THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
OFFICE OF COASTAL ZONE MANAGEMENT
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July 27, 2006

Dr. Rodney E. Cluck
Minerals Management Service
381 Elden Street
Mail Stop 4042
Herndon, VA 20164

RE: Comments on the Notice of Intent to Prepare an EIS for the Cape Wind Project

Dear Dr. Cluck:

The Massachusetts Office of Coastal Zone Management (CZM) appreciates the opportunity to provide comments during the scoping of the Draft Environmental Impact Statement (DEIS) for the Cape Wind Project. We understand that you already have the benefit of the CZM comments submitted during the earlier Army Corps of Engineers (ACOE) process, and therefore it would not be necessary to resubmit those documents[1]. However, if providing those comments again will assist you in facilitating the development of this scope, we are certainly happy to do so at your request.

Because of our involvement in the development of the earlier ACOE scope and the degree of detail provided in our comments already on record, we are able to focus our response at this juncture to an issue which we consider to be of prime importance. As is reflected in our previous comments, we have continuing concerns related to the way in which the site screening criteria were developed and applied and the adequacy of the geographic scope of the resulting alternatives analysis. Therefore, we submit the following comments for your consideration.

CZM applauds the decision by MMS to expand the range of siting alternatives for evaluation in the new DEIS for the Cape Wind project. The analysis of alternative locations plays a key role in our review of federal actions associated with coastal energy facilities for consistency with the enforceable policies of the Massachusetts CZM Program. Of particular relevance to projects involving such facilities is CZM's Energy Policy #1, which states:

> *For coastally dependent energy facilities, assess siting in alternative coastal locations. For non-coastally dependent energy facilities, assess siting in areas*

[1] Subsequent to the submission of those comments the proponents provided CZM with information regarding sediment transport modeling conducted for them in Nantucket Sound. Given the very dynamic conditions at this location, we believe that more site-specific data should be used for the model inputs, and the model needs to be calibrated and verified with data from a number of locations and during various time periods.

outside the coastal zone. Weigh the environmental and safety impacts of locating proposed energy facilities at alternative sites.

The policy is further explained in the accompanying text, which holds, "CZM's objective is to ensure that the development and maintenance of energy resources are completed with minimal displacement of water-dependent industry and by the least environmentally damaging means practicable"; and further, "This policy ensures that reasonable alternatives are considered and that sites are avoided which could lead to substantial harm to the most valued areas of the coastal zone." The importance of conducting a meaningful comparative site evaluation for mitigation purposes is also stressed in a number of provisions of the implementing state regulations that specifically govern the evaluation of energy facility sites in the coastal zone [see, e.g., 980 CMR 9.02(1)(e)].[2]

Since a significant amount of the ongoing public opposition to the proposed project is based on anticipated visual impacts, we believe that opportunities to greatly reduce or eliminate such impacts should be carefully explored in the process of identifying and evaluating alternative sites. In our comments on the previous Draft EIR/EIS, dated February 24, 2005, we noted that only one of the sites under consideration at that time (the "South of Tuckernuck Island" alternative) would not be visible from the mainland of Cape Cod; and even in that location the proposed array of wind turbines would be well in sight of the shorelines on the islands of Martha's Vineyard and Nantucket. In short, the siting options presented did not include a true "over-the-horizon" alternative, ostensibly due to technical limitations relating to deepwater constructability. As we further noted in our previous comments, however, the DEIS/R was rather inconclusive on this point, a reflection of the fact that the siting-related technology of utility-scale wind farms is evolving rapidly. The fact that MMS has now proposed to include a site with depths up to 600 feet in the scope for the FEIS appears to be a further encouraging indication that substantial progress is being made in that regard.

In this context, CZM recommends that the list of prospective alternatives be further expanded to include at least one location that would be sufficiently more distant from the nearest shoreline so as to eliminate virtually all potential for adverse visual impacts on land-based populations. On the assumption that wind resources in farther offshore regions would be rated as excellent to outstanding (in accordance with the USDOE classification tables), we further recommend that this candidate area be determined in accordance with the following two basic criteria:

- The landward edge of the wind turbine array should be no closer to the closest shoreline than 25 nautical miles, which approximates the theoretical maximum range of visibility for a 420-foot offshore structure as seen from a point 10 feet above sea level (based on standard visibility charts).

- The depth of water should not exceed 150 feet, which appears to be a conservative estimate of the maximum depths at which wind turbine construction and operation can be

[2] Similar principles regarding the role of alternatives are embodied in the NEPA regulations at 33 CFR Part 320.4, which requires every permit application to evaluate, "where there are unresolved conflicts as to resource use, the practicability of using reasonable alternative locations and methods to accomplish the proposed work or structure."

foreseen to become technically feasible within a span of approximately 10 years. This estimate has been provided to CZM in a recent report prepared by TRC Environmental Corporation[3], an experienced consultant to the energy industry, which notes that depths of up to 45 meters (150 feet) are in the planning stages presently, with one example being the Beatrice Offshore Demonstrator Wind Farm proposed in the waters of the United Kingdom.

For your convenience, a map delineating the offshore area that meets these criteria is enclosed. Please note that we have not attempted to identify any project-specific footprint within this candidate area, insofar as that would require consideration of additional factors beyond those we recommend for broad screening purposes. In addition to mitigating land-based visual impacts, an alternative site in this area might also minimize or address other adverse effects to wildlife, habitat, fisheries, navigation (marine and air), and recreation still under evaluation.

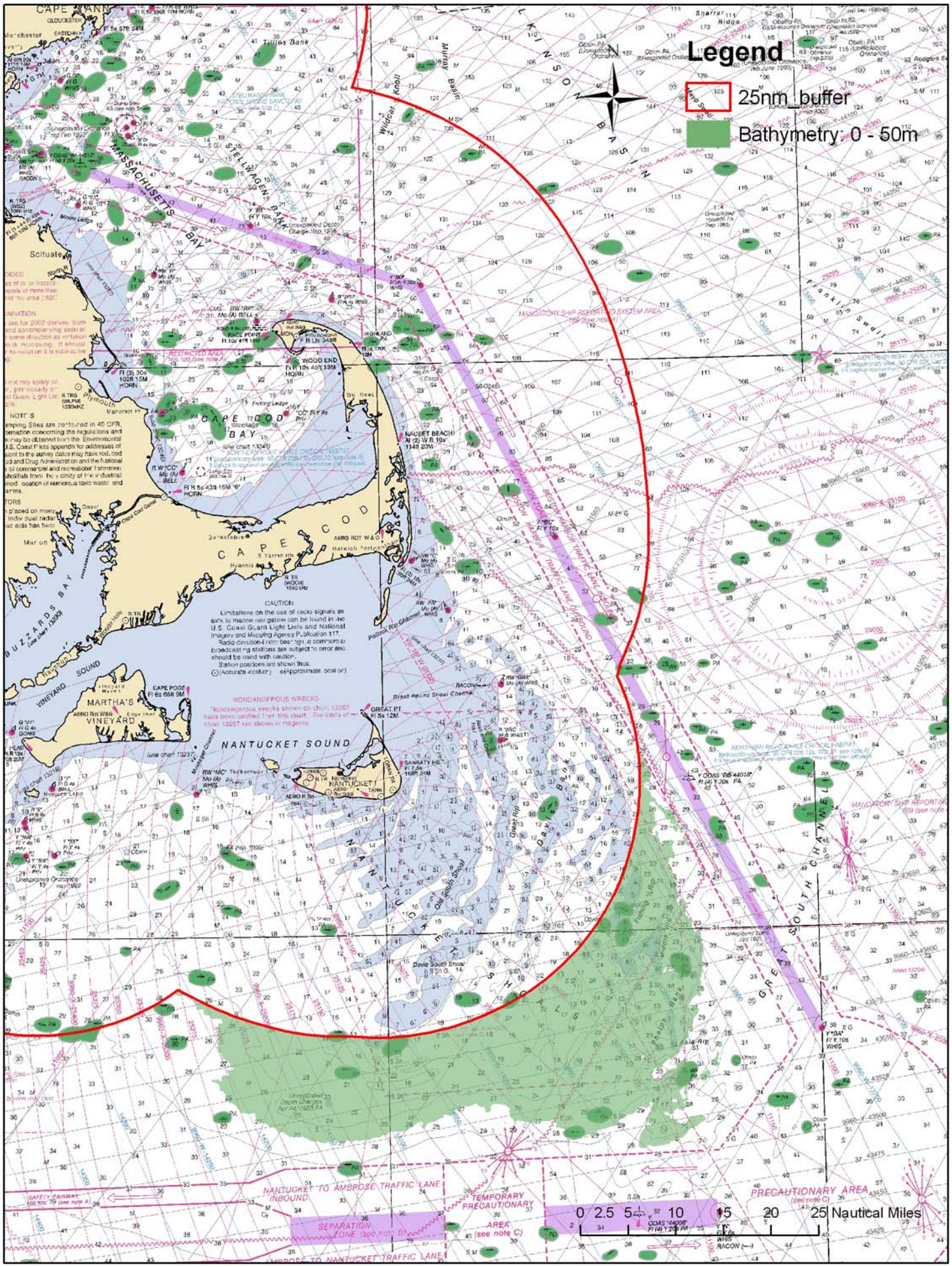
Sincerely,

(for)

Susan Snow-Cotter
Director

SSC{BC-for}/dd/th/kkm/ds

[3] TRC Environmental Corporation, Existing and Potential Ocean-Based Energy Facilities and Associated Infrastructure in Massachusetts, RFR#: ENV 06 CZN 15 (June 26, 2006).


Legend
25nm buffer
Bathymetry: 0 - 50m
0 2.5 5 10 15 20 25 Nautical Miles
CAPE COD BAY
NANTUCKET SOUND
MARTHA'S VINEYARD
NANTUCKET
GREAT SOUTH CHANNEL
NANTUCKET SHOALS
MASSACHUSETTS BAY
STELLWAGEN BANK
BUZZARDS BAY
VINEYARD SOUND
Scituate
Plymouth
Hyannis
Tillies Bank
Davis Bank
Old South Shoal
Great Rip
Pollock Rip Channel
Great Round Shoal Channel
Davis South Shoal
Franklin Swell
Wildcat Knoll
Murray Basin
Mayo Swell
Sharrer Ridge
NANTUCKET TO AMBROSE TRAFFIC LANE INBOUND
SEPARATION ZONE
TEMPORARY PRECAUTIONARY AREA (see note C)
PRECAUTIONARY AREA (see note C)
AMBROSE TO NANTUCKET TRAFFIC LANE
MANDATORY SHIP REPORTING SYSTEM AREA
CAUTION
Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Imagery and Mapping Agency Publication 117.
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
(Accurate location) (Approximate location)
NONDANGEROUS WRECKS
Nondangerous wrecks shown on chart 13267 have been omitted from this chart. The limits of chart 13267 are shown in magenta.