

May 21, 2013

House Committee on Science, Space, and Technology Subcommittees on Oversight and Energy 2321 Rayburn House Office Building Washington, DC 20515-6310

Dear Oversight Chairman Broun and Energy Chairman Lummis:

I am writing to respond to the additional questions posed by Members of the Committee on Science, Space, and Technology provided to me in your letter of May 8, 2013. I appreciate the opportunity to address your questions as well as to comment on the letter submitted by Cape Wind.

#### Question 1

"Your written testimony states that the \$4.3 billion in state and federal incentives that the Cape Wind project could receive would only create 50 permanent jobs at a cost of \$86 million per job. The project originally planned to use a local company for construction, but now appears it would use a foreign company. What do you know about how and why that decision was made? Are there American Companies that could be competitive contenders for those contracts?"

There are absolutely American companies that could be competitive contenders for these contracts, which would be a far better use of taxpayer dollars than sending jobs overseas at taxpayer expense. Mass Tank of Middleboro, Massachusetts, serves as a perfect example of creating a local supply chain. However, Cape Wind recently turned its back on an agreement with Mass Tank to manufacture the bases of its wind turbines to instead go overseas. In a January 28, 2013, letter from Mass Tank to the Department of Energy, President Carl Horstmann wrote that after signing a letter of intent with Cape Wind, "Mass Tank worked tirelessly for the next two years reaching our Cape Wind required milestones"... but that Cape Wind had "recently affirmed that Mass Tank will not be used on its project. It's our understanding that Cape Wind apparently intends to deal directly with a foreign business, bypassing Mass Tank completely and out-sourcing the work to a foreign, rather than a local business." (EXHIBIT 1)

Further, in a recent press article, Stephen Lynch, Executive Vice President of Mass Tank, stated, "Cape Wind basically is going to be built by foreign suppliers. If they had gone with us, it would have supported about 150

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permanent jobs. We don't think taxpayers should have to finance the project if it's not going to create jobs in the U.S." (EXHIBIT 2)

Cape Wind has a long history of making promises that it does not keep. The latest situation with Mass Tank is a classic bait and switch – moving jobs promised to a local MA company overseas. Mass Tank was used by Cape Wind to garner public and political support under the guise of creating local jobs. However, the reality is that if Cape Wind is allowed to move forward, ratepayers and taxpayers would be subsidizing jobs in Europe, not here.

## Question 2

"The town of Falmouth, MA has been in the news for its attempts to take down two wind turbines that were put into operation recently. Complaints about these windmills cover the gamut of reasons ranging from noise to illness, and the residents of the town were so desperate that they went as far as considering a tax increase on themselves to dismantle the turbines. Understanding that the Cape Wind project is an offshore proposal, what lessons can be learned from the pain and suffering of the Falmouth experience?"

The experience in Falmouth clearly shows that locating turbines in appropriate sites and understanding the true impacts of these projects, both onshore and offshore, is critical. Wind projects are not benign in all locations, and because they require a large footprint to generate a fairly small amount of power, they need to be sited appropriately in areas where impacts can be minimized. Furthermore, the Falmouth example shows the extreme financial burden to the public of a poorly sited project.

Cape Wind's proposed offshore site in Nantucket Sound is another poor choice from a public interest standpoint. It would pose risks to public safety, significant impacts to sacred tribal lands and historic properties, and adverse environmental effects. Located in an area with over 200 days of fog per year and quickly changing weather, Cape Wind would create significant navigational hazards for thousands of commercial and recreational vessels and pose an unacceptable hazard to aviation safety. It would cause both marine and aviation radar interference and be dangerously close to shipping lanes and Air Traffic Control operations. Cape Wind would desecrate sacred tribal land and harm traditional religious and cultural practices for the two local tribes. It would also cause permanent and pervasive damage to the rich history of the Sound. Cape Wind would also threaten the environment, including several species of endangered and protected birds and marine mammals as well as Essential Fish Habitat. The Cape Wind project, with its transformer substation holding over 40,000 gallons of oil, would introduce the chance of a devastating oil spill into Nantucket Sound. Finally, Cape Wind would burden the public with increased electricity costs as well as federal and state incentives. These impacts are described in further detail in my written testimony of April 16, 2013.

To avoid the many conflicts and risks posed by Cape Wind in its proposed location just off the coastline in Nantucket Sound, the Alliance and the project's multiple opponents have long advocated relocation to a less conflicted alternative site. Extensive Wind Energy Areas (WEAs) have been identified by the Department of

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Interior along the east coast from Massachusetts to North Carolina, confirming the current availability of numerous alternative sites all along the East Coast. In fact, Energy Management, Inc., Cape Wind's private developer, has now formally expressed interest in two new lease areas offshore in the joint Massachusetts/ Rhode Island WEA. While relocation does not address the issues related to the exorbitant financial cost of the project to the public, it would resolve the many tribal, environmental, and public safety conflicts inherent in Cape Wind's present siting and avoid another situation such as the smaller scale one in Falmouth.

## Question 3

"During the spring of 2011, more than 200 right whales (about half the species' known population) were spotted off Cape Cod. While that was a record number of sightings, two years later, the federal government appears to have dismissed those events and given Cape Wind a pass on the issue of threatened or endangered species. A March 29, 2013, Federal Register notice states: "The presence of right whales in Nantucket Sound is not common and NMFS (National Marine Fisheries Service) believes that the possibility of a survey vessel striking a right whale is unlikely."

a. Have you noticed a trend to the extent to which wind projects have to comply – or not comply – with federal environmental laws?

Yes. Under the current Administration, wind developers have received preferential treatment with regard to compliance with certain environmental laws. This trend applies across the board to virtually any environmental law, but the problem can be best illustrated by how the Administration has given wind developers a free pass at complying with the Migratory Bird Treaty Act and has refrained from prosecuting wind developers for bird deaths caused by wind turbines.

The Associated Press (AP) conducted an investigation on the Administration's enforcement activities related to prosecuting wind energy projects and oil companies over bird deaths. (EXHIBIT 3) What the AP uncovered is that the Administration has never prosecuted, or even fined, a wind energy company for the death of birds due to a project's operation. This is in stark contrast to the Administration's track record on the same issue with oil companies, as discussed below. According to the investigation, more than 573,000 birds are killed annually by the nation's wind energy projects. The AP interviewed a federal official, who confirmed that wind projects have killed more than four dozen golden eagles since 2009 in the State of Wyoming alone. Wyoming also recently approved the Chokecherry and Sierra Madre site for what is slated to be the largest wind project in the U.S. that will consist of 1,000 turbines. It is predicted this project will kill 46 to 64 eagles annually.

Another example of this preferential treatment is illustrated by the U.S. Fish and Wildlife Service's recent decision to exempt Terra-Gen Power's wind energy project in the Tehachapi Mountains, Alta East, from criminal prosecution for the accidental death, or "take" under the Migratory Bird Treaty Act, of a California

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condor during the project's 30 year operating span. This is the first time the Service has ever agreed to allow a developer to take a California condor and not face legal consequences.

The Administration has also taken great strides to amend the Service's regulations, which govern the incidental and non-purposeful take of eagles, to accommodate wind and other renewable energy developers. Last year, on April 13, 2012, the Fish and Wildlife Service issued a proposed rule to revise its current regulations to extend the term for programmatic permits for the incidental take of eagles under the Bald and Golden Eagle Protection Act from 5 years to 30 years. *See* Eagle Permits; Changes in the Regulations Governing Eagle Permitting (77 Fed. Reg. 22,267, Docket No. FWS-R90MB-2011-0054) Programmatic permits authorize take that is recurring over the long-term, is not caused solely by indirect effects, and is unavoidable even after implementation of advanced conservation practices. According to the Service, input from proponents of renewable energy projects and review of programmatic eagle permit applications led the Service to amend its regulations to better accommodate the timeframe for development of renewable energy projects. Specifically, the Service concluded that programmatic permits for the incidental take of eagles should be extended from 5 years to 30 years to enable permittees to secure funding, lease agreements, and other assurances to advance their projects.

On the other hand, oil, electric, and other traditional energy companies have been highly scrutinized by the Administration for bird deaths and have been held to a different and higher standard. In 2009, Exxon Mobil pled guilty to charges by the Government for killing 85 birds in five states, and agreed to pay \$600,000. BP was also fined \$100 million for bird deaths as a result of the 2010 Horizon oil spill, and PacifiCorp paid more than \$10.5 million in 2009 for charges by the Government that its project operations resulted in the electrocution of 232 eagles along power lines and at substations. In the summer of 2011, the U.S. Department of Justice, at the direction of the Fish and Wildlife service, brought criminal indictments against three oil companies operating in the Bakken shale oil field of North Dakota, Brigham Oil & Gas, Newfield Production, and Continental Resources, for violations of the Migratory Bird Treaty Act for the accidental deaths of birds that drowned in the oil companies' reserve pits. Most recently, in December of 2012, SM Energy Company pled guilty to misdemeanor charges brought by the Government also for violations of the Migratory Bird Treaty Act due to deaths of migratory birds in the company's oil pits. The company agreed to pay a total of \$30,000 in fines and spend an additional \$300,000 on a compliance plan to avoid similar bird takes in the future.

Of course, perhaps the best example of this lax, and unlawful, approach to applying environmental, and even public safety laws, is demonstrated by the Cape Wind project. In my previous testimony, I listed numerous examples of how the Obama Administration has gone to extraordinary lengths to approve Cape Wind and to do so under a time frame that meets the developer's financial goals and, in some cases, the political goals of Governor Patrick - who has made Cape Wind a "poster child" issue in his campaigns.

There are far too many examples of pro-Cape Wind favoritism to describe here, but I will offer two examples.

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First, in April 2009, Secretary Salazar published final regulations governing offshore renewable energy. One of the key requirements is that an offshore wind developer must submit so-called "G&G" surveys of geohazards, archaeological resources, benthic communities, and seafloor sediments as part of an application for Construction and Operations Plan (COP) approval. A COP is the key decision necessary to build. Department of the Interior staff repeatedly criticized Cape Wind's application because it did not include G&G survey information, explaining how important it was. Cape Wind protested that such surveys were too expensive and that financing was not yet available. Department of the Interior policy officials then over-ruled the staff and gave Cape Wind a waiver of the requirement. In doing so, Interior did not even meet the criteria for a waiver. To this date, long after Cape Wind lease issuance and COP approval, Cape Wind still has not completed the surveys.

Another example concerns the location of the staging area for Cape Wind. In all federal environmental documents, Cape Wind says it will stage the project out of Quonset, Rhode Island. In October, 2010, however, Governor Patrick announced as part of his campaign that New Bedford would be the staging location for Cape Wind and other offshore wind projects. Cape Wind joined in that announcement, again proclaiming local jobs. Repeatedly since then, the Governor's Office and Cape Wind have heralded the coming economic boom to New Bedford, but nothing has been done to change the federal environmental reviews.

Cape Wind quickly realized that the Quonset/New Bedford "bait and switch" had been discovered and would require supplemental environmental studies. Cape Wind appealed to the highest political levels of Interior to not require supplemental NEPA review with a public comment period on the COP, which is exactly what happened. In addition, Cape Wind forewarned New Bedford officials that they could not confirm the plan to switch from Quonset because additional environmental review would be required.

### b. Are wind projects treated differently than energy projects involving fossil fuels?"

Yes. As evidenced in the previous section addressing the Administration's treatment of wind companies compared to oil and gas companies with regard to environmental compliance, wind projects are favored. This appears to be true in the context of federal financial incentives for wind projects versus oil and gas projects, as well. As I noted in my prior testimony to the Committee, the current Administration has provided a number of financial incentives for the offshore wind industry. In particular, the Administration made available billions in federal funding under the American Recovery and Reinvestment Act of 2009 for innovative energy technologies, which included offshore wind, but excluded oil and gas projects. Additionally, the President signed into law the American Taxpayer Relief Act in December 2012, which extended the Investment Tax Credit and the Production Tax Credit for the wind industry. The Act extended the credit expiration deadline for wind energy facilities through 2013 and revised the eligibility requirements for these projects to only require that an eligible project begin construction by the end of the year rather than be placed in service. This change was made to accommodate the lengthy construction schedule for many wind energy projects.

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Administration did not provide similar incentives to the oil and gas industry or for more traditional energy companies.

1. Another example is found in the approach to lease issuance. For offshore oil and gas development, a rigorous process is applied requiring a full Environmental Impact Statement (EIS) at the lease sale stage, followed by additional National Environmental Policy Act (NEPA) review at the seismic survey, explanatory drilling, and project development stages. An EIS offer is required during this post-lease sale issuance stage, and detailed Environmental Assessments (EA) are at a minimum required.

For offshore wind, Interior seeks to avoid competitive lease sales whenever possible. It only requires an EA for lease issuance, deferring the EIS to the COP stage, after a property right has already been established for the offshore wind developer's lease. In addition, as discussed above for Cape Wind, the survey step was completely skipped prior to COP approval. When it comes to offshore renewable energy, and especially Cape Wind, almost any environmental law is fair game for an exemption, shortcut, or result-oriented decision that gives short shift to public involvement.

### Question 4

Please find attached a letter and fact sheet from a representative of the Cape Wind project addressing portions of your testimony. Do you have any comments in response to the attached documents?"

The letter from Cape Wind to the Members of the Committee is self-serving, rife with inaccuracies and most notable for the issues on which Mr. Duffy has remained silent.

#### NIMBY claims

In an attempt to trivialize opposition to its project, Cape Wind has repeatedly referred to the Alliance to Protect Nantucket Sound ("Alliance") as a NIMBY group funded by Bill Koch and formed solely to benefit waterfront homeowners. The fact is that the Alliance has over 30,000 supporters from all demographic segments including small business owners, tribal members, commercial and recreational fishermen, chambers of commerce, and others. The attached editorial by Peter Kenney from South Coast Today on May 14, 2013, accurately describes the membership and origin of the Alliance as a grassroots organization. (EXHIBIT 4)

"The Alliance was formed in 2001 by a small group of local residents who believed that Cape Wind was the wrong project in the wrong place. The Alliance is not now and never was an anti-wind effort, it is anti-Cape Wind. Bill Koch was not involved in the Alliance until 2005. For four years, the Alliance lived hand-to-mouth, scraping by on small donations from more than 25,000 individuals and local business people. Local musicians provided entertainment, there was occasionally wine and cheese as ordinary people gathered from time to time to commiserate about the Cape Wind plan and build an opposition. Not once did I see a coal magnate or oil baron at any of these affairs. I did see local commercial fisherman, wildlife protection advocates, ferry operators, pilots, working people whose houses do not have views of the Sound and many people whose careers have been dedicated to environmental protection and reform, people whose careers are marked by

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successful efforts to stop polluters. Colorful children's beach buckets were passed around to catch the contributions of these ordinary people, dollar bills and five- and ten-dollar bills."

The Alliance continues to be privately funded by local residents and receives donations from approximately 5000 supporters as well as substantial donations of pro bono assistance. The following statements provide an idea of the true sentiments motivating our donors to support our mission to protect Nantucket Sound:

- \$15 donor "I'm elderly and on a limited income, but I gladly offer this small amount because I do not want to leave this earth with the sound desecrated."
- \$25 donor "You will never know how much we appreciate all that SOS [Save Our Sound or the Alliance to Protect Nantucket Sound] has done to protect our sound! Thank you - thank you- thank you!"
- \$50 donor "I feel that we in the Alliance and other concerned citizens will be remembered for generations for working to site wind turbines intelligently and for standing up strongly against the corporate greed and short-sightedness of groups like Cape Wind."

The following note came from a supporter after Secretary Salazar's announcement to approve Cape Wind in 2010: "Thank you so much for all you folks are doing to save one of the most beautiful pieces of water in the world. When the news came down the other day, I was devastated; frankly, I took it much harder than expected. It is unfathomable to me that a group of investors can simply swoop in lay claim to a national treasure. This is the greatest theft in Massachusetts history. Cape Wind has devastated not only the Native Americans for whom this is hallowed ground, and not only the hundreds of fishermen who will lose the fertile Horseshoe Shoal, but also the untold number of people who hold this pristine place close. Cape Wind will leave broken hearts, shattered dreams and tarnished memories in its wake if the project is allowed to proceed. We must fight this project to the very end, but not just for the sake of us; for most of my life, I've had the privilege of enjoying the same Nantucket Sound that my parents and grandparents enjoyed. I've seen and felt the magic of these waters. It has been an inspiration, a healer, a source of strength, and one of the great loves of my life. But what about my daughter? Will she grow up in the shadow of an industrial monstrosity? Will she ever have the opportunity to glide over the Sound and look out towards Muskeget and the Vineyard with nothing but unblemished horizon in front of her? It breaks my heart to think that future generations will never know or feel the same magic. I will fight with you, every step of the way. I'm proud to stand alongside you."

Finally, the Alliance, with its 30,000 supporters, is not alone in filing lawsuits against Cape Wind. Numerous other organizations have previously filed legal challenges, have currently pending legal challenges or have filed an amicus brief against Cape Wind. This clearly shows the strength and breadth of opposition to this expensive and controversial project. These parties include:

- Associated Industries of MA, representing the 6000 largest employers in MA
- New England Power Generators Association

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- TransCanada Power Marketing, which owns and operates land based wind projects among its businesses
- The Wampanoag Tribe of Gayhead/Aquinnah
- The Town of Barnstable
- Public Employees for Environmental Responsibility
- Cetacean Society International
- Three Bays Preservation
- Californians for Renewable Energy
- Lower Laguna Madre Foundation
- National Trust for Historic Preservation

## Air and Maritime Safety

In his April 24, 2013, letter, Mr. Duffy dismisses legitimate concerns about public safety. While the US Coast Guard, the Federal Aviation Administration and the Department of Defense have all been involved in the review of Cape Wind and its impacts to public safety, Mr. Duffy is incorrect in stating that these agencies have rejected all of our public safety concerns. In addition, external investigations and Court decisions have shown that these agencies did not sufficiently or appropriately address safety concerns.

For example, the January 2010 report by Interior's Office of Inspector General (OIG) revealed that the USCG "indicated that the timeline imposed by Minerals Management Services (MMS) pressed them into acting atypically, restricting their ability to be as thorough as they would have liked in conducting such a review." (*See* Alliance Testimony, Exhibit 15, dated April, 16, 2013) The OIG report also stated that days before the Final Environmental Impact Statement (FEIS) was published "MMS learned that the FAA had concluded a study that determined that the project would result in a "Presumed Hazard" to aircraft, yet MMS published the final EIS without acknowledging this new FAA finding, and instead allowed the final EIS to be published with FAA's outdated finding of "no adverse effect.""

Furthermore, in a January 28, 2010, cover letter from OIG, Acting IG Mary Kendal confirmed that public safety concerns were not adequately addressed for marine and aviation stakeholders. (EXHIBIT 5) "In addition to the concerns expressed by cooperating federal agencies regarding MMS' timeline for the final EIS, our investigation also determined that several transportation entities located in the Cape Wind Project area, including all three local airports and the two major ferry operators, feel their concerns and comments about the impact of the project to the navigational safety of the area were not adequately considered by MMS. "

Documents revealed through the Administrative Record (AR) in court proceedings and Freedom of Information Act (FOIA) requests show that both USCG and FAA expressed safety concerns. USCG personnel continually expressed serious safety concerns regarding the proposed Cape Wind project, including the following documents from the AR and included in the Alliance's written testimony of April 16, 2013:

- "Someone will run into one of these eventually" and "will impede SAR [Search and Rescue] efforts" January 5, 2002
- "one additional point that the AIRSTA made, was that they often cut across that area at low altitude when returning from patrols ...the wind farm will certainly impact this practice." January 29, 2003
- With respect to SAR: "the probability of detecting these targets will be decreased due to the presence of the wind farm." January 29, 2003
- In 2006, Captain Nash wrote "The ferry routes that skirt three sides of Horseshoe shoals would likely become more congested, as fishermen and recreational boaters seek to avoid running into a tower"
- On December 8, 2008, Kovatch wrote to Leblanc, "Won't we have to consider this an un-navigable area? All those towers so close together over such a large area. I would not want to go into that field. Of course, fishermen will because fish and wildlife will flock to the towers underwater so where the fish go the boats will go, which means the CG will have to go but a helicopter couldn't fly into there to hoist a guy from a sinking boat so you'd have to wait for a small boat which would take much longer. Seems like a pretty big impact to me."
- Captain Bushy wrote to Captain Perry on January 3, 2009, "During the TSC presentation, the presenter himself, presumably after numerous viewings of the radar images, became disoriented when trying to ascertain a small boat within the cluster of wind turbines. I could not help but infer from this that the inexperienced radar observer would not be able to discern moving radar echoes within the wind farm." Also "The only safe way to mitigate danger is to impose a safety zone separating the mainstream waterways from the wind farm." A January 13, 2009, document showed that USCG concurred with Captain Bushy's comment that radar echoes near the wind farm "could create confusion by the inexperienced radar observer and would present dangers to navigation not present today in Nantucket Sound"
- A January 13, 2009, document stated, "From the Gladdening and Hearn website (builder of hi-speed ferries), the stopping distance while at full speed (30 knots) is 2 to 2.5 times the length of the vessel. The Grey Lady is 106' long, so it should be able to stop within 250 feet or so. But should it execute a "crash stop", I imagine passengers would be injured."
- March 23, 2009, Beck wrote to Colt, "The most significant conclusion is that it is going to take a lot of effort to figure out which targets are real and which are false echoes..."

Furthermore, the attached report by the McGowan Group entitled "A Comparative Analysis of the Development and Application of Marine Navigation Safety and Marine Environmental Protection Criteria for Offshore Renewable Energy Installations (OREI) dated March 11, 2013, shows that navigational safety standards being used elsewhere were not applied to Cape Wind in Nantucket Sound. The report states "the Nantucket Sound Standards provide far less protection for navigation safety than the comparative measures established or proposed for every other OREI location." (EXHIBIT 6)

Numerous FOIA responses express safety concerns by Cape TRACON (Terminal Radar Control) as well as FAA personnel involved in the review of Cape Wind. Cape TRACON's concerns are documented over several years, beginning in 2006 and continuing through 2010.

- A December 29, 2006, email from Cape TRACON to FAA personnel outlines detailed concerns regarding Cape Wind including impacts on low altitude flights, variation in traffic, IFR [Instrument Flight Rules] and VFR [Visual Flight Rules] impacts, and congestion.
- A May 4, 2009, email again from Cape TRACON to FAA includes a detailed list of impacts at FMH and Cape TRACON including approaches, search and rescue, loss of targets, and clutter.
- A July 17, 2009, draft memo of Cape Wind proposal options states that ASR 8 "clutter is a major distraction to ATC [Air Traffic Control]. ATC flight following for non-transponder equipped aircraft would be compromised over WT. Approximately 12% of traffic do not have transponders."
- On February 24, 2010, When asked by FAA personnel, "When your office reviewed the playback demo from the test that was conducted to simulate the wind turbines, what was AT's opinion as to whether the wind turbines were going to be an issue? AT responded on March 2, 2010, "While not the official AT response, I offer the following: Based on what we observed in the playback test, the radar reflections of the simulated wind turbines would exceed an acceptable level and will be an issue."
- A February 10, 2011, mitigation strategy memo regarding the FMH Reimbursable agreement acknowledges that, "Establishment of a wind turbine project that consist of many individual wind turbines that are closely spaced presents performance issues for FAA radar... The effects will exist as unwanted clutter...unwanted moving targets..."
- An October 31, 2011, email states, "I don't think air traffic could keep a low flying search-only VFR from running into a wind turbine."

Mr. Duffy also states in his letter that Cape Air and Hy-Line Cruises both support the Project. What he omits is that Island Air, another smaller regional carrier, as well as all three local airports, oppose the project with the Barnstable Airport appealing both the 2010 and 2012 FAA determinations. In addition, Steamship Authority, the larger of the two local ferry lines, remains strongly opposed to Cape Wind, and until recently, Hy-Line Cruises was on record expressing grave safety concerns, referring to Cape Wind as an "accident waiting to happen." It is unclear why the Hy-Line has changed its position after long and consistent opposition other than plans to enter into an ecotourism business partnership with Cape Wind.

Mr. Duffy also incorrectly states that the Alliance "mischaracterized a Court of Appeals decision regarding the FAA's third positive determination, which simply remanded the decision back to the FAA for clarification of its decision-making, resulting in its fourth positive determination."

It is unclear what mischaracterization to which Mr. Duffy refers. The Court revoked the FAA's ruling specifically stating in its decision "The petitions for review are accordingly granted, and the FAA's determinations are *Vacated and Remanded*. The Court also faulted the FAA for several factors including: "fail[ing] to supply any analysis of the record evidence concerning the wind farm's potentially adverse effects on VFR operations"; "cut[ting] the process short ... and never calculate[ing] the risks in the first place"; as well

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as "catapult[ing] over the real issues and the analytical work required." (*See* Alliance Testimony, Exhibit 20, dated April 16, 2013)

## PAVE PAWS Military Radar:

Mr. Duffy claims that the "allegation that the Project would interfere with the Pave Paws radar system is both irresponsible and patently false." Not only does Mr. Duffy misrepresent our position, but he offers only outdated evidence to support his position, failing to mention that his source of information is from 2004, and ignores ensuing studies by the Department of Defense as a result of the 2006 National Defense Authorization Act. The Alliance's written testimony raises issues and questions that would be prudent to address if in fact there is a potential issue to military defense.

Mr. Duffy's sole and undocumented source appears to refer to a 2004 letter by the US Air Force. In 2004, Air Force Space Command was asked to investigate if the proposed Cape Wind project would interfere with PAVE PAWS radar operations. The study determined the proposed turbines were too far below the radar's main beam to have any effect.

However, two years later, the 2006 National Defense Authorization Act required the Department of Defense (DOD) to prepare a report both on the effect of wind-turbine interference on military readiness and on possible mitigation measures. The report entitled "The Effect of Windmill Farms on Military Readiness" concluded that there was indeed significant impact from wind turbines, stating that "wind farms located within radar line of sight of air defense radar have the potential to degrade the ability of that radar to perform its intended function." The 2006 DOD report also stated that "The analysis that had been performed for the early warning radar at Cape Cod Air Force Station was overly simplified and technically flawed. A more comprehensive analysis followed by development of appropriate offset criteria for fixed-site missile early warning radars should be performed on an expedited basis." Thus, Mr. Duffy's source does not support his position.

In 2007, an additional study was conducted entitled "Wind Turbine Analysis for Cape Cod Air Force Station Early Warning Radar and Beale Air Force Base Upgraded Early Warning Radar." This study confirmed that "utility class wind farms could have a significant impact on radars, including missile defense early warning radars" and recommended a wind project offset zone of 25 km from missile defense radar systems. As acknowledged by the Alliance, the Cape Wind project is outside of this offset zone at 26 km away. However, because of this extremely small margin of error, the Alliance remains concerned that the study's recommended offset zone of 25 km is too close for comfort. It is also unclear from the 2007 study whether the current height of the turbines at 440 feet was used or an outdated lower height was improperly used, potentially affecting the radius of the safe offset zone for the PAVE PAWS early warning radar system. It would be wise to verify.

Finally, my written testimony of April 16, 2013, provides several quotes from FAA emails in 2010 which also express concerns that the Cape Wind turbines may pose threats to national security. It is unclear whether the proper agencies addressed this issue especially given the scenario that aircraft operating without a

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transponder could remain unseen. Again if there is any question of impacts or accuracy, it would be prudent to revisit the issue to ensure there are in fact no adverse impacts to military defense posed by Cape Wind's proposed 130 wind turbines.

## Electric Bill Impact/Lower Electric Market Prices:

Mr. Duffy's criticism of the Alliance's arguments is not supported by fact and is only partially explained. He essentially presents a cost-benefit analysis without the cost portion. He also refers to a MA Energy Facilities Sighting Board (EFSB) decision that was made <u>prior</u> to Cape Wind's contracts with National Grid and NStar to sell its power at huge price premiums. Cape Wind has long misrepresented the high cost of Cape Wind to the public, claiming that this expensive project would reduce costs. The following shows a screenshot of Cape Wind's web site in 2006 claiming lower electricity costs for the public.



A 2010 screen shot now shows a change to claiming the project would help stabilize electricity costs. The fact of the matter is that Cape Wind would increase costs as represented clearly in both the NStar and National Grid Power Purchase Agreements (PPAs).



Mr. Duffy's argument of reduced prices relies on a price suppression effect from a reduction of market clearing prices. However, the above market premiums to MA ratepayers represented in the PPAs already

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account for the price suppression effect and still result in billions of additional costs for MA ratepayers. In the direct testimony of Mr. James Daly, Director of Electric and Gas Energy Supply for NStar during the NStar contract proceedings held by the Ma Department of Public Utilities, Mr. Daly acknowledges this. He states: "The costs for energy, capacity and RECs under the contract are higher than the Levitan forecast of market prices for energy, capacity and RECs during all years of the contract. The contract's nominal above-market cost over the life of the contract is estimated to be \$940 million should the project qualify for investment tax credits and \$967 million should the project not qualify for any tax credits." Further Mr. Daly states that "The Levitan Forecast includes the Cape Wind project as part of the resource mix so it includes the price suppression effect of Cape Wind. " (EXHIBIT 7)

Thus, even with Cape Wind's price suppression effect, MA ratepayers would pay nearly \$1 billion more, for just the 27.5% of its power under contract to NStar. For 100% of Cape Wind's power, the above market cost – including price suppression - would approach \$4 Billion. In addition, because these estimates were performed prior to recent downward adjustments to electricity prices in MA due to falling natural gas prices, the above market cost could very well be even higher.

## Undue Influence

Mr. Duffy claims that the OIG report concluded "that no agency was affected by outside pressures." But the OIG report confirms that the federal review of Cape Wind was a flawed process and agencies were unduly pressured into reaching findings without a full and unrushed review of the dangers the project poses to commerce, aviation and marine safety and travel. In addition, Secretary Salazar issued a written response to the report acknowledging an opportunity to improve the administrative process in the future. The OIG report states that both the US Fish and Wildlife Service and the USCG "indicated that the timeline imposed by MMS pressed them into acting atypically, restricting their ability to be as thorough as they would have liked in conducting such a review." Also on January 28, 2010, Acting IG Mary Kendal wrote, "In addition to the concerns expressed by cooperating federal agencies regarding MMS ' timeline for the final EIS, our investigation also determined that several transportation entities located in the Cape Wind Project area, including all three local airports and the two major ferry operators, feel their concerns and comments about the impact of the project to the navigational safety of the area were not adequately considered by MMS. "

In the report, the EPA, the federal agency responsible for performing the overall review of the FEIS, expresses frustration that the timeline that was imposed by Interior "unnecessarily limited the amount of interagency coordination needed for such a large, complex project."

There is also ample evidence to show that the section 106 review under the National Historic Preservation Act was rushed, started far too late, and was terminated abruptly. After Interior Secretary Salazar terminated historic consultation—a procedure rarely invoked—the ACHP issued formal comments to deny or change the location of Cape Wind and criticized Interior for its belated and inadequate consideration of impacts to cultural resources. The ACHP recommended that Interior not approve the Project, stating that "The indirect and direct effects of the Project on the collection of historic properties would be pervasive, destructive, and, in the instance of seabed construction, permanent. By their nature and scope, the effects cannot be adequately mitigated at the proposed site." This recommendation was ignored. Because of the late start of the section 106 process, the historic consultation process was not even addressed in the OIG report.

## May 21, 2013 Page **14** of **16**

Finally, the OIG report was conducted based on activity which occurred during the Bush Administration, which took no final agency actions on the Cape Wind project. It is only under the Obama Administration that final agency actions were taken including:

- The Record of Decision issued in April of 2012 shortly after the section 106 process was terminated and recommendations of the ACHP to relocate or deny the project were ignore by Interior
- The issuance of the Cape Wind lease in November of 2010
- The approval of the Construction and Operations plan in February of 2011
- The issuance of three separate permits within days by the National Marine Fisheries Service which issued its revised biological opinion under the Endangered Species Act, dismissing impacts on right whales on December 20, 2010, followed by the Army Corps of Engineers permit on January 5, 2011, and the EPA Clean Air Act Permit on January 7, 2011

There has been no review by the OIG of federal agency actions taken under the Obama Administration.

## Further delays for additional study:

Mr. Duffy claims that the Alliance's call for an independent assessment is driven solely by the desire to further delay the project. The reality is that there is clear evidence that the review of Cape Wind has been rushed, shortcuts have been taken, and agencies have been under pressure to approve Cape Wind. An independent study would be a prudent course of action and one that would pose no additional delay. As previously mentioned, no independent study has been done for decisions made under the Obama Administration. Furthermore, Cape Wind is not in a position to begin construction regardless of any independent study, i.e. a study would not delay the project. Cape Wind cannot currently begin construction because it is required to:

- conduct additional surveys of Nantucket Sound to assess the benthic environment and the presence of cultural artifacts
- conduct preconstruction baseline avian and bat monitoring studies
- obtain an Incidental Harassment Authorization for construction from the National Marine Fisheries Service, among other permits required by the Construction and Operations Plan

It would be prudent to assess agency review and final agency actions taken under the Obama Administration. For example, under the Obama Administration, Interior ignored its own offshore renewable energy regulations in approving Cape Wind's Construction and Operating Plan (COP). It gave Cape Wind an exemption from conducting required surveys of the Nantucket Sound seabed prior to COP approval as required in the Outer Continental Shelf regulations solely in deference to Cape Wind's economics and the pursuit of federal subsidies.

Mr. Duffy also states that the Alliance is doing everything in its power to delay the lawsuits filed in federal Court. However, the Alliance court actions to date have been taken to secure important documents and communications that have been inappropriately withheld in the Administrative Record. Finally, since the date of Mr. Duffy's letter, the Court has issued its order setting a briefing schedule for the lawsuits with initial briefs due very quickly - June 14, 2013.

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#### Mr. Michaels

Mr. Duffy claims that Mr. Michaels' comments are not relevant to offshore wind due to wind production patterns specific to offshore wind. However, no wind speed data has been made available to the public based on the measurements taken from Cape Wind's meteorological tower in Nantucket Sound. Thus, there is no ability to validate Mr. Duffy's claims of offshore wind production producing the strongest winds during peak demand periods.

#### **Missing rebuttals**

Mr. Duffy's letter is notable for being silent on many of the issues raised during my testimony. Specifically, Mr. Duffy has not rebutted the crux of my testimony as it relates to the massive duplication of federal and state subsidies available to Cape Wind. In fact, public financial support is so high, that it exceeds not only the 65% ratio of public support to capital costs shown for the Shepherd's Flat project, but actually exceeds the projected capital cost of Cape Wind. \$4.3B of potential state and federal monies would be equivalent to 167% of Cape Wind's \$2.6B project cost. This level of support equates to a staggering public cost of \$86 million per job.

In addition, because of increased electricity costs for MA businesses, thousands of jobs would actually be lost by forcing consumers and businesses to buy above-market power. Not only would Cape Wind cause net job losses due to higher electricity costs, many of the claimed green jobs would be overseas. The Associated Industries of Massachusetts (AIM), the state's largest nonprofit nonpartisan association of MA employers, in its letter to Department of energy (DOE) on April 24, 2013, states, "Surprisingly, despite the billions in ratepayer money that will be committed to this project, there is absolutely no guarantee that any of the money will be used to purchase products from suppliers in Massachusetts, New England, or even the United States. Cape Wind has already cancelled an agreement with a Massachusetts business (*See* January 28, 2013 letter from Mass Tank Sales Corp, Middleboro, MA, Carl C. Horstmann, President, to Mr. Todd Stribley, U.S. Department of Energy). While there may be some construction jobs related to the project (although there is no guarantee that Massachusetts businesses will be awarded the contracts), dollar for dollar these jobs will come at a high price in reduced employment in other areas of the state - primarily from companies adjusting to the most significant rate increase in recent memory, perhaps ever." (EXHIBIT 8)

In the currently constrained fiscal environment and with goals of increasing renewable energy production, it is outrageous to allocate billions of dollars of state and federal money to one single project that poses so many conflicts to local stakeholders. Further detail and a breakdown are provided in the Alliance's written testimony of April 16, 2013.

Mr. Duffy has also not objected to the Alliance's testimony which stated that a DOE loan guarantee for Cape Wind would pose great taxpayer risk. First of all, numerous lawsuits face the federal government for its flawed reviews of Cape Wind. Secondly, Cape Wind's power is not fully sold and there is no guarantee Cape Wind will have a buyer for the unsold balance of its output. More importantly, under the terms of the power purchase contracts Cape Wind has secured with the aid of the state Administration, if Cape Wind does not commence physical construction by December 31, 2015, both contracts will be terminated leaving Cape Wind with no buyers for its power. In addition, new information since the issuance of the FEIS and EA's which DOE

May 21, 2013 Page **16** of **16** 

has adopted requires DOE to do additional review of Cape Wind prior to making any final loan guarantee decision. The Alliance has written five separate letters to DOE documenting this new information. (EXHIBIT 9)

Mr. Duffy also fails to mention that he has previously stated that Cape Wind does not need a loan guarantee in order to obtain financing. In pre-filed testimony pertaining to the NStar-Cape Wind contract, Mr. Duffy admitted "Based on our conversations with the financing community, Cape Wind is confident that the PPAs with National Grid and NSTAR will be sufficient to finance the Project, while Cape Wind continues to pursue sales of the remaining output." AIM cited to this in its letter to DOE on April 24, 2013.

Approval of this controversial and problematic proposal would be a terrible legacy. It would devastate the regional economy and environment, threaten public safety, put taxpayers at risk, and saddle MA ratepayers with billions of dollars in additional electricity costs to primarily create manufacturing jobs overseas. It would also further undermine the long-term credibility of the offshore renewable energy program. To the Alliance's knowledge, DOE has still not provided documents responsive to the Committee's request.

#### **Conclusion**

The letter from Cape Wind to the Members of the Committee is self-serving, full of inaccuracies, and intended to trivialize and distract from the very legitimate concerns opposition has consistently expressed. NIMBY labels used by Cape Wind are nothing more than an attempt to marginalize and minimize the breadth of individuals and groups who oppose this controversial project.

Nothing in Mr. Duffy's letter effectively refutes the fact that Cape Wind would saddle MA ratepayers with excessive electricity costs, result in net job losses, and burden taxpayers with an inordinate amount of cost through overlapping federal and state financial incentives.

The Alliance respectfully reiterates its request to the Committee to instruct the Government Accountability Office to conduct an independent assessment of Cape Wind and assess if the federal agencies involved in decision making had predetermined the outcome and applied overly lenient standards. We also request that the Committee require that no federal monies or guarantees be committed to Cape Wind until this independent report is complete and pending lawsuits are resolved to minimize potential taxpayer risk. Thank you.

Sincerely,

And Parker

Audra Parker President and CEO

## Exhibit 1



Mass Tank Sales Corp. 29 Abbey Lane Middleboro, MA 02346

January 28, 2013

Sent Via: Fed Ex Overnight Tracking #864147056084

Mr. Todd Stribley U.S. Department of Energy DOE Loan Programs Office, LP-10 1000 Independence Ave, SW Washington, DC 20585

RE: EIS 0470: U.S. Department of Energy Loan Guarantee Energy Project on the Outer Continental Shelf of Nantucket Sound

Dear Mr. Stribley:

This letter is Mass Tank's official statement of record to be submitted for the DOE Loan program review period with regards to the Cape Wind Loan Application. Cape Wind is not committed to achieve the claims it submitted in its loan application to the DOE. We urge the DOE to fully examine Cape Wind's assertions in the application specifically that "Cape Wind's development is crucial to off-shore wind development in the United States. The project's success is crucial to the development of the off-shore wind industry in the United States, and helping the country meet clean energy goals. In addition to revitalizing underutilized regional port facilities, the development of the first project will facilitate the construction of the infrastructure, job training and manufacturing support (i.e." supply chain") necessary for the US to reach the full potential off-shore wind entails." Cape Wind also submitted in the application that "Cape Wind is expected to create between 600-1000 green jobs in the US." This last reference is directly related to Mass Tank's intended participation in the project.

It was Mass Tank's intention to help fulfill those claims through performance of the foundation contract. Mass Tank was prepared to establish a new manufacturing facility at an underutilized regional facility (Fore River Ship Yard, Quincy MA). We planned to upgrade the facility, retrofit with state of the art clean tech machinery, and hire 150-300 permanent clean tech manufacturing jobs.

Mass Tank is based in Middleboro, MA and is an eighty year old manufacture and an international leader in the steel tank industry. Our steel tanks range from single wall tanks to large complex field erected projects. Mass Tank's customer service representatives and engineers work alongside clients to provide leadership and guidance from a project's inception to well beyond installation. This longstanding commitment to quality and service has made Mass Tank an international industry leader in tank manufacturing. Mass Tank is a team committed to achieving continuous growth by providing quality products and services with integrity and value which meets our customers' needs and exceeds their expectations.

As President of Mass Tank, I have been closely following the development of the Cape Wind off-shore wind project. As the manufacturer of steel tanks the building of monopiles and transition pieces is an obvious progression to our core business and is evidenced by some of the foundation fabricators in Europe whose origins were in tank fabrication. We analyzed the design, and utilizing our experience in steel fabrication, we formulated a price to manufacture the monopiles and transition pieces. After learning that our pricing structure was competitive we were contacted by the Cape Wind team and met with Jim Gordon, President of Cape Wind and Craig Olmstead, Vice-President of Cape Wind. They visited our facility and we discussed the positives of building the monopiles here in Massachusetts. After much due diligence and achieving Cape Wind's requirements, on October 10, 2010 we received a "Letter of Intent" from Cape Wind to manufacture the monopiles and transition pieces here in Massachusetts. I stood with Jim Gordon, Tim Mack of EEW, Ian Bowles, Energy and Environmental Affairs Secretary Commonwealth of Massachusetts and Governor Patrick on October 13, 2010 at the Federal Wind Test Blade Center in Charlestown MA announcing the "Letter of Intent" to provide the foundations for this project. This helped in the designation of "first mover status" and creation of 150-300 plus potential permanent clean tech manufacturing jobs in MA. The State of Massachusetts, the offices of Congressman Frank, Keating, and Markey have all been very supportive and firmly behind the benefits of this large construction project. In addition, I have been contacted at various times by federal and state officials asking me to confirm the positive job consequences of the Cape Wind Project and to make public statements to that effect. Cape Wind used our intended participation to garner public support for the project.

Understanding the critical path of this contract and the risk associated with the first US off-shore wind project, we were issued a series of mandates by Cape Wind to be reached prior to formulizing our contract. Mass Tank, worked tirelessly for the next two years reaching our Cape Wind required milestones. Obtaining a contract was a prerequisite for our technical and financial partners.

I am writing now to inform you that Jim Gordon has recently affirmed that Mass Tank will not be used on its project. It's our understanding that Cape Wind apparently intends to deal directly with a foreign business, by-passing Mass Tank completely and out-sourcing the work to a foreign, rather than a local business. As a result of decisions made by Jim Gordon, the original vision of the nation's first off-shore wind project bringing a new manufacturing industry to Massachusetts apparently will not come to pass.

Mass Tank attempted to satisfy any and all conditions Cape Wind set out as necessary to meet the needs of the first-in-the-nation off-shore wind development. Cape Wind's lack of commitment and support to this relationship opened the door for a foreign company to go direct to Cape Wind. They have made it clear that they have no intention of doing business with Mass Tank. That is not only our own loss, but more importantly, the loss of the Commonwealth's and the nation's.

From the very beginning Cape Wind made it clear that several components were vital for us to be successful. We worked very hard to insure that we were in a position to meet those requirements.

- Technical partner. Understanding Mass Tank does not have experience in supplying off-shore wind foundation components but does roll and weld similar products for on-shore, Cape Wind required technical expertise so as to ensure we not only delivered the foundations on time but also ones of the highest quality. We travelled to several leading foundation factories in Europe and came to an agreement with EEW in Germany, the leading off-shore foundation fabricator. In addition, we travelled to large steel fabricators in the US and came to an agreement with Gulf Island Fabricators (GIF), the largest steel fabricator on the Gulf Coast in Louisiana.
- 2. Schedule. One of the advantages in creating the joint venture with EEW and GIF was to ensure any schedule could be met. We have the option to front load any delivery from several factories of our joint venture partners. Additionally, if there are weather, labor or government conflicts, the joint venture provided great flexibility to address changing conditions rapidly.
- 3. Terms and conditions. Mass Tank's joint venture group, submitted the industry standard terms and conditions for the project.
- 4. Price and scope. We are the only supplier to provide "100% buy American" compliant offer.

- 5. Facility. We executed a "Memorandum of Understanding" to lease the Fore River ship yard in Quincy, MA. This document would be formalized once our contract was executed with Cape Wind. Quincy provided many positives to this project.
  - a. Deepwater port - Designated Port Area (DPA)
  - b. Rail access for support

  - c. Close proximity to the projectd. Adequate permitting requirements
  - e. Good local support and presence of skilled labor
  - Facility would utilize "Cape Wind's electricity" f.

Without Mass Tank's participation it now appears that virtually all of the manufacturing for the project will be performed outside Massachusetts, and likely outside of the country. It is most disheartening to learn that, for all intents and purposes, Cape Wind's components may all be a foreign import. We at Mass Tank and our joint venture partners worked very hard to address these conditions in order to meet them and provide local content.

When I stood with Jim Gordon and Governor Patrick that day in Charlestown I felt certain that we would be able to come to terms and bring the full economic benefits of off-shore wind development to Massachusetts. Because of the broad common ground I saw in Cape Wind's "Letter of Intent", we were initiating a mutually beneficial business arrangement that would pay dividends to the state and the region in jobs and economic development. But now I can only conclude that I was wrong, and guestion whether Cape Wind's commitment to Mass Tank and the local manufacturing jobs was ever made in good faith. Mass Tank remains committed to the vision of wind energy manufacturing on-shore and off-shore in Massachusetts, as we have shown by our new efforts to serve the on-shore wind industry with towers manufactured at our Middleboro facility. Clean energy is the nations, and the region's future, as it is Mass Tank's.

In closing, The Federal government, the Commonwealth of Massachusetts, the US taxpayers, local governments, and electric rate payers are all financially supporting this project. Cape Wind must be held accountable for the support it has received through this process. We encourage due diligence and proper review of the Loan Guarantee and claims made by Cape Wind in its application for this source of funds.

Sincerely,

Coul C. Hostim

Carl C. Horstmann President

CC Dr. Steven Chu, Secretary, U.S. Department of Energy, 1000 Independence Ave, SW, Washington, DC 20585

David Frantz, Acting Executive Director, DOE Loan Programs Office, U.S. Department of Energy, 1000 Independence Ave, SW, Washington, DC 20585

Congressman Edward Markey, 7th District Massachusetts, 2108 Rayburn House Office Building, Washington DC 20515

Congressman William Keating, 9th District Massachusetts, 315 Cannon House Office Building, Washington DC 20515

## Exhibit 2



## APRIL 06, 2013

## POLS URGE CASH FOR CAPE WIND AMID BLOWBACK

Foe: 'It's another Solyndra waiting to happen'

#### By:Marie Szaniszlo

The Bay State congressional delegation yesterday sent a letter urging departing Energy Secretary Steven Chu to approve massive loan guarantees for Cape Wind, but opponents blasted it as a political power play and warned of another costly, Solyndra-like clean energy blunder.

"It's appalling that in the current fiscal situation, the Massachusetts delegation would knowingly support an expensive project that would put taxpayers at risk, as well as saddle Massachusetts ratepayers with billions of dollars in additional electricity costs — all to send jobs overseas," said Audra Parker, president and CEO of Cape Wind foe The Alliance to Protect Nantucket Sound. "The Department of Energy should not be risking taxpayer money on a project that's heavily litigated and has strong potential for losing its customers. It's another Solyndra waiting to happen."

Solar-panel maker Solyndra landed \$535 million in government loans before going bankrupt in 2011.

Cape Wind defended the delegation's letter, noting that the loan guarantee program was set up almost eight years ago by a Republican White House with bipartisan support in Congress for cutting-edge, clean-energy projects.

"Cape Wind is a good example of that," spokesman Mark Rodgers said, adding that the project would create 600 to 1,000 jobs in the construction phase and 50 operations jobs in Falmouth Harbor.

Rodgers wouldn't provide details of Cape Wind's financing, except to say it would be a combination of equity from investors and debt, including the Energy Department loan guarantee and loans from the Bank of Tokyo and possibly other commercial banks.

Rodgers wouldn't disclose how much of a loan guarantee Cape Wind is seeking. But in 2011, the Energy Department denied it one for \$1.97 billion under a program that expired that year, according to Parker.

"Now they're once again applying under a different program," she said, adding that there's no deadline, but Cape Wind would need to begin construction by the end of this year to qualify for an additional subsidy that's a 30 percent investment tax credit.

The \$2.6 billion Cape Wind project would construct 130 wind turbines in Nantucket Sound that would be 440 feet tall at their highest point.

"Cape Wind promised if they sold their power, that would be enough to get financing," said Bob Rio, senior vice president of the Associated Industries of Massachusetts. "They sold three-quarters of their power to National Grid and Nstar at the highest rates ever known in Massachusetts, and somehow, even this wasn't enough to get financing? Exactly how much money should we give a project no one wants to invest in?"

A Bay State company that had expected to gain jobs from the project accused Cape Wind of handing it off to foreign suppliers.

"Cape Wind basically is going to be built by foreign suppliers," said Stephen Lynch, executive vice president of Mass Tank in Middleboro. "If they had gone with us, it would have supported about 150 permanent jobs. We don't think taxpayers should have to finance the project if it's not going to create jobs in the U.S."

## Exhibit 3

# Washington Post: AP IMPACT: Obama administration allows wind farms to kill eagles, birds despite federal laws

By Associated Press May 14, 2013



In this April 18, 2013, photo, a golden eagle is seen flying over a wind turbine... (Dina Cappiello/Associated...)

CONVERSE COUNTY, Wyo. — The Obama administration has never fined or prosecuted a wind farm for killing eagles and other protected bird species, shielding the industry from liability and helping keep the scope of the deaths secret, an Associated Press investigation has found.

More than 573,000 birds are killed by the country's wind farms each year, including 83,000 hunting birds such as hawks, falcons and eagles, according to an estimate published in March in the peer-reviewed Wildlife Society Bulletin.

Each death is federal crime, a charge that the Obama administration has used to prosecute oil companies when birds drown in their waste pits, and power companies when birds are electrocuted by their power lines. No wind energy company has been prosecuted, even those that repeatedly flout the law.

Wind power, a pollution-free energy intended to ease global warming, is a cornerstone of President Barack Obama's energy plan. His administration has championed a \$1 billion-a-year tax break to the industry that has nearly doubled the amount of wind power in his first term.

The large death toll at wind farms shows how the renewable energy rush comes with its own environmental consequences, trade-offs the Obama administration is willing to make in the name of cleaner energy.

"It is the rationale that we have to get off of carbon, we have to get off of fossil fuels, that allows them to justify this," said Tom Dougherty, a long-time environmentalist who worked for nearly 20 years for the National Wildlife Federation in the West, until his retirement in 2008. "But at what cost? In this case, the cost is too high." Documents and emails obtained by The Associated Press offer glimpses of the problem: 14 deaths at seven facilities in California, five each in New Mexico and Oregon, one in Washington state and another in Nevada, where an eagle was found with a hole in its neck, exposing the bone.

One of the deadliest places in the country for golden eagles is Wyoming, where federal officials said wind farms had killed more than four dozen golden eagles since 2009, predominantly in the southeastern part of the state. The officials spoke on condition of anonymity because they were not authorized to disclose the figures. Getting precise figures is impossible because many companies aren't required to disclose how many birds they kill. And when they do, experts say, the data can be unreliable.

When companies voluntarily report deaths, the Obama administration in many cases refuses to make the information public, saying it belongs to the energy companies or that revealing it would expose trade secrets or implicate ongoing enforcement investigations.

## Exhibit 4

## SouthCoastToday: 5/14/13 Your View: National Wildlife Fund's senior communications director made incorrect statements (see referenced Our View from 4/14/13 below)

By PETER A. KENNEY Peter A. Kenney lives in South Yarmouth.

On April 14, SouthCoastToday printed a piece written by Miles Grant, identified by the National Wildlife Fund as a senior communications director living in New Bedford ("Your View: Polluter blockade of New Bedford wind jobs finally falling"). The thrust of Mr. Grant's piece is that Cape Wind is environmentally safe and that its chief opposition is no more than a front for oil and coal polluters. Grant also writes enthusiastically about Cape Wind's benefits to the local economy. It is surprising that Mr. Grant is so unaware of the facts about Cape Wind.

The claim that Cape Wind is environmentally safe is bizarre. If it is, why is there a federal lawsuit pending in which a retired senior official of the U.S. Fish and Wildlife Service charges that the proper and required studies of possible harm to birds and other animals in the Cape Wind project area were never done? And, why is this same man claiming that he was disciplined after a long and distinguished career when his comments about Cape Wind became known? Does Mr. Grant believe that whistleblowers should be driven out of their jobs? Is Mr. Grant not aware that Cape Wind, if built, will set the precedent for all future offshore wind project reviews and even for other energy projects on land? Why not just kill all the migrating shore birds in the Nantucket Sound flyway and be done with it? Ten years ago, Massachusetts Audubon stated in written testimony that Cape Wind is projected to cause as many as 6,000+ bird kills annually.

Is the National Wildlife Fund aware that the Interior Department Inspector General's report on Cape Wind states that the project's review was "rushed"? Would Mr. Grant or NWF say that rushing such a review is wise?

Then there are the three Koch brothers whom Grant characterizes in very unflattering environmental terms. Actually, there are four brothers. Fred, the oldest, apparently does not count. And, as far as I know, only Bill Koch is involved with the Alliance To Protect Nantucket Sound. Describing the anti-Cape Wind advocacy group based in Hyannis, he says, "A coalition of big polluters and big money landowners on the Cape conspired to fund the 'Alliance to Protect Nantucket Sound,' a front group that's spent millions to keep Cape Wind tied up in red tape." The red tape comment is odd; since when are four federal lawsuits, accepted by the courts, considered merely red tape? As for the other claims, is Mr. Grant serious when he charges conspiracy? In my neighborhood, what he calls conspiracy is considered cooperation. Bill Koch does live in Florida. But, Massachusetts had been his principal residence for decades. He left the commonwealth after he won a lengthy court case over his claim that Massachusetts had overtaxed him; Koch won a \$46 million judgment.

Facts: The Alliance was formed in 2001 by a small group of local residents who believed that Cape Wind was the wrong project in the wrong place. The Alliance is not now and never was an

anti-wind effort, it is anti-Cape Wind. Bill Koch was not involved in the Alliance until 2005. For four years, the Alliance lived hand-to-mouth, scraping by on small donations from more than 25,000 individuals and local business people. Local musicians provided entertainment, there was occasionally wine and cheese as ordinary people gathered from time to time to commiserate about the Cape Wind plan and build an opposition. Not once did I see a coal magnate or oil baron at any of these affairs. I did see local commercial fisherman, wildlife protection advocates, ferry operators, pilots, working people whose houses do not have views of the Sound and many people whose careers have been dedicated to environmental protection and reform, people whose careers are marked by successful efforts to stop polluters. Colorful children's beach buckets were passed around to catch the contributions of these ordinary people, dollar bills and five- and tendollar bills. Was this a conspiracy?

Mr. Grant appears unaware of these facts and ignorant of the facts of the Cape Wind project itself, the environmental harm it will do to Nantucket Sound and the millions of shore birds using its migratory flyway every year. How odd it is that Mr. Grant works for something called the National Wildlife Fund. Clearly also Mr. Grant has no idea of the truth about the economics of Cape Wind. But, that is a subject for another day.

I attempted to speak with Miles Grant, leaving a detailed message at each of the two telephone numbers available for him at the NWF. To date (May 9), I have received no response.

## Exhibit 5



THE SECRETARY OF THE INTERIOR WASHINGTON

FEB 0 3 2010

Memorandum

To:	Deputy Inspector General
From:	Secretary Solo
Subject:	Cape Wind Associates, LLC Investigative Report

Thank you for your investigative report entitled *Cape Wind Associates, LLC*, which examines the handling of the Cape Wind permit application process by the Minerals Management Service in 2008 and early 2009. As explained in the report, the primary concern addressed in your investigation was whether the final Environmental Impact Statement for the Cape Wind project was compromised due to the previous Administration's desire to publish the EIS before leaving office.

As summarized in your memorandum to me: "Our investigation determined that MMS did not violate provisions of NEPA in completing the final EIS for the proposed offshore wind farm." You noted, however, that "several of the Federal agencies that worked with MMS in preparing the final EIS were concerned that its completion was unnecessarily rushed by MMS' desire to publish the report prior to the end of the previous administration." Your conclusion that "none of the agencies believes that MMS' timeline affected their overall conclusions" is particularly important. Concerns raised by agencies that the timelines "prevented them from being as thorough in their reviews as they would have desired" indicates that there was room for improvement in the previous Administration's handling of the process.

In reaching the conclusion that the final EIS was not the subject of improper influence or otherwise deficient, your report set forth a substantial amount of background information regarding the environmental impact analysis that the MMS conducted for the project, as well as reviews conducted by the U.S. Fish and Wildlife Service, United States Coast Guard, Federal Aviation Administration, and U.S. Environmental Protection Agency. In order to ensure that our Department provides due consideration to your report, I am directing Deputy Secretary David Hayes to work with our Solicitor, Ms. Hilary Tompkins, to review the report and provide recommendations to me regarding those issues that are material to the Department's upcoming Cape Wind decision.

Although the Cape Wind permitting process began several years before the establishment of the offshore renewable energy regulations that we finalized in April 2009, I want to ensure that we are considering how your report's recommendations might further strengthen this new framework, which we expect will bring added clarity and certainty to the permitting of future offshore renewable energy permits. To this end, I am directing Deputy Secretary Hayes and Assistant Secretary for Land and Minerals Management Wilma Lewis to develop recommendations for me on optimizing the permitting of offshore wind projects in a manner that comports with all legal

requirements, including the Department's new regulations that apply to all future offshore wind projects. The Cape Wind project application process and your report provide an important opportunity to learn lessons that will be beneficial for future projects of this nature. I ask you to provide your help and insights into these recommendations.

Thank you for your help in this matter.

## Exhibit 6



Report of:

A Comparative Analysis of The Development and Application of Marine Navigation Safety and Marine Environmental Protection Criteria for Offshore Renewable Energy Installations

March 11, 2013

The MCGOWAN Group, LLC 405 Georgia Avenue Fernandina Beach, FL 32034-4843 (904) 556-6143 Fax (202) 330-4600 Jfmcgowan @earthlink.net

### "A Comparative Analysis of the Development and Application of Marine Navigation Safety and Environmental Protection Criteria for US Offshore Renewable Energy Installations

#### March 2013

#### Introduction

In recent years, the Department of the Interior's (DOI) Bureau of Ocean Energy Management (BOEM) and the U.S. Coast Guard (USCG) have taken a series of significant steps to establish a process and to introduce standards for the leasing of areas for the future development of Offshore Renewable Energy Installations (OREIs) on the U.S. Outer Continental Shelf (OCS). BOEM, like its predecessor agency the Minerals Management Service (MMS), has taken the government lead for this alternative energy development.

USCG has exerted decade-old regulatory authority over oil and gas exploration and recovery vessels and mobile units on the OCS. It only took a similar stance in 2006 in OREI development. Specifically, USCG embarked in 2006 on evaluating, setting and applying standards to safeguard marine safety and marine environmental protection for the siting and operation of these energy installations on the nation's waterways and oceans. It has moved forward with the general OREI navigational safety process since then. In addition, in response to special legislation enacted in 2006<sup>1</sup>, the USCG was required to establish navigational safety terms and conditions for Nantucket Sound due to the proposal for the large-scale Cape Wind Associates (CWA) OREI.

This report provides a comparative analysis of the terms and conditions for Nantucket Sound under section 414 and the navigational safety actions taken elsewhere or now under development by USCG and BOEM. As this report concludes, the Nantucket Sound Standards provide far less protection for navigation safety than the comparative measures established or proposed for every other OREI location.

### **U.S. Beginnings of Offshore Wind Energy Development – CWA**

In November 2001, CWA applied to the US Army Corps of Engineers (ACOE) and to the Commonwealth of Massachusetts for a permits to construct a commercial scale, wind energy project on and around Horseshoe Shoal in Nantucket Sound to supply the New England power grid. The CWA facility would eventually be described as 130 wind towers, each 440 feet tall, built into the Sound's seabed over approximately a 24 square mile area, miles of cable and a transformer substation holding 40,000 gallons of

<sup>&</sup>lt;sup>1</sup> Coast Guard and Maritime Transportation Act of 2006 (Public Law 109-241) Section 414.

transformer oil.. Recently, the project has been scaled back to 101 turbines, but CWA still claims it will eventually develop the entire facility.

### The site and the design (Nantucket Sound and Cape Wind)

Nantucket Sound is not only a heavily used body of water, but one of the most dangerous places to navigate in the US. In fact, the seamanship handbook, The Coast Pilot<sup>2</sup>, singles out Nantucket Sound for special caution due to the frequent occurrence of wind, fog and high velocity currents that characterize Nantucket Sound, particularly during storms.

The USCG Waterway Analysis and Management System (WAMS) is a national process administered to analyze and review the aids to navigation in the nation's waterways. USCG's recent WAMS survey for the area notes the extremely foggy conditions year round, 2 - 3 knot currents, and that the Sound "hosts thousands of recreational vessels daily from May to October, and commercial vessels and ferries year round." The WAMS report characterizes the area which includes both Main and North channels as a "navigationally critical waterway."<sup>3</sup>

Horseshoe Shoal is a well known and marked hazard whose rocks are seldom visible above the Sound's surface. Water depths in and around the Shoal vary from 2 ft. to nearly 60 ft. The Shoal is bounded for vessels by the North Channel, which runs below Great Neck and Hyannis, and the Main Channel, which runs from Vineyard Sound from the west to the Atlantic Ocean to the east. The Main Channel that the CWA facility would abut has a controlling depth of thirty feet. It, or specifically Cross Rip Shoal, was first designated as a federal navigation project at that depth in 1930. The Coast Pilot<sup>4</sup> singles out Nantucket Sound for special caution due to wind, fog and high velocity currents that occur particularly during storms. The proposed project site is also virtually surrounded by general anchorages for vessels awaiting entry into port, conducting repairs or escaping or riding-out bad weather or visibility that is common in Nantucket Sound.

USCG has continuously maintained the navigational aids along the Main and North channels and their connecting waterways. The USCG Waterway Analysis and Management System (WAMS) is a national process administered to analyze and review the aids to navigation in the nation's waterways. USCG's recent WAMS survey for the area notes the extremely foggy conditions year round, 2 - 3 knot currents, and that the Sound "hosts thousands of recreational vessels daily from May to October, and commercial vessels and ferries year round." The WAMS report then characterizes the area which includes both Main and North channels as a "navigationally critical

<sup>&</sup>lt;sup>2</sup> U.S. Coast Pilot 5, 40<sup>th</sup> Edition 2012; http://www.nauticalcharts.noaa.gov/nsd/coastpilot\_w.php?book=5 <sup>3</sup> US Coast Guard Waterway Analysis and Management Survey (WAMS) Review of Nantucket Sound

Main Channels, January 2004.

<sup>&</sup>lt;sup>4</sup> U.S. Coast Pilot 5, 40<sup>th</sup> Edition 2012; <u>http://www.nauticalcharts.noaa.gov/nsd/coastpilot\_w.php?book=5</u>. Exhibit 1.

waterway."<sup>5</sup> The proposed CWA facility location is also virtually surrounded by general anchorages for vessels awaiting entry into port, conducting repairs or to escape or rideout bad weather or visibility that is known to be common in Nantucket Sound.

The conclusions of the 2004 WAMS report are similar to the 1997 report. The USCG Waterway Analysis and Management System (WAMS) is a national process administered by each CG region or district to analyze and review the aids to navigation in the nation's waterways. The most recent WAMS study for Nantucket Sound describes its waters as follows: "The main thoroughfare through the Sound is Nantucket Sound Main Channel. This Environmentally and Navigationally Critical waterway hosts recreational vessels, numerous deep draft cruise ships, and commercial fishing vessels & passenger ferries year round. The majority of Cape Cod and the Islands' recreational ports access Nantucket Sound resulting in severe vessel congestion during summer months. In the event that the Cape Cod Canal is closed due to ice, fog or marine incident, Nantucket Sound is the primary route, along with Martha's Vineyard Sound, that vessels use to transit around the Cape.'"

Other than marked channels and charts, there are no Traffic Separation Schemes (TSS), vessel traffic reporting or control systems or practices in place or required in Nantucket Sound. Regionally the port of Boston, Buzzards Bay, the Cape Cod Canal and Rhode Island all have had TSS ship routes or in the case of Cape Cod Canal and Buzzard's Bay vessel reporting systems in place for years. These systems, managed by USCG, have proven to significantly mitigate navigational risk and play a prominent role in the navigational risk assessment for other areas being considered as potential sites for offshore wind facilities on the Atlantic coast. The absence of TSS makes navigational risk in Nantucket Sound subject to comparatively greater risks.

While the Main Channel in Nantucket Sound can support a variety of vessels with drafts up to 24 ft. including visiting cruise liners, it also serves as the main artery for passenger and vehicle ferries connecting the Sound's islands and for an estimated 250 large oceangoing commercial fishing vessels many based out of New Bedford. The proposed site for the CWA facility borders on all its sides the channels and routes extensively used yearround by the ferry systems some of which offer high-speed service at 30 knots.

The CWA proposal would place the WTGs directly adjacent to these busy vessel routes in some cases to be constructed within 975 ft.– to 1,200 ft. from the edge of the North and Main channels, respectively. Without an additional buffer or safe setback from these routes, an allision with the nearest WTGs would occur in a mere 60 seconds, at normal speeds, for a vessel or boat that leaves the channel. A high speed ferry would have a 20 seconds to detect, take action and respond to avoid such allisions. Collision risk with vessels traveling within or adjacent to the project site also would be a problem due to WTG interference with radar.

<sup>&</sup>lt;sup>5</sup> US Coast Guard Waterway Analysis and Management Survey (WAMS) Review of Nantucket Sound Main Channels, January 2004.

### The Process and Review

The ACOE established and led an interagency cooperative group of US government and Commonwealth agencies in the preparation of an Environmental Impact Statement (EIS) for the CWA permit application.

USCG assembled and reportedly provided CWA with a three page document in February 2003<sup>6</sup> informing the ACOE that the document listed the assessments that would be needed from the developer (CWA). USCG committed to review and comment on the CWA assessments to assist in the ACOE preparation of an Environmental Impact Assessment (EIS) of the proposed facility. USCG requested three assessments from CWA covering: Navigational Safety, Search & Rescue, and Communications, Radar and Positioning Systems. The USCG cited no standards, criteria or guidelines in the document. In their letter to the ACOE, the USCG demurred in their effort stating:

We are prepared to review and comment on the completed assessments and on other marine navigation related information associated with the preparation of the EIS. We are not, however in a position to undertake data collection, conduct EIS analysis, or prepare sections of the draft or final EIS as staff and resources are fully tasked in other obligatory programs.<sup>7</sup>

As a result, as of 2003, it would appear that USCG may not have eagerly anticipated or viewed the navigation safety and marine environmental protection review and approval of the CWA proposal as obligatory.

ESS Group, Inc. prepared two Navigation Risk Assessments for CWA and submitted them to USCG. The USCG accepted these assessments even though they were based on faulty vessel traffic assessments, applied no buffers or safe separation distances from the established vessel routes and channels in Nantucket Sound, ignored or underestimated interference with navigation radar, and took the position that vessel accidents due to the facility's obstructions (WTGs) were unlikely.<sup>8</sup>

A detailed critique of the CWA risk assessment was completed by The McGowan Group in April 2004 and submitted to USCG, ACOE, and MMS. Several of that critique's major conclusions are excerpted below:

• The United States is far behind many other countries in setting national energy goals, promoting non-traditional energy sourcing such as offshore wind power and in

<sup>&</sup>lt;sup>6</sup> USCG MSO Providence letter 16670 dated February 10, 2003.

<sup>&</sup>lt;sup>7</sup> Id.

<sup>&</sup>lt;sup>8</sup> ESS Group, Inc. "Navigation Risk Assessment, Cape Wind Project, Nantucket Sound," Project No. E159-004.8, August 18, 2003 and Revision dated November 16, 2006.

establishing regulatory programs to support those goals. Most countries that have offshore wind energy facilities operating, under construction, or in the planning and evaluation stages have or are developing statutory and regulatory regimes specifically for the siting, licensing, design, construction and operation of these facilities.

- The United Kingdom (UK), through its Maritime and Coastguard Agency recently issued comprehensive national navigation safety standards that apply to wind energy facilities to be built off the UK coast. The UK standards compare favorably with US Coast Guard requirements developed and issued by the Captain of the Port, Providence, RI. The major difference lies in the identification and proposal of mitigation measures as part of the UK's risk assessment process.
- The UK standards if applied to the Cape Wind proposal, would assign its most demanding "Higher risk" designation to the project due to its location in deeper water and placement within 500 yards of active shipping channels. Other offshore wind energy facilities operating overseas would receive lesser demanding risk designations due to their placement in shallow water and at great distances from shipping channels.
- There is a substantial discrepancy between common international practice and the minimal mitigation measures for navigation issues proposed by the Cape Wind assessment. Cape Wind proposes navigational lighting, sound signals, private aids, markings and notations on charts as the only safety features to offset the risks posed by the new energy facility to current shipping, boating and fishing interests. International practice has employed total or partial exclusion of selected groups, or, in some cases, all marine traffic, and outright prohibition on trawl fishing or anchoring in proximity to the offshore wind farm areas.
- The Cape Wind navigation safety risk assessment and Nantucket Sound project proposal is fatally flawed due to its failure to:
  - Develop and apply design criteria showing that placement of the proposed wind energy facility adjacent to active shipping channels is compatible with the needs of marine transportation, and poses necessary and reasonable risks to cruise ship and ferry vessel, oil transport, fishing and recreational users.
  - Propose a tower structure whose strength was sufficient to withstand a collision without complete failure of the tower and blade and/or the tower foundation;
  - Utilize recognized methodology or to perform a complete risk assessment by examining and predicting collision frequency calibrated against actual marine casualty and marine pollution histories;
  - Conduct an accurate measure of the types, routes, and density of the current marine users of the waters of Nantucket Sound;

- Assess the safety and pollution consequences, including injury and loss of life, resulting from vessel collisions with a wind tower;
- Consider the aggravating effects of wind, fog, and current on safe navigation;
- Recognize the inherent risk of vessel collisions in a realistic manner, without overemphasizing common safeguards such as the COLREGS<sup>12</sup> and their burden on vessel operators, or navigation systems and/or of navigational aids;
- Identify and propose realistic "best practice" mitigation measures to offset the safety and environmental risks identified;
- Explore the negative impact to the Nantucket Sound fishing industry by acknowledging that these projects will effectively cut-off all trawling/dragging within the entire confines of the wind farm; and
- Highlight the threat the wind turbine blades pose to a substantial number of sailing or other vessels (including cruise vessels) with mast heights exceeding seventy-five feet."<sup>9</sup>

# Section 414

In 2005, Congress enacted Section 414 of the etc. Section 414 of the Coast Guard Maritime Transportation Act of 2006 (CGMTA) requires the U.S. Coast Guard (USCG) to "specify the reasonable terms and conditions the Commandant determines necessary to provide for navigational safety with respect to the proposed lease, easement, or right-of-way and each alternative to the proposed lease, easement or right-of-way considered by" the Secretary of the Interior for an offshore wind energy facility in Nantucket Sound. Pub. L. No. 109-241, § 414(a), 120 Stat. 516, 540 (2006) (codified at 14 U.S.C. § 1 note). Section 414 further provides that "[i]n granting a lease, easement, or right-of-way for an offshore wind energy facility in Nantucket Sound under section 8(P) of the [OCSLA], the Secretary shall incorporate in the lease, easement, or right-of-way reasonable terms and conditions the Commandant determines to be necessary to provide for navigational safety." *Id.* § 414(b). Section 414 requires the Commandant to protect existing navigational uses of the Sound and to dictate changes to the proposed lease to maintain the navigational status quo.

Section 414 makes it clear that the T&C are to protect the navigational status quo, not to protect CW in accordance with the wishes of its private developer. The USCG can fulfill this duty only by developing T&C that ensure the project does not present navigational risks, including the possible need to alter the project design through the establishment of a buffer zone from existing shipping and ferry routes, or to deny the lease application at the proposed location. The burden to

<sup>&</sup>lt;sup>9</sup> The McGowan Group, LLC (TMG) report "A Navigational Risk Assessment Review," April 26, 2004.

provide for navigational safety belongs to CW, not to mariners, fishermen, or the public.

The floor statements of the bill's sponsors confirm the far-reaching nature of USCG's duty to protect existing uses of the Sound. Congressman Young explained that section 414 "will require the Coast Guard to establish terms and conditions that are necessary to safeguard recreation and commercial vessel traffic in Nantucket Sound before any draft environmental impact statement is made available for public review." 152 Cong. Rec. H 4525 (daily ed. June 26, 2006) (statement of Rep. Young). The purpose of this requirement is to allow offshore wind development "in a way that *does not jeopardize the safety and security of the maritime community of Nantucket Sound.*" *Id.* (emphasis added). Responding to Chairman Young, Representative Brown confirmed that section 414 "will allow the Commandant to set the terms and conditions on any leasing of federal waters in Nantucket Sound that may be necessary to protect navigational safety." *Id.* Citing the ferry system and its 3 million annual passengers, Brown said "it is vitally important to protect the navigational safety of those vessels." *Id.* 

### USCG's NVIC 2007 Marine Safety Guidance for OREIs

Beginning late in 2005, USCG met with other international officials and reviewed standards and "best practices" with an authorized navigation safety advisory committee to produce the first U.S. guidelines for OREIs.<sup>10</sup> The USCG's NVIC 2007 marine safety guidance for OREIs were specifically tailored for offshore wind facilities but written so that they could also be applied to marine current turbines, wave generators and offshore solar generating facilities. These USCG guidelines were broad covering:

- risk-based decision making and systematic navigation safety risk assessment,
- standards and "best practice" utilization,
- vessel accidents and ability of structures to withstand allision by vessels,
- impacts to navigational, radar and communications equipment and aids,
- vessel traffic surveys, density and route projections,
- pollution incident response including those originating from vessel allisions; and
- research and proposal of mitigation strategies including safety zones, radar monitoring and minimum distances from shipping routes.

The new USCG's NVIC 2007 marine safety guidance for OREIs partially modeled the first-ever OREI recommendations which were published in the United Kingdom (UK) by

<sup>&</sup>lt;sup>10</sup> US Coast Guard Navigation and Inspection Circular No. 02-07 Guidance on the Coast Guard's Roles and Responsibilities for Offshore Renewable Energy Installations (OREI), March 9, 2007.

the Maritime and Coastguard Agency.<sup>11</sup> The guidelines represented USCG's marine safety and marine environmental protection standards for the siting, design, and operation of OREIs.

The USCG never applied the NVIC 2007 guidelines to the only offshore wind energy generation project which it had under its review at that time, the CWA proposed. It failed to do so even USCG staff repeatedly stated that the NVIC would be applicable and even held up the CWA recommended terms and conditions for the release of the NVIC. It is clear that NVIC 2007 continued numerous provisions that could not be met by CWA as discussed in the April 2005 report prepared by the McGowan Group.

As concluded by the McGowan Group:

The Cape Wind project is "fatally flawed," as currently designed and sited. It is incompatible with the needs of marine transportation in Nantucket Sound and is an unnecessary and unacceptable threat to the current-day and future users of Nantucket Sound's waterways. The proposed project's design violates the very definition of navigation safety delineated in the new 2007 Coast Guard Guidelines developed specifically for Offshore Renewable Energy Installations (OREIs).<sup>12</sup>

This expert study had determined that when compared against seventeen essential navigation safety and marine environmental protection factors found in the 2007 Guidelines for OREIs, the Cape Wind project failed to meet twelve of those factors and only partially met four. The project as designed, sited and assessed appeared to meet only one of the seventeen navigation safety and marine environmental protection elements found in the USCG 2007 guidelines. The study determined the following for one of the failed safety factors called "Assess site's alignment/proximity to shipping":

The proposed Cape Wind site has been positioned to encroach on both the Main and North Channels of Nantucket Sound and in direct vicinity of long-established ferry routes. The distance or CPAs<sup>13</sup> of the closest WTGs<sup>14</sup> to both the Main and North Channels have decreased to 1,190 ft. and 975 ft., respectively. The turbine array proposed in the ESS Revised Navigational Risk Assessment (DEIS Report No. 4.4.3-1) increases the risk of collision, allision and grounding for vessels following the North Channel and provides no additional relief or distance between the ships

<sup>&</sup>lt;sup>11</sup> UK Maritime and Coastguard Agency "Proposed Offshore Renewable Energy Installations (OREI) – Guidance on Navigational Safety Issues," MGN 275 (M), 8/04.

<sup>&</sup>lt;sup>12</sup> "An Evaluation of the Cape Wind Project under New 2007 US Coast Guard Guidelines for Offshore Renewable Energy Installations," April 2008; The McGowan Group (TMG), LLC, p. 18.

<sup>&</sup>lt;sup>13</sup> CPA stands for Closest Point of Approach or the minimum distance that a vessel will pass by or approach another object.

<sup>&</sup>lt;sup>14</sup> WTG stands for Wind Turbine Generator or the towers, nacelles and rotor assemblies of a wind farm.

and ferries traveling in the Main Channel. A vessel traveling at 12 knots in the North or Main Channels that has a failure and leaves the channel will strike the nearest WTG is less than 60 seconds. High speed ferries would have approximately one-third the time to react near their top speeds. Ferries passing WTGs in the southeastern sector of the project could pass with CPAs as close as 0.8 to 1.6 nautical miles at the project's corner.

The distance and orientation separating WTGs and vessel routes provides far too short a time for even the best equipped and trained crew to take action that would be likely effective in avoiding allision with a WTG.<sup>15</sup>

#### The 2009 MMS FEIS

Considerable dispute occurred over USCG's duty to implement section 414. In the fall and winter of 2008, USCG altered its approach that would have addressed navigation safety concerns by including changes to the project, to adopt the position that the project should be taken as pre-determined. As a result, all burden for safety was placed on mariners and USCG declined to recommend a safety separation zone. MMS adopted this position in its FEIS for CWA issued on January 19, 2009. Since then, neither USCG nor CWA has taken any action to revise the navigational safety terms and conditions for Nantucket Sound. Several lawsuits are pending against the CWA project, including the USCG terms and conditions.

#### **BOEM's EAs**

BOEM began implementing the DOI's "Smart from the Start" initiative in 2011 with USCG and other agencies, which collaborated to produce a series of environmental assessments (EAs). The initiative called for the identification of areas on the Atlantic OCS that appeared most suitable for commercial wind energy development and the availability of those areas for leasing and detailed site assessment. During 2011 BOEM published Notices identifying those ocean areas and requested public comment. Three of the resulting EAs published in 2012 covered OCS areas off the coasts of Massachusetts, Rhode Island and Massachusetts; and New Jersey, Delaware, Maryland, and Virginia.<sup>16</sup> A fourth EA though announced<sup>17,18</sup> has not yet been published for North Carolina. A USCG

<sup>&</sup>lt;sup>15</sup> Ibid, p.15.

<sup>&</sup>lt;sup>16</sup> DOI/BOEM Environmental Assessment (EA) "Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore New Jersey, Delaware, Maryland, and Virginia, January 2012."

<sup>&</sup>lt;sup>17</sup> DOI/BOEM Environmental Assessment (EA) "Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore Massachusetts, October 2012."

<sup>&</sup>lt;sup>18</sup> DOI/BOEM Environmental Assessment (EA) "Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore Rhode Island and Massachusetts, June 2012."

workgroup reported that it had designated "significant amounts of areas of the potential wind energy area as Red, meaning there is high conflict with vessel navigation. At the time of this writing, the NC Call Areas have not been finalized."<sup>19</sup>

Significant public comment/concern was received from maritime interests in response to the BOEM Notices. Major changes were made to the various Wind Energy Areas (WEAs) identified to accommodate those concerns. Public concern with marine safety and protection of the marine environment was recorded from: 1) marine interests (including pilot organizations) concerned with accommodating the safety and flow of the current and future marine transportation system; 2) fishing interests concerned over displacement from traditional fishing areas and activities and the impact on fishing stocks; and 3) tug and barge interests concerned with displacement from traditional routes and safe shelter areas and with the premature setting of standards.

BOEM chose not to accommodate the following request from U.S. tug and barge industry representatives, American Waterway Operators (AWO), to halt the EA process until USCG could complete an on-going study.

AWO strongly recommends BOEM refrain from moving forward with leases until after the PARS<sup>20</sup> study is completed, the results are analyzed by and discussed with the navigation industry, and fairways are established.<sup>21</sup>

BOEM in cooperation with USCG, however, made significant exclusions from the announced WEAs addressing the tug and barge interests concerns with marine navigation safety and displacement of their operations.

The criteria which emerged from these EAs represent BOEM's standards for defining a WEA and, more specifically, the guiding site selection criteria which should be applied by a would-be developer contemplating construction of wind powered OREI. Similarly, the USCG's marine safety and marine environmental protection criteria emerged and were applied through BOEM in the EAs excluding both whole and partial lease blocks from each of the WEAs to avoid conflicts with established and projected shipping and fishing activity. These actions represent USCG marine safety standards for OREI site selection and, indirectly, their design.

<sup>&</sup>lt;sup>19</sup> "Atlantic Coast Port Access Route Study Interim Report", Docket Number USCG -2011 – 0351, ACPARS Workgroup, 13 July 2012, App. VII, p.6.

<sup>&</sup>lt;sup>20</sup> PARS is the USCG national Port Access Route Study. Later references are made to a portion of PARS called the USCG Atlantic Coast Port Access Route Study (ACPARS) which covers the U.S. Atlantic Coast.

<sup>&</sup>lt;sup>21</sup> DOI/BOEM Environmental Assessment (EA) "Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore New Jersey, Delaware, Maryland, and Virginia, January 2012," p. 340.

The following are excerpts from the BOEM EAs which reflect the application of the USCG's marine safety standards to the final WEAs for the states of Massachusetts, Rhode Island, New Jersey, Delaware, Virginia and Maryland:

- After considering public input on the RFI and based on further consultation with the Task Force, the potential WEA was developed to avoid the following areas:
  - 1. Shipping lanes, traffic separation schemes (TSS);
  - 2. Nantucket Lightship Habitat Closure Area; and
  - 3. Commercial fishing areas of interest (this resulted in removal of the eastern half of the RFI area from further consideration).

In total, 189 whole OCS blocks (an OCS block is 3 statute miles by 3 statute miles) and 144 partial OCS blocks were removed. ... the area considered for lease issuance was reduced to approximately half the size of the RFI area.  $^{22}$ 

• However, on September 26, 2011, BOEM received information from the United States Coast Guard (USCG) indicating that, should lessees attempt to develop commercial-scale renewable energy facilities in certain areas of the WEA offshore Virginia, substantial risks to navigational safety would likely arise. Although BOEM is not currently considering approving any COPs<sup>23</sup> for wind energy generation facilities in any area offshore the Mid-Atlantic States, it would make little sense to give priority to issuing leases in areas that the USCG currently believes would not be suitable for development in the future (see also Section 2.3 of the EA). Therefore, and for the same reasons it eliminated USCG "Category A" areas from priority leasing in the Maryland WEA during scoping … <sup>24</sup>

The referenced EA offered the following definition: "Category A – areas that USCG believes should not be leased because, should these leases be ultimately developed in the future, they would pose navigational risks due to existing and anticipated future increase in vessel traffic density."<sup>25</sup>

• Recommended vessel routes for deep-draft vessels and tugs/barges transiting Rhode Island Sound, Narragansett Bay, and Buzzards Bay are established by the USCG Captain of the Port, Providence, in cooperation with the Southeastern Massachusetts

<sup>&</sup>lt;sup>22</sup> DOI/BOEM Environmental Assessment (EA) "Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore Massachusetts, October 2012", p.9.

<sup>&</sup>lt;sup>23</sup> COP is a Construction and Operation Plan for the development and building of an offshore facility.

<sup>&</sup>lt;sup>24</sup> DOI/BOEM Environmental Assessment (EA) "Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore New Jersey, Delaware, Maryland, and Virginia, January 2012,", p. vi.

<sup>&</sup>lt;sup>25</sup> Ibid, p.18.

and Rhode Island Port Safety and Security Committees (NOAA, NOS 2010).The USCG anticipates providing BOEM with additional navigational safety recommendations when the Atlantic Coast Port Access Route Study (ACPARS) is complete in 2012.<sup>26</sup>

Based on the USCG's recommendation and BOEM's own preliminary analysis of vessel traffic data ... these areas identified by AWO and USCG would be excluded from leasing decisions under this action (see Figure 2.2). As a result, an area slightly less than 20 OCS blocks in the Virginia WEA would be considered for leasing and subsequent site assessment activities ....<sup>27</sup>

The site selection criteria that emerged from the BOEM EAs, appear fully compatible with the USCG's NVIC 2007 marine safety guidance for OREIs. However, the EAs also provide for the first time significant detail on the mitigation of marine navigation risk by outright exclusion of areas that could produce navigation or fishing conflict and by providing safe buffer zones between WEAs and vessel routes. In sum, the following marine safety criteria are evident from the final selection of blocks that were identified as lease candidates and from those blocks which were excluded from consideration:

- The presence of Traffic Separation Schemes (TSS) or other vessel Routing measures facilitate the safe designation of WEAs in ocean areas bearing volumes of marine traffic and/or fishing activity.
- Safety Buffer zones of 1 nm from TSSs and from shipping routes should be applied in WEA identification as well as in subsequent site selection.
- Marine traffic routes and fishing areas should be identified and their densities estimated and projected for future growth and expansion in defining the limits of WEAs.
- In selecting the size, orientation and content of WEAs, blocks should be excluded which would conflict with the safe operation and transit of shipping on recognized routes and from vessels working in traditional fishing areas.

It is clear the marine safety criteria contained in the BOEM EAs as evidenced by the exercise of exclusion, buffer, separation zones and distances are welcome and sorely needed by a marine transportation and fisheries systems looking to preserve marine safety and the primacy of navigation. It is also clear that none of these criteria were applied to the siting, size and shape of the CWA proposed facility for Nantucket Sound.

# Fishing Vessels

The following excerpts from the BOEM EAs reflect the concern for and application of marine safety standards for fishing interests found in the final WEAs:

<sup>&</sup>lt;sup>26</sup> Ibid, p.183.

<sup>&</sup>lt;sup>27</sup> Ibid, p.20.

- During the Area Identification process (March through May 2012), BOEM excluded some of the OCS blocks that overlapped with high value sea duck habitat and areas that, if ultimately developed with commercial wind energy facilities, would likely cause substantial conflict with commercial and recreational fishing activities."<sup>28</sup>
- Potential effects on commercial and recreational fishing include two broad categories:
  (1) displacement of fishing activities, and (2) alteration of target species availability. Impacts on fish or fish habitat could affect the availability of target species. ... Prior to selection of the final WEA, major areas of fishing interest were removed to minimize potential conflict between activities.<sup>29</sup>

The marine safety, non-displacement and species protection criteria contained in the BOEM EAs as evidenced by their exclusion of traditional fishing areas is positive and significant. It also stands in sharp contrast to the dismissive view of fishing needs and concerns evidenced in the BOEM/MMS/USCG review of the CWA facility proposed for the fishing grounds of Horseshoe Shoal in Nantucket Sound. The fishing interests who strenuously and repeatedly objected to the CWA facility siting and to the potential loss of traditional fishing grounds on and surrounding Nantucket Sound's Horseshoe Shoal were simply told they would need to find somewhere else to fish. In a December 5, 2008 conference call, Ed Barrett commented that "collision avoidance within the wind farm is problematic and may be above and beyond what mariners should have to do," and asked if, "in mitigating these problems is the Coast Guard considering channels through this wind park that would involve removing some of the turbines? Secondly, will the Coast Guard be considering changing of the spacing given the fact that 1/3 of a mile will be unsafe for us with mobile gear to fish within that park thereby making this a 24 square mile closure?" USCG Capt. Perry responded, "I think basically no on both of those. We only go forward with our analysis with the project that is proposed. It's like you build a house. You've got to go with the plans that are presented to you... We're going forward with the plan that Cape Wind has put forward to all the agencies and MMS.... As we said before, the impacts beyond, just looking at navigational safety, now when you start adjusting the footprint or the tower locations or anything then that goes into things outside the Coast Guard realm because of the economic impact and so on. We do recognize that you know, certain activities in here, they're going to have to operate a little bit differently and the fishing fleet is one of them. Just because of the nature of your business and there probably is an impact to you."

Captain Perry went on to state that fishing territory was outside the realm of navigational safety, security, and environmental concerns, was thus not the Coast Guard's responsibility, and that the fishermen could fish someplace else.

<sup>&</sup>lt;sup>28</sup> DOI/BOEM Environmental Assessment (EA) "Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore Massachusetts, October 2012", p.10.

<sup>&</sup>lt;sup>29</sup> Ibid, pps. 190 & 191.

## USCG ACPARS

Concurrent with the BOEM "Smart from the Start" process, in 2011 USCG embarked on a separate study whose scope would influence OREI facility siting and design. While not formerly linked to the BOEM EAs, the results, as they developed from USCG's in-house "Atlantic Coast Port Access Route Study," are acknowledged and reflected in the BOEM EAs. One example of this exchange is offered from the Offshore Massachusetts EA:

The USCG is expected to provide additional navigational safety recommendations when the Atlantic Coast Port Access Route Study (ACPARS) is complete. The main purpose of the ACPARS is to enhance navigational safety by examining existing shipping routes and waterway uses and, to the extent practicable, reconcile the paramount right of navigation within designated port access routes. ... The data gathered during the ACPARS and its analysis results may suggest that the USCG modify the existing routing measures, create one or more precautionary areas, and/or identify area(s) to be avoided.<sup>30</sup>

The ACPARS is being conducted by an in-house USCG group of experts. This Workgroup (WG) issued its first and interim report in July 2012.<sup>31</sup> The final report is not expected to be issued until the end of 2013, after a vessel Automated Information System (AIS) data analysis is completed by a contracted entity.

Building on its prior work published in the USCG's 2007 marine safety guidance for OREIs and adding critical new risk assessment and mitigation detail, the interim report offers the following in the summary of its efforts:

However, the WG has developed a methodology for initially classifying lease blocks as: not suitable (Red), may be suitable with more study (Yellow) or suitable (Green), based on proximity to shipping routes. This methodology has been used by the CG to provide input to the Bureau of Ocean Energy Management (BOEM) regarding the potential impact to navigation of areas being proposed for wind energy development. The WG has determined, given the lack of complete AIS data and rudimentary analysis to date, that recommending even preliminary routing measures is not appropriate at this time.<sup>32</sup>

In other words, USCG switched the emphasis and goal in ACPARS from recommending changes in shipping routes to accommodate the BOEM identified WEAs to recommending whole or partial exclusion of blocks within the WEAs to provide for

<sup>&</sup>lt;sup>30</sup> Ibid, p. 198.

<sup>&</sup>lt;sup>31</sup> "Atlantic Coast Port Access Route Study Interim Report", Docket Number USCG-2011-0351, ACPARS Workgroup, 13 July 2012.

<sup>&</sup>lt;sup>32</sup> Ibid, p.i.

buffers and separation for the safe navigation of shipping on their traditional and projected routes. USCG, as part of the continuing study, also committed to better research vessel routes and their AIS density and possibly to make additional recommendations in the future.

The ACPARS efforts offer a substantial addition to the evolving body of USCG guidance, safety and marine environmental protection standards and criteria in the siting, design and operation of OREIs. The ACPARS embraced the following key principles in forming its navigation safety recommendations for the proposed WEAs offered in the preliminary BOEM Notices:

- Any WEA or block for potential development must be examined/evaluated for its impact on maintaining or enhancing marine navigational safety.
- The selection and design of proposed WEAs must address and reconcile the needs of and the paramount right of marine navigation.
- The Red-Yellow-Green suitability criteria (R-Y-G Methodology) were developed and applied in ACPARS to directly address known navigational risks to vessels from allision, collision and grounding posed by wind farms and their induced navigation radar interference.
- A rigorous methodology should be applied to assess marine navigational risk of proposed wind farm areas (including vessel collision/allision/grounding), routing and mitigation measures.
- The navigation risk assessment methodology applied should also account for future changes in shipping and marine uses in addition to current conditions.
- Navigational risk assessment must recognize and address that changes to traditional shipping routes (including their combination) could increase vessel density and also result in the mixing of previously segregated vessel types.
- Current AIS data collection is neither complete (lacking detection of smaller commercial, recreational, fishing and passenger vessels) nor amenable to analysis regarding shipping routes or their densities.

The core of the USCG ACPARS analysis and the basis for its recommended exclusions from the WEAs proposed in the BOEM Notices for Massachusetts, Rhode Island, New Jersey, Delaware ,Virginia and North Carolina is the R-Y-G methodology. This methodology was developed from standards and criteria for OREIs applied in the UK by its MCA. <sup>33</sup> These are the same standards which USCG loosely modeled its earlier 2007 marine safety guidance for OREIs. The ACPARS report defined the R-Y-G methodology as follows:

<sup>&</sup>lt;sup>33</sup> UK Maritime and Coastguard Agency "Offshore Renewable Energy Installations (OREIs) - Guidance on UK Navigational Practice, Safety and Emergency Response Issues, MGN 371 (M&F), August 2008.

As part of Phase 2 the WG developed a methodology based primarily on the UK Maritime Guidance Note 371 to make preliminary determinations of suitability of proposed wind development areas with regard to navigation. MGN 371 provided three break points between WEAs and vessel traffic routes that were thought to be most significant and useful to this determination:

- 1 NM The minimum distance to the parallel boundary of a TSS. At this distance there would still be S band radar interference and ARPA is affected. This is also the boundary between High/Medium navigational safety risk.
- 2 NM The distance where compliance with COLREGS becomes less challenging, mitigation measures would still be required to reduce risk As Low as Reasonably Practicable (ALARP). This is also the boundary between Medium/Low navigational safety risk.
- 5 NM –The distance where there are minimal impacts to navigational safety and risk should be acceptable without additional mitigation. This is also the boundary between Low/Very Low navigational safety risk."<sup>34</sup>

ACPARS examined the shipping routes and patterns for each area as well as individual blocks in the WEAs proposed by BOEM. Blocks that were determined to be hazardous to marine navigation and to the marine environment were "colored" RED which the group defined as:

RED BLOCKS: Those blocks, or portions of blocks, that cannot / should not be developed now or in the future because of vessel traffic usage. Development of these blocks would have an unacceptable impact to navigational safety and precludes development. Traffic usage may also increase in these blocks based on the development of adjoining / adjacent blocks.

YELLOW BLOCKS: Those blocks, or portions of blocks, that require further study /analysis of existing traffic usage / patterns as well as projected future traffic increases based on development of adjoining / adjacent blocks. Development of these blocks would potentially have an unacceptable impact on navigational safety which requires additional study to determine the risk and possible mitigation if developed.

GREEN BLOCKS: Those blocks, or portions of blocks, whose development would, based on available information, pose minimal to no detrimental impact to navigational safety. Traffic using these blocks can be "re-routed" around developed alternative energy sites. These blocks would require minimal, if any, mitigation.<sup>35</sup>

<sup>&</sup>lt;sup>34</sup> "Atlantic Coast Port Access Route Study Interim Report", Docket Number USCG – 2011-0351, ACPARS Workgroup, 13 July 2012, p.12.

<sup>&</sup>lt;sup>35</sup> Ibid, Encl.2.

The ACPARS group capped their marine navigation safety analysis with the recommendation excerpted below:

Recommendation: Although consensus was not reached, the majority of the ACPARS Workgroup recommended the use of a 1NM separation distance from shipping routes for determining the boundary between Yellow and Red Blocks. As stated above there was consensus for using 5NM as the minimum distance from shipping routes for Green Blocks. The following is the agreed upon process for designating the color of the blocks:

1) Identify existing vessel routing/management measures, i.e. TSSs, fairways, anchorages and - designate all areas within 1NM as Red

2) Using seasoned CG waterway management professionals, approximate and bound commercial shipping routes outside of TSS/fairways using best available AIS data; however, a minimum of 1 year of data is recommended. Designate all areas within 1 NM as Red ...<sup>36</sup>

# Comparison Between Nantucket Sound and Other OREI Navigational Safety Measures

The attached Figure 4-12 has been excerpted from the BOEM EA for Massachusetts and displays the WEA proposed from offshore Massachusetts, the TSS schemes for Rhode Island Sound, the Port of Boston and the approaches to NY.<sup>37</sup> Exhibit 3. It was derived from the AIS data gathered from larger commercial vessels (exceeding 300 gross tons and other vessel types carrying AIS recorders) and shows "High" density vessel tracks in a yellow to salmon color scheme. BOEM did not disclose the age of the AIS data or the period during which it was collected. However ,it is assumed that it was gathered and analyzed from the year 2009 as defined by the Northeast Ocean Data Portal Working Group's website.

Exhibit 4, that follows, is derived from the same source, data and analysis method as that of Figure 4-12 (Exhibit 3) and as used by BOEM for other areas. Exhibit 4 displays the "High" density vessel tracks for larger commercial vessels using the Rhode Island Sound TSS (purple), the coastal route from New York and Long Island Sound to the Cape Cod Canal (light green), through Vineyard Sound and through Nantucket Sound passing to the Atlantic Ocean and to Nantucket Harbor (yellow to salmon tracks). Using BOEM's analysis for AIS data, Exhibit 4 shows commercial vessels use Nantucket Sound, specifically its Main Channel, as previously described in the Coast Pilot, in heavy volumes very similar to those studied for the proposed WEAs in the Massachusetts and in the Rhode Island & Massachusetts EAs produced by BOEM.

<sup>&</sup>lt;sup>36</sup> Id.

<sup>&</sup>lt;sup>37</sup> DOI/BOEM Environmental Assessment (EA) "Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore Massachusetts, October 2012", p.200.

What is not shown in these Figures is the disparity of marine navigation risk and of displacement of fishing activities that would be created by the siting and design of OREIs in the various WEAs as compared to the CWA proposed facility.

Using the WEA area described in the Rhode Island & Massachusetts BOEM EA (RIMAWEA)<sup>38</sup> as a comparison to the proposed CWA site, several significant factors emerge that drive starkly different navigational and operational risk environments that transiting vessels must overcome.

The RIMAWEA would be located adjacent to the high density TSS in Rhode Island Sound. The vessel one-way lanes of the TSS are each 1 nm wide with water depths ranging from 60 – 120 ft. The Main Channel directly adjacent to the CWA site on Horseshoe Shoal can be visualized as a single-lane carrying vessel traffic in multiple directions which narrows to  $\frac{3}{4}$  nm between two dangerous shoals with 30 - 60 ft. of water at the junction of heavy vessel traffic crossing from east to west and north to south. There are few shoals and ledges in the direct vicinity of the RIMAWEA and the Rhode Island TSS. Vessels leaving the TSS by design or in emergency have "sea room" to maneuver and recover in water depths ranging from 60 - 160 ft. Utilizing both BOEM EA and ACPARS criteria, a troubled vessel seeking to avoid a casualty with a WTG placed near the TSS or with another vessel hidden in radar interference from the facility would have a 1 nm buffer space between the TSS and other vessel routes to safely react. The USCG ACPARS Workgroup examined the vessel routes and traffic density for the RIMAWEA proposed for Rhode Island Sound, the region most akin to the navigation conditions found in Nantucket Sound. The results of that examination were reported in Appendix VII of their report. USCG requested that BOEM exclude a total of 16 blocks from the RIMAWEA to safeguard navigation safety for vessels on routes or within the TSS which would pas within a safety buffer of 1 nm from the WEA. USCG also requested the BOEM include the following statement in the EA:

> The Coast Guard has a responsibility to ensure the safety of navigation under the Ports and Waterways Safety Act. The navigational safety risk posed by building structures in the proximity of shipping will be affected by numerous factors including but not limited to: vessel size, vessel type, density of traffic, prevailing conditions, cumulative impacts of multiple obstructions (wind farms), existence of multiple shipping routes (crossing or meeting situations), radar/ARPA interference, and existence of mitigating factors such as navigational aids, vessel traffic services, pilotage, etc. There currently is no standard recommended separation distance between OREIs and shipping routes. As an interim measure, the Coast Guard intends to apply the

<sup>&</sup>lt;sup>38</sup> DOI/BOEM Environmental Assessment (EA) "Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore Rhode Island and Massachusetts, June 2012"

UK Maritime Guidance Note MGN-371 and the expertise of waterways SME's to evaluate and/or identify individual BOEMRE RFIs/CFIs. Based o nMGN-371, any areas <1 NM from existing shipping routes pose a high risk to navigational safety and are not considered acceptable for the placement OREIs. Areas >5NM from existing shipping routes are considered to pose minimal risk to navigational safety. Everything between 1NM and 5NM would require analysis to determine if mitigation factors could be applied to bring navigational safety risk to within acceptable levels. Please note that impacts to radar and ARPA still occur outside of 1 NM which will have to be evaluated along with other potential impacts. The above are only planning guidelines and a full navigational risk assessment will be required as part of the EIS prior to approving construction of any OREIs.<sup>39</sup>

In contrast USCG accepted the design and siting of the CWA facility without challenge and without imposing any buffer or minimum separation distance between the surrounding vessel routes and channels and the facility's WTGs. The CWA facility design and placement of its WTGs would provide the crew of a passenger ferry or boat that leaves the channel a mere 60 seconds, at normal speeds, and a high speed ferry 20 seconds to detect, take action and respond to avoid an allision with an adjacent WTG.

Another significant disparity is evident in the treatment of the safety and operational needs of commercial fishing vessels. The BOEM EAs examined then excluded entire blocks and sections of the proposed WEAs to prevent the displacement of those vessels and their traditional fishing activity. BOEM appears to have adopted the position that commercial fishing vessels and their operating techniques make for an unacceptable safety risk when operating within or in the vicinity of a WEA. BOEM, MMS and USCG took the opposite tack in their review and acceptance of the CWA proposal. The repeated complaints of fishing industry representatives in Nantucket Sound that the CWA facility would make it unsafe for them to fish with long-established techniques on or adjacent to the rich fishing grounds at Horseshoe Shoal were simply ignored or obfuscated. A marine and navigational safety consultants' report by Cinnon/McGowan responding to the MMS DEIS reported:

A partnership of 18 commercial fishing organizations in a news release, dated August 23, 2006, stated that the following "Navigation of mobile

Workgroup, 13 July 2012, App. VII.

<sup>&</sup>lt;sup>39</sup> "Atlantic Coast Port Access Route Study Interim Report", Docket Number USCG-2011-0351, ACPARS

fishing gear between the 130 wind towers would be hazardous or impossible." The commercial fishing industry has stated that the only realistic compromise would be to space the turbines a minimum distance of 1 to 2 nautical miles apart from each other. There is simply no other form of safety mitigation measure which would effectively help commercial fishermen. However, the fishing industry maintains that this is a compromised solution and structures placed in a heavily fished area are purely hazards to navigation.<sup>40</sup>

The report went on to state: "The WTG spacing proposed by Cape Wind is not large. The design fails to even meet the minimum spacing recommended in the UK just to safely allow small boat operations much less commercial vessel and ferry operations. The spacing is too narrow to safely permit fishing trawls, requiring a minimum 0.5 to 1 nautical miles turning radius (equating to a 1 to 2 nautical mile minimum spacing between each WTG) which have been used for decades in and around the project's waters.<sup>41</sup>

MMS subsequently issued the FEIS making no change to the CWA facility site, its encroachment on the adjacent ferry routes or the North and Main Channels of Nantucket Sound, to the facility's design or to the number and placement of the 130 WTGs.

### Conclusion

After examining the development of guidance, standards and criteria in the U.S. as evidenced by the various EISs, EAs, the USCG's NVIC and ACPARS Study as well as reports by various experts relative to the navigation safety and marine environmental pollution aspects of the siting, design and operation of wind powered OREIs the following conclusions are offered:

- 1. As a general matter, since 2006 USCG and BOEM have made substantial progress in developing and applying marine safety and marine environmental protection standards, criteria and guidance for the siting, design and operation of wind powered OREIs in the U.S. OCS.
- 2. The application of safe buffer zones in the design of offshore WEAs and the exclusion of ocean blocks to eliminate potential conflicts with the marine navigation safety needs of vessels in the U.S.'s marine transportation system are substantial and positive mitigation to vessels' potential navigation risk. BOEM, USCG and prospective developers should continue to apply safety buffers and exclusion areas in the future to enhance marine safety and to facilitate these offshore developments. The

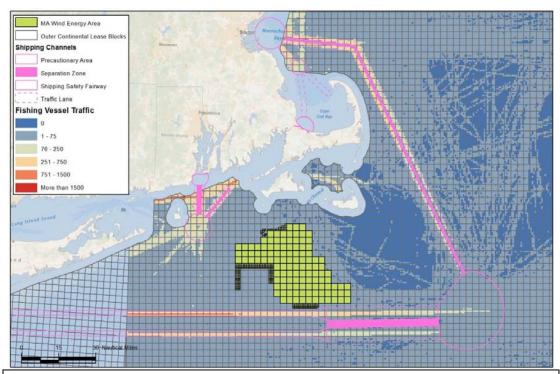
<sup>&</sup>lt;sup>40</sup> "ANALYSIS OF THE TREATMENT OF Navigation Safety, Marine Environmental Protection, Commercial Fishing, Defense & Security, Electromagnetic Emissions, Communication and Search and Rescue (SAR) IN THE MINERALS MANAGEMENT SERVICE (MMS) CAPE WIND PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT," Linnon and McGowan, April 2008, p.3.

<sup>&</sup>lt;sup>41</sup> Ibid, p.4.

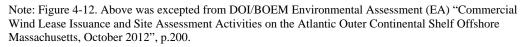
application of safe buffer zones in the design of offshore WEAs and the exclusion of ocean blocks to eliminate potential conflicts with the marine navigation safety needs of vessels in the U.S.'s marine transportation system are substantial and positive mitigation to vessels' potential navigation risk. These two measures have been uniformly appled to all WEAs with the exception of Nantucket Sound. BOEM, USCG and prospective developers should continue to apply safety buffers and exclusion areas in the future to enhance marine safety and to facilitate these offshore developments.

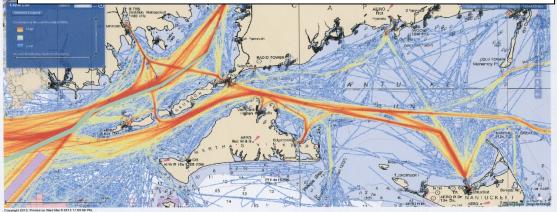
- 3. The application of safe buffer zones in the design of offshore WEAs and the exclusion of ocean blocks to eliminate potential conflicts with the marine safety and operational needs of commercial fishing vessels are substantial and positive mitigation to these vessels' potential navigation risk as well as to prevent displacement of these valuable activities. BOEM, USCG and prospective developers should continue to apply safety buffers and exclusion areas in the future to enhance marine safety and to maintain a strong fishing industry and stocks in the U.S.
- 4. The USCG, MMS and BOEM began review of the CWA proposed facility in Nantucket Sound before any meaningful navigation safety or marine environmental protection standards and criteria had been developed. That stage of the CWA was still very early in project permitting, and approximately 10 years ago.
- 5. USCG has failed to effectively apply the marine navigation safety and environmental protection standards, guidance and criteria (or, their equivalents) it developed for OREI's in the U.S. to the CWA facility.
- 6. There are strong and continuing indications backed by research that neither a sufficient and meaningful site assessment nor an accurate and detailed vessel traffic assessment has been conducted for the CWA proposed facility.
- 7. There are also indications that a realistic or detailed navigational risk assessment (to a recognized standard) has not been conducted nor have adequate and effective marine safety mitigation actions been identified for the CWA facility.
- 8. Finally, there are strong and continuing indications backed by maritime concerns and experts as well as recent guidance, standards and criteria developed by BOEM and USCG that the CWA facility is fatally flawed as currently designed and sited. It is incompatible with the needs of marine transportation in Nantucket Sound and is an unnecessary and unacceptable threat to the current-day and future users of Nantucket Sound's waterways.

Nor



Source: Modified from Northeast Ocean Data Portal Working Group, 2011 Figure 4-12. Vessel traffic density derived from AIS data, shipping channels, and the WEA





Source: Modified by The McGowan Group, LLC from Northeast Ocean Data Portal Working Group, 2013 Figure 1. Commercial vessel "High" density traffic derived from AIS data (2009), shipping channels/routes and aids to navigation for Nantucket and Rhode Island Sounds and Buzzards Bay

# Exhibit 7

### COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF PUBLIC UTILITIES

Petition of NSTAR Electric Company for Approval of a Proposed Long-Term Contract for Renewable Energy with Cape Wind Associates, LLC Pursuant to St. 2008, c. 169, § 83

D.P.U. 12-30

### DIRECT TESTIMONY OF

#### JAMES G. DALY

#### **ON BEHALF OF**

# NSTAR ELECTRIC COMPANY

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2 V.

Q.

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### V. PRICING AND MARKET ANALYSIS

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# How do the costs under the Cape Wind PPA for energy, capacity and RECs compare with the market prices for energy, capacity and RECs?

5 A. The costs for energy, capacity and RECs under the contract are higher than the Levitan 6 forecast of market prices for energy, capacity and RECs during all years of the contract. 7 The contract's nominal above-market cost over the life of the contract is estimated to be 8 \$940 million should the project qualify for investment tax credits and \$967 million 9 should the project not qualify for any tax credits. On a net present value, the 10 corresponding amounts equal \$489 million and \$508 million, respectively.

#### 11 Q. How was the total above-market estimate derived?

A. The Company prepared Exhibit NSTAR-JGD-3, which calculates the annual abovemarket costs for energy, capacity and RECs for each year of the contract. This was done by applying the forecasted output from the Cape Wind contract proposal to both the Cape Wind contract pricing terms (Exhibit NSTAR-JGD-2) and the market prices provided in the Levitan forecast (Exhibit NSTAR-JGD-3). The net difference in costs plus the appropriate remuneration equals the above-market costs to be recovered from customers.

# 18 Q. Did the Company consider price suppression in its analysis of the Cape Wind PPA?

A. Not explicitly. The Levitan Forecast includes the Cape Wind project as part of the
 resource mix so it includes the price suppression effect of Cape Wind. However, as
 presented in the testimony of Mr. Duffy, a projection of wholesale price suppression with
 and without Cape Wind has been prepared and submitted for the Department's review, in

# Exhibit 8



Associated Industries of Massachusetts One Beacon Street, 16<sup>th</sup> Floor Boston, MA 02108 617.262.1180 | www.aimnet.org

ORIGINAL BY EMAIL

April 24, 2013

Mr. Matthew McMillen Director, Environmental Compliance DOE Loan Programs Office U.S. Department of Energy LP 10 Room 4B196 1000 Independence Avenue, SW Washington D.C. 20585 <u>matthew.mcmillen@hq.doe.gov</u>

Mr. Todd Stribley DOE Loan Programs Office U.S. Department of Energy LP 10 Room 4B196 1000 Independence Avenue, SW Washington, DC 20585 todd.stribley@hq.doe.gov

> Re: Request for Comments - Department of Energy's adoption of the Final Environmental Impact Statement for the Cape Wind Project issued on January 1, 2009 by the Minerals Management Service of the U.S. Department of the Interior, "*EIS No.* 20120401, *Final EIS, DOE, MA*, Adoption" 78 Fed. Reg. 9388 (Feb. 8, 2013)

Dear Messrs. McMillen and Stribley:

Associated Industries of Massachusetts (AIM) is pleased to submit these comments for the DOE Loan Application referenced above.

AIM is the state's largest nonprofit, nonpartisan association of Massachusetts employers. AIM's mission is to promote the well-being of its thousands of members and their employees and the prosperity of the Commonwealth of Massachusetts by improving the economic climate, proactively advocating fair and equitable public policy, and providing relevant, reliable information and excellent services.

AIM would like to go on record opposing a Department of Energy (DOE) loan guarantee for Cape Wind because such a loan guarantee is not in the best interests of taxpayers, ratepayers, or the environment, and is not consistent with the goals of the DOE Loan Program.

There is no evidence submitted on the record in any of the proceedings related to this project which indicate that construction of Cape Wind will be jeopardized if it does not receive the DOE loan guarantee. Therefore, if DOE provides a guarantee it would be committing resources to this project unnecessarily and taking resources away from projects that really need such support.

#### BACKGROUND

AIM has been involved with the Cape Wind proposal for several years, beginning in May 2010, when National Grid (NGRID), the largest utility in Massachusetts, filed a power purchase agreement with the Massachusetts Department of Public Utilities (D.P.U.) for 50% of the full output of Cape Wind.<sup>1</sup> This was the first time Cape Wind had ever disclosed the expected price for the power from the project. After a series of hearings and briefings the power purchase agreement was approved by the Massachusetts Department of Public Utilities on November 22, 2010.

Similarly, on March 30, 2012, NSTAR Electric Company (NSTAR), the second largest utility in Massachusetts, filed their power purchase agreement with the Department for an additional 27.5% of the full output of Cape Wind.<sup>2</sup> This power purchase agreement was approved essentially as submitted on November 26, 2012, bringing the total amount of the Cape Wind project output committed to guaranteed long-term contracts to 77.5% of the total output at full build.

In both cases, the prices and terms were for all practical purposes identical – a 15-year contract beginning at a price of nearly 20 cents per kWh (including utility remuneration or commission), with higher prices guaranteed in the event the federal production tax credit (PTC) and/or investment tax credit (ITC) is not available, and with further higher prices guaranteed if a smaller project is built than originally planned. Finally, on top of all these guaranteed prices is an additional guaranteed 3.5% increase in the price every year regardless of inflation or the price of non-Cape Wind power.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> See DPU-10-54 - Power Purchase Agreement between National Grid and Cape Wind Associates, LLC, May 10, 2010

<sup>&</sup>lt;sup>2</sup> See DPU-12-30 - Petition of NSTAR Electric Company for Approval of a Proposed Long-Term Contract for Renewable Energy with Cape Wind Associates, LLC Pursuant to St. 2008, c. 169, § 83

<sup>&</sup>lt;sup>3</sup> It should be pointed out that of all the other power purchase agreements signed by other utilities under the same section of the law which governed the Cape Wind agreements, Cape Wind is the only project to have pricing

#### **COMMENTS**

Throughout the adjudicatory processes at the Department of Public Utilities, AIM opposed the power purchase agreements. It did so not because of any bias against renewable power (in fact, AIM supported several other long-term contracts during the same period of time - See DPU 11-5, 11-6 and 11-7 (2011)), but rather because of reasons unique to the Cape Wind project. It should be noted that AIM has *never* opposed Cape Wind because of its location and has never commented in any other proceeding related to a federal or state environmental permit.

We believe it would be helpful to reiterate the reasons for AIM's opposition, which stem from the ratepayer's perspective and impacts, for purposes of assisting in your review of the Cape Wind loan guarantee application.

#### 1. The Loan Guarantee is Not Necessary to Finance Cape Wind.

The two power purchase agreements negotiated between Cape Wind by NSTAR and NGRID represent the most expensive above-market contracts ever negotiated for renewable power in Massachusetts, including other wind energy. As stated above, there is not only the high initial cost, but multiple increases based on contingencies, assuring that Cape Wind will be made whole no matter what happens as long as it produces power. While proponents often cite the initial cost of power as acceptable, they overlooked the fact that it is guaranteed the price of Cape Wind will increase exponentially and very quickly, with the price doubling from the initial price near the end of the contract. No other long-term renewable contract negotiated by the utilities has these favorable terms.

Clearly, Cape Wind does not need this guarantee. In fact, all the price negotiations occurred without the loan guarantee as a possibility, indicating that the risk premium to investors was already built into power purchase price negotiated. Dennis Duffy, Cape Wind's Vice President of Regulatory Affairs admitted as much in pre-filed testimony pertaining to the NSTAR-Cape Wind power purchase agreement:

Based on our conversations with the financing community, Cape Wind is confident that the PPAs with National Grid and NSTAR will be sufficient to finance the Project, while Cape Wind continues to pursue sales of the remaining output. Prefiled Direct Testimony of Dennis J. Duffy D.P.U. 12-30, Exhibit CW-DJD-1, Page 16, lines 12-15, March 30, 2012

contingencies related to yearly guaranteed escalation clauses, PTC or ITC availability or project size. All other projects are fixed flat priced over the term of the contract period. See DPU 11-5, 11-6 and 11-7 (2011)

This was repeated during sworn cross examination as part of the hearing process:

Q. In the National Grid PPA [referring to the earlier Cape Wind/NGRID PPA], was it stated that 77.5 percent of an agreement to purchase Cape Wind would be enough to get financing?

[Duffy] I don't believe it's stated in the PPA, and I don't believe Mr. Daly [of NSTAR] said that, *although in my testimony we've made it very clear in this case that that would be sufficient to finance the project.* 

Cross examination of Dennis Duffy, D.P.U. – 12-30, Page 146, lines 11-18. August 6, 2012. Emphasis Added

Given these statements, what has changed since August of 2012 when Cape Wind promised they would not need a loan guarantee to secure financing? Perhaps a realization that the project is riskier than the proponents have declared or simply no one wants to invest in it.

In addition, if Cape Wind is experiencing financial difficulties there is no obligation for them under any PPA to build the full project. It is in fact more advantageous for the developers not to build the entire project. With the NSTAR and NGRID contracts, Cape Wind now has committed power purchase agreements for 77.5% of the total output. However, the contracts are for a stated amount of power, not a stated percentage. For instance, if only 77.5% of the original project is built (say 100 windmills), under the terms of both power purchase agreements, the utilities will be obligated to purchase ALL of the output, essentially giving Cape Wind a sellout. Again, this was confirmed by Mr. Duffy in sworn cross examination.

Q. If a smaller Cape Wind project was built, say 77.5 percent of the original size, essentially you would have sold 100 percent of the output through bilateral contracts; is that correct?

[Duffy] Yes, if the 77 percent number you're referencing is the originally proposed 130, and the two PPAs that have come before the Department in combination come up to 77 percent, I agree, yes.

Cross examination of Dennis Duffy, D.P.U. – 12-30, Page 148, lines 3-10, August 6, 2012.

In addition, if a smaller project is built, the cost per kilowatt-hour is increased to account for the higher costs.

Q. And under the NGRID contract and also the NSTAR contract, it is stated that if you build less [turbines], the price will be adjusted accordingly?

[Duffy] Within parameters; that's correct.

Cross examination of Dennis Duffy, D.P.U. – 12-30, Page 145, lines 19-22, August 6, 2012.

In the final analysis, Cape Wind is looking for a loan guarantee they do not need for a larger project than they need to build. Cape Wind could easily reduce the price of the project by the equivalent amount of the loan guarantee and just build a smaller, more efficient project.

#### 2. A DOE Loan Guarantee will not Reduce Prices for Ratepayers Already Burdened by the High Price of Cape Wind Power.

The cost to ratepayers for this power purchase agreements are enormous, averaging almost 200 million dollars per year in above market cost. With Massachusetts having near the highest electricity prices in the country, any additional costs would be borne by a region of the country that can ill afford any increases. Additionally it should be pointed out that the cost of Cape Wind is far higher than other renewable power, nearly three times higher than other wind energy assets. In essence, multiple times more renewable energy could be purchased for the same money.

There is no discernible benefit to the ratepayer if taxpayer dollars are committed to the project – "the PPA does not call for any adjustment whatsoever if Cape Wind is not able to secure a federal loan guarantee from the United States Department of Energy ("USDOE")." Prefiled Direct Testimony of Dennis J. Duffy, D.P.U. 12-30, Exhibit CW-DJD-1, Page 12, lines 9-11, March 30, 2012. Emphasis Added

# **3.** The DOE Loan Guarantee Will Not Result in Additional Investments in Massachusetts, New England, or the United States.

Surprisingly, despite the billions in ratepayer money that will be committed to this project, there is absolutely no guarantee that any of the money will be used to purchase products from suppliers in Massachusetts, New England, or even the United States. Cape Wind has already cancelled an agreement with a Massachusetts business (See January 28, 2013 letter from Mass Tank Sales Corp, Middleboro, MA, Carl C. Horstmann, President, to Mr. Todd Stribley, U.S. Department of Energy). While there may be some construction jobs related to the project (although there is no guarantee that Massachusetts businesses will be awarded the contracts), dollar for dollar these jobs will come at a high price in reduced employment in other areas of the state - primarily from companies adjusting to the most significant rate increase in recent memory, perhaps ever.<sup>4</sup>

Again, in sworn cross examination of Mr. Duffy, he relieves us of any doubt as to Cape Wind's real intentions:

<sup>&</sup>lt;sup>4</sup> While the amount of power attributed to the Cape Wind PPA is comparatively small - (3.5% of total load in NGRID territory and 1.9% in NSTAR territory), the huge prices will result in energy price increases of 10% or more in an average customers distribution charge, absent other increases.

Q. When Cape Wind sources out their parts for their project, is there any requirement anywhere in the PPA that you would need to purchase a certain amount of these parts in Massachusetts?

[Duffy] I don't recall. Not that I recall.

Q. Is there a certain amount that is specified that you would have to buy in the United States?

[Duffy] I don't recall any such provision.

Q. So essentially you could source the building of the parts for Cape Wind anywhere in the world?

[Duffy] Well, without conceding whether that hypothetical is practical or realistic, I'm not aware of a provision whereby such an approach would be a violation of the terms of these particular contracts.

Cross examination of Dennis Duffy, DPU 12-30 - NSTAR Electric Company - Vol. 2, page 163, lines 6-21, August 6, 2012

### 4. The DOE Loan Guarantee Will Not Reduce the Use of Foreign Oil or Coal and Will Not Result in Significant Reductions of Pollutants, Including Carbon Dioxide.

Throughout the negotiations and adjudicatory hearings for Cape Wind the developers have promised that Cape Wind will bring significant reductions in pollutant levels in New England, particularly in greenhouse gases. However, while this may have been true when the project was first proposed, it is no longer the case and the proponent has not updated its analysis, something that AIM has been calling for repeatedly.

The New England Electric Grid is served by several sources of energy – natural gas, nuclear, renewable power, hydro<sup>5</sup>, and coal. On any given average day in New England, the fuel mix for electric generation is nearly 50% non-carbon emitting (nuclear, renewable and hydro), with the vast majority of the rest (often over 50%) being natural gas, the cleanest of fossil fuels. Only a tiny portion of electricity is generated by coal, generally under 4% and almost none is produced using oil. Therefore the claim that foreign oil or coal use will be reduced if Cape Wind is helped by the DOE loan guarantee is simply incorrect. While some of the natural gas does come from foreign sources though the use of liquefied product, even that amount will be reduced over the next several years as additional pipeline capacity is built to take advantage of US natural gas deposits in Pennsylvania and elsewhere.

<sup>&</sup>lt;sup>5</sup> Large scale hydro, such as that from Hydro Quebec and other renewables built prior to implementation of recent laws are not considered "renewable" under Massachusetts law and therefore will be listed separately for consistency. AIM prefers to use the term "non-carbon emitting" but for consistency the Massachusetts legal definitions will be used.

In fact, one of the coal plants in Massachusetts – Salem Harbor - will be shutting down next year and Brayton Point, the largest plant in New England that uses coal, has just been sold and faces an uncertain future. Otherwise only small capacity coal plants remain in New England and none will be built anytime in the future. Therefore, any "emission reductions" that Cape Wind claims should be taken with a grain of salt when almost 50% of the electric grid is served by non-carbon emitting sources already, with the remaining served by the lowest carbon emitters available. New England's generation profile is already one of the cleanest in the country.

In addition to the project not reducing the amount of pollutants previously claimed, it is even unclear if Cape Wind will reduce any pollutants at all worldwide. While a wind turbine does not produce pollution during it normal use, this is a very limited and outdated analysis – many sustainability experts are now using life cycle analysis to make sure that emission reductions here in the US do not result in higher emissions is undeveloped countries as a result of mining and processing materials used to construct renewable power generation equipment. In fact, Massachusetts recently instituted stringent regulations concerning the burning of biomass for energy because of a life-cycle analysis which showed the overall environmental impact of such a project to be negative – surprising everyone.

Oddly, for such a large project like Cape Wind, there has never been a life cycle analysis performed. This is especially crucial as Cape Wind will use an enormous amount of steel and other materials, including rare earth elements largely mined unregulated in China and as pointed out earlier in these comments there are no restrictions for where Cape Wind can source materials. As a result, Cape Wind could easily source materials from environmentally unsustainable sources which could have a demonstrably worse impact on the environment than the small amount of emissions it will displace. We would urge the DOE in considering the Cape Wind application for a loan guarantee to insist on such a life-cycle analysis. We all may be very surprised with the answer.

The DOE should not be party to such sleight of hand. If Cape Wind is good for the environment, they should prove it, given the amount of promises made and money spent, or the DOE should demand that Cape Wind purchase from only the most sustainable sources. It would be a tragedy for a project claiming to be green to leverage a taxpayer guarantee to harm the environment outside the US.

# 5. Cape Wind Will Not Foster Innovation, Lower Costs, or Result in More Offshore Wind Projects

The proponents of the project often point out that the real goal of building Cape Wind is to establish an off-shore wind industry in the United States. If that is the case, then Cape Wind is simply not the project to support.

Even if Cape Wind gets built and performs as promised, the added cost to ratepayers will be so high – on the order of 150-200 million dollars per year on average - that that cost alone will be upsetting to ratepayers. It represents nearly 10% or even more increase in distribution charges,

depending on service territory.<sup>6</sup> This will cost tens of thousands of dollars in electricity increases per year for a number of companies already struggling under the high cost of power here. It is inconceivable that another power purchase contract will be made with Massachusetts utilities that have the same or similar cost structures to Cape Wind. In fact, recent legislation would make non-competitively bid deals like the one Cape Wind did with NGRID and NSTAR much more difficult to accomplish.

Further, the notion that future prices will drop to acceptable levels because of this project is fantasy. Prices would have to drop almost 75% to make offshore wind of this magnitude acceptable. There is no known technological change that depends on this project being built that would change the cost equation for off shore wind. If there are off the shelf or new technologies available that would lower Cape Wind's costs even marginally (such as new designs for more efficient turbines), then perhaps a project containing those advances should be financed, but not this outdated project.

#### CONCLUSION

One of the hallmarks of DOE's review should be whether or not to commit taxpayer money for commensurate societal benefits. We do not believe there are societal benefits for committing taxpayer resources to the Cape Wind project.

DOE should not be swayed by promises or with incomplete or outdated data. Cape Wind has enjoyed every conceivable advantage and that should have resulted in financing without committing and risking taxpayers' money. The fact that they keep promising construction - *if only* they had another guarantee, or another contract, or another tax credit - simply means that Cape Wind is not a good deal. In any other business that had pre-sold 75% + of its output at a high price and with guaranteed escalators, financing would be easily available. Here it is not because the economics of the project are not sustainable. The absence of sustainability is a dire warning that DOE should not commit and risk taxpayer funding to Cape Wind.

Dollar for dollar, Cape Wind is a terrible investment for taxpayers and for ratepayers. It does not deliver on its promises for the environment. We believe a loan guarantee to Cape Wind would threaten the integrity of DOE's loan program. This is an outdated project at a time when new advances could mean lower prices and more meaningful pollution reductions.

<sup>&</sup>lt;sup>6</sup> While Cape Wind is clearly producing *energy* and should rightly be part of a ratepayer's *energy* charge, under Massachusetts law, the charge for Cape Wind will be added to a ratepayer's non-bypassable *distribution* charge. Also note that the increase will be double in NGRID's territory versus NSTAR territory since NGRID purchased double the amount that NSTAR did and their total system loads are similar.

We urge the DOE to reject this risky loan application and invest in more worthwhile projects that need such loan assistance.

Respectfully submitted,

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