

U.S. House of Representatives
Committee on Transportation and Infrastructure
Washington, DC 20515

February 15, 2006

The Honorable Charles W. Boustany, Jr.
U.S. House of Representatives
1117 Longworth House Office Building
Washington, DC 20515

Dear Representative Boustany:

In the near future, the conferees on the Coast Guard Reauthorization bill will finalize this legislation. I want to bring to your attention an important amendment which requires that the Coast Guard develop regulations to ensure that offshore wind energy facilities do not pose a threat to marine safety, navigation, national defense and national security. This amendment requires the Coast Guard to set comprehensive navigational standards, including the setting of a 1.5 nautical mile buffer zone between shipping and ferry lanes and wind turbine facilities. The Coast Guard is the appropriate agency to deal with the very real navigational safety issues that come into play as offshore wind energy facilities are developed.

Until last year's energy bill was enacted, no Federal standards existed for the establishment and siting of offshore wind energy facilities. These facilities were required to have permits under Section 10 of the Rivers and Harbors Act, but those permits are designed for the review of docks, piers, and bridges not for large energy projects. The energy bill established a new review and royalty process within the Interior Department for non-petroleum related energy projects that occur on the outer continental shelf. The Department of Interior (DOI) is now in the process of developing regulations to carry out this new review process and fill the current regulatory void. However, while DOI has direct experience with permitting oil and gas facilities in the offshore environment, navigational issues have been limited; offshore wind plants have a much larger and more distributed footprint posing many more navigational issues and hazards, making the establishment of standards to maximize safety absolutely critical. The amendment I have proposed in conference perfects that process by assuring a full navigational safety review of such projects by the Coast Guard.

In the last few months it has come to our attention that significant navigational safety problems come into play with regard to offshore wind energy facilities. Studies released in the UK in 2004 and 2005 have shown that wind turbines interfere with navigational radar. That interference exists out to distances of 10 nautical miles and there is a zone of extreme caution, according to the studies, extending outward up to 1.5 nautical miles to 2 nautical

miles from the peripheries of a single facility. While the Coast Guard Reauthorization bill was well under way when the latest information was released, this bill is the most appropriate place to deal with the issue; and staff and members on both sides of the aisle and in both chambers have looked closely at the issue. We must deal with the issue now in order to appropriately and safely advance the development of offshore wind. It has been suggested that this amendment would discourage the development of offshore wind energy. Nothing could be farther from the truth. Objective standards can only make it easier for investors and developers to make investment decisions. Developers and investors, as well as the American public, deserve to know the rules in advance. The public needs to be assured that its safety is being protected.

Here is what the amendment does. It requires the Coast Guard to promulgate regulations within six months to ensure that offshore wind energy facilities do not pose a threat to marine safety, navigation, national defense, and national security. It requires the Coast Guard to establish navigational standards for the siting of offshore wind facilities and prohibit the establishment of any offshore wind energy facilities within 1.5 nautical miles of a shipping channel or commonly used route for a licensed or regulated ferry system. No offshore wind energy project could be approved during the six month promulgation period.

No one debates that America must encourage the development of alternative energy sources like offshore wind. But we need to set standards for such facilities before we move forward. This amendment, together with last year's energy bill, provides the necessary blueprint.

Offshore wind facilities should not be sited in places that can put human life in jeopardy. The U.S. is fortunate that the United Kingdom has extensively studied the effects of these facilities on navigational radar. Those comprehensive and objective studies reveal that offshore wind facilities seriously disrupt basic navigation, increasing collision and pollution risk. Although radar interference exists out to distances of 10 nautical miles, the zone of extreme caution has been designated as extending outward up to 1.5 nautical miles (9,000 feet) to 2 nautical miles from the peripheries of a single facility.

The United Kingdom at the end of 2005 promulgated a comprehensive risk assessment regime and set minimum standards for distances between offshore wind facilities and well traveled shipping and ferry routes. This regime requires a comprehensive risk assessment based on a history of historical accident and spill histories, marine activity surveys, weather as well as models of human failings and machine failures. Even prior to the publication of the final rules, the United Kingdom denied the application of a Thames wind project in part because of the 1.5 nautical mile concern. America is fortunate in that we can set down the rules before the first mistake is made.

The development of a robust offshore wind energy industry will come as a result of the permit regulations being developed in the Department of the Interior. Developers will move quickly to have their projects permitted as soon as these regulations are finalized. Two projects have been singled out for preliminary attention and it is illustrative to mention them in the context of this amendment. The two projects in question are polar opposites in terms

of their impact on their environs and are an instructive case history of why this amendment is so necessary.

The first project, off the shores of Long Island, is the Long Island Power Authority (LIPA) project. It is being developed with the support of the local community and is located far enough away from established shipping and ferry channels (1.65 nautical miles) that it would not have to change its footprint to fall within this amendment's guidelines. To date, this project fits well in its environment and is strongly supported.

The polar opposite proposal is the Cape Wind Project, proposed in the heart of Nantucket Sound in Massachusetts. This project is extremely controversial and has significant local opposition. It is opposed by most of the top elected officials in Massachusetts on both sides of the political spectrum. It is opposed by the Governor, the Attorney General, the senior U.S. Senator, and the local Congressional Representative, the majority of the adjacent state legislatures and many of the local officials in the area. It is opposed by the tourism industry and by virtually every facet of the commercial fishing industry, the recreational boating industry, the airports and the regional transportation authorities and ferry lines as well as by significant numbers of the local citizenry. In large part it is opposed because there was not a regulatory regime in place to set the objective standards that were needed to assure that it was properly sited.

Directly in the center of Nantucket Sound is a "donut hole" of federal property. The rest of the Sound is state territory and the state protects it as a marine sanctuary. In the absence of a comprehensive regulatory regime, the Cape Wind developers exploited an antiquated 1899 Rivers and Harbors law which is mostly intended for the siting of buoys and docks-not massive wind energy projects. They sited the Cape Wind project in the donut hole where it could (until recently) be built with few guidelines and no royalties or payments to the federal government. In fact, the project would be profitable because of the existence of some \$28 million in federal tax credits and some \$40 million in state subsidies that would be available to the Cape Wind investors. Local opposition had been based on a variety of critical concerns including aesthetic, environmental, economic, tourism and public safety issues. From my perspective the most critical problem with the proposed siting of the Cape Wind project is the navigational safety issue. That problem is certainly the purview of this committee and perfectly illustrates the need for this amendment and the comprehensive navigational safety standards which this timely amendment mandates. Cape Wind is indeed the model for study so let me discuss some of the navigational safety issues concerning Cape Wind.

The proposed Cape Wind project is a massive undertaking in the heart of Nantucket Sound. It will include 130 towers-each reaching up to 417 feet in height-and spread out over 24 square miles. The span of the turbine blades would approximate the length of a football field. This project would be located in a body of water that is shrouded in fog and significant amount of the time while ships and ferries and recreational boats are plying its waters. It is located in the heart of Horseshoe Shoal which is a rich fishing area and provides some sixty percent of the fish that commercial fishermen catch in the area. Unlike the much-discussed Danish wind farm which is located in water so shallow that boating collision accidents are

impossible, the Cape Wind project is located in water deep enough that ships can enter into the area and do so regularly.

Ferry service is a major industry between Cape Cod, Martha's Vineyard and Nantucket. The Steamship Authority, which provides some of this service and strongly opposes the project on navigational grounds, says that it provides over 14,000 trips a year in Nantucket Sound, transporting three million passengers a year and up to 600,000 cars and trucks. These routes come within a few hundred yards from proposed wind turbines on all sides of the projects. As the Authority said in a recent letter, "...a complex of this size will at some point contribute to a serious marine accident...[and] will have an adverse effect on our ability to safely navigate the area." Ferry captains point to the frequent need to go off course or unavoidable maneuvers off course in the wake of gales and northeasters which often affect the area. As presently proposed, the Cape Wind proposal provides in some places only a 1200-foot separation. A sixty second reaction time combined with a 1200-foot separation is grossly deficient - threatening loss of life, injury and pollution.

In addition to ferry service, shipping channels and freighters ply the waters supplying Nantucket and Martha's Vineyard with fuel and goods. Other ships pass through Nantucket Sound. For example, the Gray Gull services Nantucket and holds 1.3 million gallons of oil. It services the island every three or four weeks, a Gray Gull collision with a wind turbine would be an ecological disaster in Nantucket Sound.

The proposed Cape Wind project also includes a transformer substation that will be a half-acre in area and 100 feet high and will store 40,000 gallons of lubricating oil. Finally, given the sizeable nature of commercial and recreational uses of the area, marine search and rescue is often needed in the area. According to Bill Rypka, a retired US Coast Guard pilot, "accidents can and will happen, and the wind plant will increase both their frequency and the potential for loss of life."

As my amendment suggests I am also concerned about national security, defense and hurricane related issues. The conferees should be aware that Congress already has acknowledged that the placement of wind plants in certain sensitive locations could potentially undermine our national security functions. Included in the FY 2006 National Defense Authorization Act (Public Law 109-163) is a provision (Section 358) directing the secretary of Defense to prepare a detailed report on the effects on the operations of military radar installations in close proximity to wind plants.

This DOD report, which will be submitted to Congress in mid-2006, was prompted in large part by exhaustive studies into offshore wind plants conducted in recent years by the United Kingdom's Ministry of Defense. Notably, a significant number of proposed offshore wind farms in the United Kingdom have been delayed, or cancelled altogether, as a result of possible interference with air traffic control and defense surveillance radar systems. Certainly, the DOD's review of similar impacts on our systems should be no less thorough.

Finally, the Conferees should note that there has been no meaningful assessment of the catastrophic impacts that a major hurricane could have on offshore wind farms, and the


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recent experiences with Hurricanes Katrina, Rita and Wilma have taught us that any sort of infrastructure is potentially vulnerable.

Nothing shows the need for my navigational safety standards amendment better than the proposed Cape Wind Project. I know others oppose the project entirely on a wide variety of economic, environmental, and tourism standards. I am not necessarily opposed to the project, but I am convinced we need a set of objective navigational safety standards that will assure that wind energy projects are properly sited with regard to navigational safety and national security. This is the bill in which we can accomplish that task. This is the time for us to undertake this work. If we do not act now, the shortened legislative session will make it difficult if not impossible to revisit this issue. Delay will be a setback for the development of wind energy and a setback for the development of our navigational safety standards that can safeguard human life.

I strongly urge you to adopt this amendment.

Sincerely,



DON YOUNG
Chairman