

DNR Ex #5

Martin O'Malley  
Governor

Anthony G. Brown  
Lt. Governor



Margaret G. McHale  
Chair

Ren Serey  
Executive Director

STATE OF MARYLAND  
CRITICAL AREA COMMISSION  
CHESAPEAKE AND ATLANTIC COASTAL BAYS

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August 8, 2008

Ms. Susan Gray  
Maryland Department of Natural Resources  
Power Plant Research Program  
Tawes State Office Building  
580 Taylor Avenue, B-3  
Annapolis, Maryland 21401

Re: **Notification of Critical Area Commission Action on Request for Approval of Calvert Cliffs Nuclear Power Plant Expansion Project**

Dear Ms. Gray:

The purpose of this letter is to officially notify you of the Critical Area Commission's action on the above referenced project. On August 6, 2008, the Critical Area Commission approved, with conditions, UniStar's proposal to the Public Service Commission (PSC) to expand the existing Calvert Cliffs Nuclear Power Plant by constructing a third nuclear power generation unit. This approval is subject to the following conditions:

1. The applicant may not create any disturbance within the Critical Area including cutting, clearing or grading for site preparation until a Mitigation Plan is approved by the Commission staff. The Mitigation Plan must include the size, number, spacing and type of species to be provided, and adequate provisions for survivability and maintenance of the plantings. With the exception of the proposed 7.5 acre and 3.8 acre planting areas on site, the mitigation plantings must be provided and established no later than one planting season after the commencement of site preparation activities including cutting, clearing and grading in the Critical Area.
2. Prior to commencement of disturbance from site preparation by cutting, clearing or grading within the Critical Area, both of UniStar's conservation easements will be submitted to Commission staff and will be finalized. The easements shall provide (1) protection of 63.4 acres of existing Forest Interior Dwelling Birds (FIDs) habitat on the Calvert Cliffs Nuclear Power Plant property in the Critical Area; and (2) a 6.64 acre off-site Critical Area Buffer at the Battle Creek property or a similar property on which Buffer plantings will be provided. The easements shall be held by an appropriate environmental trust or governmental entity.

3. Prior to commencement of site clearing and grading activities in the Critical Area, UniStar shall initiate the planting of native tree species in a 16.4-acre area of cleared field located in the Critical Area to the north of the Project area, as described in the Mitigation Plan. Mitigation plantings in this area will be completed no later than one planting season after the site clearing and grading activities begin.
4. Upon establishment of final grades and cessation of disturbance in the Critical Area, UniStar shall create approximately 7.5 acres of forested wetland, plant approximately 3.8 acres of upland forest, and restore/enhance streams in the Critical Area, in accordance with the Mitigation Plan approved by Commission staff. The plantings in the 3.8 acre and 7.5 acre planting areas shall be completed no later than the first planting season after establishment of final grades and cessation of disturbance in the Critical Area. The stream restoration/enhancement project shall disturb no more than 2.3 acres, shall not exceed a width of 50', and shall replace trees cleared from the stream corridor at a ratio of 1:1.
5. If the proposed third unit at Calvert Cliffs Nuclear Power Plant does not receive all of the required State and federal approvals or does not become operational for any reason, and if any disturbance of the Critical Area has occurred on site, UniStar shall plant the area disturbed onsite, and in addition, provide a portion of the Mitigation Plan plantings based on the amount of Buffer and FIDs habitat disturbance that has been created from clearing, grading, structures or impervious surfaces. The planting and additional mitigation shall be accomplished in accordance with the Mitigation Plan.
6. The Initial Recommended Licensing Conditions proposed and filed on July 16, 2008, by the Power Plant Research Program of the Maryland Department of Natural Resources (PPRP conditions) for incorporation into a Certificate of Public Convenience to be issued to UniStar by the Maryland Public Service Commission (PSC), as may be modified and approved by final order of the PSC, are incorporated herein by reference, and are made conditions of the Critical Area Commission's approval. 15 of the most relevant conditions addressing the proposed project impacts in the Critical Area are set forth below. Because the Commission understands that the PPRP conditions may be modified or supplemented in the course of the PSC proceedings, the Commission accepted the Panel's recommendation that the Commission's approval be construed as incorporating the final PPRP conditions as approved by PSC.

**Initial Recommended Licensing Conditions**

**PSC Case No. 9127**

**UniStar Nuclear Energy, LLC**

**As Filed by State of MD PPRP on July 16, 2008**

- Prior to construction, UniStar shall submit to the Maryland Historical Trust (MHT) a copy of training programs, or guidelines provided to applicant inspectors or contractors, to identify and/or protect unforeseen archeological sites that may be revealed during construction of the project. If such relics are identified in the project area, UniStar, in consultation with and as approved by MHT, shall develop and implement a plan for avoidance and protection, data recovery, or destruction without recovery of the properties

adversely affected by the project.

- Prior to construction, UniStar shall execute an MOA with MHT 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. No site preparation activities (such as clearing or grading) or construction activities having the potential to affect 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.
- All portions of the power plant and rights-of-way disturbed during construction shall be stabilized immediately after the cessation of construction activities within that portion of the footprint and right-of-way, followed by seed application, except in actively cultivated lands, in accordance with the best management practices presented in the MDE document 1994 Maryland Standards and Specifications for Soil Erosion and Sediment Control, and as approved by Calvert County. In wetlands and wetland buffers, seed application shall consist of the following species: annual ryegrass (*Lolium multiflorum*), millet (*Setaria italica*), barley (*Horedum* spp.), oats (*Uniola* spp.), and/or rye (*Secale cereale*). Other non-persistent vegetation may be acceptable, but must be approved by the MDE Water Management Administration. Kentucky 31 fescue shall never be used in wetlands or buffers.
- UniStar shall construct the facilities for Calvert Cliffs Unit 3 in accordance with a Forest Conservation Plan (FCP) that has been approved by the Maryland Department of Natural Resources Forest Service. The FCP shall define forested areas to be cleared during project construction, as well as forested areas that will remain under permanent protection as mitigation. The FCP must describe site management techniques used during construction (e.g., protective measures, equipment used, stress reduction measures, etc.), or make reference to a sediment control plan prepared for the project that also incorporates protective measures for trees. In addition, so as to minimize forest losses, cleared areas that are no longer in use following project construction (e.g., laydown areas) shall be replanted with tree species appropriate for the area. Tree planting and maintenance should be conducted in accordance with the State Forest Conservation Technical Manual 3<sup>rd</sup> edition, 1997, and COMAR 08.19.04.05B(4)(a). Areas not replanted with trees shall be vegetated with grasses. Grasses will be planted along streams and other open areas where acceptable. If the areas along streams are wetlands or wetland buffers, only grasses listed in Condition -, or others approved by MDE WMA, shall be used. If areas along streams are uplands, the following grass species may be used: blue joint grass (*Calamagrostis canadensis*), switchgrass (*Panicum virgatum*), little bluestem (*Schizachyrium scoparium*), or Indian grass (*Sorghastrum nutans*). Other non-persistent vegetation may be acceptable, but must be approved by DNR or MDE WMA. Kentucky 31 fescue shall never be used.
- For the protection of bald eagles (*Haliaeetus leucocephalus*) at the project site, UniStar shall follow the State's standard guidelines for nest site protection (see DNR Heritage Letter dated 23 June 2008). If these guidelines cannot be followed, an incidental take

permit will be required for disturbance to or removal of any bald eagle nests. If take of the Camp Conoy nesting territory cannot be avoided, consideration should also be given to protecting the Rocky Point area of the property for nesting eagles. It should be understood that acquiring a State permit for take of a bald eagle does not carry any authority for take under the federal Bald and Golden Eagle Protection Act as administered by the USFWS.

- For the protection of showy goldenrod (*Solidago speciosa*), UniStar shall take steps to avoid habitat alteration during the proposed construction activities. Mitigation for impacts to this population through transplanting individuals is discouraged. Transplanting of threatened or endangered plants is not considered a substitute for the protection of existing populations and may result in limited or no conservation value. However, since threatened and endangered plants are the property of the landowner, transplanting such species is not illegal provided the plants are not transported off the property. If such an action is pursued, adherence to DNR's guidelines for the reintroduction of rare plants is recommended. Prior to construction, the site should be accessible to DNR Heritage botanists to confirm the identity of the showy goldenrod.
- For the protection of the two species of State endangered, federally threatened tiger beetles (northeastern beach tiger beetle and Puritan tiger beetle) that are known to occur along the Chesapeake Bay shoreline and proximal to the project site, no construction activities shall occur within 500 feet of any cliff or beach habitats that are suitable for either species. Administrative controls that restrict personnel access to beaches shall be implemented. UniStar shall allow DNR to access the shoreline as requested to conduct surveys to examine the health of tiger beetle populations.
- To compensate for impacts to American eel (*Anguilla rostrata*) caused by loss and degradation of stream habitat due to construction of the Unit 3 facilities, prior to disturbing any eel habitat onsite, UniStar shall prepare and submit a mitigation plan to DNR Fisheries Division for approval.
- To minimize impacts to American oyster (*Crassostrea virginica*) in the Flag Pond Oyster Bar area, UniStar shall either (a) not conduct dredging associated with this project in the Chesapeake Bay during the periods of December 16 to March 14 and June 1 to September 30 in any year and prepare and submit a mitigation plan, prior to conducting any dredging, for approval by DNR Fisheries Division; or (b) prepare and submit an application for a waiver or reclassification of the oyster bar within 500 yards of the area of disturbance, prior to conducting any dredging, for approval by DNR Fisheries Division.
- Construction and operation of the Calvert Cliffs Unit 3 power facility and all its appurtenant features shall be undertaken in accordance with this CPCN and shall comply with all applicable local, State, and Federal regulations, including but not limited to the following:

- a. Nontidal Wetlands—COMAR 26.23 applies to activities conducted in nontidal wetlands.
  - b. Waterway Construction—COMAR 26.17.04 applies to activities in State waterways.
  - c. Water Quality and Water Pollution Control—COMAR 26.08.01 through COMAR 26.08.04 apply to discharges to surface water and maintenance of surface water quality.
  - d. Erosion and Sediment Control—COMAR 26.17.01 applies to the preparation, submittal, review, approval, and enforcement of erosion and sediment control plans.
- UniStar shall obtain applicable State and federal dredge-and-fill and waterway construction permits for the Chesapeake Bay intake and discharge facilities and for the barge facility modifications. UniStar shall not commence construction on any aspect of the project under the jurisdiction of Section 404 of the Clean Water Act covered by the *Joint Federal/State Application for the Alteration of Any Floodplain Waterway, Tidal or Nontidal Wetland in Maryland*, until such application has been approved by the U.S. Army Corps of Engineers and MDE.
  - UniStar shall not commence construction on any aspect of the project under the jurisdiction of the Chesapeake Bay Critical Area Commission (CAC) until it has received approval of the proposed Unit 3 project from the CAC. All site preparation, preconstruction, and construction activities at the site shall be implemented in accordance with the CAC-approved plans.
  - Portions of the Calvert Cliffs Unit 3 construction footprint adjacent to existing forested nontidal wetlands shall comply with Best Management Practices for Nontidal Wetlands of Special State Concern and Expanded Buffers, COMAR 26.23.06.03, which provides for stringent best management practices in the vicinity of very sensitive nontidal wetlands sites. These practices and techniques will include use of adequately sized temporary sediment traps, as needed, as well as super silt fencing and other specialized techniques specifically needed for limiting the quantity of sediment entering existing forested wetlands and streams during the power facility construction process.
  - At a minimum, sediment control during construction of all aspects of this project shall include the following Best Management Practices: construction of earth dikes and retaining walls in appropriate locations, sediment traps, use of super silt fences, stabilizing disturbed areas as quickly as possible, and converting silt traps to permanent features as soon as practicable.
  - In the event that UniStar commences site preparation/preconstruction activities and subsequently either (a) the U.S. Nuclear Regulatory Commission (NRC) does not issue an operating license, or (b) UniStar decides not to proceed with construction and operation of Calvert Cliffs Unit 3, UniStar shall be responsible for returning the site to a long-term environmentally stable condition. If either (a) or (b) occurs, UniStar shall

inform the PSC within sixty (60) days and at the same time will describe specific measures that will be taken to stabilize the site. Such measures will depend upon the status of site preparation or preconstruction that has already occurred; however, at a minimum, UniStar must consider appropriate actions to address the following areas:

- Stormwater management measures and erosion/sediment control as required by Conditions and -;
- Wetlands mitigation and buffering as required by Conditions d and -, and as specified in the joint federal/State wetlands permit;
- Revegetation and reforestation as required by Conditions - and -, and as specified in the approved Forest Conservation Plan;
- Protection for species and habitats as required by Conditions -, -, -, -, and -, and as specified by the Chesapeake Bay Critical Area Commission and the joint federal/State wetlands permit; and
- Mitigation for cultural resource impacts as required by Condition -, and as specified in the Memorandum of Agreement (MOA) with Maryland Historical Trust (MHT).

UniStar shall obtain PSC and Maryland Power Plant Research Program (PPRP) approval of its site stabilization plan and shall complete implementation of the approved plan on the schedule outlined in the plan.

The Commission requests that PPRP include this Notification of Action with the testimony submitted by PPRP to the PSC in PSC Case No. 9127. Under separate cover, the Commission will also notify the PSC Hearing Examiner of the Commission's action. Should you have any questions, please feel free to contact me at 410-260-3481. Also, please forward any modifications of the initial recommended licensing conditions submitted to the PSC as they become available.

Sincerely,



Amber Widmayer  
Natural Resource Planner