

**WRITTEN TESTIMONY OF TED DIERS
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**BEFORE THE US HOUSE OF REPRESENTATIVES
COMMITTEE ON NATURAL RESOURCES
SUBCOMMITTEES ON FISHERIES, WILDLIFE AND OCEANS AND ENERGY AND
MINERAL RESOURCES**

APRIL 24, 2007

Representatives Bordallo and Costa, and Members of the Subcommittee on Fisheries, Wildlife and Oceans and Subcommittee on Energy and Mineral Resources; thank you for the opportunity to appear before you today to discuss renewable energy opportunities and issues on the outer continental shelf (OCS).

My name is Ted Diers, I am the program manager of the New Hampshire Coastal Program in the Department of Environmental Services. I am here today on behalf of the Coastal States Organization, where I serve as vice-chair. My comments here today reflect both the New Hampshire experience with renewable energy as well as the experience in many other states. As such, I will identify issues on which there is broad national consensus from coastal zone managers. Before I begin, I request that my written testimony be included in the record.

This testimony will cover three main points:

- 1) States and territories should be partners with the federal government;
- 2) Much more information is needed for thoughtful management of OCS; and
- 3) A new management regime for our nation's marine waters is needed.

First of all, I would like to thank you for taking the issues of ocean energy and global climate change to heart. It is gratifying to see the policies needed to create a climate of change beginning to take shape.

Energy and reducing greenhouse gas emissions are both critical national needs, which make the possibilities of alternative energy so promising. This is a local and state phenomenon as well as a federal one. The State of New Hampshire is taking this issue seriously. At this Spring's town meetings, 157 towns passed resolutions. That resolution is as follows:

“New Hampshire Climate Change Resolution

To see if the town will go on record in support of effective actions by the President and the Congress to address the issue of climate change which is increasingly harmful to the environment and economy of New Hampshire and to the future well being of the people of our town. These actions include:

1. Establishment of a national program requiring reductions of U.S. greenhouse gas emissions while protecting the U.S. economy.
2. Creation of a major national research initiative to foster rapid development of sustainable energy technologies thereby stimulating new jobs and investment.

In addition, our town encourages New Hampshire citizens to work for emission reductions within their communities, and we ask our Selectmen to consider the appointment of a voluntary energy committee to recommend local steps to save energy and reduce emissions.”

This resolution and much of Congress’ work on climate change is focused on reducing greenhouse gases, which is a critical thing to do. I urge you to also include the issues of adaptation and mitigation in your legislative deliberations. Even if all greenhouse gases emissions were stopped tomorrow, the effects of climate change would continue for decades. Coastal states are literally on the front lines of sea level rise and we need more resources and tools to conduct assessments and develop models of the potential future impacts; develop adaptation and response strategies; and increase the resilience of coastal communities.

Concerning greenhouse gas reduction at the state level, Governor John Lynch has endorsed the “25 by 25” initiative – that is 25% of our energy will be produced from renewable sources by 2025. New Hampshire already obtains 14% of its energy from renewable sources. We will accomplish the 25% goal in a variety of ways, some of which are already well underway. Given that our state is 80% forested, wood power is a viable source of energy, and a new facility was just build on our shore. Last week, the Town of Salem planning board approved the first in the state biofuel plant. The first land-based wind power facility is likely to be constructed this year. And, importantly, Renewable Portfolio Standards for the state are working their way through the Legislature. This will require all power producers to include a certain percentage of renewables to make up energy portfolio. Finally, New Hampshire exports about twice as much power as we use so energy is an important commodity to the state.

We may be able to achieve our 25% renewable target within the bounds of our small state, however, it is clear that achieving that sort of goal on the national scale will likely require a significant ocean based component. And, the likely place for that power generation is the last frontier for America – the outer continental shelf.

However, alternative energy development on the OCS needs to be done thoughtfully and in coordination with other programs, activities and resources. The US Ocean Commission report, “An Ocean Blueprint for the 21st Century,” has a number of recommendations that are germane to this subject. I will refer often to that report because, as the report titles itself, it is a blueprint for moving forward.

I hope that this hearing will be the start of an intense process to act on those relevant recommendations. As mentioned above, I will cover three main points as they relate to creation of a comprehensive policy for renewable energy on the OCS.

I. States and territories should be partners with the federal government.

As Congress determines the regulatory structure for alternative energy and other development on the OCS, it is imperative that the states have a meaningful voice in how these decisions are made. I would like to highlight three reasons for a strong partnership between the states and the federal government regarding activities in the OCS.

First, what happens on the OCS can impact state resources. As you are all well aware the ocean is a dynamic place where species can travel over long distances and the currents and tides can carry things hundreds of miles, often coming to rest onshore in a state. Given the dynamic nature of the ocean and coast, we strongly recommend that Congress consider all potential impacts and not just impacts to an individual site. With the knowledge of their coastal waters, the states can aid the federal government in ensuring that all potential impacts are taken into account.

A second reason for ensuring a strong state partnership is that eventually the coastal states will have to address the impacts of infrastructure that will deliver the energy onshore. If the federal government sites facilities on the OCS without having considered the entire scope of all infrastructure then unintended consequences could result, such as the applicant encountering difficulties in obtaining the necessary state permits even with their federal permits in hand. An example from New Hampshire illustrated how infrastructure issues can be quite complicated. The recent application of the LNG facility in Quoddy Bay in downeast Maine may provide needed natural gas to New England. However, Quoddy Bay is a long way from the people who need the gas down in Massachusetts and Connecticut. Thus, the gas must be piped across four states, including New Hampshire. So, additional pipeline capacity with all of its accompanying impacts will be installed through our coastal communities. Any alternative energy development on the OCS should require that the land-based component be included in the federal permit and that state approval is necessary for portions of the project in the state or potentially affecting state resources.

Third, we believe that affected states and local communities should be involved and have a voice in these decisions. The coastal states do not want to see a repeat of the provisions in the Energy Policy Act of 2005, where state sovereignty was preempted by the Federal Energy Regulatory Commission (FERC). In the Energy Policy Act, FERC was given “exclusive authority” to approve or deny permits for the siting of LNG facilities. Congress also included a saving clause for states’ authority of the Coastal Zone Management Act, which should have required that FERC be consistent with state enforceable policy in the coastal zone. Unfortunately, federal courts are reading the law to say states cannot explicitly place conditions on the siting of LNG facilities. Under this interpretation, local communities’ voices and opinions concerning the siting of LNG facilities in their neighborhoods have largely been silenced. The states believe that local communities deserve to be heard on these issues. The Governors recently reiterated their support of maintaining state sovereignty in decisions regarding energy siting when they passed their Ocean and Coastal Policy (NR-10) at their Winter meeting in February of this year. I would request that this policy be incorporated into the record.

II. Much more information is needed for thoughtful management of the OCS.

When I go to work in the morning, and an issue comes up regarding the siting of any type of facility on the land, I can sit down at my computer and have immediate access to dozens of map products, hundreds of environmental monitoring datasets, and detailed photography and visualization tools. That allows for informed decision-making. As soon as a similar issue leaves the shoreline, those dozens of map products are reduced to a handful, the datasets can be

measured in dozens, and I have precious few ways to visualize offshore resources. Last Tuesday, the Federal Energy Regulatory Commission (FERC) approved two preliminary permits for tidal energy turbines in New Hampshire waters. There is great interest in tidal energy in the Piscataqua River, which has some of the fastest currents of any river in America. However, we lack much of the necessary information to make a thoughtful decision, especially as it pertains to natural resources and how they are impacted by new technology. We do not know if these turbines are a largely benign source of consistent, dependable energy, or have the potential to create a puree out of migrating fish. While this is not an OCS application, the point is that we do not have the information for project siting adjacent to shore; the difficulties 100 miles offshore are much greater.

The key components of the information needs for OCS management include – mapping, observation, technology and assessment. These components are discussed below:

Mapping

There is a strong need for proactive thinking and resolution of spatial planning, especially as it pertains to jurisdictions. I note that the Minerals Management Service (MMS) has started a marine cadastre initiative as a requirement under the Energy Policy Act of 2005. It is defined as "a system to enable the boundaries of marine rights and interests, to be recorded, spatially managed, and physically defined in relationship to the boundaries of other neighboring or underlying rights and interests", with the goal of the "Identification of OCS locations of Federally permitted activities; obstructions to navigation; submerged cultural resources; undersea cables; offshore aquaculture projects; and any area designated for the purpose of safety, national security, environmental protection, or conservation and management of living marine resources." See <http://www.mms.gov/ld/PDFs/MappingInitiative.pdf>. This is critical and should be given the resources to be completed quickly.

As Dr. Robert Ballard, the deep sea explorer, has stated many times, "We have better maps of Mars than we do of the Pacific Ocean." As renewable energy projects in the OCS begin to take shape, we need a great deal more information to inform the siting and decision-making process.

The Minerals Management Service has been mapping the OCS for many decades. However, that mapping has been focused on the extraction of minerals and fuel products. In addition, the intensity and accuracy of mapping is greatest in those areas which currently have production. We need planning that is not solely focused on one type of natural resource.

There are numerous national efforts to conduct mapping of our oceans. One such effort is the Gulf of Maine Mapping Initiative (GOMMI), a U.S.-Canadian partnership of government and nongovernment organizations to conduct comprehensive seafloor imaging, mapping, and biological and geological surveys. GOMMI grew out of a mapping workshop in October 2001 that was sponsored by the Gulf of Maine Council on the Marine Environment and the National Oceanic and Atmospheric Administration. The Gulf of Maine Council endorses GOMMI, and the GOMMI Steering Committee is a subcommittee of the Council. Currently, GOMMI is working to secure funding and conduct a mapping program of areas in the Gulf of Maine not already mapped by multibeam sonar surveys. The key data products that will emerge from GOMMI are habitat maps that interpret biological and geological data to show types of sediment

and animals in a particular area. These data products have already resulted in some victories, such as the successful routing of an underwater cable to avoid key aquatic habitats off the coast of Massachusetts – a result that is good for the environment and good for commerce. And it all started with good information

Observation

Mapping refers to data about things that change relatively slowly or not at all. Observation refers to the condition of those things and about changes over time. As you are well aware, the science of observation has and is changing rapidly. From satellites to buoys to volunteer water quality monitoring, our ability to monitor the environment is improving rapidly. One such area is the Integrated Ocean Observation System (IOOS). IOOS, once completed, will be a “system of systems” that routinely and continuously provides quality controlled data and information on current and future states of the oceans and Great Lakes from the global scale of ocean basins to local scales of coastal ecosystems. It is a multidisciplinary system designed to provide data in forms and at rates required by decision makers to address seven societal goals, which are:

1. Improve predictions of climate change and weather and their effects on coastal communities and the nation;
2. Improve the safety and efficiency of maritime operations;
3. Mitigate the effects of natural hazards more effectively;
4. Improve national and homeland security;
5. Reduce public health risks;
6. Protect and restore healthy coastal ecosystems more effectively; and
7. Enable the sustained use of ocean and coastal resources. (Source: www.ocean.us)

The real point of the IOOS is not to float a bunch of buoys around in the ocean, rather it is to make sense of all the mapping and observation data that is collected from a variety of sources. I am a user of IOOS data, as delivered by the Gulf of Maine Ocean Observing System (GOMOOS). Last week as our coast was beaten by a significant Nor'easter, my first stop to look at the storm was the GOMOOS website to look at the current ocean conditions. What the buoys showed were 30 foot waves. GOMOOS makes sense of that data relative to other data, such as barometric pressure, which was as intense as in a hurricane. Based on that information, we knew that this storm was going to do a number of our shoreline. And it did.

Technology

One of the reasons we are all gathered here today is because technology is progressing faster than policy. The point is not to slow down the technology but to create policy that can keep up with it.

We need more information on new and changing technologies. Wind is a good example. Most of you are probably familiar with the proposed Cape Wind project in the waters south of Massachusetts. In the more than 5 years it has taken for Cape Wind to get through the state regulatory process, technology advancements have allowed them to reduce the number of towers, shrink the height and increase energy output. Much of the controversy around this project is because the towers are to be located in relatively shallow water. Getting information about new technologies is also tricky, as many of the new ocean-based renewable energy technologies are

either in preliminary development or are continually being refined. We are told that deep water wind technology is still years away, but how many years? Will we have the time to create a better regulatory regime before those applications come streaming in?

Finally, there are technologies that we can barely imagine that could end up in the ocean. It should be clear from the rapid changes in the past decade that future ocean energy technologies may look very different than the structures we are discussing today. And, the regulatory regime needs to be adaptable to that uncertainty.

Assessment

Mapping, observation and understanding technology is meaningless without translating that information into understandable assessments of ocean resources. One key method for that is Ecosystem Based Management (EBM), a management approach that:

- Integrates ecological, social, and economic goals and recognizes humans as key components of the ecosystem.
- Considers ecological- not just political- boundaries.
- Addresses the complexity of natural processes and social systems and uses an adaptive management approach in the face of resulting uncertainties.
- Engages multiple stakeholders in a collaborative process to define problems and find solutions.
- Incorporates understanding of ecosystem processes and how ecosystems respond to environmental perturbations.
- Is concerned with the ecological integrity of coastal-marine systems and the sustainability of both human and ecological systems. (Source: www.ebmtools.org)

Ecosystem Based Management should be a component of any ocean management regime. However, it requires excellent information and analysis to make it work. One suggestion for moving the ideals of EBM forward was made in the US Ocean Commission report.

Recommendation 5-5 from that report calls on the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (EPA), working with other appropriate federal and regional entities, to coordinate the development of regional ecosystem assessments. These assessments would be invaluable for comprehensive OCS resource planning.

Good information will allow us to be proactive and get ahead of the curve, instead of simply reacting to a permit when it comes in the door. I urge to you to take these recommendations under serious consideration as you ponder the future of the OCS. Good mapping, observational data and assessment is absolutely critical to the long-term health of our managed ocean ecosystems.

III. A new management regime for the OCS is needed.

As your Subcommittees take up the issue of OCS development, I would ask that you also take a step back and fit the program into a broader framework. As the US Ocean Commission recognized in its final report, a coordinated, integrated management regime for our oceans is

sorely needed. (See Recommendations 6-1 and 6-2), and alternative energy needs to be part of that regime (Recommendation 24-5). Currently, the uses of our ocean are all regulated separately, fisheries in one agency, energy in another, sediment management in another, shipping and maritime activities in another. No government agency or body is charged with looking across the stovepipes of programs to see how all of the different uses of our oceans fit together. This needs to change.

To improve coordination and management of the nation's ocean resources, the US Ocean Commission recommended a framework for regional ocean governance (See Chapter 5). The states have taken up the challenge and are leading the way in trying to improve the coordination of government activities in our marine waters. Don't take our word for it; The Joint Ocean Commission Initiative's Report Card issued in January of 2007 gave the states and regional efforts the highest grade: an A minus.

Since the release of the Commission report, the Governors of the five Gulf of Mexico states have released a plan to improve the health and resilience of the Gulf coast, The three West Coast Governors of California, Oregon and Washington, have signed the West Coast Governors Agreement for Ocean Health and plan to have an action plan completed by the end of this year. The Great Lakes have developed the Great Lakes Regional Collaboration Strategy, which involved hundred of stakeholders from around the region. In my home region, the Northeast Governors have created the Northeast Regional Ocean Council. NROC will work to harmonize sub-regional ocean initiatives, identify shared priorities, promote regional solutions and to raise ocean awareness. NROC identified four core ocean management areas for a regional management:

- Ocean energy resource planning and management
- Ocean and coastal ecosystem health
- Maritime security
- Coastal hazard response and resiliency

New Hampshire is hosting a Regional Ocean Congress in May. At that meeting we will be to define our priorities within each those core management areas. Similarly the West Coast Governor's Agreement also names energy siting and renewable development as one of their seven priorities. The regional councils are learning from each other as they move forward.

The states believe that federal legislation would be helpful to advance these regional efforts. Such legislation should codify these regional efforts as coordinating bodies that are supported with federal resources. The coastal states have specific recommendations concerning principles and provisions that we believe should be included in regional legislation and many of them are outlined in the National Governors Association's Ocean and Coastal Policy I referenced earlier. NOAA should be one of the lead federal agencies in all of these regional governance efforts.

I would like to end by focusing on one of the recommendations from the US Ocean Commission Report. Recommendation 24-5 states that Congress, with input from the National Ocean Council, should enact legislation providing for the comprehensive management of offshore renewable energy development as part of a coordinated offshore management regime. Specifically, this legislation should:

- be based on the premise that the oceans are a public resource.
- streamline the process for licensing, leasing, and permitting renewable energy facilities in U.S. waters.
- subsume existing statutes, such as the Ocean Thermal Energy Conversion Act.
- ensure that the public receives a fair return from the use of the resource and that development rights are allocated through an open, transparent process that considers state, local, and public concerns.

And if I may add one more bullet to that list, to involve states and regional interests as full partners in the discussion. While this ends my testimony, I hope it will be a starting point for your deliberation.