DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
P.O. BOX 1715
BALTIMORE, MD 21203-1715

REPLY TO
ATTENTION OF

OCT 2 8 2008

52-16

Operations Division

Calvert Cliffs 3 Nuclear Project, LLC
Mr. Thomas E. Roberts
1650 Calvert Cliffs Parkway
Lusby, Maryland 20657

Dear Mr. Roberts:

This is in reference to your application, NAB-2007-08123-M05 (Calvert Cliffs 3 Nuclear Project, LLC/Unistar Nuclear Operating Services, LLC), for a Department of the Army (DA) permit to perform site preparation activities and construct supporting facilities at the site of a proposed nominal 1,710 MW nuclear power generation station, which is the third unit at Unistar's Calvert Cliffs site near Lusby, Calvert County, Maryland. The current proposal indicates that approximately 17.42 acres of jurisdictional waters would be impacted in the Chesapeake Bay and its unnamed tributaries, forested nontidal wetlands, Johns Creek and Goldstein Branch, and their unnamed tributaries.

The Nuclear Regulatory Commission (NRC) is the lead Federal agency in the preparation of an Environmental Impact Statement (EIS) for work associated with the expansion of the power plant facilities. The Corps will be cooperating with NRC to ensure that the information presented in the National Environmental Policy Act (NEPA) document is adequate to fulfill the requirements of Corps regulations, the Clean Water Act Section 404(b)(1) Guidelines and the Corps public interest review process. The Corps permit decision will be made following issuance of the final EIS.

The environmental impact of construction activities in Waters of the U.S., including jurisdictional wetlands, will be reviewed by the Corps and addressed in the EIS prepared by NRC. The decision to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. The following factors that must be evaluated as part of the Corps public interest review include: conservation, economics, aesthetics, general environmental concerns, wetlands and streams, historic and cultural resources, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, energy needs, safety, food and fiber production, mineral needs, water quality, considerations of property ownership, air and noise impacts, and the general needs and welfare of the people. In addition, the following consultations and coordination efforts must be concluded prior to release of the EIS: Section 106 of the National Historic Preservation Act, including as appropriate, development and implementation of any Memorandum of Agreement; Endangered

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Species Act; Essential Fish Habitat coordination; State Forest Conservation Plans; Marine Spill Prevention, Containment, and Control Plan; State Water Quality Certification; and State Coastal Zone Consistency determination.

The Clean Water Act Section 404(b)(1) Guidelines contain the substantive environmental criteria used by the Corps in evaluating discharges of dredged or fill material into waters of the U.S. A fundamental precept of the regulatory program is that impacts to jurisdictional waters, will be avoided and minimized where it is practicable to achieve. Under Section 404, only the least environmentally damaging practicable alternative can obtain Department of the Army authorization. Note that an alternative is practicable if it is available and capable of being accomplished after taking into consideration cost, logistics and existing technology in light of overall project purposes.

As part of the evaluation of permit applications subject to Section 404 of the Clean Water Act, the Corps is required by regulation to apply the criteria set forth in the Environmental Protection Agency's (EPA) 404(b)(1) guidelines (40 CFR Part 230). These guidelines establish criteria which must be met in order for the proposed activities to be permitted pursuant to Section 404. Specifically, these guidelines state, in part, that no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge that would have less adverse impact on the aquatic ecosystem provided the alternative does not have other significant adverse consequences. An area not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed activity may be considered if it is otherwise a practicable alternative.

Regulations under 40 CFR 230.10 (a)(3) state that an activity is not water dependent if the activity associated with a discharge that is proposed for a special aquatic site does not require access or proximity to or citing within the special aquatic site in question to fulfill its basic purpose. In such instances, practicable alternatives that do not involve special aquatic sites are presumed to be available unless clearly demonstrated otherwise. In addition, all practicable alternatives to the proposed discharge which do not involve a discharge into a special aquatic site are presumed to have less adverse impact on the aquatic ecosystem, unless clearly demonstrated otherwise.

You have not yet demonstrated that no practicable alternatives exist to the filling of a special aquatic site to fulfill the basic purpose of the proposed project which is to create energy. The proposed project is not water dependent because it does not require access or proximity to or citing within a special aquatic site to fulfill its basic purpose of providing a source of energy. You must demonstrate why the project proposed to be built could not be reconfigured or reduced in scope to further minimize or avoid adverse impacts to Waters of the U.S. The proposed fill activity would not comply with the EPA 404(b)(1) guidelines in the absence of demonstrating that there are no practicable alternatives available with less damaging impacts to the special aquatic site. Current DA regulations 33 CFR 320.4(a) state that a permit will be denied for activities involving 404 discharges if the discharge that would be authorized by such permit would not comply with the EPA's 404 (b)(1) guidelines.

The Corps issued a public notice on September 3, 2008 to solicit comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. The National Marine Fisheries Service (NMFS) defers final comments until its review of the EIS; however, the NMFS did identify potential issues of concern including the intake impact on finfish and crustaceans from impingement and entrainment; discharge pipe impacts on benthic habitat during installation and the thermal quality of the effluent; dredging impacts to benthic habitat and a natural oyster bar; and nontidal wetland and stream impacts. The Environmental Protection Agency (EPA) requested interagency site visits to evaluate avoidance and minimization and assist in the development and review of the mitigation plan. The U.S. Fish and Wildlife Service (FWS) requested the comment period remain open until the agencies review the EIS. FWS indicated that two Federally listed threatened tiger beetle species occur along the Chesapeake Bay shoreline of the project area and formal Endangered Species Act consultation may be required. The Maryland Historical Trust (MHT) stated that the project will result in the unavoidable and complete destruction of the National Register-eligible Camp Conoy property and resolution of all adverse effects will require negotiation and execution of a Memorandum of Agreement. A copy of the correspondence we received in connection with your application is enclosed for your review.

The Corps is required to evaluate permit applications based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interests. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. Based upon our preliminary evaluation of this project, we have determined that the project, as proposed, will have a significant adverse impact on the environment. We have also determined that the project may be conducive to additional alternatives in other project aspects that are less damaging to the aquatic environment and we request that they be considered.

Regulations under 40 CFR Part 230 describe the general compensatory mitigation requirement for losses of aquatic resources. In accordance with 40 CFR 332.3, the fundamental objective of compensatory mitigation is to offset environmental losses resulting from unavoidable impacts to waters of the United States. The Corps therefore must determine the compensatory mitigation to be required based on what is practicable and capable of compensating for the aquatic resource functions that will be lost as a result of a permitted activity.

In accordance with the above, we request the following information to assist us in the review of your proposal:

1. A detailed analysis of all possible forms of energy that could meet the project purpose. The analysis should include, but not be limited to fossil fuel, fission, hydroelectric, biomass, solar, wind, geothermal, fusion and other potential near

future energy options including a complete description of the criteria used to identify, evaluate, and screen project alternatives.

2. A detailed analysis of alternative locations for the proposed project or any of the alternate energy sources that would have less impact to wetlands and waterways. Data collected using resource mapping is acceptable and should be noted as appropriate in all evaluations

3. A detailed analysis of the steps taken to minimize the proposed on-site impacts and the reasons for amending the project as changes developed from the initial proposal through to the current proposal and ultimately to a project that would further minimize the currently proposed impacts, including a complete description of the criteria used to identify, evaluate, and screen project alternatives. This on-site analysis does not preclude the necessity to review of the off-site alternatives or various forms of energy. This information must include the following:
   a. Methods to avoid and minimize impacts to waters of the U.S.
      i. Methods to minimize dredging and construction related turbidity
      ii. Methods to minimize adverse effects to water quality
      iii. Methods to minimize adverse effects to natural and cultural resources
   b. Quantify impacts to waters of the U.S. (both temporary and permanent) to all waters of the U.S., including jurisdictional wetlands, for each on-site project alternative. For waterways, include both the linear feet of waterway impacts (measured along the centerline of the waterway) and square feet of impact; for wetlands, include both square foot and acreage impacts; and for temporary wetland impacts, quantify any change in wetland classification (e.g., palustrine forested to palustrine emergent, etc.) and method of work to accomplish these changes.

4. A revised proposal to reduce wetland and stream impacts to the minimum necessary to meet access and safety requirements.
   a. Relocate or redesign the proposed construction laydown areas to uplands.
   b. Modify the construction schedule so that the areas proposed for permanent impacts could be utilized as construction laydown areas.
   c. Construct a retaining wall for the switchyard in lieu of the proposed grading.

5. A revised proposal to reduce impacts to tidal waters to the minimum necessary for ingress and egress and erosion control.
   a. Reduce the width of the proposed dredge channel to the minimum necessary for barge ingress and egress and to ensure dredge barge access for the proposed method of dredging
   b. Reduce the stone revetment footprint channelward of the intake area.

c. Reduce the length and width of the impact area for the discharge pipe and fish return to the minimum necessary to meet the purpose of these projects aspects.

6. A detailed mitigation plan
   a. Proposed mitigation methods.
   b. Proposed mitigation site (s).
   c. Wetland creation and enhancement plans.
      i. Planting and grading plans.
      ii. Hydrologic inputs and maintenance of hydrology.
      iii. Monitoring and restoration plan.
   d. Stream Mitigation
      i. Baseline plan
      ii. Existing site conditions plan including photographic documentation; channel cross section; pattern and profile; ordinary high water mark (OHWM); and channel and structure stability in relationship to permanent survey markers that shall be installed.
      iii. Proposed project plans
      iv. Project plans related to the existing site conditions and the proposed conditions, including all structures or fill; dimensions of structures or fill; proposed water depths relative to the OHWM; channel cross section; pattern and profile; and channel and structure stability in relationship to permanent survey markers.
   e. Distinction between the wetland and stream mitigation plan, critical areas mitigation plan, forest mitigation plan and forest interior dwelling bird (FIDS) habitat mitigation plan.

7. Copies of all previously issued Federal, State and local permits and plans for the existing facilities at the project site as well as a description and plans for all mitigation completed for these previously authorized projects.

8. Vessel information including the ship/barge navigation needs to access the site; maximum draft when full; length and width of ships/barge; and the potential for the largest industry ships/barge necessary for project construction and future construction activities to access the site at the current proposed dredge depths.

9. A plan to manage potential impacts to aquatic species during pile driving work at the barge unloading facility site, including the use of curtains or containment structures.
   a. Describe any pre-cast concrete elements that may be installed into the water for pier facility construction or rehabilitation work.
   b. Explain the potential aquatic species turbidity impacts and shock wave impacts due to driving large diameter steel piles for dock facility construction and provide a construction plan that would minimize these impacts, as well as quantify the difference due to implementation of these

potential methods such as, but not limited to, silt or bubble curtains and netting.

10. A narrative to describe and quantify cumulative and indirect impacts resulting from the project.

11. A vicinity map and plan for the disposal options for any excess fill material resulting from construction.

12. A narrative addressing public benefits of this project separate from the project's proponents' benefit.

13. A description of the relative extent of the public and private need for the proposed project.

14. Are there any brownfields at the proposed project site?

15. Will the construction and heavy haul roads be permanent use roads?

You are hereby informed that additional information needs may arise as the EIS is developed. The information requested above is necessary for us to assist the NRC with the development of the draft EIS (DEIS). Inclusion of this information in the DEIS would allow the resource agencies and the public the opportunity to review and comment on this additional information prior to the release of the final EIS. Your modified plans and the required information are requested within 20 days of the date of this letter. If no response is received, your application will be considered withdrawn.

A copy of this letter will be furnished to the NRC and MDE. If you have any questions concerning this matter or if you wish to meet with the Corps to discuss this correspondence, please call Mrs. Kathy Anderson, at this office at (410) 962-5690.

Sincerely,

FOR William P. Seib
Chief, Maryland Section Southern

Enclosures

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401
(410) 573-4575

Rec'd 9/30
Q: Don Snyder

September 30, 2008

Colonel Peter W. Mueller
District Engineer
Baltimore District, Corps of Engineers
P.O. Box 1715
Baltimore, Maryland 21203-1715

Attn: Ms Kathy Anderson, Regulatory Branch

Re: CENAB-OP-RMS(NAB-2007-08123-M05 (Calvert Cliffs 3 Nuclear Project, LLC/Unistar Nuclear Operating Services, LLC))

Dear Colonel Mueller:

The U.S. Fish and Wildlife Service has reviewed the referenced public notice. The applicants propose to build a third unit at the Calvert Cliffs Nuclear Power Plant (CCNPP). Extensive clearing and grading will occur, eliminating extensive forested wetland and streams. This letter constitutes the report of the Service and the Department of the Interior on the proposed permit and is submitted in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.)

We understand that the Corps does not plan to issue a permit until the Nuclear Regulatory Commission (NRC) releases an Environmental Impact Statement. It would seem prudent that the permit comment period remain open until the agencies have a opportunity to review that document in order to better understand the full scope of effects. This is the first reactor being proposed in over 30 years in the United States and there is little institutional knowledge available within the agencies.

In addition, two Federally listed threatened species, the Puritan tiger beetle (*Cicindela puritana)* and the Northeastern beach tiger beetle (*Cicindela dorsalis dorsalis*) occur along the Chesapeake Bay shoreline in the project vicinity. Formal consultation in accordance with Section 7 of the Endangered Species Act may be required. However, that determination will not be made until NRC/Corps or the project applicants have completed their Biological Assessment (which may be incorporated into the EIS) concerning effects of the project on these two threatened species. Until we have reviewed this Biological Assessment and this Section 7 process has been concluded with NRC and the Corps, no permit can be issued for the referenced project.

Therefore, the Service recommends that the comment period remain open until the EIS and the Biological Assessment are received and reviewed by the agencies.

Sincerely,

Leopoldo Miranda
Field Supervisor

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Habitat Conservation Division
Chesapeake Bay Program Office
410 Severn Ave., Suite 107A
Annapolis, Maryland 21403

October 3, 2008

MEMORANDUM TO: Kathy Anderson
Baltimore District, Corps of Engineers
Regulatory, Maryland Permit – South

FROM: John Nichols

SUBJECT: CALVERT CLIFFS NUCLEAR PROJECT

This pertains to Public Notice CENABOP-RMS 2007-08123, and your Essential Fish Habitat (EFH) Assessment, dated September 3, 2008, for the proposal by Unistar Nuclear Operating Services to perform site preparation activities and construct supporting facilities at the site of a proposed 1,710 MW nuclear power generation station (Unit 3).

The Nuclear Regulatory Commission (NRC), the lead Federal Agency for this proposal, is preparing an Environmental Impact Statement (EIS) for work associated with the expansion of the power plant facilities. The EIS will contain information important to our ability to make a comprehensive review of the project's impacts on National Marine Fisheries Service resources. Therefore, we wish to defer our final comments on this proposal until following our review of the EIS.

Based on our participation, to date, in the scoping process for this proposal, we have identified several issues of concern, which will be addressed further in our final comments. These issues are as follows.

1. The proposed new Unit 3 intake, relative to its impact from impingement and entrainment of adult, juvenile, and planktonic stages finfish and crustaceans, and other forms of local meroplankton.
2. The proposed new discharge pipe, relative to impacts on benthic habitat during installation, and the thermal quality of its effluent.
3. Restoration of a barge unloading facility, including maintenance and new dredging of an entrance channel, relative to impacts on benthic habitat and natural oyster bar.
4. Nontidal wetland and stream impacts (permanent and temporary) resulting from construction of the new Unit 3 facility and associated infrastructure.

I will be looking forward to further coordination with your agency and NRC, prior to, and following our forthcoming review of the EIS. If you have any questions, please contact me at (410) 267-5675; or, John.Nichols@NOAA.GOV.

Maryland Department of Planning
Maryland Historical Trust

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor

Richard Eberhart Hall
Secretary

Matthew J. Power
Deputy Secretary

June 19, 2008

Ms. Susan Gray
Power Plant Research Program
MD Department of Natural Resources
Tawes State Office Building
Annapolis, MD 21401

Re: MHT Review of Draft ERD, Calvert Cliffs Nuclear Power Plant Unit 3, CPCN Case 9127
Calvert County, Maryland

Dear Ms. Gray:

In response to a June 10, 2008 request from DNR, the Maryland Historical Trust (MHT) has reviewed the above-referenced document with respect to the project's potential effects on historic properties. We understand that UniStar Nuclear Energy LLC and UniStar Nuclear Operating Services have submitted an application to the Maryland Public Service Commission (PSC) to add a third reactor to the Calvert Cliffs Nuclear Power Plant (CCNPP), and that DNR's Power Plant Research Program (PPRP) has performed the above-referenced environmental review as part of the PSC licensing process. Please note that the proposed undertaking is also regulated by the federal Nuclear Regulatory Commission (NRC) and is therefore subject to both federal and state historic preservation laws. For these reasons, we have reviewed the draft ERD in accordance with Section 106 of the National Historic Preservation Act and the Maryland Historical Trust Act, §§ 5A-325 and 5A-326 of the State Finance and Procurement Article, and are writing to provide the following comments/recommendations regarding effects on cultural resources.

Status of Historic Preservation Review: The proposed expansion of the Calvert Cliffs Nuclear Power Plant was first submitted to our office for review in October of 2006. Following our review of the initial submittal, we requested a Phase I archeological survey as well as the completion of Determination of Eligibility (DOE) forms for a variety of structures that are located within the project area and are included in the Maryland Inventory of Historic Properties (MIHP) (see MHT letter dated November 20, 2006). These investigations were carried out by GAI Consultants, Inc., and the resulting Phase I survey report and DOE forms were submitted to our office in March and April of 2007. Upon our review of these documents, we found that Phase II evaluative investigations were warranted for four of the identified archeological sites (18CV474, 18CV480, 18CV481, and 18CV482), and that four of the MIHP properties – CT-58 (Parran's Park), CT-1295 (Baltimore and Drum Point Railroad), CT-1312 (Camp Conoy), and CT-59 (Preston's Cliffs) are eligible for listing in the National Register of Historic Places (see MHT letter dated June 7, 2007). As noted in Section 5 of the draft ERD, GAI has completed the Phase II archeological investigations and an Assessment of Effects study has been conducted to evaluate the project's impacts on the four National Register-eligible MIHP properties. Please note, however, that the Phase II report and the Assessment of Effects documentation have not yet been submitted to our office for review. It is clear, of course, that the proposed expansion of the Calvert Cliffs Nuclear Power Plant will have an adverse effect on historic properties. The construction of the third reactor, for example, will result in the unavoidable (and complete) destruction of the National Register-eligible Camp Conoy property. However, as we have not yet received the complete Phase II report or the Assessment of Effects documentation, we are not yet able to provide definitive comments or recommendations regarding these effects or possible mitigation measures. Once we have received the necessary documentation, we will be able to work with all interested parties to evaluate the potential adverse effects and make appropriate recommendations regarding measures to avoid, minimize, or mitigate any such effects. The resolution of all adverse effects will require the negotiation and execution of a Memorandum of Agreement (MOA) between NRC, MHT, UniStar, and other involved parties stipulating the agreed-upon mitigation measures that will be implemented by UniStar. Please note that this consultation process must involve all relevant parties such as Calvert County and the Southern Maryland Heritage Area.

100 Community Place • Crownsville, Maryland 21032-2023
Telephone: 410.514.7600 • Fax: 410.987.4071 • Toll Free: 1.800.756.0119 • TTY Users: Maryland Relay
Internet: www.marylandhistoricaltrust.net

Draft ERD/Draft Licensing Conditions: Below are our comments regarding the draft ERD and the draft licensing conditions that were submitted to our office by DNR, and we would like to ask that these items be addressed in the preparation of the final documents.

- Condition #56 states that "prior to construction, UniStar shall execute a Memorandum of Agreement (MOA) with the Maryland Historical Trust to mitigate the adverse effects of site preparation and construction upon on-site cultural resources that are eligible for the National Register of Historic Places." On page 1-2, however, it is stated that, "after receiving a CPCN, NRC rules would allow UniStar to commence limited site preparation and certain non-safety related pre-construction activities prior to obtaining final COL approval...UniStar states that it needs to begin site clearing and pre-construction site preparation by early 2009." We would therefore like to request that condition #56 more clearly specify that **no** site preparation activities (such as clearing or grading) or construction activities having the potential to effect historic properties will take place within the limits of National Register-eligible archeological or structural resources and no removal or demolition of eligible structures will take place until an MOA has been executed to mitigate the adverse effects of these activities.

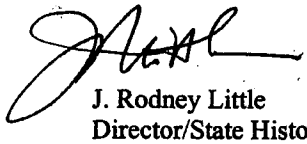
- When discussing the cultural impacts in Section 5, the draft ERD should reference the appropriate Maryland inventory site numbers (such as 18CV474) rather than listing the sites as "Site 1," Site 2," etc...

- In the first full paragraph of page 5-45, it may be more efficient and precise to eliminate much of the text and simply state that the complete Phase II report must be prepared in accordance with the *Standards and Guidelines for Archeological Investigations in Maryland* (Shaffer and Cole 1994).

- It may be helpful to clarify on page 5-46 that the Captain John Smith Chesapeake National Historic Trail is **not** a historic property under Section 106 of the National Historic Preservation Act but is being considered nonetheless as an important resource.

If you have any questions or require further information, please do not hesitate to contact either Dixie Henry (for inquiries regarding archeological resources) at 410-514-7638 or dhenry@mdp.state.md.us or Jonathan Sager (for inquiries regarding the historic built environment) at 410-514-7636 or jsager@mdp.state.md.us. We look forward to receiving a copy of the full Phase I/Phase II report and Assessment of Effects documentation discussed above, when it becomes available, and we also look forward to further consultation as project planning proceeds. Thank you for providing us with this opportunity to comment.

Sincerely,



J. Rodney Little
Director/State Historic Preservation Officer
Maryland Historical Trust

JRL/DLH/200801870
cc: Richard Raione (NRC)
Peter Hall (Metametrics)
Barbara Munford (GAI Consultants)
Kirsti Uunila (Calvert County)
George Wrobel (Constellation Energy)
Roslyn Racanello (Southern Maryland Heritage Area)