CCNPP3COLA NPEmails

From: Perdomo, Federico R [Federico.Perdomo@unistarnuclear.com]
Sent: Friday, September 25, 2009 11:22 PM
To: Quinn, Laura; 'kathy.anderson@usace.army.mil'
Cc: Stevenson, Michael; Frailer, Melanie D; Yox, Michael J; Lutchenkov, Dimitri; Burkman, Jim
Subject: UN#09-404 - Response to Environmental Report RAI No. 1019, U.S. Army Corps of Engineers (USACE)
Attachments: FINAL UN#09-404 -- SIGNED.pdf

Laura/Kathy,

Attached please find UniStar letter UN#09-404, "Response to Environmental Report RAI No. 1019, U.S. Army Corps of Engineers (USACE)." The hard copies of this letter will be distributed as normal. This E-mail copy will help in any telephone discussions that we may have near-term.

Thank You

Federico Perdomo

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Hearing Identifier: CalvertCliffs_Unit3Cola_NonPublic_EX
Email Number: 2649

Mail Envelope Properties (A13FFF10B6AE4244A4665E8C12752FE55C5B4F1939)

Subject: UN#09-404 - Response to Environmental Report RAI No. 1019, U.S. Army Corps of Engineers (USACE)
Sent Date: 9/25/2009 11:22:02 PM
Received Date: 9/25/2009 11:22:22 PM
From: Perdomo, Federico R

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Post Office: EXM-MSW-07.Ceg.Corp.Net

Files	**Size**	**Date & Time**
MESSAGE	667	9/25/2009 11:22:22 PM
FINAL UN#09-404 -- SIGNED.pdf	6026834	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

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UniStar
NUCLEAR ENERGY

10 CFR 50.4
10 CFR 52.79

September 25, 2009

UN#09-404

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

Subject: UniStar Nuclear Energy, NRC Docket No. 52-016
Calvert Cliffs Nuclear Power Plant, Unit 3
Response to Environmental Report
RAI No. 1019, U.S. Army Corps of Engineers (USACE)

References:
1) Laura Quinn (NRC) to Greg Gibson (UniStar Nuclear Energy), "Request for Additional Information Related to the Environmental Review for the Calvert Cliffs Combined License Application – Revised Alternative Sites," dated September 18, 2009.
2) Greg Gibson (UniStar Nuclear Energy) to NRC Document Control Desk letter UN#09-403, "Responses to RAI 1015, 1016, 1017, and 1018," dated September 25, 2009.

The purpose of this letter is to respond to the U.S. Army Corps of Engineers (USACE) request for additional information (RAI) identified in NRC letter to UniStar Nuclear Energy, dated September 18, 2009 (Reference 1). The response to RAIs 1015 through 1018 is provided in Reference 2. RAI No. 1019 provides five questions from the USACE for Calvert Cliffs Nuclear Power Plant (CCNPP) Unit 3.

Enclosure 1 provides the response to RAI No. 1019. This response does not include any new regulatory commitments and it does not impact the Combined License Application content.

If there are any questions regarding this transmittal, please contact me at (410) 470-4205, or Mr. Dimitri Lutchenkov at (410) 470-5524.

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

Executed on September 25, 2009

for Greg Gibson

Enclosures: 1) Response to NRC Request for Additional Information, RAI No. 1019, U.S. Army Corps of Engineers (USACE) RAIs, Calvert Cliffs Nuclear Power Plant Unit 3

cc: Surinder Arora, NRC Project Manager, U.S. EPR Projects Branch
Laura Quinn, NRC Environmental Project Manager, U.S. EPR COL Application
Getachew Tesfaye, NRC Project Manager, U.S. EPR DC Application (w/o enclosure)
Loren Plisco, Deputy Regional Administrator, NRC Region II (w/o enclosure)
Silas Kennedy, U.S. NRC Resident Inspector, CCNPP, Units 1 and 2
U.S. NRC Region I Office
Kathy Anderson, US Army Corps of Engineers (w/enclosure)

GTG/FRP/jmm

Enclosure 1

Response to NRC Request for Additional Information
RAI No. 1019, US Army Corps of Engineers (USACE) RAIs
Calvert Cliffs Nuclear Power Plant Unit 3

RAI No. 1019

US Army Corps of Engineers (Corps) RAIs

Question 1

Delete the permit application, cultural resources report and mitigation plan from the Alternatives Evaluation Report Appendix F.

Response

The permit application, cultural resources report and mitigation plan will be removed from the Alternative Site Evaluation Report (ASER) Appendix F as requested, and the ASER will be reissued as Revision 2.

COLA Impact

No changes to the CCNPP COLA are required as a result of this RAI response.

Question 2:

Provide any work description and plan changes that differ from the proposed project that the Corps advertised by public notice on September 3, 2008, linked here:
http://www.nab.usace.army.mil/Regulatory/PublicNotice/Calvert/07-08123.pdf

Response

UniStar letter UN#09-391, dated September 25, 2009, serves to provide a summary of Phase I Compensatory Mitigation Plan for Non-Tidal Wetland and Stream Impacts requested to support the Joint Permit Application for Calvert Cliffs Nuclear Power Plant (CCNPP) Unit 3. During the development of letter UN#09-391, the USACE was informed of a minor change to the number of linear feet of stream portions for stream mitigation. The USACE Public Notice reflects a number of 6,283 linear feet of stream portions for restoration (first paragraph on page 4). UniStar letter UN#09-391 reflects a corrected 6,292 ft total. On September 24, 2009, the USACE acknowledged the change and requested that UNE provide the revised summary. No further changes have been made that differ from the September 3, 2008, public notice.

COLA Impact

No changes to the CCNPP COLA are required as a result of this RAI response.

Question 3:

For each alternate site, provide maps of the locations of potential transmission/pipe line routes, intakes and discharges for each of the alternative sites. The maps should include a notation that the locations are speculative based on mapping only and are required to provide potential impact information. For each corridor, indicate the potential width and length, as well as the dominant land use/vegetative cover within the corridor. For each alternative site, provide a map with the locations of wetlands, streams, and ponds.

Response

To determine potential off site impacts primarily associated with water line and transmission right-of-way (ROW), conceptual paths were identified utilizing GIS tools. These work products allowed for discrete calculation of wetland and stream impacts needed for completeness of alternative site evaluations. However, these work products characterize 3rd party properties and are considered sensitive from a liability risk standpoint and, as such, are not included in any responses forwarded to the NRC. These work products can be reviewed by NRC and USACE staff via the CC3 Reading Room.

COLA Impact

No changes to the CCNPP COLA are required as a result of this RAI response.

Question 4:

State which type of potential impacts would occur with transmission/pipe line corridors such as wetland conversion, temporary matting, grading, substation/switchyard, work areas, etceteras. Also, state the potential width of each corridor type.

Response

Assumptions supporting the analysis of wetland and stream impacts on both the 420 acre "Site" component of the three Alternative Site properties, as well as impacts associated with water and transmission line right-of-way (ROW) construction are included in ER Section 9.3, Tables 9.3-12, 9.3-13, and 9.3-14, and include the following:

- Water line ROWs are proposed to be 120 feet wide, accommodating two (2) 60 inch pipes. All construction activities supporting water line ROW development are proposed to occur within the 120 foot wide ROW and do not require additional support properties.
- New transmission line ROWs are proposed to be 300 feet wide. While the majority of transmission requirements are met by using existing maintained ROWs, there are new ROWs and associated stream crossing and wetland impacts as detailed in Tables 9.3-12, 9.3-13, and 9.3-14. Reconductoring of existing lines (circuit replacement/upgrade to higher capacity) is not assumed to require additional ROW development and associated environmental impacts.
- All wetlands and streams located within the 420 acre EPR development footprint (referred to within the tables as the "site") and new water and transmission ROWs are projected to be entirely impacted.
- Impacts associated with new ROW construction are considered to be temporary, though a conversion in use may occur to wetland crossed by the ROW since ROWs will be maintained as herbaceous/low growing shrub wetland communities.

Tables 9.3-12, 9.3-13, and 9.3-14 describe the level of impact to each individual stream and wetland located on the Alternate Sites and their associated ROWs. A set of drawings has been prepared and keyed to the data in Tables 9.3-12, 9.3-13, and 9.3-14 to allow graphical inspection of the wetlands on the Alternative Sites and ROWs. These drawings, considered work products, allowed for discrete calculation of wetland and stream impacts needed for completeness of alternative site evaluations. However, because these work products characterize 3rd party properties and are considered sensitive from a liability risk standpoint and, as such, are not included in any responses forwarded to the NRC. These work products can, however, be reviewed by NRC and USACE staff in the CC3 reading room.

It is expected that grading of project ROWs following construction would match pre-construction contours to the maximum extent practicable. Surficial ROW components such as vaults and vents are not expected to be significant enough to have any effect on local hydrology or generation of stormwater or pollutants.

No substation improvements or new substations requiring land alteration were considered necessary, and no additional off site property is proposed to be employed for ROW construction support. This assessment is based on a very general understanding of transmission system capacity; the level of analysis required to determine the need for a new substation requires engineering and system analysis which is beyond the scope of a screening level evaluation.

The use of swamp mats would be standard operating procedure to cross wet areas and small streams during ROW development. Streams which cannot be effectively crossed in a dry

condition or with swamp mats would be crossed using pipe jacking or horizontal directional drilling (HDD) as appropriate. The EASTALCO Alternative Site water line would be expected to use HDD relatively extensively to accommodate the crossings of creeks and tributaries to the Potomac, and the new transmission line access roadway would likely need to include multiple permanent stream crossings, relying on use of mats during initial construction. The transmission line ROW for the Bainbridge Alternative Site would also require the use of swamp mats to cross several small streams, however it would be expected that a continuous transmission line access road would not be constructed across major streams (i.e., greater than 10 feet wide at mean high water). The Thiokol Alternative Site transmission line ROW would require use of swamp maps during construction; however major streams would not include any permanent crossing or temporary crossing requiring stream bank or in-water disturbance.

COLA Impact

The revised CCNPP Unit 3 COLA ER Tables 9.3-12, -13, and -14 were provided with the response to RAI No. 1016 Question 1 in UniStar letter UN#09-403, dated September 25, 2009.

Question 5:

Provide a Corps-focused alternative site analysis which must include a text description of the wetland and stream impact analysis outcome for the offsite and onsite alternatives. Based on potential/proposed wetland and stream impact information, provide a statement indicating which site location would be the Least Environmentally Damaging Practicable Alternative (LEDPA). If not the selected project, explain the reasons the LEDPA site was not selected.

Response

Table 9.3-12 of ER Chapter 9 of the Calvert Cliffs Nuclear Power Plant Unit 3 COLA presents the impacts of the EPR project at all four sites; the proposed site and three alternative sites. The relevant information from the subject table needed for a Corps-focused LEDPA analysis has been transferred to the summary table below.

Review of the table identifies that for impacts on the site itself EASTALCO would be the LEDPA site. However, further evaluation for off-site impacts for water line and transmission line right-of-way (ROW) would have Calvert Cliffs Nuclear Power Plant Unit 3 as the LEDPA site. Finally, 41 other environmental criteria used to evaluate all four sites, as described in the Calvert Cliffs Nuclear Power Plant Unit 3 Alternative Site Evaluation Report (ASER), clearly show that the Calvert Cliffs Nuclear Power Plant Unit 3 site is the environmentally preferred location for construction of the EPR within the defined Region of Interest: the State of Maryland.

	Calvert Cliffs 3[1]	Bainbridge	EASTALCO	Thiokol
Wetlands Affected – Site (ac)	6.6	0.0	0.0	34.5
Wetlands Affected - Water Line ROW (ac)	NA	1.3	3.2	0.4
Wetlands Affected - Transmission Line ROW (ac)	0	5.2	0.2	26.6
Streams Affected– Site (LF)	3604	1557	1311	3435
Streams Affected - Water Line ROW (LF)	NA	0	865	0
Streams Affected - Transmission Line ROW (LF)	0	3517	1820	4051

COLA Impact

The revised CCNPP Unit 3 COLA ER Table 9.3-12 was provided with the response to RAI No. 1016 Question 1 in UniStar letter UN#09-403, dated September 25, 2009.

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[1] ER Section 4.1.1.1 (Rev. 5) states the CCNPP3 and supporting facilities will be located on 2,070 acres; ER Section 4.3.1.3 (Rev. 5) states the construction of CCNPP3 will permanently fill approximately 8,350 LF of stream and 11.72 acres of delineated wetland areas. This table provides data primarily for the approximate 420-acre EPR Site for consistent comparison with the alternative sites and, therefore, some data in this table will be different from quantities of affected acreage stated in the ER Rev. 5