

ROY COOPER
Governor

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CRC-18-07

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MEMORANDUM

TO: Coastal Resources Commission

FROM: Mike Lopazanski

SUBJECT: CRC Coastal Energy Policies

While North Carolina's territorial jurisdiction extends only three miles into the Atlantic Ocean, the state has an interest in activities occurring beyond its jurisdictional boundary since there can be possible impacts to the State's coastal resources and uses. When it comes to offshore energy development, the State has the ability to comment on these projects under several authorities - the federal Outer Continental Shelf Lands Act (OCSLA), the federal Coastal Zone Management Act (CZMA), and the NC CAMA and the administrative rules of the CRC. The OCSLA outlines the provisions under which the Governor comments on proposed energy development activities. The CZMA, CAMA, and CRC Rules provide the authorities for making federal consistency determinations (as described in another memo in your packet, labelled **CRC-18-06**).

The CRC's administrative rules at 15A NCAC 7M .0400 (Coastal Energy Policies) outline information needs and issues of importance in making federal consistency determinations. The CRC Coastal Energy Policies were originally adopted in 1979. In 1996, these rules were updated based on a NC Sea Grant analysis of state ocean policies and recommendations of a DCM Ocean Resources Task Force. The Coastal Energy Policies were once again updated in 2010-2011 based on a DCM Ocean Policy Steering Committee's recommendations. At this time, your Coastal Energy rules were broadened to incorporate all ocean-based energy activities (including wind and other alternative sources).

In response to the BP Deepwater Horizon explosion in 2010, the NC General Assembly passed SL 2010-179 (S836) to address the possibility of such an event occurring in, or having some effect on North Carolina. SL 2010-179 added a new section to CAMA (113A-119.2 Review of Fossil Fuel Facilities), incorporating elements of CRC Coastal Energy Policies into law, specifically 7M .0403 definitions (Coastal Fishing Waters, Discharge, Offshore Fossil Fuel Facility and Oil). The law also incorporates federal requirements associated with Spill Prevention and Response Plans, assessment of alternatives to offshore facilities, and assessment of spills causing violations of water quality standards.

Your 7M .0400 Coastal Energy Policies include the following statements, policies or requirements:

- o Reliable sources of energy serve the public interest.
- o Development of energy resources can serve regional and national interests.
- o Define "major energy facilities" (including wind energy facilities).
- o List information to be included in impact assessments.
- o List sensitive areas to be avoided to the maximum extent practicable.
- o Require avoidance of nesting and spawning periods.
- o Require accessibility to coastal resources including beach compatible sand.
- o Specific information to be included in an Oil Spill Contingency Plan.
- o Specific information relative to wind facility development.
- o Protect scenic and visual qualities of coastal areas.
- o Consider effects on the human environment from noise, vibration and visual impacts.
- o Require restoration of coastal areas when facilities are abandoned.
- o Local governments' ability to plan and site energy facilities.
- o Preserve access to and utilization of public trust resources.
- o Require plans for decommissioning of facilities.

Your 7H .0208(b)(13) Specific Use Standards also include provisions related to Wind Energy development to address:

- o Noise, viewshed and shadow flicker.
- o Bird and bat impacts.
- o Potential use conflicts (fishing, recreation, navigation etc).
- o Impacts to natural/ artificial reefs, archaeological resources and significant biological communities, including high relief hard-bottom areas.
- o Impacts to air navigation routes, military training areas/routes or special airspace.

North Carolina may review the following stages of ocean energy development under the consistency authority:

- Geologic and Geophysical Surveys while not necessarily associated with ocean energy development, the NC Coastal Program has requested and received approval from NOAA to review these as an "unlisted activity."
- Development of BOEM's 5-Year Leasing Program.
- Lease Sale: the "bulk" lease sale that allows companies to bid for particular lease areas (for wind energy projects this includes the Site Assessment Plan).
- Plan of Exploration: the plan of how a company will explore in order to determine if they will develop their lease site.
- Plan of Development and Production: this lays out the plan for producing oil or gas from the lease site (for wind energy projects, this includes the Construction and Operations Plan).
- Decommissioning: (federal consistency review may be required, but not in all cases) there is likely to be a review at this stage, especially if the rig is decommissioned as part of a Rigs-To-Reef Program. However, decommissioning might also be included in the Plan of Development and Production in which case those activities are reviewed/approved under the Plan of Development and Production.

I have attached a brief history of North Carolina's OCS activities as well as a copy of the Coastal Energy Policies and Wind Energy rules. I look forward to discussing the Coastal Energy Policies in more detail at our upcoming meeting in Sunset Beach.

NC OCS History

Mobil 1988

- Proposed to drill in Manteo Lease block 467.
- 1990 found inconsistent by the state due to inadequate info.
- Mobil appealed consistency determination.
- Consistency determination upheld by US DOC.
- Mobil sues fed gov't.
- Congress passes OBPA in 1990.
- Mobil initially loses breach of contract suit, then wins on appeal to US Supreme Court (2000).
- As a result of winning, Mobil relinquishes leases.

NC Ocean Resources Task Force 1993

- Formed by DCM to review a range of ocean issues and provide recommendations to CRC.
- DCM also contracted NC Sea Grant for independent analysis of state ocean policies.
- ORTF recommends amendments to CRC Coastal Energy Policies
 - o Address deficiencies from Mobil experience.
 - o Clarify state's information needs for review of OCS proposals.
 - o Identify specific areas (wildlife refuges, offshore reefs, hard bottom areas, SAV, anadromous fish spawning and nursery areas, sea turtle nesting beaches) as areas to be avoided when locating facilities.
 - o Requires mitigation were impacts to coastal resources cannot be avoided.
 - o Requires restoration of sites when facilities are abandoned.
 - o Includes drill ships and platforms as "major energy facilities".

Chevron 1997

- Sept 1997 Proposes to drill in Manteo lease block 467 or 510.
- Plans exploratory well in 2000.
- POE to be submitted in 1999.
- During the 1998 legislative session, DCM requested \$302,143 for staff, equipment, and studies related to the review of a Chevron POE. DCM received a \$367,023 appropriation:
 - o \$37, 106 Salary and fringe for Technical Position thru 6/30/99
 - o \$59,917 Materials and supplies
 - o \$270,000 Contracts
- In January 1998, MMS sponsored a technical workshop to identify issues and study needs relative to the NC OCS.
- State forms OCS Advisory Committee in 1998.
 - o OCS Technical Review Team -
 - o Focus on missing info from Mobil proposal
 - *Socioeconomic impacts
 - *Economic importance of "The Point" area
 - *Recreational fishery
 - *Laval fish impacts
 - *Hydrocarbon monitoring
- 1997 Gov. Hunt enacts CRC 1996 amendments to Coastal Energy Policies by Executive Order.
- 1998 MMS funds several studies to better define the importance of "The Point" area.
- 1998 President withdraws areas not already under annual Congressional moratorium
- 1999 Gas drops below \$1 per gallon.
- Early 2000 Conoco purchases remaining interest in Manteo Block leases. Lease have since expired with no activity.

SECTION .0400 - COASTAL ENERGY POLICIES

15A NCAC 07M .0401 DECLARATION OF GENERAL POLICY

- (a) It is hereby declared that the general welfare and public interest require that reliable sources of energy be made available to the citizens of North Carolina. It is further declared that the development of energy facilities and energy resources within the state and in offshore waters can serve important regional and national interests. However, unwise development of energy facilities or energy resources can conflict with the recognized and equally important public interest that rests in conserving and protecting the valuable land and water resources of the state and nation, particularly coastal lands and waters. Therefore, in order to balance the public benefits of necessary energy development with the need to 1) protect valuable coastal resources and 2) preserve access to and utilization_of public trust resources, the planning of future uses affecting both land and public trust resources, the exercise of regulatory authority, and determinations of consistency with the North Carolina Coastal Management Program shall assure that the development of energy facilities and energy resources shall avoid significant adverse impact upon vital coastal resources or uses, public trust areas and public access rights.
- (b) Exploration for the development of offshore and Outer Continental Shelf (OCS) energy resources has the potential to affect coastal resources. The Federal Coastal Zone Management Act of 1972, as amended, requires that leasing actions of the federal government be consistent to the maximum extent practicable with the enforceable policies of the federally approved North Carolina Coastal Management Program, and that exploration, development and production activities associated with such leases comply with those enforceable policies. Enforceable policies applicable to OCS activities include all the provisions of this Subchapter as well as any other applicable federally approved components of the North Carolina Coastal Management Program. All permit applications, plans and assessments related to exploration or development of OCS resources and other relevant energy facilities shall contain sufficient information to allow analysis of the consistency of all proposed activities with these Rules.

History Note: Authority G.S. 113A-102(b); 113A-107; 113A-124; Eff. March 1, 1979; Amended Eff. November 3, 1997 pursuant to E.O. 121, James B. Hunt Jr., 1997; Temporary Amendment Eff. July 8, 1999; December 22, 1998; Amended Eff. February 1, 2011; August 1, 2000.

15A NCAC 07M .0402 DEFINITIONS

- (a) "Impact Assessment" is an analysis which discusses the potential environmental, economic and social consequences, including cumulative and secondary impacts, of a proposed major energy facility. At a minimum, the assessment shall include the following and for each of the following shall discuss and assess any effects the project_will have on the use of public trust waters, adjacent lands and on the coastal resources, including the effects caused by activities outside the coastal area:
 - (1) a discussion of the preferred sites for those elements of the project affecting the use of public trust_waters, adjacent lands and the coastal resources:
 - (A) In all cases where the preferred site is located within an area of environmental concern (AEC) or on a barrier island, the applicant shall identify alternative sites considered and present a full discussion [in terms of Subparagraphs (a)(2) through (9) of this Rule] of the reasons why the chosen location was deemed more suitable than another feasible alternate site;
 - (B) If the preferred site is not located within an AEC or on a barrier island, the applicant shall present evidence to support the proposed location over a feasible alternate site;
 - (C) In those cases where an applicant chooses a site previously identified by the state as suitable for such development and the site is outside an AEC or not on a barrier

island, alternative site considerations shall not be required as part of this assessment procedure;

- (2) a discussion of the economic impacts, both positive and negative, of the proposed project. This discussion shall focus on economic impacts to the public, not on matters that are purely internal to the corporate operation of the applicant. No proprietary or confidential economic data shall be required. This discussion shall include analysis of likely adverse impacts upon the ability of any governmental unit to furnish necessary services or facilities as well as other secondary impacts of significance;
- (3) a discussion of potential adverse impacts on coastal resources, including marine and estuarine resources and wildlife resources, as defined in G.S. 113-129;
- (4) a discussion of potential adverse impacts on existing industry and potential limitations on the availability of, and accessibility to, coastal resources, including beach compatible sand and water, for future use or development;
- (5) a discussion of potential significant adverse impacts on recreational uses and scenic, archaeological and historic resources;
- (6) a discussion of potential risks to human life or property;
- (7) a discussion of the impacts on the human environment including noise, vibration and visual impacts;
- (8) a discussion of the procedures and time needed to secure an energy facility in the event of severe weather conditions, such as extreme wind, currents and waves due to northeasters and hurricanes;
- (9) other specific data necessary for the various state and federal agencies and commissions with jurisdiction to evaluate the consistency of the proposed project with relevant standards and guidelines;
- (10) a plan regarding the action to be taken upon the decommissioning and removal of the facility and related structures. The plan shall include an estimate of the cost to decommission and remove the energy facility including a discussion of the financial instrument(s) used to provide for the decommissioning and the removal of the structures that comprise the energy facility. The plan shall also include a proposed description of the condition of the site once the energy facility has been decommissioned and removed.
- (11) a specific demonstration that the proposed project is consistent with relevant local land use plans and with guidelines governing land uses in AECs.

Any impact assessment for a proposed major energy facility shall include a discussion of the items described in Subparagraphs (a)(1) through (11) of this Rule for the associated energy exploration or development activities including all foreseeable assessments of resource potential, including the gathering of scientific data, exploration wells, and any delineation activities that are likely to follow development, production, maintenance and decommissioning.

- (b) "Major energy facilities" are those energy facilities which because of their size, magnitude or scope of impacts, have the potential to affect any land or water use or coastal resource of the coastal area. For purposes of this definition, major energy facilities shall include, but are not necessarily limited to, the following:
 - (1) Any facility capable of refining petroleum products;
 - (2) Any terminals (and associated facilities) capable of handling, processing, or storing petroleum_products or synthetic gas;
 - (3) Any petroleum storage facility that is capable of storing 15 million gallons or more on a single site;
 - (4) Gas, coal, oil or nuclear electric generating facilities 300 MGW or larger;
 - (5) Wind energy facilities, including turbines, accessory buildings, transmission facilities and other equipment necessary for the operation of a wind generating facility that cumulatively,

- with any other wind energy facility whose turbines are located within one-half mile of one another, capable of generating three megawatts or larger;
- (6) Thermal energy generation;
- (7) Major pipelines 12 inches or more in diameter that carry petroleum products or synthetic gas;
- (8) Structures, including drillships and floating platforms and structures relocated from other states or countries, located in offshore waters for the purposes of energy exploration, development or production; and
- (9) Onshore support or staging facilities related to offshore energy exploration, development or production.
- (c) "Offshore waters" are those waters seaward of the state's three-mile offshore jurisdictional boundary in which development activities may impact any land or water use or natural resource of the state's coastal area.

History Note: Authority G.S. 113A-102(b); 113A-107; 113A-124;

Eff. March 1, 1979;

Amended Eff. October 1, 1988;

Amended Eff. November 3, 1997 pursuant to E.O. 121, James B. Hunt Jr., 1997.

Temporary Amendment Eff. July 8, 1999; December 22, 1998;

Amended Eff. March 1, 2011; August 1, 2000.

15A NCAC 07M .0403 POLICY STATEMENTS

- (a) The placement and operations of major energy facilities in or affecting the use of public trust waters and_adjacent lands or coastal resources of North Carolina shall be done in a manner that allows for protection of the environment and local and regional socio-economic goals as set forth in the local land-use plan(s) and state guidelines in 15A NCAC 07H and 07M. The placement and operation of such facilities shall be consistent with state rules and statutory standards and shall comply with local land use plans and with use standards for development within AECs, as set forth in 15A NCAC 07H.
- (b) Proposals, plans and permit applications for major energy facilities to be located in or affecting any land or water use or coastal resource of the North Carolina coastal area shall include a disclosure of all costs and benefits associated with the project. This disclosure shall be prepared at the earliest feasible stage in planning for the project and shall be in the form of an impact assessment as defined in 15A NCAC 07M .0402 prepared by the applicant. If appropriate environmental documents are prepared and reviewed under the provisions of the National Environmental Policy Act (NEPA) or the North Carolina Environmental Policy Act (NCEPA), this review will satisfy the definition of "impact assessment" if all issues listed in this Rule are addressed and these documents are submitted in sufficient time to be used to review state permit applications for the project or subsequent consistency determinations.
- (c) Local governments shall not unreasonably restrict the development of necessary energy facilities; however, they may develop siting measures that will minimize impacts to local resources and to identify potential sites suitable for energy facilities. This section shall not limit the ability of a city or county to plan for and regulate the siting of a wind energy facility in accordance with land-use regulations authorized under Chapter 160A and Chapter 153A of the General Statutes. Wind energy facilities constructed within the planning jurisdiction of a city or county shall_demonstrate compliance with any local ordinance concerning land use and any applicable permitting process.
- (d) Energy facilities that do not require shorefront access shall be sited inland of the shoreline areas. In instances when shoreline portions of the coastal zone area are necessary locations, shoreline siting shall be acceptable only if it can be demonstrated that there are no significant adverse impacts to coastal resources, public trust waters, and the public's right to access and passage will not be unreasonably restricted, and all reasonable mitigating measures have been taken to minimize impacts to AECs. Whether

restrictions or mitigating measures are reasonable shall be determined after consideration of, as appropriate, economics, technical feasibility, aerial extent of impacts, uniqueness of impacted area, and other relevant factors.

- (e) The scenic and visual qualities of coastal areas shall be considered and protected as important public resources. Energy development shall be sited and designed to provide maximum protection of views to and along the ocean, sounds and scenic coastal areas, and to minimize the alteration of natural landforms.
- (f) All energy facilities in or affecting the use of public trust waters and adjacent lands or coastal resource shall be sited and operated so as to comply with the following criteria:
 - (1) Activities that could result in significant adverse impacts on resources of the coastal area, including marine and estuarine resources and wildlife resources, as defined in G.S. 113-129, and significant adverse impacts on the use of public trust waters and adjacent lands in the coastal area shall be avoided unless site specific information demonstrates that each such activity will result in no significant adverse impacts on the use of public trust waters and adjacent lands or coastal resources;
 - (2) For petroleum facilities, necessary data and information required by the state for state permits and federal consistency reviews, pursuant to 15 CFR part 930, shall assess the risks of petroleum release or spills, evaluate possible trajectories, and enumerate response and mitigation measures employing the best available technology to be followed in the event of a release or spill. The information must demonstrate that the potential for petroleum release or spills and ensuing damage to coastal resources has been minimized and shall factor environmental conditions, currents, winds, and inclement events such as northeasters and hurricanes, in trajectory scenarios. For facilities requiring an Oil Spill Response Plan, this information shall be included in such a plan;
 - Oredging, spoil disposal and construction of related structures that are likely to have significant_adverse impacts on the use of public trust waters and adjacent lands or coastal resources shall be minimized, and any unavoidable actions of this sort shall minimize damage to the marine environment;
 - (4) Damage to or interference with existing or traditional uses, such as fishing, navigation and access to public trust areas, and areas with high biological or recreational value such as those listed in Subparagraphs (f)(10)(A) and (H) of this Rule, shall be avoided to the extent that such damage or interference is likely to have significant adverse impacts on the use of public trust waters and adjacent lands or coastal resources;
 - (5) Placement of structures in geologically unstable areas, such as unstable sediments and active faults, shall be avoided to the extent that damage to such structures resulting from geological phenomena is likely to have significant adverse impacts on the use of public trust waters, adjacent_lands or coastal resources;
 - (6) Procedures necessary to secure an energy facility in the event of severe weather conditions, such as extreme wind, currents and waves due to northeasters and hurricanes, shall be initiated sufficiently in advance of the commencement of severe weather to ensure that significant adverse impacts on the use of public trust waters, adjacent lands and coastal resources shall be avoided;
 - (7) Significant adverse impacts on federally listed threatened or endangered species shall be avoided;
 - (8) Major energy facilities are not appropriate uses in fragile or historic areas, and other areas containing environmental or natural resources of more than local significance, as defined in G.S. 113A-113(b)(4), such as parks, recreation areas, wildlife refuges, and historic sites;
 - (9) No energy facilities shall be sited in areas where they pose a threat to the integrity of the facility and surrounding areas, such as ocean front areas with high erosion rates, areas having a history of overwash or inlet formation, and areas in the vicinity of existing inlets;

- (10) In the siting of energy facilities and related structures, significant adverse impacts to the following areas shall be avoided:
 - (A) areas of high biological significance, including offshore reefs, rock outcrops, hard bottom areas, sea turtle nesting beaches, coastal wetlands, primary or secondary nursery areas or spawning areas and essential fish habitat areas of particular concern as designated by the appropriate fisheries management agency, oyster sanctuaries, submerged aquatic vegetation as defined by the Marine Fisheries Commission, colonial bird nesting areas, and migratory bird routes;
 - (B) tracts of maritime forest in excess of 12 contiguous acres and areas identified as eligible for registration or dedication by the North Carolina Natural Heritage Program;
 - (C) crossings of streams, rivers, and lakes except for existing readily-accessible corridors;
 - (D) anchorage areas and port areas;
 - (E) artificial reefs, shipwrecks, and submerged archaeological resources;
 - (F) dump sites;
 - (G) primary dunes and frontal dunes;
 - (H) established recreation or wilderness areas, such as federal, state and local parks, forests, wildlife refuges and other areas used in a like manner;
 - (I) military air space, training or target area and transit lanes;
 - (J) cultural or historic sites of more than local significance; and
 - (K) segments of Wild and Scenic River System.
- (11) Construction of energy facilities shall occur only during periods of lowest biological vulnerability. Nesting and spawning periods shall be avoided; and
- (12) If facilities located in the coastal area are abandoned, habitat of value equal to or greater than that existing prior to construction shall be restored as soon as practicable following abandonment. For abandoned facilities outside the coastal area, habitat in the areas shall be restored to its preconstruction state and functions as soon as practicable if the abandonment of the structure is likely to have significant adverse impacts on the use of public trust waters, adjacent lands or coastal resources.

History Note: Authority G.S. 113A-102(b); 113A-107; 113A-124;

Eff. March 1, 1979;

Amended Eff. April 1, 1992;

Amended Eff. November 3, 1997 pursuant to E.O. 121, James B. Hunt Jr., 1997;

Temporary Amendment Eff. July 8, 1999; December 22, 1998;

Amended Eff. February 1, 2011; August 1, 2000.

15A NCAC 7H .0208(b)(13) Wind Energy Facilities

- (13) "Wind Energy Facilities"
- (A) An applicant for the development and operation of a wind energy facility shall provide:
 - (i) an evaluation of the proposed noise impacts of the turbines to be associated with the proposed facility;
 - (ii) an evaluation of shadow flicker impacts for the turbines to be associated with the proposed facility;
 - (iii) an evaluation of avian and bat impacts of the proposed facility;
 - (iv) an evaluation of viewshed impacts of the proposed facility;
 - (v) an evaluation of potential user conflicts associated with development in the proposed project area; and
 - (vi) a plan regarding the action to be taken upon decommissioning and removal of the wind energy facility. The plan shall include estimates of monetary costs, time frame of removal and the proposed site condition after decommissioning.
 - (B) Development Standards. Development of wind energy facilities shall meet the following_standards in addition to adhering to the requirements outlined in Part (a)(13)(A) of this Rule:
 - (i) Natural reefs, coral outcrops, artificial reefs, seaweed communities, and significant benthic communities identified by the Division of Marine Fisheries or the WRC shall be avoided;
 - (ii) Development shall not be sited on or within 500 meters of significant biological_communities identified by the Division of Marine Fisheries or the WRC; such as high relief hard bottom areas. High relief is defined for this standard as relief greater than or equal to one-half meter per five meters of horizontal distance;
 - (iii) Development shall not cause irreversible damage to documented archeological_resources including shipwrecks identified by the Department of Cultural Resources and unique geological features that require protection from uncontrolled or incompatible development as identified by the Division of Energy, Mineral, and Land Resources pursuant to G.S. 113A-113(b)(4)(g);
 - (iv) Development activities shall be timed to avoid significant adverse impacts on the life cycles of estuarine or ocean resources, or wildlife;
 - (v) Development or operation of a wind energy facility shall not jeopardize the use of the surrounding waters for navigation or for other public trust rights in public trust areas or estuarine waters; and
 - (vi) Development or operation of a wind energy facility shall not interfere with air_navigation routes, air traffic control areas, military training routes or special use_airspace and shall comply with standards adopted by the Federal Aviation_Administration and codified under 14 CFR Part 77.13.
 - (C) Permit Conditions. Permits for wind energy facilities may be conditioned on the applicant amending the proposal to include measures necessary to insure compliance with the standards for development set out in this Rule. Permit conditions may include monitoring to ensure compliance with all applicable development standards; and

(D) Public Benefits Exception. Projects that conflict with these standards, but provide a public benefit, may be approved pursuant to the standards set out in Subparagraph (a)(3) of this Rule.

History Note: Authority G.S. 113A-107(b); 113A-108; 113A-113(b); 113A-124;

Eff. September 9, 1977;

Amended Eff. February 1, 1996; April 1, 1993; February 1, 1993; November 30, 1992;

RRC Objection due to ambiguity Eff. March 21, 1996;

Amended Eff. August 1, 2012(see S.L. 2012-143, s.1.(f)); February 1, 2011; August 1,

2010;

June 1, 2010; August 1, 1998; May 1, 1996.