COMMONWEALTH OF MASSACHUSETTS
Energy Facilities Siting Board

In the Matter of the Petition of Cape Wind Associates, LLC and Commonwealth Electric Company, d/b/a NSTAR Electric for Approval to Construct Two 115 kV Electric Transmission Lines	)	EFSB 02-2A/D.T.E. 02-53

FINAL DECISION ON PROJECT CHANGE, REQUEST FOR EXTENSION, SECTION 72

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Presiding Officer
May 1, 2008

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ABBREVIATIONS

ACOE	U.S. Army Corps of Engineers
dBA	A-weighted decibel
DEIS	Draft Environmental Impact Statement
Department	Department of Public Utilities
DOMSB	Decisions and Orders of Massachusetts Energy Facilities Siting Board
DRI	Development of Regional Impact
EFSB	Energy Facilities Siting Board
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EMF	electromagnetic fields
ESP	electrical service platform
FEIS	Final Environmental Impact Statement
HDD	horizontal directional drilling
kV	kilovolts
L_{90}	sound level exceeded 90 percent of time
L_{eq}	time-averaged sound level
L_{max}	maximum sound level
MEPA	Massachusetts Environmental Protection Act
mG	milligauss
MMS	Minerals Management Service
NHESP	Natural Heritage and Endangered Species Program
NSTAR	Commonwealth Electric Co., d/b/a NSTAR Electric Company
Project	Cape Wind's transmission project
ROW	right-of-way
Siting Board	Energy Facilities Siting Board
SJC	Massachusetts Supreme Judicial Court
wind farm	planned offshore wind generating facility

The Energy Facilities Siting Board hereby APPROVES: (1) subject to conditions, changes to the Cape Wind Associates, LLC, transmission project as further described below; (2) the request by Cape Wind Associates, LLC, for an extension of the deadline for commencement of project construction; and (3) the petition of Cape Wind Associates, LLC, and Commonwealth Electric Company, d/b/a NSTAR Electric, for a determination pursuant to G.L. c. 164, § 72 that the transmission project is necessary, will serve the public convenience, and is in the public interest.

I. INTRODUCTION

A. Summary of the Proposed Project

On September 17, 2002, Cape Wind Associates, LLC ("Cape Wind" or "Company") and Commonwealth Electric Company d/b/a NSTAR Electric ("NSTAR") filed with the Energy Facilities Siting Board ("Siting Board") a petition pursuant to G.L. c. 164, § 69J for approval to construct two new 115 kV electric transmission lines, partly undersea and partly underground, to interconnect a planned offshore wind generating facility ("wind farm") in Nantucket Sound with the regional electric grid on Cape Cod ("proposed transmission lines" or "transmission project"). On May 11, 2005, the Siting Board issued a final decision ("Final Decision" or "Cape Wind Decision") approving the Company's petition with conditions. See Cape Wind Associates, LLC and Commonwealth Electric Company d/b/a NSTAR Electric, EFSB 02-2, 15 DOMSB 1 (2005) ("Cape Wind Decision (2005)").

The wind farm would consist of 130 interconnected wind turbines spaced approximately one-third to one-half mile apart in an approximately 25 square-mile area on Horseshoe Shoal in Nantucket Sound (Exh. CW-1, App. A at 3). The Company stated the wind farm would include an electrical service platform ("ESP"), which would connect to the individual wind turbines and step up the voltage from 33 kV to 115 kV. Cape Wind Decision (2005) at 2. Transmission from the ESP would consist of two parallel 115 kV circuits, with each circuit consisting of two cables, each with three conductors, for a total of four cables and twelve conductors. Id. Each circuit would be buried approximately 6 feet below the sea bottom in a separate trench, and the two trenches would be placed 20 feet apart. Id. At landfall, the twelve conductors would feed into a single underground duct bank for the on-land portion of the route. Id.

The transmission project route as approved by the Siting Board in the Cape Wind Decision was described as being approximately 18.1 miles in length, 12.2 miles of which would be submarine and 5.9 miles of which would be on land. Cape Wind Decision (2005) at 14. As described in the Company's subsequent project change filing, the submarine portion would be slightly longer, 12.5 miles, and thus the total project length would be 18.4 miles (Exhs. CW-1, at 5; EFSB-RR-5). The route would extend from the ESP through Nantucket Sound and then through Lewis Bay, making landfall at New Hampshire Avenue in Yarmouth. Cape Wind Decision (2005) at 2-3. It would then travel underground along town streets and an existing NSTAR right-of-way ("ROW") to an interconnection with the grid at NSTAR's Barnstable Switching Station. Id. Cape Wind stated that it would own, operate, and maintain the proposed wind farm, the ESP, the submarine cables connecting the wind farm to the ESP, and all on-land facilities up to the point where the proposed transmission lines would enter the NSTAR ROW. Id. Cape Wind stated that NSTAR would own, operate, and maintain the transmission facilities in its ROW at Cape Wind's expense. Id.

B. Procedural History

1. EFSB 02-2A: Project Change Filing and Extension Request

The Siting Board issued the Cape Wind Decision on May 11, 2005. On July 19, 2005, Siting Board staff requested information from Cape Wind regarding potential changes to the Project resulting from a change in the jurisdictional boundary of Massachusetts state waters in Nantucket Sound (Presiding Officer letter at 2 (July 19, 2005)). On July 25, 2007, Cape Wind filed a Project Update ("project change filing") identifying changes that had occurred to the transmission project since the issuance of the Cape Wind Decision. Siting Board staff issued written discovery to the Company with respect to the project change filing on September 26, 2007. On November 19, 2007, the Company filed a request for an extension of the three-year deadline established in the Cape Wind Decision for the commencement of transmission project construction ("extension request"). One day of evidentiary hearings relative to the project change filing and the extension request was held on November 27, 2007. The project change filing and the extension request comprise EFSB 02-2A.

2. D.T.E. 02-53: Section 72 Petition

Cape Wind and NSTAR initially filed their petition to construct the transmission project on September 17, 2002. The petition to construct was docketed as EFSB 02-2. At the same time, the Company also filed a petition with the Department of Telecommunications and Energy (now the Department of Public Utilities), pursuant to G.L. c. 164, § 72, seeking a determination that the proposed transmission lines are necessary, would serve the public convenience, and would be consistent with the public interest. The Section 72 petition was docketed as D.T.E. 02-53. At the time the Company filed its petitions, it requested that the petitions be consolidated for hearing by the Siting Board in a single adjudicatory proceeding. On September 27, 2002, the Chairman of the Department granted the Company's request, issuing a Consolidation Order which referred both petitions to the Siting Board for review and final decision. The consolidated proceeding was docketed as EFSB 02-2/D.T.E. 02-53 ("underlying proceeding").

From April through October 2003, the Siting Board held 21 days of evidentiary hearings in the consolidated proceeding. Cape Wind Decision (2005) at 19. Approximately 930 exhibits were entered into the evidentiary record. Id. On March 16, 2005, the Presiding Officer issued a ruling bifurcating the Siting Board petition and the Section 72 petition for decision. The Presiding Officer bifurcated the petitions because review of the transmission project under the Massachusetts Environmental Policy Act ("MEPA") was not yet completed. Id. at 19-20. By law, a decision on the Section 72 petition could not be issued until completion of MEPA review. Accordingly, the Siting Board issued a Final Decision in EFSB 02-2, but deferred issuance of a decision in D.T.E. 02-53. On March 29, 2007, the Secretary of the Executive Office of Energy and Environmental Affairs issued a Certificate on the Final Environmental Impact Report ("FEIR") for the transmission project (Company Initial Brief at 5). From July to November 2007, updated project information relevant to both EFSB 02-2 and D.T.E. 02-53 was developed (see Section II below).

II. PROJECT CHANGE FILING AND REQUEST FOR EXTENSION

Cape Wind identified in its project change filing changes to the transmission project between December 18, 2003, the close of the record in the underlying proceeding, and the

July 25, 2007 project change filing (Exh. CW-1, cover letter at 2).[1] The project change filing identified four project changes. First, a Massachusetts marine boundary change brought one additional mile of the route into Massachusetts jurisdiction; second, the submarine cable route across Lewis Bay has been realigned; third, the Company has modified the underground vault and ductbank design for the upland segment; and fourth, a different construction method has been selected for the landfall (Exh. CW-1, at 4-9).[2] Project changes are addressed in Sections II.A through II.C, below. The Company's request for an extension is addressed in Section II.D.

A. Standard of Review

In its 2005 approval of the proposed transmission lines, the Siting Board required Cape Wind to notify it of any changes other than minor variations to the proposal as presented to the Siting Board, so that it might decide whether to inquire further into such issues. Cape Wind Decision (2005) at 147. The standard of review to determine whether further inquiry is warranted was articulated by the Siting Board in the Berkshire Power Decision on Compliance ("Berkshire Compliance Decision") 7 DOMSB 423, at 437 (1997). In the Berkshire Compliance Decision, the Siting Board declined to make further inquiry regarding certain project changes if the change did not alter in any substantive way either the assumptions or conclusions reached in its analysis of the project's environmental impacts in the underlying proceeding. Id. at 437-439; see also Fore River Development, LLC, 15 DOMSB 403, 409 (2006).

B. Scope of Review

1. Changes Relating to Relocation of the State Boundary

The transmission line route approved by the Siting Board in the Final Decision was approximately 18.1 miles in length, 12.2 miles of which would be submarine. Cape Wind

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[1] At the November 27, 2007 evidentiary hearing, the Company also was asked to identify any project changes that might have occurred since the project change filing (Tr. at 10).

[2] The project change filing contains information regarding the wind farm as well. However, as the wind farm is not subject to Siting Board review in this proceeding, evaluation of the project change filing is limited herein to those portions addressing the transmission project only.

Decision (2005) at 14. Of the 12.2 submarine miles, 6.6 miles were identified as being located in Massachusetts state waters, with the remaining 5.6 miles located in federal waters (project change filing at 9; see Cape Wind Decision (2005) at 14). The Company stated that, since the issuance of the Cape Wind Decision in 2005, the U.S. Department of Interior, Minerals Management Service ("MMS") has remapped a portion of the boundary of Massachusetts state waters in the vicinity of the transmission project, shifting it one mile seaward (Exh. CW-1, at 2, 9; Tr. at 69-74). The Company stated that, as a result of this boundary shift, the length of the submarine portion of the cable route located in state waters, rather than federal waters, is one mile longer, 7.6 miles versus the 6.6 miles originally presented to the Siting Board (Exh. CW-1, at 2, 9).[3] The Company stated that, consequently, one additional mile of temporary seabed impacts (sand and sediment disturbance) due to jet-plowing would now occur in state waters rather than in federal waters (id. at 9). Specifically, the Company stated that an additional 63,360 square feet (1.45 acres) of disturbance would now occur in state waters (id. at 10). The Company stated that there would be no overall net increase in seabed disturbance associated with this change; part of the disturbance that would have occurred in federal waters would now occur in state waters instead (id.). The Company asserted that this change should not require additional inquiry by the Siting Board, as the impacts of the cables along the entire 12.2-mile submarine route were evaluated in the underlying proceeding (id.).

The Siting Board, in the Final Decision, conducted a comprehensive analysis of the entire submarine cable route, which included the one-mile portion now located in state waters. Based on the record in the underlying proceeding, as updated by the record in this proceeding, the Siting Board finds that the boundary change is a minor variation to the project as originally approved that does not require further inquiry, as it does not alter in any substantive way either the assumptions or conclusions reached in the Siting Board's analysis of the transmission project's environmental impacts in the underlying proceeding.

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[3] The Company stated that the location and specifications of this additional one-mile section are unchanged (Exh. CW-1, at 2, 9).

2. Change To Submarine Cable Route in Lewis Bay

The Company stated that it is now proposing to shift the original route of the submarine cables in Lewis Bay approximately 900 feet to the north, to avoid an area of fine-grained sediment (Exh. CW-1, at 6, 11). The Company stated that this routing change would increase the length of the submarine cable route by approximately 500 feet, but would not increase environmental impacts (id. at 11-12). The Company stated that the route realignment may minimally decrease construction-generated turbidity, because finer sediments remain suspended longer, and are carried further away by currents (id.).

Based on the record in the underlying proceeding and in this proceeding, the Siting Board finds that the realignment of the cable route in Lewis Bay 900 feet to the north of its original location is a minor variation to the project as originally approved, that does not require further inquiry, as it does not alter in any substantive way either the assumptions or conclusions reached in the Siting Board's analysis of the transmission project's environmental impacts in the underlying proceeding.

3. Changes to Underground Vaults and Ductbank Systems

The Company provided information on a number of engineering refinements related to the design of the underground transition vaults, upland splice vaults, and ductbank system. For example, the transition vault would now consist of two parallel vaults rather than a single vault, with the total area remaining the same; also, the ductbank system would use a four-over-four configuration in the transition zone instead of an eight-over-eight configuration (Exh. CW-1, at 4, 6). These changes would not affect the land construction impacts and permanent impacts of the proposed transmission lines as analyzed in the underlying proceeding.

Based on the record in the underlying proceeding, and as updated in this proceeding, the Siting Board finds that the engineering refinements related to the design of the underground transition vaults, upland splice vaults, and ductbank system are minor variations to the project as originally approved that do not require further inquiry, as they do not alter in any substantive way either the assumptions or conclusions reached in the Siting Board's analysis of the transmission project's environmental impacts in the underlying proceeding.

4. Change in Method of Landfall Construction

As approved by the Siting Board in the Final Decision, the proposed transmission lines would travel from the wind farm in Nantucket Sound, through Lewis Bay, and make landfall at New Hampshire Avenue in Yarmouth, where there is a small sandy beach and a concrete seawall. Cape Wind Decision (2005) at 14-15, 71. In the underlying proceeding, Cape Wind initially proposed minimizing impacts to coastal wetlands in the near-shore area by using horizontal directional drilling ("HDD") to achieve landfall at New Hampshire Avenue. Id. at 135. The Company later concluded that any reduction in impacts to coastal wetlands due to the use of HDD would be outweighed by significant traffic and noise impacts on New Hampshire Avenue residents, so the Company proposed jet-plowing rather than HDD as its preferred landfall construction method. Id. Based on the evidence presented in the underlying proceeding, the Siting Board approved jet-plowing rather than HDD for the landfall. Id. at 136. In addition, the Siting Board specifically required that if the Company reverted to an HDD design, it would need to evaluate noise and traffic impacts of the HDD and file a project change filing with the Siting Board.[4] Id.

In its project change filing, the Company proposes a change from jet-plowing to a modified version of the HDD design originally proposed. The modified HDD design is only 200 feet in length, compared to 800 feet for the original HDD design. Based on the Siting Board's directive in the Final Decision, the use of the modified HDD design to install the transmission lines at the New Hampshire landfall requires further Siting Board inquiry. Further, this change in the method of landfall construction may alter in a substantive way certain

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[4] The Siting Board held that, should the Company choose, either for technological reasons or because of restrictions imposed by another agency, to pursue use of HDD at the landfall, additional proceedings before the Siting Board would be required to determine whether and how that approach could be undertaken consistent with minimizing noise and traffic impacts. Cape Wind Decision (2005) at 136. Specifically, the Siting Board stated that to allow use of HDD to achieve landfall at New Hampshire Avenue, the Company would be required to make a project change filing, providing: (1) an analysis of both existing and predicted construction period L_{eq}, L_{90} and L_{max} noise levels at affected residences, and proposed and possible mitigation to minimize residential noise impacts; and (2) an analysis of proposed and possible mitigation to minimize traffic impacts on residents, particularly for those homes in close proximity to the transition vault. Id. at 136, 137.

conclusions reached in the Siting Board's analysis of the environmental impacts of using HDD, rather than jet-plowing, as the method for landfall construction, and the overall balance of cost, reliability, and environmental impacts of the two methods. The Siting Board undertakes this further inquiry in Section II.C, below.

C. Proposed Change to HDD

As stated above, the Company proposes a change from jet-plowing to HDD as the construction method for the New Hampshire Avenue landfall. Horizontal directional drilling at the New Hampshire Avenue landfall was an option compared to jet-plowing in the underlying proceeding. In the underlying proceeding, the Company supported its choice to use jet-plowing at the landfall by asserting that (1) jet-plowing and HDD would have similar environmental impacts, (2) the coastal bank at New Hampshire Avenue is man-made and not an ecologically valuable resource, but that (3) HDD is more complicated than jet-plowing, and (4) HDD would take more time and have more impact on traffic. Cape Wind Decision (2005) at 133-134.

1. Marine Impacts

The Final Decision describes the Company's plan for the use of HDD at the New Hampshire Avenue landfall, comparing it to the plan for jet-plowing and hand-jetting at the same location. According to the record of the underlying proceeding, the Company set forth an HDD option based on drilling four parallel boreholes a distance of approximately 800 feet each. Cape Wind Decision (2005) at 133. Under that plan, 660 cubic yards of sediment would be excavated for a temporary offshore pit and cofferdam, and an additional 180 cubic yards was to be removed for the boreholes, for a total of 840 cubic yards. Id. The Final Decision noted that most of the wetland impacts from jet-plowing would be temporary, and that the coastal bank that would be affected by jet-plowing, but left undisturbed by HDD, has limited ecological value. Id. at 135-136. Furthermore, the Siting Board suggested that any advantages of HDD in terms of marine impacts would be minor, compared to noise and traffic impacts projected for the HDD. Id. at 136.

The Company's project change filing presents an HDD option that differs in significant respects from the HDD option reviewed in the underlying proceeding. The modified HDD

design limits the length to 200 feet for each of the four boreholes; however, the Company increased its excavation estimate to 840 cubic yards for the temporary offshore pit and cofferdam, with another 57 cubic yards of excavate from the boreholes (Exhs. CW-1, at 6; EFSB-2; EFSB-7). The Company provided the following information on the seafloor area and sediment volume that would be disturbed using the modified HDD design, compared to the area and volume that would be disturbed using jet-plowing:

Type of Impact	Modified HDD	Jet-Plowing
Area disturbed	2925 sq. ft.	3360 sq. ft.
Volume of sediment	897 cu. yds.	383 cu. yds.

(Exh. EFSB-7; Tr. at 75)

According to the Company, the offshore pit and cofferdam would be shoreward of the recreational shellfish area in Yarmouth (Tr. at 76-77). Overall, the Company asserted that use of the modified HDD design would reduce disturbances to sediments and to the recreational shellfish bed located near the landfall location, compared to the use of jet-plowing in the same area (Exh. CW-1, at 7).

The Company stated that the seaward pit for the HDD would be surrounded on three sides by a steel sheet pile cofferdam approximately 65 feet long and 45 feet wide (Exh. EFSB-7). The Company stated that it would backfill this area, rather than relying on water currents to refill the depression (Exh. CW-1, at 7). The Company stated that its HDD operation would re-circulate drilling fluids, composed of bentonite clay suspended in water, and that it would process drilling returns for offsite disposal (Exhs. CW-1, at 8; EFSB-7). The Company stated that, were any drilling fluids to be released into the bay, they would remain as a cohesive mass of bentonite slurry on the seafloor until removed by divers (Exh. YAR-14). The Company indicated that HDD construction would not occur between January 1 and May 1, nor between Memorial Day and Labor Day (Tr. at 11-12).

The record indicates that using HDD for 200 feet of the transmission line installation at the landfall location would allow the Company to avoid re-building the existing seawall at New Hampshire Avenue. While a greater volume of sediments would be disturbed using the modified HDD than jet-plowing, the record shows that each method would disturb a comparable amount

of surface area seaward of the seawall. The record shows that the area of differential impact does not include the shellfish area, and that any released bentonite slurry would be removed. The record also shows that the construction would not occur during sensitive periods of the year. No significant difference between the marine impacts of the modified HDD design and jet-plowing was identified. The record further shows that the Company would adequately mitigate any impacts resulting from use of the modified HDD design. Therefore, the Siting Board finds that the marine construction impacts of the proposed transmission lines along the primary route, with the project change, would be minimized.

2. Noise

In the underlying proceeding, Cape Wind stated that, were the original HDD design to be selected as the construction method for the New Hampshire Avenue landfall, HDD operations would take place 20 to 24 hours a day, seven days a week, for four to six weeks. Cape Wind Decision (2005) at 134. The Company explained that the equipment used to drill the bore holes and pull back the transmission line would be located in a transition vault on New Hampshire Avenue, adjacent to the Englewood Beach recreation area approximately 300 feet north of the landfall and 200 feet north of Shore Road. Id. at 134-135. The Company estimated that the L_{max} for the HDD would be 78 dBA at 50 feet, while the L_{eq} would be approximately 73 dBA at 50 feet, and 61 to 67 dBA at 200 feet. Id. at 135. The Company estimated that, absent mitigation, L_{max} noise levels at the closest residence to the northwest would be 79 dBA, and L_{max} noise levels at the closest residence to the southwest would be 77 dBA. Id. The Company discussed using a solid wood sound barrier similar to those used in highway sound attenuation, 10 feet high. Id. The Company estimated that using such a sound barrier could reduce L_{max} noise levels from 79 dBA to 74 dBA at the nearest residence to the northwest. Id.

The Company's original construction plan anticipated four-to-six weeks of continuous nighttime construction noise, based on a 20-to-24 hour construction day, at a noise level comparable to that generated by a backhoe or excavator. Id. at 136. Thus, the Siting Board stated that it could not find that construction noise impacts would be minimized along the primary route if HDD were used to make landfall. Id. at 136. The Siting Board noted that, to allow use of HDD to achieve landfall at New Hampshire Avenue, it would require the Company

to make a project change filing providing an analysis of both existing and predicted construction period L_{eq}, L_{90}, and L_{max} noise levels at affected residences, and proposed and possible mitigation to minimize residential noise impacts. Id.

In discussions with contractors since the issuance of the Final Decision, the Company determined that drilling operations can be shut down overnight and still operate safely (Exh. EFSB-2; Tr. at 27).[5] The Company stated that, under the modified HDD design, it would conduct HDD operations from 7:00 a.m. to 5:00 p.m., seven days a week (Exh. EFSB-6). The Company explained that in the event it needed to run the HDD operations outside of these hours, it would request permission from the Town of Yarmouth (Exh. EFSB-6; Tr. at 33). The Company estimated that two-to-four weeks would be needed for completion of the modified HDD, and indicated that the work would occur during the off-season (Exhs. EFSB-5; EFSB-6; Tr. at 11-12, 30).

Under the modified HDD plan, the length of the HDD would be reduced from 800 feet to 200 feet by moving the temporary cofferdam operation area closer to land, and by moving the on-land HDD operation area closer to the seawall at the end of New Hampshire Avenue and further from residences (Exh. EFSB-2). The Company has proposed installing sound barriers on both sides of New Hampshire Avenue along the HDD operation area (Exh. EFSB-4(S) fig. 2).[6] In addition, the Company indicated that the drilling rig engine would have a sound muffler and that additional sound blanketing, which could reduce the sound by a few decibels, could be provided if there are noise complaints (Exh. EFSB-11; Tr. at 40-41).

The Company asserted that noise from the modified HDD installation would be temporary and would be minimized by using noise barriers and limiting the hours of construction (Exh. EFSB-4(S)). The Company provided an updated noise analysis to estimate the noise impacts at residences closest to the HDD installation for the hours of 7:00 a.m. to 5:00 p.m.

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5 The Company indicated that there may be limited instances – for example, if temperatures were to fall below freezing – where the equipment would need to run overnight to maintain the borehole (Exh. EFSB-2; Tr. 34).

6 The sound barrier along the north would be 12-feet high and approximately 115-feet long, and the sound barrier along the south would be 18-feet high and approximately 100-feet long (Exh. EFSB-4(S) fig. 2).

(Exh. EFSB-4(S)).[7] With the use of sound barriers, (1) the L_{max} for the HDD would range from 57.7 dBA to 65.3 dBA, where the existing background L_{max} was measured at 86.4 dBA, and (2) the L_{eq} for the HDD would range from 56 dBA to 61.6 dBA, where the existing background L_{eq} was measured at 53 dBA (id.).

The Company also provided an updated analysis to estimate noise impacts using jet-plowing, noting that sound barriers are not feasible for use with jet-plowing due to the mobility of the sound-producing equipment (Exh. EFSB-RR-2). Therefore, in the same residential area, (1) the L_{max} for the jet plow would range from 82 dBA to 94 dBA, where the existing maximum L_{max} was measured at 86.4 dBA, and (2) the L_{eq} for the jet plow would range from 66.2 dBA to 80 dBA, where the existing L_{eq} was measured at 53 dBA (id.)

In the Final Decision, the Siting Board expressed concern with the noise impacts from operating HDD on a continuous basis, 20-24 hours a day. The modified HDD operation would be limited to daytime hours, between 7:00 a.m. and 5:00 p.m. Any operation at night would be limited and would require approval from the Town of Yarmouth in advance. Further, the L_{max} noise level estimates under the original HDD design, 74 dBA at the nearest residence, are higher than the estimates under the modified HDD plan of 65.3 dBA. In addition, the current noise analysis shows that, due to the ability to install stationery sound barriers in conjunction with the operation of HDD, the noise impacts with the use of HDD would be lower than those with the use of jet-plowing.

In considering the Company's proposed use of HDD, the Siting Board notes that the Company must request approval by the Town for HDD activity occurring beyond daytime hours. The Siting Board also notes, however, the importance of notifying residents in the event that HDD operation would, on any particular day, be extended beyond 5:00 p.m. Therefore, the Siting Board directs the Company to provide advance notice, either by hand delivered notices or by phone, to residents in the New Hampshire Avenue/Shore Road neighborhood, 24 hours in advance, if possible, in the event that HDD operations are to extend beyond 5:00 p.m. The Siting Board finds that with the implementation of this condition, the noise impacts of the proposed transmission lines along the primary route, with the project change, would be

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[7] The noise modeling analyzed sound impacts at 24, 23/25, 32, and 49 New Hampshire Avenue (Exh. EFSB-4).

minimized.

3. Traffic

In the underlying proceeding, the Company explained that if HDD were used to make landfall, construction of the transition vault would occupy the full width of New Hampshire Avenue for the four-to-six week period of the HDD operation. Cape Wind Decision (2005) at 134. According to the Company, this would obstruct frontages of two residences and the Englewood Beach recreation area, and block travel from Berry Road to points on New Hampshire Avenue south of the work area, including access to Shore Road. Id. at 134. The Company noted that, if jet-plowing were used, the transition vault could be located south of the intersection with Shore Road, and only the portion of New Hampshire Avenue between the landfall and Shore Road, which is not heavily traveled, would be closed. Id. The Siting Board therefore concluded that the traffic impacts from use of the original HDD plan would be significant. Id. at 136. The Siting Board noted that, to allow use of the original HDD plan to achieve landfall at New Hampshire Avenue, it would require the Company to make a project change filing, providing an analysis of proposed and other possible mitigation to minimize traffic impacts on residents, particularly for those homes in close proximity to the transition vault. Id. at 136-137.

As described in Section II.C.2, above, the drill pit under the modified HDD plan would be located just south of the Shore Road/New Hampshire Avenue intersection (Exhs. CW-1, at 15; EFSB-2). The Company explained that due to the shorter length of the HDD, the location of the drill pit would lessen the traffic impact to residents of New Hampshire Avenue north of Shore Road, as well as residents of Shore Road (Exhs. CW-1, at 15; EFSB-11; Tr. at 43). The Company asserted that due to the ability to locate the HDD equipment closer to the seawall, the traffic impacts would likely be similar for both the HDD and the jet plow technology (Exh. EFSB-11; Tr. at 43). The Company provided information confirming that with either construction method, access to one residence, located on New Hampshire Avenue between the landfall and Shore Road, could be obstructed (Exh. EFSB-3; See Cape Wind Decision (2005) at 134). The Company stated that it is prepared to mitigate short-term access concerns with affected residents/property owners (Exh. CW-1, at 16; Tr. at 34-35). In addition, the Company

has provided a draft copy of a Traffic Management Plan it developed for the Towns of Barnstable and Yarmouth and the Massachusetts Highway Department (Exhs. CW-1, App. D; YAR-2).

Under the modified HDD plan, the HDD drilling equipment would be situated south of the New Hampshire Avenue/Shore Road intersection, eliminating the difference in locational traffic impacts associated with use of HDD versus jet plow. The record shows that the equipment associated with constructing the New Hampshire Avenue landfall using either method would still require the closing of New Hampshire Avenue between the seawall and Shore Road. Using the modified HDD plan, however, the complete closure of a portion of New Hampshire Avenue north of Shore Road, with associated impacts to more residences as well as to the Englewood Recreation Area, would be avoided.

In the Final Decision, with jet plow construction proposed for the New Hampshire Avenue landfall, and taking into account mitigation proposed by the Company, the Siting Board made the following finding on overall construction traffic impacts:

> "Consequently, to ensure that all outstanding issues can be resolved in a timely fashion, the Siting Board directs the Company to submit a draft Traffic Management Plan to Yarmouth officials and school administrators at least six months prior to the commencement of construction. The Siting Board finds that, with the implementation of this condition, the construction traffic impacts of the proposed transmission lines along the primary route would be minimized." Id. at 118, 147.

Given that (1) the traffic impacts associated with the modified HDD design would be similar to those associated with jet plow construction, and (2) submittal of a draft Traffic Management Plan is required by the Final Decision, the Siting Board finds that the traffic impacts of the proposed transmission lines along the primary route, with the project change, would be minimized.

4. EMF

The Company provided estimates of magnetic fields from installed cable at the beach surface, both for jet-plowing and for the modified HDD design. With the jet-plowing alternative, the Company indicated that the maximum magnetic field would be "something less" than the 85 milligauss ("mG") level which has been accepted in previous Siting Board proceedings for

the edge of a transmission right-of-way, assuming a burial depth of 6 feet (Exh. EFSB-RR-3). With HDD, the Company stated that the magnetic field would be about 14 mG in the beach area, where the HDD conduits would be approximately 10 feet deep, and up to 30.8 mG at the transition vault at the end of New Hampshire Avenue, where the top of the upper conduit would be 4½ feet below grade (Exh. EFSB-RR-3). The Company concluded that magnetic field levels on the beach would be reduced with HDD technology and that either method would result in levels less than the Siting Board's 85 mG benchmark (Exh. EFSB-RR-3). The Siting Board concurs with this assessment. Therefore, the Siting Board finds that the magnetic field impacts of the proposed transmission lines along the primary route, with the project change, would be minimized.

5. Cost

In the Final Decision, the Company stated that the use of the original HDD design at the landfall would increase costs by $460,000 over the use of jet-plowing. Cape Wind Decision (2005) at 138. In addition to the construction cost differential, the Company also noted that the cost of installing a sound barrier could range from $14,000 to $23,500, assuming the use of a 100-foot long wall. Id. The Company has submitted information indicating that, currently, the cost of installing cable using the modified HDD design would be $30,000 more than the cost of installation with jet-plowing (Exh. EFSB-14; Tr. at 44). The Company explained that the reduced costs are driven by the shortened length of HDD and the installation of the cofferdam in shallower water, which would require less construction time and smaller installation equipment (Exh. EFSB-14; Tr. at 45).

In the Final Decision the total capital cost for the transmission project was estimated to be $79.5 million. Cape Wind Decision (2005) at 44, 138. The difference in cost between the HDD and the jet plow approach, given use of the modified HDD design, is now estimated to be $30,000, which is minimal. The Siting Board therefore finds that the costs of jet-plowing and modified HDD are comparable. Also since the change from using jet-plowing to modified HDD at the landfall, based on current cost projections, would not significantly affect the total cost of the project, it does not affect the cost analysis and finding made by the Siting Board in the Final Decision, which specifically related to a comparison of routes.

6. Reliability

The Company stated that any difference in reliability between jet-plowing and HDD would be associated with the potential for cable exposure or mechanical damage (Exh. EFSB-12). The use of HDD technology at the landfall would result in deeper burial of the cables at this more exposed location, and the cables would be encased within conduits (Exh. EFSB-12; Tr. at 82-91, 104). The Company stated that the reliability of the cable system could therefore be increased by the use of HDD (Exh. EFSB-12). Based on the record in the underlying proceeding, as updated in this proceeding, the record identifies no reliability disadvantages to using HDD at the landfall. Accordingly, the Siting Board finds that the project change would not alter its analysis and finding on reliability made in the Final Decision.

7. Conclusion

Consistent with the Siting Board's directive to Cape Wind in the Final Decision to inform the Siting Board of any changes to Cape Wind's proposed project, other than minor variations, Cape Wind has informed the Siting Board of four such changes: a Massachusetts marine boundary change which brings one additional mile of the route into Massachusetts jurisdiction; a realignment of the submarine cable route across Lewis Bay; engineering refinement for the underground vault and ductbank design for the upland segment; and a change from jet-plowing to HDD for the landfall at New Hampshire Avenue.

In Sections 1 through 6 above, the Siting Board considered changes to the proposed project due to the switch from jet-plowing to the modified HDD design at the landfall. The Siting Board found that further inquiry was warranted to evaluate the marine, traffic, noise, and EMF impacts that might result from this change. As determined in the Final Decision, any marine advantages of the original HDD design would be outweighed by noise and traffic disadvantages. However, the noise disadvantage associated with 24-hour operation of HDD has been eliminated, and additional noise mitigation due to an improved location of the HDD operation and placement of noise barriers would occur. Further, the disadvantages associated with traffic impacts caused by the original location of the HDD have been reduced by locating the HDD operation closer to the seawall.

Therefore, the Siting Board finds that with the implementation of the condition in Section II.C.2 above, the marine, noise, traffic, and magnetic field impacts of the proposed transmission lines along the primary route, with the project change, would be minimized. Further, the Siting Board found that any changes associated with the use of the modified HDD would not alter the analysis and findings made in the Final Decision with regard to cost and reliability. The Siting Board finds that the Company's use of the modified HDD plan, rather than jet-plowing, for landfall construction would not alter in any substantive way either the assumptions or conclusions reached in the Siting Board's analysis of the project's environmental impacts in the underlying proceeding. Accordingly, the Siting Board approves the Company's use of the modified HDD plan as its landfall construction method.

D. Request for an Extension

1. Standard of Review

In order to determine whether good cause exists to grant the Company's extension request as presented, the Siting Board must determine, inter alia: (1) whether there have been changes either in background conditions (e.g., land use surrounding the site) or applicable regulations sufficient to alter the underlying assumptions upon which the Siting Board based its approval; and (2) whether the length of the requested extension is reasonable. See Brockton Power, LLC, 14 DOMSB 140 at 149 (2003); Sithe West Medway Development, LLC, 14 DOMSB 16, 17 (2003); Cabot Power Corporation, EFSB 91-101A (December 23, 1997 Procedural Order).

In Section II.D.2, below, the Siting Board considers any changes to background environmental conditions and applicable regulations sufficient to alter the underlying assumptions upon which the Siting Board based its approval of the transmission project in the Final Decision. In Section II.D.3, below, the Siting Board considers the reasonableness of the requested extension period.

2. Changes to Background Conditions and Regulatory Context

The Siting Board has reviewed information regarding actual or potential changes to background conditions or regulatory context relevant to the extension of its May 2005 approval

to construct the transmission project. With respect to background conditions, the Company indicated that an additional transmission cable has been installed by the Nantucket Electric Company across Nantucket Sound (Exh. EFSB-16). With respect to regulatory context, the Company stated that MMS is now the lead federal reviewing agency for the project instead of the Army Corps of Engineers; that the state's definition of "dredging" was expanded to include jet-plowing; that gray seal is no longer listed as a state species of special concern; and that the Massachusetts Natural Heritage and Endangered Species Program ("NHESP") has determined that the project will not result in a take of state-listed rare species (Exhs. EFSB-17; EFSB-23; EFSB-24; Tr. at 18, 20-21). With respect to impacts reviewed by the Siting Board in the underlying proceeding, these changes do not affect any of the analysis developed in the Final Decision.

The Siting Board therefore finds that there have been no changes in background conditions or applicable regulations sufficient to alter the underlying assumptions upon which the Siting Board based its approval of the transmission project in the Final Decision.

3. Reasonableness of the Extension Period

Cape Wind has set out a number of factors that have affected the scheduled date of construction of the wind park and the subsequent construction of the transmission lines. First, the lead federal agency responsible for reviewing the Cape Wind Project changed from the Army Corps of Engineers to the MMS, pursuant to the Energy Policy Act of 2005 (Exh. CW-2, at 2; Tr. at 13). The change in jurisdiction necessitated the issuance of a new Draft Environmental Impact Statement ("DEIS") under the auspices of the MMS (Exh. CW-2, at 2). MMS issued the DEIS on January 11, 2008, and the DEIS was noticed in the Federal Register on January 14, 2008. Second, the Final Decision issued by the Siting Board on May 11, 2005, was appealed to the Supreme Judicial Court ("SJC") by intervenors (Exh. CW-2, at 2; Tr. at 14). The SJC affirmed the Siting Board approval on December 16, 2006 (Exh. CW-2, at 2). Most recently, the Cape Cod Commission denied Cape Wind's Development of Regional Impact ("DRI") application on October 19, 2007 (id.). The Company noted that without an approval of its DRI, it cannot obtain certain required local approvals or a Chapter 91 license from the Massachusetts Department of Environmental Protection (id.).

In light of the above factors, Cape Wind asserted that the request for a three-year extension is reasonable and appropriate (Exh. CW-2, at 3). Cape Wind explained that the three-year request is intended to correspond to the delays that have been associated with the original decision, which have been largely associated with the federal EIS process (Tr. at 18-19). The Company pointed out that the Siting Board conditioned its approval of the Final Decision on completion of the federal permitting process for the wind farm (Tr. at 13; Exh. CW-2, at 2, citing Cape Wind Decision (2005) at 133.) The Company stated that it did not initiate any of the delays or regulatory changes, and will endeavor to commence construction sooner than the three-year extension period (Exh. CW-2, at 4). In addition, the Company stated that based on its analysis of the project schedule and the upcoming time frame for the federal process, three years will be an adequate period to begin construction (Tr. at 19).

The DEIS for the Cape Wind project has recently been issued by the MMS and the time frame for the continuing EIS review process is beyond the control of the Company. The Final Decision issued by the Siting Board specifically conditioned the approval to construct on the completion of the federal permitting process. The Company has stated that it will endeavor to begin construction before the start of the allotted three-year extension, however, the Siting Board notes that an earlier start time is not assured. The requested three-year extension would achieve general consistency of timing requirements among Cape Wind's EIS review, DRI approval, and other federal, state and local permits. Further, the Cape Wind project was delayed, in part, by the appeal of the Cape Wind Decision. While an appeal does not automatically toll a Siting Board approval, it contributes to the rationale for the need for an extension. Therefore, the Siting Board finds that the request for a three-year extension of the Siting Board's approval is reasonable.

4. Conclusion

In Section II.D.2, above, the Siting Board has found that there have been no changes in background conditions or applicable regulations sufficient to alter the underlying assumptions upon which the Siting Board based its approval. Further, in Section II.D.3, above, the Siting Board found that the request for a three-year extension of the Siting Board's approval is reasonable. Accordingly, the Siting Board finds good cause and approves the request for

extension.

III. SECTION 72

A. Standard of Review

G.L. c. 164, § 72, requires, in relevant part, that an electric company seeking approval to construct a transmission line must file with the Department a petition for:

> authority to construct and use … a line for the transmission of electricity for distribution in some definite area or for supplying electricity to itself or to another electric company or to a municipal lighting plant for distribution and sale … and shall represent that such line will or does serve the public convenience and is consistent with the public interest .... The [D]epartment, after notice and a public hearing in one or more of the towns affected, may determine that said line is necessary for the purpose alleged, and will serve the public convenience and is consistent with the public interest.[8]

The Department, in making a determination under G.L. c. 164, § 72, is to consider all aspects of the public interest. Boston Edison Company v. Town of Sudbury, 356 Mass. 406, 419 (1969). Section 72, for example, permits the Department to prescribe reasonable conditions for the protection of the public safety. Id. at 419-420. All factors affecting any phase of the public interest and public convenience must be weighed fairly by the Department in a determination under G.L. c. 164, § 72. Town of Sudbury v. Department of Public Utilities, 343 Mass. 428, 430 (1962).

In evaluating petitions filed under G.L. c. 164, § 72, the Department examines: (1) the need for, or public benefits of, the present or proposed use (see Massachusetts Electric Company, D.P.U. 93-29/30, at 10-14, 22-23 (1995); New England Power Company, D.P.U. 92-278/279/280, at 19-22 (1994) ("NEPCo, D.P.U. 92-278/279/280"); Tennessee Gas Pipeline Company, D.P.U. 85-207, at 6-9 (1986) ("Tennessee")); (2) the environmental impacts or any other impacts of the present or proposed use (see NEPCo, D.P.U. 92-278/279/280, at 20-23; New England Power Company, D.P.U. 92-270, at 17-20 (1994) ("NEPCo, D.P.U. 92-270"); Tennessee, at 20-25); and (3) the present or proposed use and any alternatives identified (see

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[8] Pursuant to G.L. c. 164, § 72, the electric company must file with its petition a general description of the transmission line, a map or plan showing its general location, an estimate showing in reasonable detail the cost of the line, and such additional maps and information as the Department requires.

NEPCo, D.P.U. 92-278/279/280, at 19; NEPCo, D.P.U. 92-270, at 17; Tennessee at 18-20). The Department then balances the interests of the general public against the local interests and determines whether the line is necessary for the purpose alleged and will serve the public convenience and is consistent with the public interest.

B. Analysis and Findings

The record indicates the Siting Board conducted an extensive review of the need for, alternatives to, and environmental impacts of the Cape Wind transmission lines in the Cape Wind Decision which, with its supporting record, is incorporated into this case. Here, the Siting Board reviews the findings made in the Cape Wind Decision that are relevant to the present case.

1. Need for the Proposed Project

In the Final Decision, the Siting Board found a need for additional transmission resources to interconnect the wind farm with the regional transmission grid. Cape Wind Decision (2005) at 32. The Siting Board stated that the proposed wind farm could not supply energy to the region in the absence of an adequate and reliable energy facility to interconnect the generating facility to the transmission system and that Cape Wind and NSTAR had established that the existing transmission system was inadequate to support the proposed wind farm. Id. This finding was based on a showing by Cape Wind and NSTAR that an electric interconnection was required for Cape Wind to transmit the output of the proposed wind farm to contribute to the regional energy supply. Id. The Siting Board found that, to establish that the wind farm is likely to be available to contribute to the regional energy supply, Cape Wind was required to submit to the Siting Board copies of all permits required for Cape Wind to begin installation of wind farm equipment in Nantucket Sound. Id. at 33.

The Siting Board affirms the above analysis. For purposes of Section 72 review, the Siting Board finds that the proposed project would serve the need for transmission to interconnect the proposed wind farm.

2. The Proposed Project and Alternatives

In the Final Decision, the Siting Board conducted a detailed analysis of the reliability,

cost, and environmental impacts of four approaches for interconnecting the wind farm with NSTAR's transmission system. These four approaches include connecting the wind farm: (1) to NSTAR's 115 kV Barnstable Switching Station ("Barnstable Interconnect"); (2) to NSTAR's 115 kV Harwich Substation ("Harwich Alternative"); (3) to NSTAR's 115 kV Pine Street Substation in New Bedford ("New Bedford Alternative"); and (4) to a new 115 kV substation on Martha's Vineyard, then proceeding on to the mainland ("Martha's Vineyard Alternative"). Cape Wind Decision (2005) at 34-38. The Siting Board found that the Barnstable Interconnect would be preferable to the Harwich Alternative and the New Bedford Alternative, with respect to providing a reliable energy supply for the Commonwealth, with a minimum impact on the environment at the lowest possible cost.

With regard to the route selection process, the Siting Board found that the Company had demonstrated that it examined a reasonable range of practical siting alternatives. The Siting Board found that the primary route would be preferable to the alternative route with respect to environmental impacts. Further, the Siting Board found that the alternative route was slightly preferable to the primary route with respect to cost, and that the primary route and the alternative route were comparable with respect to reliability. Therefore, in the Final Decision, the Siting Board found that the primary route was preferable to the alternate route with respect to providing a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost. Id. at 143.

The Siting Board affirms its prior analysis with respect to project alternatives, the site selection process, and alternative routes. For purposes of Section 72 review, the Siting Board finds that the Company established, through the range of its siting analysis and comparison of identified alternatives, that its proposed project is advantageous.

3. Impacts of the Proposed Project

In the Final Decision, the Siting Board conducted a detailed analysis of the cost and environmental impacts, including marine construction impacts, land-based construction impacts, and permanent impacts, of the proposed transmission lines along two routes. Further, the Siting Board stated in the Final Decision that Cape Wind provided sufficient information regarding cost, reliability and environmental impacts to allow the Siting Board to determine whether it has

achieved the proper balance among environmental impacts, cost and reliability. Cape Wind Decision (2005) at 142. The Siting Board imposed ten conditions on the proposed transmission lines. Id. at 145-147. The Siting Board found that with the implementation of conditions, environmental impacts would be minimized. Id. at 137.

Moreover, the Siting Board found that the proposed transmission lines would be generally consistent with the identified requirements of related regulatory and other programs of the Commonwealth, specifically, programs related to wetlands and riverfront protection, water supply, wellhead protection, rare and endangered species, tidelands and waterways, water quality certification, marine fisheries, coastal zone management, ocean sanctuaries, historical preservation, and underwater technology. Id. at 145.

In Section II, above, with regard to project changes, the Siting Board found that the environmental impacts of the proposed facility, with the project change, would be minimized. The Siting Board also directed the Company to follow an additional condition. Consequently, the Siting Board affirms the analysis of impacts in the Cape Wind Decision regarding the proposed transmission lines, as supplemented by the analysis of project change in Section II, above. For purposes of Section 72 review, the Siting Board finds that the local impacts of the proposed transmission lines would be minimized.

4. Conclusion on Serving the Public Convenience and Consistent with the Public Interest

The Siting Board has found that the transmission lines are needed to connect the proposed wind farm to the regional electric transmission system. The Siting Board also has found that the proposed transmission lines would serve this purpose; that the Company established, through the range of its siting analysis and comparison of identified alternatives, its proposed project is advantageous; and that the local impacts of the proposed transmission lines would be minimized.

In considering project benefits and impacts together, the Siting Board finds that the general public interest in the construction, operation, and maintenance of the proposed transmission lines outweighs any adverse impacts of the proposed project on the local community. Accordingly, based on the record in this proceeding and the above analyses, the

Siting Board finds, pursuant to G.L. c. 164, § 72, that the transmission lines are necessary for the purpose alleged, will serve the public convenience, and are consistent with the public interest.

C. Section 61 Findings

MEPA provides that "[a]ny determination made by an agency of the Commonwealth shall include a finding describing the environmental impact, if any, of the project and a finding that all feasible measures have been taken to avoid or minimize said impact." G.L. c. 30, § 61. Pursuant to 301 CMR, § 11.01(3), these findings are necessary when an Environmental Impact Report ("EIR") is submitted by a petitioner to the Secretary of Environmental Affairs, and should be based on such EIR. Where an EIR is not required, G.L. c. 30, § 61 findings are not necessary. 301 CMR, § 11.01(3). The record indicates that an EIR was required for Cape Wind's proposed wind farm and ancillary facilities, including the transmission lines and, therefore, a finding under G. L. c. 30, § 61 is necessary in this case.

As discussed above, the Siting Board undertook a comprehensive investigation and analysis of the environmental impacts of the transmission lines in its review and approval of the transmission lines in the Cape Wind Decision. The Siting Board, in issuing the Cape Wind Decision, found that the environmental impacts of the proposed transmission lines along the primary route would be minimized, and that the primary route would be preferable to the alternative route with respect to environmental impacts. Cape Wind Decision (2005) at 137. The Siting Board determines that in making a Section 61 finding in this case, it would examine the same environmental issues that were comprehensively examined in the Cape Wind Decision. Since the Cape Wind Decision and record of the Cape Wind Decision have been incorporated into the record of this case, the Siting Board determines that the analysis of environmental impacts in the Cape Wind Decision, as supplemented by the record in this decision, stands as the Section 61 review in this case.[9] The Siting Board finds that all feasible measures have been taken to avoid or minimize the environmental impacts of the proposed transmission lines.

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[9] The Siting Board did not make a Section 61 finding in the Cape Wind Decision because the Siting Board is explicitly exempted from making such a finding when issuing a decision under G. L. c. 164, §§ 69I - J¼. This petition, however, was filed under G. L. c. 164, § 72, so that exemption does not extend to this decision.

IV. DECISION

In Sections II.C.1 through II.C.6 above, the Siting Board considered changes to the proposed project due to the switch from jet-plowing to the modified HDD plan at the landfall. The Siting Board found that further inquiry was warranted to evaluate the marine, traffic, noise, and EMF impacts that might result from this change. After conducting such inquiry, the Siting Board found that with the implementation of the following Condition K, the marine, noise, traffic, and magnetic field impacts of the proposed transmission lines along the primary route, with the project change, would be minimized. Further, the Siting Board found that any changes associated with the use of the modified HDD plan would not alter the findings made in the Final Decision with regard to cost and reliability. Accordingly, in Section II.C.7, above, the Siting Board approved the use by Cape Wind of the modified HDD plan, subject to compliance with Conditions A through J in the Final Decision and with the following condition:

Condition K:

> In order to minimize noise impacts, the Siting Board directs the Company to provide advance notice, either by hand delivered notices or by phone, to residents in the New Hampshire Avenue/Shore Road neighborhood, 24 hours in advance, if possible, in the event that HDD operations are to extend beyond 5:00 p.m.

In Section II.D.2, above, the Siting Board found that there have been no changes in background conditions or applicable regulations sufficient to alter the underlying assumptions upon which the Siting Board based its approval of the transmission lines in the Cape Wind Decision. Further, in Section II.D.3, above, the Siting Board found that the request for a three-year extension of the Siting Board's approval is reasonable. Accordingly, in Section II.D.4, above, the Siting Board approved the request for extension.

In addition, in Section III.B.1 through III.B.3, the Siting Board has found pursuant to G. L. c. 164, § 72 that Cape Wind and NSTAR's proposed transmission lines are necessary for the purpose alleged, and will serve the public convenience and are consistent with the public interest. Thus, in Section III.B.4, the Siting Board approved the Company's Section 72 petition.

Accordingly, the Siting Board finds that the proposed transmission project with the project change will provide a reliable energy supply for the Commonwealth with a minimum impact on the environment at the lowest possible cost.

The Siting Board notes that the findings in this decision are based on the record in this case. A project proponent has an absolute obligation to construct and operate its facility in conformance with all aspects of its proposal as presented to the Siting Board. Therefore, the Siting Board requires Cape Wind and NSTAR to notify the Siting Board of any changes other than minor variations to the proposal so that the Siting Board may decide whether to inquire further into a particular issue. Cape Wind and NSTAR are obligated to provide the Siting Board with sufficient information on changes to the proposed project to enable the Siting Board to make these determinations.

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M. Kathryn Sedor

APPROVED by the Energy Facilities Siting Board at its meeting of May 1, 2008, by the members and designees present and voting. **Voting for** approval of the Tentative Decision, **as amended**: Ann Berwick (Acting EFSB Chairman/Designee for Ian A. Bowles, Secretary, Executive Office of Energy & Environmental Affairs); Rob Sydney, Designee for Philip Giudice, Commissioner (Division of Energy Resources); Laurie Burt, Commissioner (Department of Environmental Protection); Christine Williams, Designee for Daniel O'Connell, Secretary of the Executive Office of Housing & Economic Development; Paul J. Hibbard, Commissioner DPU; and Tim Woolf, Commissioner DPU.

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Ann Berwick, Acting Chair
Energy Facilities Siting Board

Dated this 1st day of May, 2008

Appeal as to matters of law from any final decision, order or ruling of the Siting Board may be taken to the Supreme Judicial Court by an aggrieved party in interest by the filing of a written petition praying that the order of the Siting Board be modified or set aside in whole or in part.

Such petition for appeal shall be filed with the Siting Board within twenty days after the date of service of the decision, order or ruling of the Siting Board, or within such further time as the Siting Board may allow upon request filed prior to the expiration of the twenty days after the date of service of said decision, order or ruling. Within ten days after such petition has been filed, the appealing party shall enter the appeal in the Supreme Judicial Court sitting in Suffolk County by filing a copy thereof with the clerk of said court. (Massachusetts General Laws, Chapter 25, Sec. 5; Chapter 164, Sec. 69P).