

United States Department of the Interior



FISH AND WILDLIFE SERVICE

New England Field Office 70 Commercial Street, Suite 300 Concord, NH 03301-5087 http://www.fws.gov/newengland

May 25, 2010

Mark D. Driscoll ESS Group, Inc. 888 Worcester Street, Suite 240 Wellesley, Massachusetts 02482

Dear Mr. Driscoll:

This responds to your April 23, 2010 letter requesting our review of the proposed installation of two 1.65-megawatt (MW) wind turbines in Brewster and two 1.5-MW wind turbines in Harwich, Massachusetts. Your request asks for information on significant wildlife resources that might be associated with the project location. Accordingly, we have reviewed the project with respect to the potential presence of federally-listed endangered or threatened species, candidate species, and other significant wildlife resources. Our comments relative to endangered and threatened species are provided in accordance with the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531, *et seq.*) and the Migratory Bird Treaty Act (16 U.S.C. 703-712).

Federally-listed and Candidate Species

The proposed Brewster project is located between Routes 6 and 28, approximately 3.5 miles south of Cape Cod Bay and 1.5 miles west of Pleasant Bay. Freshwater ponds occur within one mile of the site. The proposed Harwich project is located north of Route 6, adjacent to Robbins Pond, approximately 4 miles south of Cape Cod Bay and 3.5 miles north of Nantucket Sound. Based on information currently available to us, federally-threatened piping plovers (*Charadrius melodus*) are known to breed on coastal beaches to the north, south and east, but are not known to occur near the proposed projects' locations. Currently, there is little information regarding the seasonal migratory pathways used by piping plovers as they move along the coast to their breeding habitat, specifically whether they fly over land or follow the shoreline. Similarly, the flight paths used by plovers in late summer/fall, when they move southward out of the Northeast to winter along the southeast Atlantic Coast, are also poorly known.

Research indicates that there is little movement by piping plovers once they are on their breeding beaches, either to new sites after a nest failure or between breeding and feeding habitat. Piping plovers rarely move great distances from one nest site to another after a nest failure (MacIvor 1990).¹ With respect to movements between breeding and feeding habitats, MacIvor *et al.* (1985)² observed a single plover breeding at one beach and feeding at another site 23 miles (37 kilometers) away. Moreover, studies of banded piping plovers indicate limited occasional overland flights. MacIvor (1990) reported a few piping plovers making overland crossings of the Cape. Overland flights between beaches north and south of the proposed wind turbine locations could make plovers vulnerable to collision mortality if the turbines are constructed in their flight paths. However, the likelihood of overland flights is difficult to assess based on the information currently available.

Endangered roseate terns (*Sterna dougallii*) are not known to nest near the proposed turbine locations in Brewster or Harwich. However, roseate terns could occur over the mainland of the Cape during the post-breeding period, when the entire North Atlantic breeding population converges on outer Cape Cod to feed in preparation for their southward migration to coastal Brazil (Trull *et al.* 1999).³ These fall staging flocks of terns move frequently throughout the Cape Cod-Nantucket Sound area, seeking areas of preferred foraging and resting. To what extent these flocks that sometimes number in the thousands of birds fly over the mainland of the Cape in the vicinity of Barnstable is unknown. No other federally-listed threatened or endangered species are known to occur in the vicinity of the project area.

The New England cottontail (*Sylvilagus transitionalis*) and the red knot (*Calidris canutus rufa*) are candidates for federal listing as a threatened or endangered species (FR vol. 71, no. 176: 53757-53758). The cottontail is a thicket- or shrubland-dependent species and is known to occur east of the proposed project location near the Barnstable Airport. We have no information on the occurrence of this species in the project location, but it may be present if shrublands or dense understory vegetation occur at the site. The red knot is an arctic nesting species that seasonally migrates along the Atlantic Coast. It is documented as occurring at many coastal locations on Cape Cod, but we are unaware of any studies examining the potential for overland movements across the Cape.

Other Migratory Birds and Bats

The presence of natural waterbodies in the area may attract gulls and waterfowl to the locations. Whether gulls or ducks will be at risk from colliding with the turbines can be evaluated by a better understanding of the use of the airspace at the projects' locations before and after construction.

¹ MacIvor, L.H. 1990. Population dynamics, breeding ecology, and management of Piping Plovers on Outer Cape Cod, Massachusetts. M.S. Thesis. University of Massachusetts, Amherst, Massachusetts. 100 pp.

² MacIvor, L.H., C.R. Griffin and S. Melvin. 1985. Management, habitat selection and population dynamics of piping plovers on Outer Cape, Massachusetts. Progress Report. University of Massachusetts, Amherst, Massachusetts. 15 pp.

³ Trull, P., S. Hecker, M.J. Watson and I. C. T. Nisbet. 1999. Staging of Roseate Terns Sterna dougallii in the post-breeding period around Cape Cod, Massachusetts, USA. Atlantic Seabirds 1(4):145-158.

In some locations, operation of wind turbines can adversely affect a variety of wildlife species, including migratory birds and bats. In order to assess the level of risk and the scope of species potentially present in a wind turbine project area, the U.S. Fish and Wildlife Service (Service) recommends that the spatial and temporal uses of the rotor-swept zone by wildlife be identified and evaluated, e.g., by a qualified observer, or perhaps through the use of radar and other remote-sensing techniques.

Pre-construction surveys will inform the project proponent, as well as the Service, of potential wildlife conflicts during the site selection and planning stages. With this information, risks can be assessed, and methods to avoid, minimize and mitigate impacts to wildlife may be accommodated. Without pre-construction surveys, unexpected mortality of birds or bats may warrant operational adjustments to reduce or avoid further impacts to wildlife. Absent adequate pre-construction surveys and careful analysis of subsequent data, the siting, construction and operation of a wind project may result in the mortality of wildlife in violation of federal laws, such as the Migratory Bird Treaty Act or the Endangered Species Act. We are available for technical assistance in the development of pre- and post-construction surveys in order to ensure that impacts to birds and bats will be avoided and/or minimized.

For further information regarding endangered species, please contact Susi von Oettingen, and for further assistance relative to migratory birds, contact Maria Tur at the contact information provided above. You may also visit the Wind Energy page on the New England Field Office's website for useful links, including guidance documents for avoiding and minimizing impacts to wildlife: (http://www.fws.gov/newengland).

Sincerely yours,

Fire L. Dientett

Thomas R. Chapman Supervisor New England Field Office



Federal Aviation Administration Air Traffic Airspace Branch, ASW-520 2601 Meacham Blvd. Fort Worth, TX 76137-0520

Aeronautical Study No. 2010-WTE-8171-OE

Issued Date: 06/17/2010

Margaret Downey Cape & Vineyard Electric Cooperative 3195 Main Street Barnstable, MA 02630

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine Brewster (A) 0632.003
Location:	Brewster, MA
Latitude:	41-44-26.53N NAD 83
Longitude:	70-00-48.68W
Heights:	410 feet above ground level (AGL)
	460 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is marked and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- _X__ Within 5 days after the construction reaches its greatest height (7460-2, Part II)

This determination expires on 06/17/2012 unless:

- (a) extended, revised or terminated by the issuing office.
- (b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE POSTMARKED OR DELIVERED TO THIS OFFICE AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. Additional wind turbines or met towers proposed in the future may cause a cumulative effect on the national airspace system. This determination is based, in part, on the foregoing description which includes specific coordinates and heights . Any changes in coordinates will void this determination. Any future construction or alteration requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2010-WTE-8171-OE.

Signature Control No: 710869-127160877 Michael Blaich Specialist (DNE -WT)



Federal Aviation Administration Air Traffic Airspace Branch, ASW-520 2601 Meacham Blvd. Fort Worth, TX 76137-0520

Aeronautical Study No. 2010-WTE-8172-OE

Issued Date: 06/17/2010

Margaret Downey Cape & Vineyard Electric Cooperative 3195 Main Street Barnstable, MA 02630

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Wind Turbine Brewster (B)
Location:	Brewster, MA
Latitude:	41-44-18.13N NAD 83
Longitude:	70-00-45.72W
Heights:	410 feet above ground level (AGL)
	475 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is marked and/or lighted in accordance with FAA Advisory circular 70/7460-1 K Change 2, Obstruction Marking and Lighting, white paint/synchronized red lights - Chapters 4,12&13(Turbines).

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

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If we can be of further assistance, please contact our office at (404) 305-7081. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2010-WTE-8172-OE.

Signature Control No: 710870-127160878 Michael Blaich Specialist (DNE -WT)



Engineers

Consultants

June 18, 2010

Massachusetts Audubon Society Advocacy Headquarters 208 South Great Road Lincoln, Massachusetts 01773 888 Worcester Street Suite 240 Weliesley Massachusetts 02482 p 781.431.0500 f 781.431.7434

Re: Cape & Vineyard Electric Cooperative/Brewster Wind Project Site Brewster, Massachusetts ESS Project Number W279-000.02

To whom it may concern:

ESS Group, Inc. (ESS) is developing a Phase I Avian and Bat Risk Assessment for a proposed wind energy project in the town of Brewster, Massachusetts. The site is being evaluated as a potential location for the placement of two 1.8 megawatt wind turbines. The proposed location is identified on the attached USGS site locus figure.

We have submitted data requests with the U.S. Fish and Wildlife Service as well as the Massachusetts Natural Heritage and Endangered Species Program. However, in light of the valuable comments that Mass Audubon has provided regarding other wind energy projects in the Commonwealth of Massachusetts, we would like to invite your organization to share any comments or data concerning avian or bat populations near the proposed project site at this time.

Please feel free to contact me at (781) 489-1143 if you have any questions or require any additional information. We look forward to your reply and thank you in advance for your time.

Sincerely,

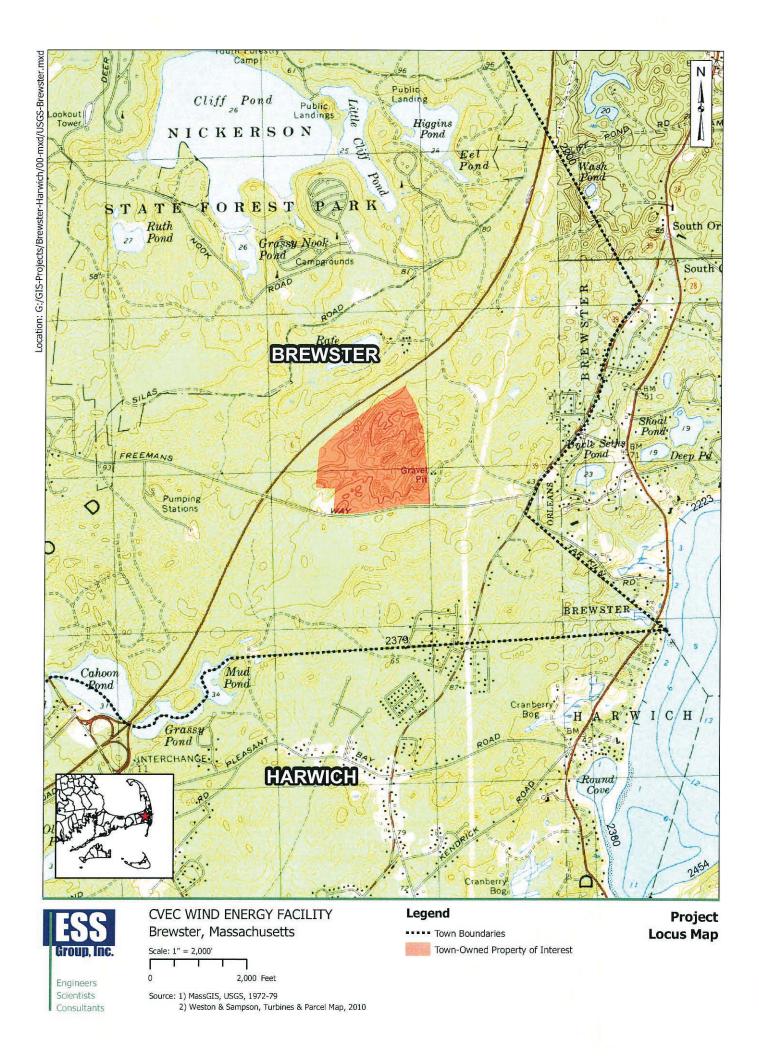
ESS GROUP, INC. at FOR

Darrell Oakley Senior Ecologist

Enclosures: Site Locus Figure

C: File







DEVAL L. PATRICK, GOVERNOR TIMOTHY P. MURPAY, LT. GOVERNOR JEFFREY B. MURLAN, SECRETARY & CEO CHRISTOPHER WILLENBORG, Administrator



July 19, 2010

Cris Justis Aviation Systems 2510 W 237th Street, Suite 210 Torrance, CA 90505

RE: File No: 10-CQX-V0410-04, Wind Turbine, Brewster, MA 10-CQX-V0410-05, Wind Turbine, Brewster, MA

Dear Mr. Justis:

Enclosed is a copy of the final determination by the Massachusetts Department of Transportation (MassDOT) Aeronautics Division on your *Request for Airspace Review* of the above referenced proposal. The Aeronautics Division's assistance is offered pursuant to the aviation law requirements of the Commonwealth.

Please note that although the proposal is not subject to further action required by the Aeronautics Division's laws or regulations, this office may offer additional comments after considering FAA's determination of its impact to a public use airport or NAVAID facility through the aeronautical study process.

This project does not violate MassDOT-Aero airspace laws or regulations.

If you have any questions, please feel free to contact me.

Sincerely,

M Ruddy voun

Joanne M. Ruddy Airport Engineer MassDOT- Aeronautics Division Phone: 617.412.3689 Email: joanne.ruddy@state.ma.us

Enclosed: Airspace Review Form

Massachusetts	Department (of Transportation	For Office Use Only
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AERONAUTICS DIVISION

REQUEST FOR AIRSPACE REVIEW

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Engineers

Scientists

Consultants

August 3, 2010

888 Worcester Street Suite 240 Wellesley Massachusetts 02482 p 781.431.0500 f 781.431.7434

Ms. Brona Simon, Executive Director Massachusetts Historical Commission 220 Morrissey Boulevard Boston, MA 02125

Re: Project Notification and Request for Information Proposed Brewster Wind Energy Project Commerce Park, Brewster, Massachusetts ESS Project No. W279-000.01

Dear Ms. Simon:

The Cape and Vineyard Electric Cooperative (CVEC) (the Proponent) is proposing the Brewster Wind Energy Project (the Project), which will include the installation and operation of two wind turbines and associated facilities. The preferred location of the Project is within an approximately 25-acre municipally-owned industrial parcel at Commerce Park (the Site). The Site is generally adjacent to and southeast of Route 6 (the Mid-Cape Highway), east of Commerce Park Road and north of Freemans Way in Brewster, as shown on the attached Figure 1.

The Proponent will be applying for financial assistance from the U.S. Department of Agriculture's Rural Utilities Service (USDA RUS), which will act as lead federal agency in reviewing the Project under NEPA and Section 106 of the NHPA. The USDA RUS has recently informed three federally recognized Tribal Nations about the Project and invited them to participate in government-to-government (GTG) consultations. Copies of USDA RUS's letters to the Wampanoag Tribe of Gay Head/Aquinnah, the Mashpee Wampanoag Tribe, and the Narragansett Indian Tribe of Rhode Island (two letters) are attached for your files. No state permits are anticipated, although municipal permits will be required.

The Area of Potential Effect (APE) for physical effects will include the construction footprint for all aspects of the Project, including access roads and staging areas, and will encompass the operational fall zones of the turbines. RUS has proposed that the APE for visual effects from the two wind turbines (each at an approximate maximum height of 410 feet above surface grade, and therefore slightly higher than the two existing communications towers in Commerce Park), will be within a radius of 1.5 miles from the turbines. This radius is consistent with the standard established by the Federal Communications Commission (FCC) in its nationwide programmatic agreement executed in September 2004 (Stipulation IV.C.4.c).

No buildings and no wetlands are located upon the Site, which is an upland generally level location now covered with shrub vegetation. It does not appear that the Site has been previously developed. MHC's MACRIS database, accessed on July 8, 2010, identified no cultural sites on Commerce Park Road and Freemans Way in Brewster, though others have been identified at other locations within the Town.





On behalf of the Proponent, ESS Group Inc. requests information from the Massachusetts Historical Commission about known and potential cultural resources on the Site, and would appreciate concurrence on the APEs defined by USDA RUS above.

Thank you for your consideration. Should you have any questions or require additional information, please contact me at <u>sfaldetta@essgroup.com</u> or 781-489-1110.

Sincerely,

ESS GROUP, INC. Baldette

Sarah K. Faldetta Senior Scientist

Attachments: Figure 1: Site Locus USDA RUS Four Letters to Three Tribal Nations to Participate in GTG Consultations

C: S. Wood – ESS Lauren McGee - RUS







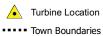
CVEC WIND ENERGY FACILITY Brewster, Massachusetts



Engineers Scientists Consultants

Source: 1) MassGIS, Orthos, 2005 2) Weston & Sampson, Turbines & Parcel Map, 2010

Legend



Town-Owned Property of Interest

Locus Map (Brewster Site)



June 17, 2010

Mr. John Brown, THPO Narragansett Indian Tribe of Rhode Island P.O. Box 700 Wyoming, RI 02898

Re: Cape and Vineyard Electric Cooperative (MA 1) Proposed Brewster Wind Energy Project Initiation of Consultation under Section 106 of the NHPA

Dear Mr. Brown,

The U.S. Department of Agriculture's Rural Utilities Service (RUS) is considering an application from the Cape and Vineyard Electric Cooperative (CVEC) for financial assistance to construct the proposed Brewster Wind Energy project in Brewster, MA. RUS is considering funding this application, thereby making the referenced project an undertaking subject to review under Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800).

CVEC is proposing to install two wind turbines (maximum height of 410-ft) and associated facilities at the preferred Commerce Park location (generally adjacent to and south of the Mid-Cape Highway, east of Commerce Park Road and north of Freemans Way) in Brewster, MA. A project description and an aerial map, showing the location of the proposed project components, are enclosed for your review.

CVEC and RUS have discussed an Area of Potential Effect (APE) for the proposed project. For belowground cultural historic resources, the APE includes the entire Commerce Park Site as identified in the enclosed aerial map. The project's footprint of disturbance (turbine sites and access roads) is not expected to include the entire site. For aboveground cultural historic resources, RUS proposes that the APE be an 1.5-mile radius around the Commerce Park site. This approach is consistent with the standard established by the Federal Communications Commission in its nationwide programmatic agreement executed in September 2004 (Stipulation IV.C.4.c).

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Brown

By letter of this same date to Chief Sachem Thomas, RUS invited the Narragansett Indian Tribe of Rhode Island to participate in government-to-government consultation for the proposed Brewster Wind Energy project. If the Narragansett Indian Tribe of Rhode Island decides to participate in consultation, I request that you notify RUS as soon as possible, but no later than Friday, July 23, 2010. In your notification, please include comments on the proposed project.

RUS appreciates your attention to this matter. Should you have any questions or require additional information, please contact RUS's environmental review coordinator, Ms. Lauren McGee, at 202-720-1482 or <u>lauren.mcgee@wdc.usda.gov</u> or CVEC's environmental consultant, Mr. Steve Wood, of the ESS Group, Inc. at 401-330-1206 or swood@essgroup.com.

Sincerely,

all S. Plan

MARK S. PLANK Director, Engineering and Environmental Staff Water and Environmental Programs Rural Utilities Service



June 17, 2010

Mr. Matthew Thomas Chief Sachem Narragansett Indian Tribe of Rhode Island P.O. Box 268 Charlestown, RI 02813

Re: Cape and Vineyard Electric Cooperative (MA 1) Proposed Brewster Wind Energy Project Initiation of Government-to-Government Consultation

Dear Chief Sachem Thomas,

The U.S. Department of Agriculture's Rural Utilities Service (RUS) is considering an application from the Cape and Vineyard Electric Cooperative (CVEC) for financial assistance to construct the proposed Brewster Wind Energy project in Brewster, MA. RUS is considering funding this application, thereby making the referenced project an undertaking subject to review under Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800).

CVEC is proposing to install two wind turbines (maximum height of 410-ft) and associated facilities at the preferred Commerce Park location (generally adjacent to and south of the Mid-Cape Highway, east of Commerce Park Road and north of Freemans Way) in Brewster, MA. A project description and an aerial map, showing the location of the proposed project components, are enclosed for your review.

RUS is inviting the Narragansett Indian Tribe of Rhode Island to participate in government-togovernment consultation for the proposed Brewster Wind Energy project. Please advise RUS of your decision by Friday, July 23, 2010. RUS has submitted similar project information to Mr. John Brown, Tribal Historic Preservation Officer, for review.

RUS appreciates your attention to this matter. Should you have any questions or require additional information, please contact RUS's environmental review coordinator, Ms. Lauren McGee, at 202-720-1482 or <u>lauren.mcgee@wdc.usda.gov</u> or CVEC's environmental consultant, Mr. Steve Wood, of the ESS Group, Inc. at 401-330-1206 or <u>swood@essgroup.com</u>.

Mark S. PLANK Director, Engineering and Environmental Staff Water and Environmental Programs Rural Utilities Service

Sincerely.

cc: Lauren McGee, RUS Steve Wood, ESS Group John Brown, Narragansett Indian Tribe of Rhode Island

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June 17, 2010

Ms. Cheryl Andrews-Maltais Chairperson Wampanoag Tribe of Gay Head (Aquinnah) 20 Black Brook Road Aquinnah, MA 02535-1546

Re: Cape and Vineyard Electric Cooperative (MA 1) Proposed Brewster Wind Energy Project Initiation of Government-to-Government Consultation

Dear Chairperson Andrews-Maltais,

The U.S. Department of Agriculture's Rural Utilities Service (RUS) is considering an application from the Cape and Vineyard Electric Cooperative (CVEC) for financial assistance to construct the proposed Brewster Wind Energy project in Brewster, MA. RUS is considering funding this application, thereby making the referenced project an undertaking subject to review under Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800).

CVEC is proposing to install two wind turbines (maximum height of 410-ft) and associated facilities at the preferred Commerce Park location (generally adjacent to and south of the Mid-Cape Highway, east of Commerce Park Road and north of Freemans Way) in Brewster, MA. A project description and an aerial map, showing the location of the proposed project components, are enclosed for your review.

RUS is inviting the Wampanoag Tribe of Gay Head (Aquinnah) to participate in government-togovernment consultation for the proposed Brewster Wind Energy project. Please advise RUS of your decision by Friday, July 23, 2010. RUS has submitted similar project information to Ms. Bettina Washington, Tribal Historic Preservation Officer, for review.

RUS appreciates your attention to this matter. Should you have any questions or require additional information, please contact RUS's environmental review coordinator, Ms. Lauren McGee, at 202-720-1482 or <u>lauren.mcgee@wdc.usda.gov</u> or CVEC's environmental consultant, Mr. Steve Wood, of the ESS Group, Inc. at 401-330-1206 or <u>swood@essgroup.com</u>.

Sincerely. Marle S. Plant

MARK S. PLANK Director, Engineering and Environmental Staff Water and Environmental Programs Rural Utilities Service

cc: Lauren McGee, RUS Steve Wood, ESS Group Bettina Washington, Aquinnah Wampanoag

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June 17, 2010

Ms. Bettina Washington, THPO Wampanoag Tribe of Gay Head (Aquinnah) 20 Black Brook Road Aquinnah, MA 02535

Re: Cape and Vineyard Electric Cooperative (MA 1) Proposed Brewster Wind Energy Project Initiation of Consultation under Section 106 of the NHPA

Dear Ms. Washington,

The U.S. Department of Agriculture's Rural Utilities Service (RUS) is considering an application from the Cape and Vineyard Electric Cooperative (CVEC) for financial assistance to construct the proposed Brewster Wind Energy project in Brewster, MA. RUS is considering funding this application, thereby making the referenced project an undertaking subject to review under Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800).

CVEC is proposing to install two wind turbines (maximum height of 410-ft) and associated facilities at the preferred Commerce Park location (generally adjacent to and south of the Mid-Cape Highway, east of Commerce Park Road and north of Freemans Way) in Brewster, MA. A project description and an aerial map, showing the location of the proposed project components, are enclosed for your review.

CVEC and RUS have discussed an Area of Potential Effect (APE) for the proposed project. For belowground cultural historic resources, the APE includes the entire Commerce Park Site as identified in the enclosed aerial map. The project's footprint of disturbance (turbine sites and access roads) is not expected to include the entire site. For aboveground cultural historic resources, RUS proposes that the APE be an 1.5-mile radius around the Commerce Park site. This approach is consistent with the standard established by the Federal Communications Commission in its nationwide programmatic agreement executed in September 2004 (Stipulation IV.C.4.c).

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Washington

By letter of this same date to Chairperson Andrews-Maltais, RUS invited the Wampanoag Tribe of Gay Head (Aquinnah) to participate in government-to-government consultation for the proposed Brewster Wind Energy project. If the Wampanoag Tribe of Gay Head (Aquinnah) decides to participate in consultation, I request that you notify RUS as soon as possible, but no later than Friday, July 23, 2010. In your notification, please include comments on the proposed project.

RUS appreciates your attention to this matter. Should you have any questions or require additional information, please contact RUS's environmental review coordinator, Ms. Lauren McGee, at 202-720-1482 or <u>lauren.mcgee@wdc.usda.gov</u> or CVEC's environmental consultant, Mr. Steve Wood, of the ESS Group, Inc. at 401-330-1206 or swood@essgroup.com.

Sincerely, & S. Plank

MARK S. PLANK Director, Engineering and Environmental Staff Water and Environmental Programs Rural Utilities Service



June 17, 2010

Mr. Cedric Cromwell Chairman Masphee Wampanoag Tribe P.O. Box 1048 Mashpee, MA 02649-1048

Re: Cape and Vineyard Electric Cooperative (MA 1) Proposed Brewster Wind Energy Project Initiation of Government-to-Government Consultation

Dear Chairman Cromwell,

The U.S. Department of Agriculture's Rural Utilities Service (RUS) is considering an application from the Cape and Vineyard Electric Cooperative (CVEC) for financial assistance to construct the proposed Brewster Wind Energy project in Brewster, MA. RUS is considering funding this application, thereby making the referenced project an undertaking subject to review under Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800).

CVEC is proposing to install two wind turbines (maximum height of 410-ft) and associated facilities at the preferred Commerce Park location (generally adjacent to and south of the Mid-Cape Highway, east of Commerce Park Road and north of Freemans Way) in Brewster, MA. A project description and an aerial map, showing the location of the proposed project components, are enclosed for your review.

RUS is inviting the Masphee Wampanoag Tribe to participate in government-to-government consultation for the proposed Brewster Wind Energy project. Please advise RUS of your decision by Friday, July 23, 2010. RUS has submitted similar project information to Mr. George Chuckie Green, Assistant Director of the Department of Natural Resources, for review.

RUS appreciates your attention to this matter. Should you have any questions or require additional information, please contact RUS's environmental review coordinator, Ms. Lauren McGee, at 202-720-1482 or <u>lauren.mcgee@wdc.usda.gov</u> or CVEC's environmental consultant, Mr. Steve Wood, of the ESS Group, Inc. at 401-330-1206 or <u>swood@essgroup.com</u>.

Sincerely

MARK S. PLANK Director, Engineering and Environmental Staff Water and Environmental Programs Rural Utilities Service

cc: Lauren McGee, RUS Steve Wood, ESS Group George Chuckie Green, Mashpee Wampanoag

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June 17, 2010

Mr. George Chuckie Green Assistant Director, Dept. of Natural Resources Masphee Wampanoag Tribe P.O. Box 1048 Mashpee, MA 02649-1048

Re: Cape and Vineyard Electric Cooperative (MA 1) Proposed Brewster Wind Energy Project Initiation of Consultation under Section 106 of the NHPA

Dear Mr. Green,

The U.S. Department of Agriculture's Rural Utilities Service (RUS) is considering an application from the Cape and Vineyard Electric Cooperative (CVEC) for financial assistance to construct the proposed Brewster Wind Energy project in Brewster, MA. RUS is considering funding this application, thereby making the referenced project an undertaking subject to review under Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800).

CVEC is proposing to install two wind turbines (maximum height of 410-ft) and associated facilities at the preferred Commerce Park location (generally adjacent to and south of the Mid-Cape Highway, east of Commerce Park Road and north of Freemans Way) in Brewster, MA. A project description and an aerial map, showing the location of the proposed project components, are enclosed for your review.

CVEC and RUS have discussed an Area of Potential Effect (APE) for the proposed project. For belowground cultural historic resources, the APE includes the entire Commerce Park Site as identified in the enclosed aerial map. The project's footprint of disturbance (turbine sites and access roads) is not expected to include the entire site. For aboveground cultural historic resources, RUS proposes that the APE be an 1.5-mile radius around the Commerce Park site. This approach is consistent with the standard established by the Federal Communications Commission in its nationwide programmatic agreement executed in September 2004 (Stipulation IV.C.4.c).

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Green

By letter of this same date to Chairman Cromwell, RUS invited the Masphee Wampanoag Tribe to participate in government-to-government consultation for the proposed Brewster Wind Energy project. If the Masphee Wampanoag Tribe decides to participate in consultation, I request that you notify RUS as soon as possible, but no later than Friday, July 23, 2010. In your notification, please include comments concerning the proposed project.

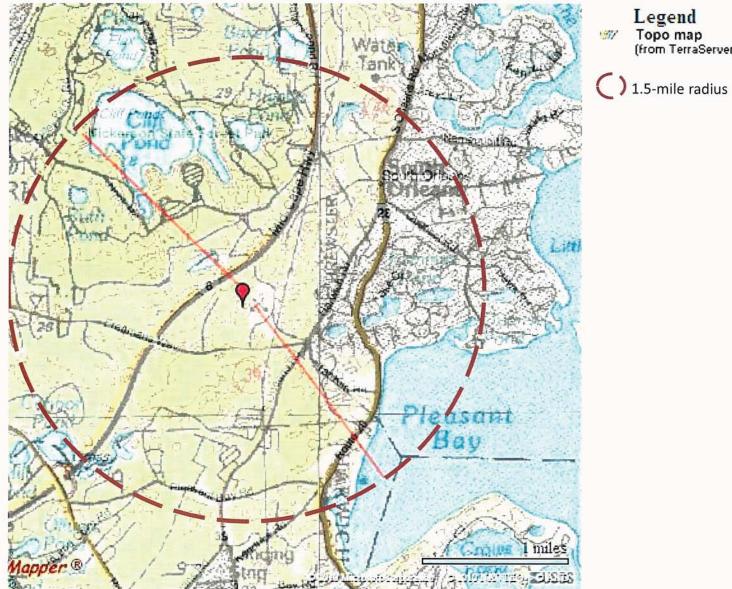
RUS appreciates your attention to this matter. Should you have any questions or require additional information, please contact RUS's environmental review coordinator, Ms. Lauren McGee, at 202-720-1482 or <u>lauren.mcgee@wdc.usda.gov</u> or CVEC's environmental consultant, Mr. Steve Wood, of the ESS Group, Inc. at 401-330-1206 or <u>swood@essgroup.com</u>.

Sincerely,

Mark S. Place

MARK S. PLANK Director, Engineering and Environmental Staff Water and Environmental Programs Rural Utilities Service

ewster Wind - Aboveground (visual) APE





950 CMR: OFFICE OF THE SECRETARY OF THE COMMONWEALTH

<u>APPENDIX A</u> MASSACHUSETTS HISTORICAL COMMISSION 220 MORRISSEY BOULEVARD BOSTON, MASS. 02125 617-727-8470, FAX: 617-727-5128

PROJECT NOTIFICATION FORM

Project Name:CVEC/Brewster Wind Energy Facility
Location / Address: 0 Commerce Park Road
City / Town: Brewster, MA 02631
Project Proponent
Name: Cape & Vineyard Electric Cooperative, Inc.
Address: 3195 Main Street
City/Town/Zip/Telephone:Barnstable, MA 02630 (508) 375-6636
Agency license or funding for the project (list all licenses permits approvals grants or other entitlements being

Agency license or funding for the project (list all licenses, permits, approvals, grants or other entitlements being sought from state and federal agencies).

Agency Name

Ma Division of Fisheries and Wildlife Federal Aviation Administration Mass Department of Transportation

Project Description (narrative):

Type of License or funding (specify)

MESA Project Review Determination of No Hazard to Air Navigation Airspace Review

Please see Attached Project Description

Does the project include demolition? If so, specify nature of demolition and describe the building(s) which are proposed for demolition. $_{N/A}$

Does the project include rehabilitation of any existing buildings? If so, specify nature of rehabilitation and describe the building(s) which are proposed for rehabilitation. N/A

Does the project include new construction? If so, describe (attach plans and elevations if necessary).

Yes, this project includes construction of two large scale wind turbines. Please refer to the attached conceptual site plan.

5/31/96 (Effective 7/1/93) - corrected

950 CMR: OFFICE OF THE SECRETARY OF THE COMMONWEALTH

APPENDIX A (continued)

To the best of your knowledge, are any historic or archaeological properties known to exist within the project's area of potential impact? If so, specify.

What is the total acreage of the project area?

Woodland	65.3	acres	Productive Resources:	
Wetland	0.5	acres	Agriculture 0	acres
Floodplain	0	acres	Forestry 0	acres
Open space	15.6	acres	Mining/Extraction 2.7	acres
Developed _	14.7	acres	Total Project Acreage 98.8	acres

What is the acreage of the proposed new construction? <u>5.8</u> acres

What is the present land use of the project area?

The present land use is an industrial park with wooded areas surrounding the developed areas.

Please attach a copy of the section of the USGS quadrangle map which clearly marks the project location.

This Project Notification Form has been submitted to the MHC in compliance with 950 CMR 71.00.

Signature of	of Person submitting this form: Multure S/11/10
Name:	Stephen Wiehe P.G. Weston & Sampson
Address:	5 Centennial Drive
City/Town	/Zip:Peabody, MA 01960
Telephone:	978 532-1900 x2221

REGULATORY AUTHORITY

950 CMR 71.00: M.G.L. c. 9, §§ 26-27C as amended by St. 1988, c. 254.

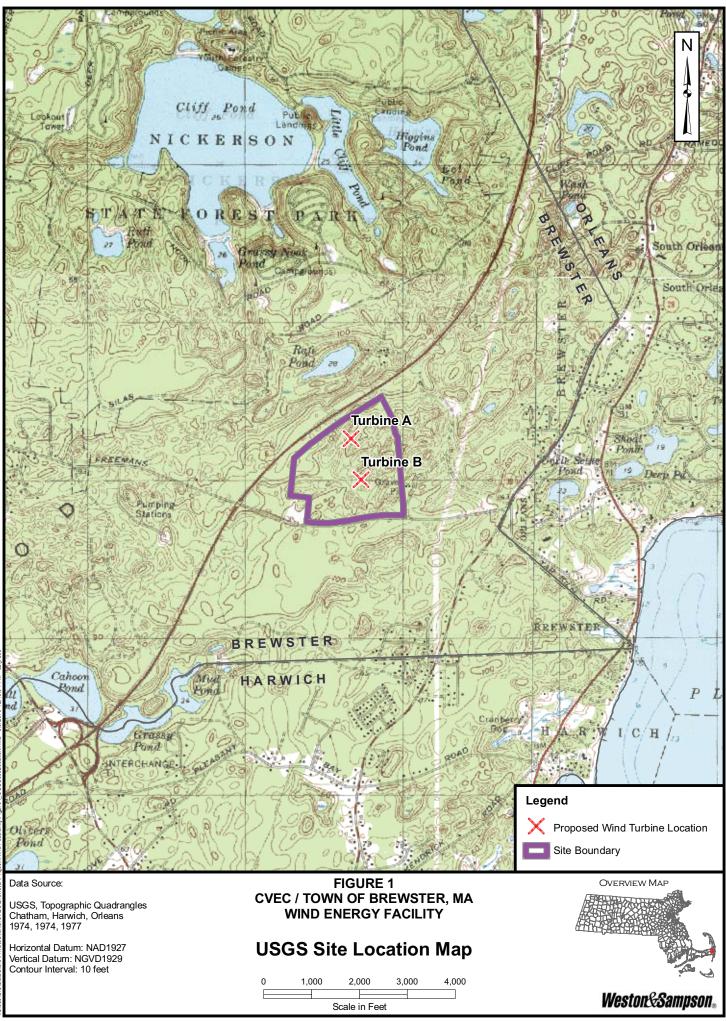
950 CMR - 276

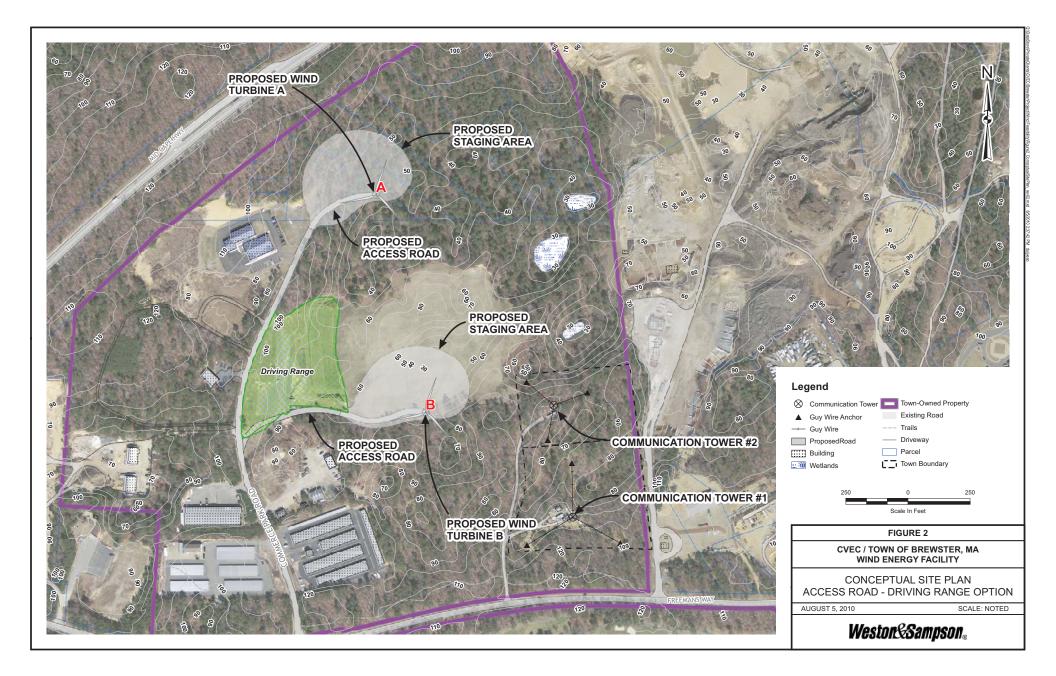
7/1/93

Project Description

Cape and Vineyard Electric Cooperative, Inc. (CVEC) proposes to install two Large Scale Wind Energy Turbines (LWETs) on Town-owned property located off of Commerce Park Road in Brewster, MA. The two wind turbines, designated Turbine "A" and Turbine "B" are to be located within the Commerce Park off Freemans Way. The parcel is depicted on old Assessors Map 46, Lot 41 and new Map 131, Lots 1 and 32. The turbines will be modern, three-bladed, upwind, horizontal axis wind turbines, mounted atop monopole towers with a maximum overall structure height of 410 feet. The Town of Brewster will be the primary user of the electricity generated by the two turbines. The remainder of the electricity will be allocated to other CVEC members under Massachusetts net metering regulations.

The Special Permit Application and supporting documentation presented to the Planning Board is intended to demonstrate compliance with Bylaw Sections 179-40.2, 179-51, and 179-67, for development of the proposed project. CVEC requests that the Planning Board approve this application which demonstrates appropriate land use, affords environmental protection with adequate infrastructure for the proposed development, while preserving historical, cultural, archaeological, architectural, and recreational values of the area.







The Commonwealth of Massachusetts

William Francis Galvin, Secretary of the Commonwealth Massachusetts Historical Commission

August 23, 2010

Mark S. Plank Director, Engineering and Environmental Staff Water and Environmental Programs Rural Utilities Service United States Department of Agriculture and Rural Development 1400 Independence Avenue, S.W. Washington DC20250-0700

Attn: Lauren McGee, Mail Stop 1571

RE: Cape & Vineyard Electrical Cooperative Wind Turbines, Commerce Park, Freemans Way, Brewster, MA. MHC #RC.49147.

Dear Mr. Plank:

Staff of the Massachusetts Historical Commission, office of the Massachusetts State Historic Preservation Officer, have reviewed preliminary information submitted by the ESS Group, Inc., received August 4, 2010, and a Project Notification Form (PNF) and conceptual site plan, received August 16, 2010, for the project referenced above. The proposed project consists of the construction of two approximately 410 foot tall wind turbines and associated infrastructure within the Commerce Park industrial area off Freemans Way in Brewster.

MHC understands that the project is to be funded by a grant from the USDA Rural Utilities Service. MHC will review the project under Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800).

MHC concurs with the recommendation for a 1.5 mile radius to study potential visual effects of the project to historic properties. MHC requests that a visual effects study, including a balloon test, and photographic simulations keyed to an aerial photo or USGS topographic map, be conducted for the project that show the proposed project from several vantage points from any identified historic resources within the visual area of potential effect. The visual effects study should be conducted by a qualified historic preservation consultant, to assist in determining what visual effect, if any, the project may have on historic properties.

The proposed turbine area of potential effect includes places within the towns of Brewster, Orleans and Harwich. Project information and the visual effects study should be provided to the Brewster, Orleans and Harwich Historical Commissions for review and comment. Copies of any comments received from these bodies should be provided to the MHC. The MHC looks forward to receiving and reviewing these materials and to consultation to avoid, minimize or mitigate adverse effects to significant historic and archaeological properties.

220 Morrissey Boulevard, Boston, Massachusetts 02125 (617) 727-8470 • Fax: (617) 727-5128 www.sec.state.ma.us/mhc These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800). Please contact Jonathan K. Patton of my staff if you have any questions.

Sincerely,

xc:

Brona Sim

Brona Simon State Historic Preservation Officer Executive Director Massachusetts Historical Commission

Sarah K. Faldetta, ESS Group, Inc.
Stephen Wiehe, Weston & Sampson
Carter Wall, Massachusetts Clean Energy Center
John Cunningham, Town of Brewster Energy Committee
Cape & Vineyard Electric Cooperative, Inc.
Sara Korjeff, Cape Cod Commission
Brewster Planning Board
Brewster Historical Commission
Orleans Historical Commission
Harwich Historical Commission