CCNPP3COLA NPEmails

From: Fredrichs, Thomas
Sent: Wednesday, February 11, 2009 1:07 PM
To: Graham, Keith
Cc: Parkhurst, Mary Ann; CCNPP3COL Resource; Redden, Adrienne; Fetter, Allen; Mussatti, Daniel; Fuller, Edward; Weiss, Eric; Cicotte, George; Stirewalt, Gerry; Nash, Harriet; Jones, Henry; Caverly, Jill; Cook, John; Quinn, Laura; Mazaika, Michael; Hart, Michelle; Tiruneh, Nebiyu; Garcia-Santos, Norma; Emch, Richard; Bernal, Sara; Tammara, Seshagiri; Echols, Stan; Fredrichs, Thomas
Subject: Calvert Cliffs RAI Conference Call
Attachments: 2009.02.03 RAIs_ML083310256.pdf

Mr. Graham;

Our team is available at 3:00 PM EST on Thursday, Feb. 12, or at 12:00 PM Friday, Feb. 13, 2009 to discuss the RAIs dated Feb. 3, 2009.

Please let me know which time is preferable, and how many people will participate on your end. As I understand it, the questions generally concern aquatic ecology, water issues, alternative sites, and the graphics needed by the staff. If you have a GIS expert who can explain what is available for use by the NRC, it would be helpful.

I will set up a bridge line after you pick the date and time.

Sincerely,

Thomas Fredrichs, Sr. Project Manager
US Nuclear Regulatory Commission
Office of New Reactors
Divison of Site and Environmental Reviews
Rockville, MD 20852
Phone: (301) 415-5971

Hearing Identifier: CalvertCliffs_Unit3Cola_NonPublic_EX
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Subject: Calvert Cliffs RAI Conference Call
Sent Date: 2/11/2009 1:07:17 PM
Received Date: 2/11/2009 1:07:20 PM
From: Fredrichs, Thomas

Created By: Thomas.Fredrichs@nrc.gov

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

February 3, 2009

Mr. Greg Gibson
Vice President Regulatory Affairs
UniStar Nuclear Energy
100 Constellation Way
Suite 1400P
Baltimore, Maryland 21202-3106

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION RELATED TO THE ENVIRONMENTAL REPORT FOR THE CALVERT CLIFFS COMBINED LICENSE APPLICATION

Dear Mr. Gibson:

During its review of your environmental report, submitted for the Calvert Cliffs Unit 3 combined license application, the U.S. Nuclear Regulatory Commission (NRC) staff determined that additional information is needed to complete its review. The NRC staff's requests are listed in Enclosure 1. Please provide the Request for Additional Information (RAI) responses to the NRC under oath or affirmation.

Responses should be sent within 30 days of receipt of the RAIs. Timely response will help the staff to re-establish the environmental review schedule for Calvert Cliffs Unit 3. For any RAI that cannot be answered in 30 days it is expected that a date for receipt of this information will be provided to the staff within the 30 day period so that the staff can assess how this will impact its resources. In addition, any new and significant changes or additions to information that you have already submitted could impact the time necessary to complete the review.

If you have any questions or comments concerning this matter, I can be reached at (301) 415-5971 or by e-mail at thomas.fredrichs@nrc.gov.

Sincerely,

/RA/

Thomas L. Fredrichs,
Sr. Environmental Project Manager
Environmental Projects Branch 3
Division of Site and Environmental Reviews
Office of New Reactors

Docket No.: 52-016

Enclosure:
As stated

February 3, 2009

Mr. Greg Gibson
Unistar Nuclear Energy
100 Constellation Way
Suite 1400P
Baltimore, Maryland 21202-3106

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Sincerely,

/RA/

Thomas L. Fredrichs,
Sr. Environmental Project Manager
Environmental Projects Branch 3
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Office of New Reactors

Docket No.: 52-016

Enclosure:
As stated

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JColaccino GHatchett Mary Ann Parkhurst, PNNL

ADAMS Accession Number: ML083310256

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NAME	TFredrichs	ARedden	JBiggins	RSchaaf
DATE	12/29/08	11/26/08	01/09/09	02/02/09

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Enclosure1

Request for Additional Information No.1001

UniStar Calvert Cliffs Unit 3
Docket No. 52-016

Graphics and Illustrations

Figures provided with the environmental report (ER) were in color, with many layers of information. Many of these figures are not legible due to the number of layers and level of detail or resolution. Additionally, it would be helpful if the figures are legible in black and white for possible inclusion in the printed version of our environmental impact statement (EIS). To provide greater clarity of the information for technical evaluation and print quality for the EIS, the staff requests the figures listed below be submitted to meet the following specifications:

1. Figures should be submitted in color (if previously produced in color) *but must be able to be reproduced clearly in black-and-white only with legends in legible (larger) fonts, sized to fit within 1in. margins on one 8.5" x 11" page or less.*

2. When color is not practical, figures should be created in black-and-white only with legends in legible fonts, sized to fit within 1 in. margins on one 8.5" x 11" page or less.

3. The figures should focus on the information requested (but should keep appropriate landmarks, roads, etc.). To minimize clutter in figure appearance, texture that reduces figure legibility and nonessential elements should be minimized. For the figures requested, if no additional information is specified, then the request is being made because the figures are not legible in black-and-white.

Additional figures not previously provided are also requested in this list.

An alternative to this request is to provide staff with the GIS data for the requested figures, and our GIS team can make the needed changes.

ESRP 2.1.1 - 1

Provide a revised ER Fig 2.2-1 that specifically indicates the transmission line circuit to the proposed switchyard and onsite wetlands. The staff notes that agriculture is no longer practiced onsite but that the area previously used for this purpose is still shown in figure 2.2-1. The figure should be revised to either (1) remove the marking from the areas currently marked as agricultural, or (2) change the legend to state the areas show historic use of agriculture.

ESRP 2.4.1 - 1

Provide a revised version of ER Fig 2.4-1 with a legible legend depicting only the following attributes: Calvert Cliffs site boundary, Chesapeake Bay label, Plant communities: Mixed

Deciduous Forest, Old Field (Phragmites and Other subtypes combined), Landscaping/Development, Mixed Deciduous Regeneration Forest, Well-drained Bottomland Deciduous Forest, Poorly Drained Bottomland Deciduous Forest, Herbaceous Marsh, Successional Hardwood Forest. In addition to the aquatic resources already labeled, please include labels for Laveel Branch, Branches 1, 2, 3, and 4, and Ponds 1 and 2.

ESRP 2.4.1 - 2

Provide a legible graphic (not provided in the ER) with a legible legend depicting only the following attributes: Calvert Cliffs site boundary, Wetland Delineation Area, 9 Wetland Assessment Areas.

ESRP 2.5.1 - 1

Provide a legible graphic of ER Fig 2.5-3 so that it has sharper (not fuzzy) titles and no distracting background "textures."

ESRP 4.1.1 - 1

Provide a legible graphic of ER Fig. 2.4-2 with a legible legend depicting only the following attributes: Calvert Cliffs site boundary, Chesapeake Bay label, new, inactive, and active bald eagle nest locations (different symbols for each type).

ESRP 4.1.1 - 2

Provide a legible graphic of the figure in Attachment 3 of RAI Response Letter dated 17 October 2008. Provide this figure with a legible legend depicting only the following attributes: Calvert Cliffs site boundary, Chesapeake Bay label, 500’ tiger beetle buffer area, extent of tiger beetle habitat area along shoreline, proposed activities/structures within and immediately outside of the 500’ tiger beetle buffer area.

ESRP 4.3.1 - 1

Provide a legible graphic of ER Fig 4.3-1 with a legible legend depicting only the following attributes: Calvert Cliffs site boundary, Chesapeake Bay label, Proposed construction areas and labels superimposed over the following plant communities: Mixed Deciduous Forest, Old Field (Phragmites and Other subtypes combined), Landscaping/Development, Mixed Deciduous Regeneration Forest, Well-drained Bottomland Deciduous Forest, Poorly Drained Bottomland Deciduous Forest, Herbaceous Marsh, Successional Hardwood Forest.

ESRP 4.3.1 - 2

Provide a legible graphic of ER Fig 4.3-2 with a legible legend depicting only the following attributes: Calvert Cliffs site boundary, Chesapeake Bay label, proposed construction areas and labels superimposed over the wetlands and wetland buffers.

ESRP 4.3.1 - 3

Provide a legible graphic of Fig 5-6 from CPCN Final Report 16 July 2008, with a legible legend depicting only the following attributes: Calvert Cliffs site boundary, Chesapeake Bay label, Wetlands, Development Envelope, proposed Wetland Mitigation Actions.

ESRP 4.3.1 - 4

Provide a legible graphic of Fig 5-7 from CPCN Final Report 16 July 2008, with a legible legend depicting only the following attributes: Calvert Cliffs site boundary, Chesapeake Bay label, Development Envelope, proposed FIDS Forest Planting Area, Proposed FIDS Forest Preservation Area.

ESRP 4.3.1 - 5

Provide a legible graphic of figure on pg 5-34 of CPCN Final Report 16 July 2008, with a legible legend depicting only the following attributes: Calvert Cliffs site boundary, Chesapeake Bay label, Development Envelope, 1320 ft development envelope buffer, active eagle nest, proposed ¼ mi eagle preservation zone, 15-yr eagle conservation area.

ESRP 4.3.2 - 1

Provide a legible version of the figure provided in response to RAI AE-9 in June 2008. Include a legible legend depicting: the construction layout, the aquatic resources that would be affected, and labels for the aquatic resources onsite including Johns Creek, Laveel Branch, Goldstein Branch, Woodland Branch, Branches 1, 2, 3, and 4, and Ponds 1 and 2. It is not necessary to separately identify the wetlands assessment areas.

ESRP 4.3.2 - 2

Provide new graphic with a legible legend depicting the locations of the intake system, fish return system, and discharge area for Units 1 and 2, the intake system, fish return system, and discharge pipe for proposed Unit 3, the barge dock area and the area to be dredged. The scale should be such that it includes the complete area from north of the current intake area (including any plant-related discharges north of the intake) to south of the barge dock facility.

ESRP 4.3.2 - 3

The September 29 , 2008 RAI response to RAI #6 includes a Fig. 3A, which refers (within the figure) to Fig. 3B (Proposed Armor Protection—see Figure 3B for Extent of Protection), which was not found. Provide this or a new graphic that shows the bayward extent of the armoring that would be added to protect the new baffle wall installed for the intake system for proposed Unit 3.

ESRP 5.3.4 - 1

Provide a new graphic with a legible legend depicting the boundary of the NOB 19-2 (Natural Oyster Bar), the locations of the discharge area for Units 1 & 2, and the discharge pipe for proposed Unit 3, the historical thermal plume predictions for Units 1 & 2, the thermal plume predicted for Unit 3, and the proximity to the two recreational parks flanking the plant (Flag Ponds Park and Calvert Cliffs State Park). The scale should be such that it includes both the northern and southern boundaries of the plant and the entire NOB 19-2 boundary.

ESRP 9.3 - 1

Provide a legible graphic with a legible legend depicting only the following attributes: Nine Mile point site boundary, proposed Unit 3 footprint, National wetlands inventory delineated wetlands, other delineated wetlands, and onsite streams and ponds.

ESRP 9.3 - 2

Provide a legible graphic with a legible legend depicting only the following attributes: R.E. Ginna site boundary, proposed Unit 3 footprint, National wetlands inventory delineated wetlands, other delineated wetlands, and onsite streams.

ESRP 9.3 - 3

Provide a legible graphic with a legible legend depicting only the following attributes: the former Thiokol site boundary, proposed facility footprint, National wetlands inventory delineated wetlands, other delineated wetlands, and onsite streams (Rich Neck Creek, Tom Swamp Run), and the interconnected reaches of the watershed, including Burnt Mill Creek and McIntosh Run. It should also show the nearest public roadways, and the distance to and the approximate line of route of piping access to the Patuxent River.

ESRP Various – Graphics to be in color but reproducible in black and white

Provide legible graphics or GIS data for ER Figures 2.2-2, 2.2-9, 2.3-1, 2.3-2, 2.3-42, 2.3-68, 2.5-1, 2.5-3, 2.5-7, 2.5-8, 3.2-1, 5.3-2, and 5.3-3.

Provide legible graphics or GIS data for FSAR Figure 2.5-1.

Provide legible graphics or GIS data for August 18, 2008 RAI 198 Figures 9.3-3 and 9.3-4.

Provide a legible graphic or GIS data for Figure 3 of the Final Wetland Delineation report for Proposed UniStar Nuclear Project Area Calvert Cliffs Nuclear Power Plant Site Calvert County, MA. 2007. Tetra Tech.

Provide a legible graphic or GIS data showing rare plants, animals, and significant natural communities in the general vicinity of the Nine Mile Point Site, Oswego County, New York.

Provide a legible graphic or GIS data showing rare plants, animals, and significant natural communities in the general vicinity of the R.E. Ginna Site, Oswego County, New York.

Provide two legible graphics or GIS data showing the distribution and abundance of wetlands on the National Wetlands Inventory on and around the Nine Mile Point site. One view should be a closer view, showing the main drainage and the residential areas immediately around the site. The second should provide more of an overview of the community.

Provide a legible graphic or GIS data showing Public Land Parcels managed by the State of New York in Oswego County.

Provide a legible graphic or GIS data showing the distribution and abundance of wetlands on the National Wetlands Inventory on and around the R.E. Ginna site.

Provide a legible graphic or GIS data showing Public Land Parcels managed by the State of New York in Wayne County.

Hydrology

ESRP 2.3 - 1
4.2 - 1
5.2 - 1

Provide measurements or estimates of pre-construction seasonal flow conditions and associated water quality of CCNPP branches feeding into Johns Creek so that impact to onsite surface water and associated wetlands can be evaluated. Quantify seasonal changes to water flow and quality in Johns Creek during construction and during operations. (Related to May 13, 2008 RAI #49)

ESRP 3.4.4 - 1
5.3 - 1
5.3 - 2

In Section 3.4.4.2 (page 3.0-33), there is a corrected flowrate value of 21,019 gpm (19,437 gpm lined out in tracked changes). In Section 5.3.2 (page 5.0-38), the first paragraph lists an average discharge flow rate of 19,400 gpm. Table 5.3-3 (page 5.0-59), gives a discharge flow rate of 17,633 gpm. On this same table there is a correction in the line above (labeled "Discharge Water Density") that contains the 21,019 gpm value, but the units do not match those lined out (density units). Identify the correct value or explain these differences.

Aquatic ecology

ESRP 2.4.2 - 1

Items 14 and 15 in the May 13, 2008 RAI set requested complete survey data of aquatic habitats affected by the proposed new unit. UniStar responded (June 12, 2008 RAI responses with attachments) with a figure of sampling locations and a file that included raw data tables were provided in the attachment, but there was no information relating the data to the locations in the surveys. Please identify where sampling locations LC-M1, WB-M1, UTJC-M5, UTJC-I03, LC-I01, JC-M4, and WB-M2 were located and explain whether or not they can be used to help characterize streams onsite.

ESRP 2.4.2 - 2

In the June 12 2008 response to Items 14 and 15 in the May 13, 2008 RAI set, UniStar included additional data collected in the Spring 2008. A figure of sampling locations and a file that included raw data tables were also provided. The figure identifies sampling locations for which data were not provided. These are UT-GB-I-2, UT-GB-I-4, UT-JC-I-3, UT-JC-I-4, UT-JC-I-5, UT-JC-I-6, and LC-I-1of1. Please provide data for these sampling locations.

ESRP 2.4.2 - 3

The liquid waste stream to be discharged into the Chesapeake consists of blowdown from the circulating water supply system and essential service water system cooling towers; desalinization plant waste; and other site waste streams. These waste streams are discharged into a common retention basin before release.

What is the projected temperature of the liquid waste stream at the Unit 3 discharge point? Would there be any variation with different flow or seasonal conditions? If so, describe such differences.

Environmental Justice

ESRP 2.5.4 - 1

Two ER maps of minority populations appear to be contradictory. Fig. 2.5-4 (Black or African American Minority Population) and 2.5-7 (Aggregate Minority Population) should look essentially identical with the exception of the much smaller other minority populations incorporated into the aggregate map. However, a close look at the two maps reveals that there are populations captured in Fig. 2.5-4 that are not included in Fig. 2.5-7 and that there are a few population areas shown in the aggregate map that are not present in the various minority maps. Please provide corrected maps and/or explain why this apparent discrepancy is correct.

Cooling System

ESRP 3.4.1 - 1

Provide an estimated date that the desalinization plant will be available for operation after construction is initiated. Identify the environmental impact on water use before and after the desalinization system is operating.

ESRP 3.4.2 - 1

The applicant made recent changes to the intake structure and fish return since the COLA was submitted. Provide a description and schematic of the relocated cooling water intake structure, the new fish return design, and armoring of the bay bottom associated with both structures. Provide a figure showing the location of these structures with respect to the existing Unit 1 and 2 plant intake structures and shoreline.

Cultural/Historical Resources

ESRP 4.1.3 - 1

Background:
The ER does not include a plan that ensures that the applicant will not intentionally significantly adversely affect a historic property prior to issuance of the COL for Calvert Cliffs.

ESRP Section 4.1.3 Section II states:

Regulatory positions and specific criteria to meet the regulations identified above are as follows:

Nuclear Reactor Regulation (NRR) Office Letter No. 906, Revision 1, which includes guidance for complying with the requirements contained in the NHPA with respect to protection of historic properties during the construction phase and for handling inadvertent discoveries during construction.

NRR Office Instruction LIC-203 states:

Section 3 Office Instruction LIC-203 is a revision to Office Letter 906, providing minor clarifications to guidance.

Section 4.2 In addition to its regulatory responsibilities embodied in the health and safety requirements of the Atomic Energy Act, NRC has responsibilities that are derived from NEPA and from other environmental laws (such as the CZMA, the ESA, the NHPA, and the FWCA).

Section 110(k) of the National Historic Preservation Act (NHPA) (16 U.S.C. § 470h-2(k)), requires each Federal agency to ensure that it will not grant a license to an applicant who, with intent to avoid the requirements of 16 USC 470f, has intentionally significantly adversely affected a historic property to which the grant would relate.

RAI:
Provide a plan that ensures Unistar will not intentionally significantly adversely affect a historic property prior to issuance of the combined license for Calvert Cliffs Unit 3, or explain how other plans, such as the preservation plan and unanticipated discovery plan for historical and cultural resources, provide such assurance.

Water-Related Impacts

ESRP 4.2 - 1

Using the best estimate of final site utilization plot plan, and other data, describe the criteria that will be used in the groundwater monitoring plan to quantify the impacts of construction and the impacts of operation. Describe the criteria that will be used to denote an impact as being significant. (Related to May 13, 2008 RAI #136)

ESRP 4.2 - 2

Provide an estimate of the total dissolved solids concentrations in the three following locations before, during, and after disposal of dredging material: surface water and groundwater leaving Lake Davies; spring/seep water entering the nearest branch to Johns Creek; Johns Creek water leaving the CCNPP site boundary. (Related to May 13, 2008 RAI HS-16)

Ecological Impacts

ESRP 4.3.1 - 1
4.3.2 - 1

Provide a description of terrestrial and aquatic impacts to tidal wetlands. A discussion of these impacts was omitted in the ER.

ESRP 4.3.2 - 2

The response to RAI Item #7 (September 29, 2008) that asked for clarification on a previous RAI (#59, June 2008) stated that the barge dock would be in use for about five years. To better understand the incremental impacts from Unit 3 to aquatic organisms in the barge area, knowledge of past operations and planned future operations and maintenance activities is needed.
(1) Has the barge dock been used within the last ten years (e.g., in conjunction with the operation of Units 1 and 2)?
(2) Will the barge dock need to be used during the operation of the proposed new unit? Will maintenance dredging be required during the operation of proposed Unit 3?
(3) Will the dredged area be backfilled with native sediment after the five-year construction period to restore the benthic habitat?

ESRP 4.3.2 - 3

Describe the impacts to aquatic organisms and habitat from the relocated intake structure and the Unit 3 fish return.

ESRP 4.3.2 - 4

Provide more detailed information about how the piping to be used for the fish return system will be designed to enhance potential survival of aquatic organisms (smooth walls, no 90° turns, etc.). Is there any design feature that reduces the likelihood that aquatic organisms will become entrapped in the intake forebay? Is there any design feature, in addition to trash racks, in the wedge-shaped intake pool that prevents aquatic organisms from entering the intake pipes? Specify mesh sizes for all screens. How would installation of the new intake pipe affect the existing fish return system for Units 1 and 2? Would the existing fish-return system be shutdown for any amount of time during construction of Unit 3? If so, for how long and would any measures be taken to return organisms to the Bay?

ESRP 4.3.2 - 6

Provide a figure that shows the bayward extent of the armoring that would be added to protect the new baffle wall installed for the intake system for proposed Unit 3. This is Figure 3B, which was not included in the September 29, 2008 RAI response. The figure should fit on one 8.5” × 11” page.

ESRP 4.3.2 - 5

Provide additional information about the intake system for proposed Unit 3. Will the existing baffle wall separating the intake area for Units 1 & 2 from the Chesapeake Bay be removed after the new baffle wall for proposed Unit 3 is installed? What is the length of the new baffle wall that will be in contact with the bay bottom?

Radiological Monitoring

ESRP 6.2

Describe any additional radiological monitoring that has been instituted at Calvert Cliffs, Units 1 and 2, to support the Nuclear Energy Institute Ground Water Protection Initiative, including number of monitoring wells and locations. Describe any changes being planned by Unistar to provide monitoring coverage under the initiative for the proposed Unit 3.

Energy Alternatives

ESRP 9.2-1

Information on a coal-fired energy alternative is provided in Section 9.2.3.1 of the ER. The staff requests additional information on the type of coal plant assumed in the ER. The staff also requests that estimated emissions for the coal plant be recalculated, if appropriate, using updated emission factors including the 2007 National Energy Technology Laboratory report, *Cost and Performance Baseline for Fossil Energy Plants Volume 1: Bituminous Coal and Natural Gas to Electricity*, DOE/NETL-2007/1281 Rev. 1.

The most recent published information that the staff is aware of regarding the performance of fossil energy power systems is the report cited above (online at: http://www.netl.doe.gov/energy-analyses/pubs/Bituminous%20Baseline_Final%20Report.pdf). The report examines four cases of subcritical and supercritical pulverized coal-fired power plants and includes emission estimates for each case. Section 9.2.3.1 of the ER does not state whether a subcritical or supercritical coal plant is assumed. The ER also uses EPA's 1995 AP-42 document to estimate emissions from a new coal-fired power plant. Emission estimates in the 2007 NETL report assume environmental regulations that would most likely apply to plants built in 2010 (see p. 18 of the report). The staff also notes that EPA published a version of AP-42 applicable to coal combustion in 1998 (see p. 8-54 of draft NUREG-1437, Supplement 36).

ESRP 9.2-2

Information on the natural gas combined-cycle (NGCC) energy alternative is provided in Section 9.2.3.2 of the ER. The staff requests that estimated emissions for the NGCC plant be recalculated, if appropriate, using updated emission factors including the 2007 National Energy Technology Laboratory report, *Cost and Performance Baseline for Fossil Energy Plants Volume 1: Bituminous Coal and Natural Gas to Electricity*, DOE/NETL-2007/1281 Rev. 1.

The most recent published information that the staff is aware of regarding the performance of fossil energy power systems is cited above (online at: http://www.netl.doe.gov/energy-analyses/pubs/Bituminous%20Baseline_Final%20Report.pdf). The report includes emission estimates for NGCC power plants. Section 9.2.3.2 of the ER uses EPA's 1995 AP-42 document to estimate emissions from a new NGCC power plant. Emission estimates in the 2007 NETL report assume environmental regulations that would most likely apply to plants built in 2010 (see p. 18 of the report). The staff also notes that EPA published a version of AP-42 applicable to natural gas combustion in 2000 (see p. 8-54 of draft NUREG-1437, Supplement 36).

Alternative Sites

ESRP 9.3-1

UniStar's region of interest is stated in the ER to be New York and Maryland. The ER discusses four candidate sites, two in Maryland and two in New York. Need for power is analyzed in the ER for Maryland but not for New York. Explain why the two New York sites were included in the ER as alternative sites given that no need for power in New York is identified or discussed in the ER.

ESRP 9.3-2

Assuming that a need for power exists in both New York and Maryland, why did UniStar select a Maryland site for the proposed site?

ESRP 9.3 - 3

The August 18, 2008 RAI responses 198 and 199 identify criteria used to screen for candidate areas, potential sites, and candidate sites. However, it does not provide the actual evaluation used including the ratings for the sites being screened. Provide the actual ratings by criteria for the site selection process used to screen for candidate areas and potential sites and used to select the candidate sites. Describe in detail the full process including the scores of the 13 potential sites evaluated in the screening to candidate sites.

ESRP 9.3 - 4

The proposed site may be determined from a list of candidate sites (screening process) or, as a special case, which includes selection of one at an existing nuclear power plant site. Was the Calvert Cliffs site selected based on the screening process or the ESRP 9.3 exception process for existing nuclear plant sites? Provide the analysis details that resulted in its selection.

ESRP 9.3 - 5

What was the screening process described in the responses to June 12, 2008 RAIs 198 and 199, used to select NMP and Ginna as candidate sites?

ESRP 9.3 - 6

Describe any difference in the alternative site selection processes, that led UniStar to add the former Thiokol site as an alternative site.

ESRP 9.3 - 7

Provide a copy of the restrictive covenant that limits use of the Thiokol site.

ESRP 9.3 - 9

Explain how the potential presence of unexploded ordnance was included in the site rating for the Thiokol site.

ESRP 9.3 - 10

Describe the actions previously taken to locate and remove the unexploded ordnance from the Thiokol site.

ESRP 9.3 - 11

Provide an evaluation of the potential impacts of the construction and operation of a nuclear unit at the Thiokol site on the Federally endangered dwarf wedge mussel (*Alasmidonta heterodon*), which occurs in McIntosh Run just downstream from the site. Provide information about any other Federally listed or State-listed endangered or threatened species that could be affected by the construction and operation of a nuclear unit at the Thiokol site.