question 09.02.01-39¹ Supplement 12, indicates that four separate radiation monitors, one for each of the four Essential Service Water System (ESWS) trains, will be installed downstream of the Component Cooling Water System (CCWS) heat exchanger. Also, a radiation monitor will be installed in the dedicated train, downstream of the dedicated CCWS heat exchanger in the ESWS. The ESWS radiation monitors are shown in U.S. EPR FSAR Figure 9.2.1-1 Sheets 2 and 4.

Additional radiation monitors are not required in the site-specific portion of the UHS blowdown line from the discharge of the ESWS pump to comply with NRC regulatory requirements of GDC 64, 10 CFR 52.79(a)(45) and 10 CFR 20.1406.

COLA Impact

The BBNPP COLA will not be revised as a result of the response to this question.

¹ Areva Response to NRC, U.S.EPR Design Certification Application RAI No. 345, FSAR Ch. 9, Supplement 12, dated February 15, 2011 (ADAMS Accession No. ML110460698).