APPLICANT: DOMINION VIRGINIA POWER
Immediate Waterway: Rappahannock River
Locality: RICHMOND COUNTY
Purpose: Crossing Utility
Application Type: Wetlands, Subaqueous
Site Inspection: 2/11/03
Report Date: 3/18/03

Type of Activity

<table>
<thead>
<tr>
<th>Submarine Crossings (ft)</th>
<th>Proposed Extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fill Subaqueous Bottom (ft²)</td>
<td>0</td>
</tr>
<tr>
<td>Impact Subaqueous Bottom (ft²)</td>
<td>28560</td>
</tr>
</tbody>
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<th>Total Impacts (ft²)</th>
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<tr>
<td>Total Impacts (Beach/Dune)</td>
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<td>Total Fill (ft²)</td>
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Project Location

Richmond County
ATTENTION

This assessment is based on biological, chemical, geological, and physical factors affecting the marine environment at and in the vicinity of the proposed activity. Parameters of the marine environment which may influence recreational, commercial, or industrial activities which are dependent on the marine environment are also considered where applicable.

The Virginia Institute of Marine Science (VIMS) is aware that regulatory or administrative bodies who weigh the overall potential public and private benefits and detriments in arriving at decisions must also consider other factors such as economics, aesthetics, zoning, or community desires. INFORMATION PROVIDED IN THIS REPORT IS, THEREFORE, ONLY THE ENVIRONMENTAL AND MARINE RESOURCES INPUT INTO THE DECISION MAKING PROCESS.

Comments:

We have reviewed this proposal from a marine environmental viewpoint. A submarine utility crossing is proposed to replace a failing electric cable that crosses the Rappahannock River between Essex and Richmond Counties near Tappahannock. The individual and cumulative adverse impacts resulting from this activity will be minimized if the cable is constructed as proposed. Directional boring will be conducted from the upland to a point beyond mean low water to avoid impacts to tidal wetlands on both sides of the river. The cable will then be embedded in a 3-foot trench across the river bottom. The existing cable alignment will be followed and the proposed installation technique will restore the depth of the original bottom.

Although direct impacts to tidal wetlands are not proposed, precautions should be taken on both shorelines to avoid disturbance to existing bank and wetland vegetation. The landing area on the Richmond County side includes a tidal marsh and a high, eroding upland bank with an invasive stand of reed grass (Phragmites australis), which can easily spread into disturbed areas. If unavoidable, incidental impacts do occur, then a vegetative cover should be restored as soon as possible. Also, removing exposed and abandoned infrastructure from the tidal wetlands and upland banks is recommended, but only if it can be done without excessive disturbance to the existing vegetation.

Karen A. Duhring
Marine Scientist
Hydrologic units represent smaller, isolated watersheds defined by topography and flow direction. These units can be thought of as insulated ecosystems or landscapes within which resources can be managed at a larger scale. The cumulative impact of a project to resources within a hydrologic unit may be significantly greater than the impact to the larger watershed above.
Permit Site Study Area

Richmond County
RAPPAHANNOCK RIVER
Rappahannock River

Project site

Rappahannock River watershed

Tidal Marsh Inventory - TMI
- Arrow Arum-Pickerelweed
- Big Cordgrass
- Black Needlerush
- Brackish Water Mixed
- Cattail
- Freshwater Mixed
- Reed Grass
- Saltbush
- Saltmeadow
- Saltmarsh Cordgrass
- Yellow Pond Lily

Roads
- Primary
- Secondary
- Tertiary

Intertidal flat

Open water

0 0.5 1 Miles
To Wetlands Board: Please indicate Wetlands Board action on this sheet and return to VIMS

Application Number: 02-2003
Name: Dominion Virginia Power
Locality: Richmond County
Waterway: Rappahannock River

Please check here if this application was approved as proposed _____
Complete the form below if the application was modified.

<table>
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<tr>
<th>ACTIVITIES</th>
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<th>PERMITTED</th>
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Comments: __________________________________________________________________________________
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Certified by: __________________________________________