



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
NORTHEAST REGION  
55 Great Republic Drive  
Gloucester, MA 01930-2276

Kathy Anderson  
Regulatory Branch, Maryland Permits - South  
Baltimore District, Corps of Engineers  
P.O. Box 1715  
Baltimore, Maryland 21203-1715

AUG 20 2010

Attn: Woody Francis

Dear Ms. Anderson:

The National Marine Fisheries Service (NMFS) has reviewed Public Notice CENABOP-RMS 2007-08123, dated September 3, 2008; and, the draft environmental impact statement (DEIS) and essential fish habitat (EFH) assessment, dated April, 2010, for the Combined License for Calvert Cliffs Nuclear Power Plant, Unit 3. We had not responded to the public notice until now as your office had agreed to postpone processing of the permit application until completion of the NEPA document. We offer the following comments and recommendations.

The Nuclear Regulatory Commission and the Baltimore District are acting as cooperating agencies for the review of this proposal, and are participating in a joint essential fish habitat (EFH) consultation as required under the Magnuson Stevens Fishery Conservation and Management Act. We understand that the Corps of Engineers has the authority to respond to recommendations we have provided that pertain to project construction activities, such as dredging, which will be authorized under the Clean Water Act and/or Rivers and Harbors Act. This response to your agency is specifically to address our EFH conservation recommendations and our Fish & Wildlife Coordination Act recommendations on this proposal.

NMFS, in general, does not object to the proposed new unit. Locating the proposed unit at the site of the existing Constellation Generation facility will consolidate impacts to fish resources. The proposed closed loop cooling system, lower intake volumes from the Bay, and use of intake design parameters that minimize fish entrainment and impingement will maintain fish mortality rates at levels significantly lower than those from the existing plant intake.

Our outstanding issues that remain, relative to the proposed facility, pertain to compensatory mitigation requirements for tidal and non-tidal impacts. We offer the following comments and recommendations on the mitigation issue.

#### **ESSENTIAL FISH HABITAT: NEW DREDGING OF THE ACCESS CHANNEL TO THE RESTORED BARGE UNLOADING FACILITY**

The proposed lengthening of the access channel to the barge unloading facility will directly affect the substrate of Natural Oyster Bar 19-2 (Flag Pond Oyster Bar). While oyster



productivity on the Flag Pond Bar is currently low, surficial substrate within the proposed dredge area on the bar is comprised chiefly of sand, and is of oyster-producing quality.

Similar to other oyster bars in the mesohaline section of the Bay, the Flag Pond Bar supports benthic and pelagic communities important to local food webs. The sand substrate is preferred habitat for many benthic invertebrates, including mysid shrimp (*Mysis spp.*), sand shrimp (*Crangon spp.*); and, the commercially important soft clam (*Mya arenaria*). Sand bottom also provides unique and select foraging opportunities for bottom fish, and is preferred forage ground for many predatory species such as summer flounder (*Paralichthys dentatus*) and weakfish (*Cynoscion regalis*).

The proposed new dredging will permanently alter 4.5 acres of sandy bottom on the Flag Pond Oyster Bar. Deepening the dredge area to minus 16 feet, mean low water (MLW), may expose under-lying clay sediments, and will facilitate settling and accretion of fine-grain materials on the dredged channel bottom. Fine-grain substrate occurring adjacent to the previously dredged barge unloading facility likely reflects the habitat conditions that will exist in the newly dredged access channel.

The proposed dredging will permanently impact coarse-substrate benthic community, as well as forage habitat important to managed species such as summer flounder. Therefore, NMFS recommends that compensatory mitigation be required for the 4.5 acres of dredging impact on Flag Pond Bar. The compensatory action should be in-kind; and, at a 2:1 replacement ratio. NMFS recommends pursuant to Section 305(b)(4)(A) of the Magnuson-Stevens Fishery Conservation & Management Act that the Corps of Engineers adopt the following EFH conservation recommendation.

Many oyster bars in the mesohaline section of the Chesapeake Bay have areas of substrate comprised of hard-pan clay and/or compacted mud. For example, one such area is Kent Narrows Bar in Queen Anne's County, where strong tidal currents maintain a surficial substrate of hard-pan clay. Opportunities exist in on these bars for enhancement of substrate with additions of sand and gravel.

1. With assistance from the Maryland Department of Natural Resources, Unistar should identify nine acres of public oyster bar within the mesohaline section of the mid-Chesapeake Bay with compacted clay/mud bottom. The selected nine acres of bottom may be distributed over one to three different public bars, and should be checked for firmness and ability to support additions of coarse material additions prior to material placement (e.g., through poling of the substrate). Selection of bars swept by strong bottom tidal currents is preferred, to avoid excessive siltation of the new substrate.
2. The substrate of the identified nine acres should be built-up or raised in elevation through placement of clean coarse sand, pea-gravel, small cobble from an upland source, to a thickness that will facilitate natural maintenance of the modified substrate (e.g., 24-36 inches).

3. The enhancement site(s) should be monitored by Unistar over a five-year period for resilience of the modified bottom as coarse substrate. Success of the enhancement action should be gauged by it producing at least 4.5 acres of stable coarse bottom substrate by the end of the five-year monitoring period. In the event of failure to meet the 4.5-acre threshold of success, Unistar would have the post monitoring requirement to provide additional tidal compensatory mitigation at the end of the monitoring period at the discretion of the federal regulatory/resource agencies.

## **FISH & WILDLIFE COORDINATION ACT RECOMMENDATIONS**

### **PROTECTION OF THE JOHNS CREEK NONTIDAL WATERSHED**

With proposed displacement of headwater tributaries to Johns Creek, NMFS has been particularly concerned about adverse hydrologic impacts associated with this project throughout the Johns Creek watershed. Consequently, we are strong supporters of the proposed use of Regenerative Stormwater Management (RSM) within upper Johns Creek and its headwater tributaries, a process for transferring surface water run-off from impervious surface to the shallow ground water system which feeds downstream base-flow. RSM has been practiced in other Maryland counties, particularly Anne Arundel County, to minimize typical watershed impacts associated with deforestation and increased impervious surface. NMFS requests that our Annapolis Habitat Field Office receive updates on installation of RSM systems associated with this project, as well as monitoring results (including photographic evidence) on the success of these systems in protecting and/or enhancing the hydrologic integrity of the Johns Creek watershed.

### **NONTIDAL WETLAND & STREAM COMPENSATORY MITIGATION**

A significant portion of the proposed mitigation for nontidal wetland and stream impacts involves eradication of *Phragmites australis*. In consideration of the resistance of this species to control measures, the proposed control actions should be employed within designated areas in perpetuity, in order to better ensure success. Permanent common reed control measures that are the responsibility of the applicant should be required as special conditions in the authorized 404 permit for this project, with monitoring reports on success required up to 5-years following initiating of the enhancement action.

If you have any questions concerning this matter, you should contact John S. Nichols of our Annapolis, Maryland, Habitat Office; (410) 267-5675; or, [John.Nichols@NOAA.GOV](mailto:John.Nichols@NOAA.GOV).

Sincerely,



Peter D. Colosi, Jr.  
Assistant Regional Administrator  
for Habitat Conservation