PUBLIC NOTICE

US Army Corps of Engineers
New York District
ATTN: Regulatory Branch
LIPA Offshore Wind Park Application
Jacob K. Javits Federal Building
New York, N.Y. 10278-0090

In replying refer to:
Public Notice Number: 2005-00365-L4
Issue Date: JUN 9 2005
Expiration Date: JUL 22 2005

To Whom It May Concern:

The New York District, U.S. Army Corps of Engineers has received an application for a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) as extended by Section 4(f) of the Outer Continental Shelf Lands Act (43 USC 1333(e)), and Section 404 of the Clean Water Act (33 U.S.C. 1344).

APPLICANTS: Long Island Power Authority (LIPA)
333 Earl Ovington Boulevard
Suite 403
Uniondale, NY 11553

Long Island Offshore Wind Park, LLC
700 Universe Boulevard
Juno Beach, FL 33408

ACTIVITY: Install an Offshore Wind Energy Generating Facility and Submarine Electric Cables

WATERWAY: Atlantic Ocean, Great South Bay, Narraskatuck River

LOCATION: Atlantic Ocean 3.6 mi offshore of Jones Beach Island
West Gilgo, Town of Babylon, Suffolk County, NY and
West Amityville and East Massapequa, Town of Oyster Bay, Nassau County, NY

A detailed work description and drawings of the applicants regulated proposed activity are enclosed with this public notice to assist in your review.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments.

All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this

decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in preparation of an environmental assessment and/or an environmental impact statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

ALL COMMENTS REGARDING THE PERMIT APPLICATION MUST BE PREPARED IN WRITING AND **MAILED** TO REACH THIS OFFICE BEFORE THE EXPIRATION DATE OF THIS NOTICE, otherwise, it will be presumed that there are no objections to the proposed activity.

Any person may request, in writing, before this public notice expires, that a public hearing be held to receive information necessary to consider this application. Requests for public hearings shall state, with particularity, the reasons why a public hearing should be held. It should be noted that information submitted by mail is considered just as carefully in the permit decision process and bears the same weight as that furnished at a public hearing.

Our preliminary determination is that the proposed activity for which authorization is sought herein may affect four species of sea turtles, leatherback (Dermochelys coriacea), loggerhead (Caretta caretta), green (Chelonia mydas), Kemp's ridley (Lepidochelys kempi) or their critical habitat; four species of whales, North Atlantic right whale (Eubalaena glacialis), humpback whale (Megaptera novaeangliae), fin whale (Balaenoptera physalus), minke whale (Balaenoptera acutorostrata); as well as, piping plover (Charadrius melodus), roseate tern (Sterna dougalli dougalli), and seabeach amaranth (Amaranthus pumilis). Pursuant to Section 7 of the Endangered Species Act (16 USC 1531), the New York District is consulting with the appropriate Federal agencies to determine the presence of and potential impacts to listed species in the applicants' project area or their critical habitat.

The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996 (16 USC 1801 et.seq.) requires federal agencies to consult with the National Oceanic and Atmospheric Administration (NOAA) Fisheries Service on all actions, or proposed actions, permitted or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). A complete description of the applicants' proposed project is in the enclosed work description. The New York District has made the preliminary determination, based on information that is currently available; that the site-specific adverse effects are not likely to be substantial provided special permit conditions to protect Essential Fish Habitat are included in any issued permit. Consultation with the National Oceanic and Atmospheric Administration Fisheries Service regarding impacts to Essential Fish Habitat, and conservation recommendations to protect Essential Fish Habitat or mitigate for impacts, as well as special permit conditions, will be concluded prior to a final permit decision.

Based upon a review of the latest published version of the National Register of Historic Places, information provided by the applicant, and information provided by the New York State Office of Parks, Recreation and Historic Preservation, it has been determined that several eligible properties are located in the general vicinity of the applicants' proposed project. These include Jones Beach State Park, Causeway and Parkway System and Fire Island Light Station. Consultations with the New York State Office of Parks, Recreation and Historic Preservation, will be undertaken to ensure that the requirements of Section 106 of the National Historical Preservation Act of 1966 (16 USC 470), are satisfied prior to final permit decision.

A discharge of fill material is anticipated in order to restore the original grades after the removal of the temporary coffer dams and vaults, construction thus requiring review under Section 404 of the Clean Water Act. Reviews of activities pursuant to Section 404 of the Clean Water Act will include application of the guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, under authority of Section 404 (b) of the Clean Water Act and the applicant will obtain a water quality certificate or waiver from the appropriate state agency in accordance with Section 401 of the Clean Water Act prior to a permit decision.

Pursuant to Section 307 (c) of the Coastal Zone Management Act of 1972 as amended [16 USC 1456 (c)], for activities under consideration that are located within the coastal zone of a state which has a federally approved coastal zone management program, the applicants have certified in the permit application that the proposed activity complies with, and will be conducted in a manner that is consistent with, the approved state coastal zone management program. By this public notice, we are requesting the state's concurrence with, objection to, or waiver of the applicants certification. No final permit decision will be made until one of these actions occurs. For activities within the coastal zone of New York State, the applicants certification and accompanying information is available from the Consistency Coordinator, New York State Department of State, Division of Coastal Resources and Waterfront Revitalization, Coastal Zone Management Program, 41 State Street, Albany, New York 12231, Telephone (518) 474-6000. Comments regarding the applicants Coastal Zone Management Certification, should be mailed to this same address.

In addition to the coastal zone management program concurrence, the applicants will request the following governmental authorizations for their proposed activity under consideration:

* New York State Public Service Commission Article VII Certificate of Environmental Compatability and Public Need
* New York State Office of General Services Easement
* New York State Office of Parks, Recreation and Historic Preservation Easement
* Town of Babylon Easement
* Town of Oyster Bay Easement

It is requested that you communicate the foregoing information concerning the applicants proposed activity to any persons known by you to be interested and who did not receive a copy of this public notice.

If you have any questions concerning this application, you may contact this office at (917) 790-8526 and ask for Mary Ann Miller.

For more information on New York District Corps of Engineers programs, visit our website at http://www.nan.usace.army.mil

FOR THE DISTRICT ENGINEER

Richard L. Tomer

Richard L. Tomer
Chief, Regulatory Branch

Enclosures

Long Island Power Authority (LIPA)

and

Long Island Offshore Wind Park, LLC

Public Information Open Houses

On

Long Island Offshore Wind Park

Public Information Open Houses

The applicants intend to hold public information open houses on June 16, June 21, and June 22, 2005. All open houses are scheduled to run 2:00 - 4:00 pm and 7:00 - 9:00 pm. All facilities are handicapped accessible and light refreshments will be served. The Long Island Power Authority and the Long Island Offshore Wind Park, LLC (a wholly owned subsidiary of FPL Energy) representatives and experts involved in specific aspects of the proposed project will be on hand to explain their project s elements and answer questions.

Thursday, June 16, 2005
Robert Moses State Park
Robert Moses Field 4 Concession Building
2:00 - 4:00 pm and 7:00 - 9:00 pm

Tuesday, June 21, 2005
Tanner Park Senior Center
Copiague, New York
2:00 - 4:00 pm and 7:00 - 9:00 pm

Wednesday, June 22, 2005
Massapequa Park Village Hall
110 Front Street
Massapequa Park, New York
2:00 - 4:00 pm and 7:00 - 9:00 pm

Interested parties are encouraged to take advantage of the public information open houses to learn about the applicants proposed activities and have any questions addressed.

WORK DESCRIPTION

The applicants, the Long Island Offshore Wind Park LLC and the Long Island Power Authority, have requested a Department of the Army permit for construction of an offshore wind park consisting of forty wind turbine generators mounted on individual steel tower monopiles, with interconnecting submarine electrical cables, an offshore electric substation platform, and a submarine electric transmission cable leading from the offshore electric substation platform to the mainland of Long Island and then on to an existing upland electric substation. The offshore wind park would be located in the Atlantic Ocean, 3.6 miles south of Jones Beach Island, New York. The offshore-to-onshore submarine transmission cable would connect the offshore electrical substation platform in the Atlantic Ocean to the mainland and the existing Long Island Power Authority Sterling Substation in West Amityville, Town of Oyster Bay, Nassau County, New York.

The applicants stated purpose and need for this project is:

1. To contribute toward the Long Island Power Authority (LIPA) meeting the growing electrical energy demand on Long Island;
2. To comply with on-island generation requirements imposed by the New York Independent System Operator on LIPA; and
3. To provide electricity to Long Island from a diversified clean, renewable energy source.

To assist in the readers review of the applicants proposed activity, twenty-eight drawings and photographs are enclosed with this work description. Sheets 12 through 20 are a set of photographs and computer-generated depictions showing the view now and what it would be from four locations, if the offshore wind park is permitted and constructed. The four locations are Jones Beach State Park boardwalk, Gilgo Beach, Cedar Beach Park parking lot, and Robert Moses State Park.

Offshore Wind Turbine Generators on Monopile Steel Towers (Sheets 1 through 6)
This work would involve the construction of 40 wind-turbine-generator towers in a multiple row array. The nearest wind-turbine-generator tower would be located 3.6 statute miles from the shore. The wind-turbine-generator towers would be spaced at an average interval of approximately 2,155 feet from any other wind-turbine-generator tower, over an 8-square-mile area, to ensure that the optimum wind resource is obtained and to allow for boat traffic within the wind-turbine-generator towers (see sheet 3).

Each wind-turbine-generator tower would consist of a 3.6 Megawatt (MW) wind turbine generator atop a steel monopile tower. Each turbine would be approximately 261 feet above Mean Low Water (MLW) sea level measured to the center of the nacelle (or blade hub) and approximately 443 feet above Mean Low Water (MLW) sea level at the peak of the blades. The rotor blades diameter would be 364 feet and the bottom blade tip would be approximately 78 feet above Mean Low Water (MLW) sea level (see sheet 5). The turbine blades would spin at the rate of 8 to 16 revolutions per minute depending on the speed of the wind.

For installation, the lower 18.7-foot-diameter section of the monopile tower would be lifted into place by a heavy lift vessel, and then driven into the seabed with a pile driver. The tapered upper section would be lifted into place on the lower pile and attached. The applicants report most of the foundations would have a seabed embedment depth of approximately 98 to 112 feet. For example, as shown on Sheet 5, at a seabed depth of 72.5 feet below Mean Low Water sea level, the depth to the bottom of the monopile tower would be 184.2 feet below Mean Low Water (MLW) sea level. The applicants report driving time for the individual monopile towers would vary by seabed conditions, but is anticipated to take one to two days each. Twelve-inch-diameter J-tubes (cable conduits) would

be installed on each side of the individual towers to carry the 34.5-kilovolt electric collection cables from the wind turbine generator down into the ocean floor.

After the monopile towers are installed, scour control measures would be put in place on the ocean floor. Scour control mats would consist of four-foot-long polypropylene buoyant fronds that would reduce local bottom current velocities around the base of the towers. Depending on the seabed conditions, mats could be anchored with specially designed stakes or attached to concrete mats of sufficient weight to hold them in place. As shown on Sheet 6, eight square mats, 16.4 feet on a side, would surround each monopile tower on the ocean floor

Offshore Electrical Substation Platform (Sheets 7 and 8)
The offshore electrical substation platform would be centrally located behind the front (landward) row of wind turbine generators (see sheet 7). The approximate dimensions for the substation platform would be 70 feet long by 85 feet wide with the tallest structural point approximately 98 feet above Mean Low Water (MLW) sea level, with the platform elevated on a monopile tower 55.3 feet above Mean Low Water (MLW) sea level. J-tubes (cable conduits) would be installed on the sides of the tower to carry the six 34.5 kilovolt collection grid cables up into the offshore electrical substation platform, as well as carry the 138 kilovolt offshore-to-onshore main transmission cable out of the offshore electrical substation platform and into the ocean floor for its trip to the mainland. A small emergency diesel generator and fuel tank with spill containment will be installed in the offshore electrical substation platform. In the event of electric power loss, this diesel generator would also power the aviation and navigation warning lights (see sheets 5 and 11). Spill prevention would be provided at the storage tank and an Oil Spill Prevention Control and Countermeasure Plan, approved by the U.S. Coast Guard, would be in place before construction of the offshore electrical substation platform.

Installation of Buried 34.5 kilovolt (kV) Inner-Array Collection Grid Submarine Cables From Turbine Towers to the Offshore Electrical Substation Platform (Sheets 9 and 10)
Electrical output from the individual wind turbine generators would be collected via approximately 125,000 linear feet (23.7 miles) of submarine cables buried in the ocean floor, and connected to the offshore electrical substation platform. A transformer internal to each wind turbine generator would convert the 3.3 kilovolt voltage in each turbine to the 34.5 kilovolt voltage used in the inner-array submarine cable collector grid. The wind turbine generators would be connected in six circuits, or sets, of six to eight wind turbine generators each. Each circuit would connect through a 34.5-kilovolt circuit breaker in the offshore electrical substation platform. After a section of wind turbine generators is erected, a cable-laying vessel would begin jet plowing the collection cables between the offshore electrical substation platform and the nearby wind turbine generator towers, and between adjacent wind turbine generator towers, to form each circuit. The jet plow would bury these cables a minimum of 6 feet below the sea floor. Each cable would be jet plowed close to the offshore electrical substation platform tower and the wind turbine generator towers. Divers would then assist in feeding the cable into the J-tube conduits on the sides of the towers in order for it to be pulled up into each wind turbine generator. The divers would also assist in burying the cables adjacent to the towers. The submarine cable itself would be a three conductor ("3/C") solid dielectric type. Each conductor, or wire, would have a copper conductor minimum cross-sectional area of 800 square millimeters. The submarine cable would have an overall diameter of approximately 10-12 inches as shown on Sheet 9.

Installation of the 138 kilovolt Offshore-to-Onshore Submarine Cable Route to the Long Island Mainland and Onward on the Upland to the Existing Sterling Substation (Sheets 21 to 28)
The buried 138 kilovolt submarine cable would be installed using a combination of three construction methods depending upon the location along the cable route:

1) In the Atlantic Ocean and Great South Bay the cable would be buried in the sea floor a minimum of six feet using an underwater hydraulic jet plow (see sheet 10);
2) In transition locations between water and land, such as crossing Jones Beach Island barrier beach, making landfall on Long Island, and crossing underneath an unnamed creek along Clocks Boulevard (tributary of the Narraskatuck River), a horizontal directional drilling (HDD) method and installed High Density Polyethylene (HDPE) plastic conduit would be used to also protect the cable in the transition areas;
3) Along the upland route to the existing upland electrical substation, a traditional direct trenching method, or existing cable conduits, would be used.

The offshore-to-onshore and inner array submarine cables would be installed using a towed hydraulic jet plow vehicle technique shown on Sheet 10 that consists of either:

1) A jetting device that travels along a cable placed on the sea bed with or without diver assistance, which hydraulically fluidizes the underlying bottom sediments, and allows the cable to then sink into the fluidized sediments before they settled back into the trench; or
2) A jetting device equipped with a mechanical plow in which the jetting device is utilized to fluidize hardened sediment that the plow has difficulty penetrating in a one pass process with the cable lay and embedment occurring simultaneously by feeding the cable through a chute on the towed vehicle (see Sheet 10). The cable then would settle to the desired depth (minimum of 6 feet) based upon the degree of jetting utilized before the sediments settle back into the trench.

Both techniques would allow a cable to be buried without dredging. The hydraulic jet plow would create a narrow trench, approximately 36-inches wide, suspending a relatively small amount of sediment within the water column near the sea floor, the majority of which is expected to settle over the installed cables and cable trenches soon after disturbance. The end result would be a narrow area of disturbed sediment above the length of the cable and undisturbed sediment to the sides.

Horizontal directional drilling and lining of the drilled boreholes with High Density Polyethylene (HDPE) plastic conduits at three locations would occur as follows. The bore hole would be horizontally directionally drilled from land to a previously installed temporary U-shaped coffer dam which is open at the seaward end, or a temporary pre-cast concrete capture vault box. Drilling spoils and bottom sediments would be removed from within the cofferdam and disposed of at a state-approved upland disposal site. The High Density Polyethylene (HDPE) plastic conduits are pulled into the borehole behind the reamer drill as the drill rods are pulled back into the entry pit. The cable itself would then be pulled towards land through the installed conduit with a nylon rope connected to a tensioning machine. After the cofferdam or vault is removed, the disturbed area would be restored with clean sand to pre-existing bathymetric conditions.

In upland areas between the shoreline and the existing Sterling Substation a trench would be excavated along Clocks Boulevard to a design depth that would place the top of the conduit carrying the cable at 42-inches below grade. The width of the narrow trench is expected to be approximately 22-inches at grade level down to the trench bottom. A below grade splicing vault would be installed on Clocks Boulevard near the landfall to allow the transition from the underwater cable to the land cables. The overland cable route on the main island would be within existing utility corridors and other rights-of-way (ROW).

The offshore-to-onshore submarine cable route would originate at the offshore electrical substation platform. The cable would travel northwest, buried a minimum of six feet in the Atlantic Ocean floor, towards Jones Beach Island approximately 4.26 statute miles. On this approach, approximately five hundred feet from the beach, the cable would transition from direct embedment in the ocean floor and it would enter a temporary capture and transition vault approximately 30-feet long by 15-feet wide by 8-feet high. There it would enter a permanent 1000-foot-long HDPE plastic conduit that was installed by horizontal directional drilling from a new pre-cast concrete splice vault located in the center median of Ocean Parkway at West Gilgo. Installation of this temporary capture and transition vault would require the displacement of approximately 233 cubic yards of ocean bottom sediment. The cable would then run north across Jones Beach Island, through another horizontal directionally drilled and installed 1000-foot conduit, and out into the Great South Bay. There would be a temporary cofferdam installed (three sided, 30-foot by 50-foot by 30-foot) at the end of this drilling run approximately 450-feet north from the beach in the Great South Bay to capture drilling spoils and bentonite used in the directional drilling process. Approximately 444 cubic yards of drilling spoils, including the bentonite, would be dredged from the temporary cofferdam using mechanical methods and disposed of in a state-approved upland disposal site, when the drilling and HDPE plastic conduit installation is completed.

The cable would proceed north buried a minimum of six feet in the bottom of the Great South Bay for approximately 2.7 miles, and still buried it would then turn to the northwest, toward the bulkhead at the south end of Clocks Boulevard for two-thirds of a mile.

On this approach, approximately five hundred feet from the existing bulkhead at the seaward end of Clocks Boulevard, the cable would transition from direct embedment in the bay floor and it would enter a temporary cofferdam and transition into a permanent 500-foot-long conduit that was installed by horizontal directional drilling from a new pre-cast concrete splice vault located in Clocks Boulevard. Approximately 444 cubic yards of drilling spoils, including the bentonite used in the directional drilling process, would be dredged from the temporary cofferdam using mechanical methods and disposed of in a state-approved upland disposal site, when the drilling and conduit installation is completed.

From this point inland, the majority of the cable would be installed using the traditional upland open-cut trenching method. The cable would be installed under Clocks Boulevard, East Massapequa and run north along Clocks Boulevard, into West Amityville, to the north edge of Old Sunrise Highway, a distance of approximately 2.1 miles. The portion of the cable route in Clocks Boulevard crossing of the Narraskatuck River would be horizontally directionally drilled under the creek bed. At the north edge of Old Sunrise Highway, the cable would enter existing spare Long Island Power Authority conduits and proceed north, crossing under the Long Island Rail Road Right-of-Way. The cable would then proceed approximately 600-feet west along the Long Island Rail Road Right-of-Way into the existing Long Island Power Authority Sterling Substation. The following information is provided to provide the reader with an understanding of the applicants entire project.

The applicants report the offshore wind park would require a landside manned Operations Center, which would consist of a single building proposed to be located on the upland at the Robert Moses State Park Boat Basin. This location is approximately five miles from the proposed offshore wind park, allowing for a quick response of maintenance crews and equipment. Operations, maintenance, safety and emergency response personnel would mobilize from this building and boat basin. The operations of the offshore wind park would be monitored from this Operations Center and from FPL Energy's centralized wind facility monitoring center in Juno Beach, Florida.

The applicants report a construction material lay down and staging area would be leased at an existing commercial maritime terminal in Bayonne, New Jersey. It would be used to receive and store major construction items and materials such as the wind turbine generator monopile tower components, nacelles, hubs and blades. The existing maritime terminal would already have adequate water access for deep-draft ocean vessels and adequate upland area to maneuver and use cranes so that the wind turbine generator components can be partially pre-assembled and loaded out for transport to the Atlantic Ocean construction area off of Long Island.