123 Main Street White Plains, NY 10601



Gil C. Quiniones Chief Operating Officer

September 8, 2011

Maureen A. Bornholdt Program Manager Office of Offshore Alternative Energy Programs Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) Mail Stop 4090 381 Elden Street Herndon, Virginia 20170-4817

Re: Long Island – New York City Offshore Wind Collaborative Request for Commercial Lease on Outer Continental Shelf, Long Island, New York

Dear Ms. Bornholdt:

On behalf of the Long Island – New York City Offshore Wind Collaborative (hereinafter referred to as the "Collaborative" as further defined below), the Power Authority of the State of New York ("NYPA"), under the direction of its Board of Trustees, acting on behalf of the Collaborative requests that the Bureau of Ocean Energy Management, Regulation and Enforcement ("BOEMRE") issue a commercial lease to NYPA located on the Outer Continental Shelf ("OCS") off of the State of New York ("NYS") approximately 13 nautical miles off the south shore of Long Island for an offshore wind project (the "Proposed Project"), as further detailed below and in conformity with the process established by the Department of the Interior and set forth in its "Renewable Energy and Alternate Uses of Existing Facilities on the Outer Continental Shelf; Final Rule" (30 CFR Parts 250, 285, and 290, hereinafter referred to as the "Final Rule").¹

1. THE LONG ISLAND - NEW YORK CITY OFFSHORE WIND COLLABORATIVE PROJECT

a. Relationship of NYPA to the Collaborative

The Collaborative is currently comprised of the three largest electric utility power providers in the Long Island – New York City region: (1) the Long Island Power Authority ("LIPA"); (2) Consolidated Edison Company of New York Inc. ("Con Edison"), and (3)

¹ On April 29, 2009, the Department of the Interior published the Final Rule which sets forth final regulations to establish a program to grant leases, easements and rights-of-way ("ROW") for renewable energy project activities on the OCS which became effective on June 29, 2009.

NYPA.² The Collaborative's goal is the development of the Proposed Project to supply the Long Island and New York City ("NYC") region with clean, renewable energy in furtherance of the renewable energy goals of NYS and NYC. NYPA, LIPA and Con Edison have executed a Memorandum of Understanding ("MOU") in June 2010, which defines the roles and responsibilities of the Collaborative members.

As part of, and on behalf of, the Collaborative, NYPA is seeking to acquire a commercial lease for the Proposed Project from BOEMRE in the Collaborative's area of interest of the OCS, as described below.

b. General Description of the Proposed Project

The Proposed Project is an important initiative to help New York State and the City of New York reach their clean and renewable energy goals. The Proposed Project area is located in the Atlantic Ocean, approximately 13 nautical miles off the south shore of Long Island, in a south eastern direction from the Rockaway Peninsula. The Proposed Project area is designed to accommodate up to 350 megawatts ("MW") of wind generation, with the ability to expand up to 700 MW, giving the Proposed Project the potential to be the largest offshore wind energy facility in the United States.

c. The Collaborative's Process

Coinciding and in coordination with the BOEMRE lease review and assessment process, the Collaborative will continue to examine the viability of the proposed site for the development of an offshore wind project. The Collaborative will consider factors including New York State's policy(ies) with respect to wind power development in federal offshore waters adjacent to New York, offshore wind and geological assessments at the lease location, environmental, economic, and social issues to be addressed through the NEPA process, and those that may influence the economic viability of the project.

During or upon the completion of such assessments, one or more members of the Collaborative may choose to further the development of the project itself, or collectively with other members of the Collaborative, or by issuing a Request for Proposals ("RFP"), through which the Collaborative may pursue a Power Purchase Agreement ("PPA") and other definitive agreements that would support the installation of a Proposed Project to be constructed, owned and operated by the Developer(s). NYPA, in consultation and together with the Collaborative, will coordinate with and communicate such decisions to BOEMRE as to the development of the project.

d. Assignment of Commercial Lease Rights

If NYPA successfully acquires the commercial lease and one or more members of the Collaborative develop the project or enter into a PPA with a Developer(s), it is NYPA's

² The Collaborative includes LIPA, NYPA and Con Edison as the electric utility participants. In addition, the New York State Energy Research and Development Authority ("NYSERDA"), the New York State Department of State ("DOS"), the New York State Department of Environmental Conservation ("DEC"), the Metropolitan Transportation Authority ("MTA"), the New York City Economic Development Corporation ("NYC EDC") and the Port Authority of New York and New Jersey ("Port Authority"), while not members of the Collaborative, are among government agencies that are routinely apprised of the Collaborative's activities.

intention to assign all rights and responsibilities of the commercial lease to the Developer(s). If the Proposed Project requires less land than requested below in Section 2a, NYPA intends to relinquish the unneeded property as provided in 30 CFR § 285.434 to BOEMRE. The Developer(s) (once they are assigned the commercial lease) will own, construct and operate the Proposed Project and provide the wind energy to the Collaborative in accordance with the terms and conditions of the PPA.

2. SPECIFICS OF THE COMMERCIAL LEASE REQUEST

The below items address BOEMRE's requirements for an unsolicited request for a commercial lease, as specified in 30 CFR § 285.

a. Area Requested for Commercial Lease

The area of interest is approximately 81,500 acres as defined by the attached diagram and coordinates (See Attachments 1 and 2) for up to a 700 MW project. The area is located off the south shore of Long Island, from the Rockaway Peninsula east out to Robert Moses State Park in New York located in New York NK 18-12 of the BOEMRE North Atlantic planning area. The area is comprised of portions of 19 lease blocks, as described below:

- Block 6654:
 - SE quarter of the NE quadrant
 - NE quarter of the SE quadrant
- Block 6655:
 - Entire NE, NW and SE quadrants
 - NE, NW and SE quarters of the SW quadrant
- Block 6656:
 - SE and SW quarters of the NE quadrant
 - Entire SE and SW quadrants
 - SE and SW quarters of the NW quadrant
- Block 6657:
 - SW quarter of the NW quadrant
 - Entire SE and SW quadrants
- EntinBlock 6658:
 - SE and SW quarters of the SE quadrant
 - NW, SE and SW quarters of the SW quadrant
- Block 6659:
 - SW quarter of the SW quadrant
- Block 6705:
 - NE quarter of the NE quadrant
- Block 6706:
 - NE, NW and SE quarters of the NW quadrant
 - Entire NE quadrant
 - NE and NW quarters of the SE quadrant
- Block 6707:
 - All quadrants (entire block)
- Block 6708:
 - All quadrants (entire block)
- Block 6709:

- All quadrants (entire block)
- Block 6710:
 - Entire SW and SE quadrants
 - NW, SE and SW quarters of the NW quadrant
 - SE and SW quarters of the NE quadrant
- Block 6711:
 - Entire SW and SE quadrants
 - SW and SE quarters of the NW quadrant
- Block 6712:
 - Entire SW quadrant
 - SW and SE quarters of the SE quadrant
- Block 6713:
 - SW quarter of the SW quadrant
- Block 6757:
 - NE and NW quarters of the NE quadrant
- Block 6758:
 - Entire NE and NW quadrants
 - NW, NE and SE quarters of the SE quadrant
- Block 6759:
 - All quadrants (entire block)
- Block 6760:
 - All quadrants (entire block)
- Block 6761:
 - All quadrants (entire block)
- Block 6762:
 - Entire NE and NW quadrants
 - NW, NE and SW quarters of the SW quadrant
- Block 6763:
 - NW quarter of the NW quadrant
- Block 6809:
 - NE, NW and SE quarters of the NE quadrant
 - NE quarter of the NW quadrant
- Block 6810:
 - Entire NE and NW quadrants
 - NE quarter of the SW quadrant
 - NW, NE and SE quarters of the SE quadrant
- Block 6811:
 - Entire NW quadrant
 - NE, NW, and SW quarters of the NE quadrant
 - NW quarter of the SW quadrant

b. General Description of Objectives and Facilities

On March 23, 2009, the LIPA and Con Edison submitted an interconnection request to the New York Independent System Operator, Inc. ("NYISO") in accordance with Section 3.3.2 of the NYISO's Standard Large Facility Interconnection Procedure for a 700 MW offshore wind project. On June 21, 2011 the request was withdrawn pending availability of information necessary to proceed further, which will become available as studies and

assessments continue. The interconnection request will resume at that time, with a newlyrestored position in the NYISO's queue.

The Collaborative is tentatively assuming the 700 MW Proposed Project will require the installation of approximately 194, 3.6-MW units (or approximately 97 such units for a 350 MW project). Given estimated water depths, which range from approximately 60 to 125 feet, the wind turbine foundations are likely to be monopole, jacket or gravity base structures, or a combination of same. The Collaborative is assuming a maximum 120 meter rotor diameter and a 10 by 10 rotor diameter spacing between turbines, resulting in 1.2 kilometers between turbines. These assumptions were used when estimating BOEMRE's lease block requirements. The spacing assumption accounts for turbine-to-turbine wake effects and additional leeway should non-useable locations be identified as a result of physical, regulatory or environmental issues that are unknown at this time.

The output of the Proposed Project will interconnect from an offshore substation to an onshore receiving station via 138 kV submarine cables, before connecting with LIPA's Far Rockaway substation and Con Edison's Corona substation. Details of the interconnection are provided in the "Joint Con Edison-LIPA Offshore Wind Power Integration Project Feasibility Assessment" report dated March 20, 2009 (hereinafter referred to as the "Interconnection Feasibility Study" see Attachment 3).

The average annual wind speed of the Proposed Project area is expected to be in the range of 8.7 - 9.1 meters per second (19.5 - 20.4 mph) at a presumed hub height of 90 meters. Accordingly, the Proposed Project's performance is anticipated to realize an annual net capacity factor of 35% to 40%. As an interim step, the Collaborative is considering deploying a meteorological-wave buoy within the Proposed Project site area to obtain better information relative to wind and wave conditions prior to the installation of a temporary or permanent meteorological tower which would occur at a later date.

c. General Schedule of Proposed Activities

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The Collaborative's projected timeline is as follows:

D	Summer 2011	NYPA submits qualification to hold a commercial lease
		and NYPA submits application letter;

- Fall 2011 BOEMRE convenes NYS BOEMRE Task Force;
- Fall 2011 BOEMRE completes Completeness and Qualifications Reviews;
- Winter 2011 BOEMRE issues Request for Interest, open for 60 days;
- Winter 2011 BOEMRE initiates Environmental Assessment;
 - March/April 2012 Determination of Competitive or Non-Competitive Lease by BOEMRE;

The following dates assume BOEMRE makes a Non-Competitive determination:

- Summer 2012 Site Assessment Plan ("SAP") submission by NYPA;
 Fall 2012 BOEMRE completes Environmental Assessment, issues Finding of No Significant Impact, if applicable;
- Late-2012/early 2013 Commercial lease awarded to NYPA; SAP approved by BOEMRE, with specified conditions;

0	Mid-2013-mid 2014	Perform selected site assessment activities such as geophysical, wildlife, and/or meteorological surveys using temporary installations;
0	2013/2014	Determination by the Collaborative of next steps for the commercial development of the project, including assignment of commercial lease to the Developer(s) if applicable;
0	2013/2014	Install permanent meteorological tower under SAP;
0	2015	Construction and Operations Plan ("COP") submission by the Developer(s), additional or supplemental EIS is initiated for construction and operations;
0	2017	Approval of COP by BOEMRE, following completion of supplemental NEPA and/or EIS;
0	2017	Facility Design Report and Facility Installation Report submitted by the Developer(s) as required by 30 CFR § 285.700;
0	2017	BOEMRE review Design Reports (60 day review), following review construction by the Developer(s) can begin;
0	2017	Construction can begin by the Developer(s);
0	2018	Commercial operation.

d. Available and Pertinent Data and Information

The Collaborative has conducted, or intends to conduct, the following studies related to the Proposed Project, or has acquired the following information:

- Interconnection Feasibility Studies: A joint Interconnection Feasibility Study was conducted and completed on March 20, 2009 by Con Edison and LIPA concluded that an interconnection of up to 700 MW of wind power, located at the desired location in the Atlantic Ocean, would be feasible with upgrades to their respective transmission systems (See Attachment 3). The Collaborative is presently conducting further feasibility studies pursuant to the NYISO interconnection process.
- Potential Fatal Flaw Assessment: AWS Truepower LLC³, on behalf of the Collaborative, performed a fatal flaw analysis of the Proposed Project location, completed on June 24, 2009. Multiple potential fatal flaws were analyzed, including the items listed below. Data sources for the analysis included personal communications with subject matter experts, literature reviews, and more than 25 years of institutional experience conducting technical consulting services for the wind energy industry.
 - Shipping Lanes
 - Military and Commercial Aviation
 - Commercial and Recreational Fishing
 - Cables and Pipelines

³ AWS Truepower LLC is a consultant performing certain studies and other activities on behalf of the Collaborative.

- Historical and Archaeological Resources
- Other Water and Seabed Uses
- Public Acceptance
- Avian
- Marine Mammal Protection
- Regulatory Concerns
- Staging Area Availability

Findings from the analysis suggest there is no fatal flaw associated with the development of the Proposed Project. (See Attachment 4)

- *Request for Information ("RFI"):* On June 30, 2009, the Collaborative issued a joint RFI soliciting feedback from wind power industry participants and regional stakeholders on the development of the Proposed Project. The objective of the RFI was to support the preparation of an RFP for the Proposed Project. While the identity of the respondents and their specific responses are confidential, the Collaborative received 30 responses from a diverse group of firms which included wind developers, equipment manufacturers, consultants, law firms, and vessels and marine services.
- *Pre-development studies*: NYSERDA in cooperation with the Collaborative pursued assessment of available market research to understand information to support the preparation of a Site Assessment Plan as described under 30 CFR § 285.605-618. Three topical areas are addressed by the studies: 1) geophysical features including water depths (bathymetry), obstructions, archaeological resources, bottoms soils, sand waves, geology, and seismicity; 2) meteorological and ocean climatologies (means, frequencies, extremes) for wind, waves and currents; and 3) marine species and habitats, migration patterns, commercially valuable resources (such as fisheries), and potential impacts from the Proposed Project. The studies include consultation of existing literature and discussions with regulators and other relevant experts to establish a baseline of knowledge about the Proposed Project area. The work was initiated in January 2010, funded by NYSERDA and submitted to the Collaborative in September 2010. (See Attachment 5)
- *Wind Energy Assessment*: In association with the meteorological component of the desktop studies, an assessment of the expected electrical energy output of the Proposed Project is also being conducted by a consultant for the Collaborative. The assessment will apply the developed wind resource information for the Atlantic region to the power curves of commercially available offshore wind turbine models. Energy production predictions on a diurnal, monthly, annual, and multi-year basis will be derived for turbine layout scenarios using different turbine models. The work was initiated in January 2010, funded by NYSERDA and submitted to the Collaborative in September 2010. (See Attachment 5)
- Economic Impact and Port Availability Assessment: The Collaborative completed an evaluation of the positive economic impact potential of the Proposed Project to the New York City and Long Island region in November 2010. The economic impact analysis estimated that during the construction phase, between \$450 to \$900 million in new sales will be generated in the Study Area annually, and approximately 2,300 to 4,700 new jobs paying \$170 to \$330 million in annual wages will be created. During the operational phase of the Proposed Project, 85 to 170 new jobs will be created in the

Study Area, paying \$5 to \$11 million in wages annually. The results of a high-level survey of the ports in New York and New Jersey indicate that suitable facilities exist that could host the Proposed Project's onshore activities with minimal infrastructure upgrade costs. (See Attachment 6)

Outreach activities: The Collaborative has conducted outreach activities with various agencies and customer groups as the Proposed Project has evolved. The Collaborative is in the process of developing a public outreach communications plan and will engage local communities, industries, and other parties to determine immediate or overarching concerns with the Proposed Project area. The Collaborative solicited input from the United States Coast Guard ("USCG") through the New York Harbor Safety Committee and the Port Authority of New York and New Jersey ("PANYNJ"). Summary of the USCG and PANYNJ feedback is included. (See Attachment 7)

e. Relationship to State and Local Energy Planning Requirements, Initiatives, or Guidance

The Collaborative's Proposed Project is in line with New York State's and the City of New York's renewable energy initiatives, which are summarized below.

- 2009 New York State Energy Plan⁴: The 2009 New York State Energy Plan "sets forth a vision for a robust and innovative clean energy economy that will stimulate investment, create jobs and meet the energy needs of residents and businesses over its 10-year planning horizon." One of its five policy objectives is to "support the development of in-state supplies."
- *PlaNYC⁵*: New York City's PlaNYC initiative specifically calls for the support of "large-scale far off-shore wind" to support the City's objectives to encourage clean sources of electricity generation for the metropolitan area.

In furtherance of this purpose, NYPA has attached letters of support from Collaborative members and appropriate City and State agencies. (See Attachment 8)

f. Qualifications to Become a Lessee

NYPA is a corporate municipal instrumentality and political subdivision of the State created in 1931 by the Act, which has its principal office located at 30 South Pearl Street, Albany, New York 12207-3425. NYPA generates, transmits and sells electric power and energy, principally at wholesale, as permitted or required by applicable law.

Section 1007 of the New York Public Authorities Law does not preclude NYPA from leasing property outside of New York State and NYPA would not be restricted from holding a lease in federal waters of the OCS. By resolution dated June 29, 2010, NYPA's Board of Trustees granted authorization to hold a lease for the purpose sought and verifies the person(s) acting on behalf of NYPA and that the specified person(s) is authorized to bind NYPA in its business with the BOEMRE. (See Attachment 9)

 ⁴ The New York State Energy Plan is available at: http://www.nysenergyplan.com/stateenergyplan.html.
 ⁵ The PlaNYC energy report is available at: http://www.nyc.gov/html/planyc2030/html/plan/energy.shtml.

The required technical and financial qualifications cited in the document "Qualification Guidelines to Acquire and Hold Renewable Energy Leases and Grants and Alternate Use Grants on the U.S. Outer Continental Shelf," dated March 1, 2011, are addressed in the statement included as Attachments 10 and 11.

g. Acquisition Fee

As specified in 30 CFR § 285.502(a), the acquisition fee of \$20,371.50 has been submitted on the pay.gov website, based on an acquisition of 81,486 acres. (See Attachment 12)

h. Environmental Impact Statement (National Environmental Policy Act compliance)

In the event that NYPA successfully acquires the commercial lease, the NYPA requests on behalf of the Collaborative that BOEMRE fund the development of the initial EIS and associated activities required to comply with the NEPA for the lease assignment and site assessment.

NYPA and the Collaborative appreciates BOEMRE's prompt attention to this request and we look forward to providing any further information that may help facilitate the timely processing of this commercial lease sale. NYPA also requests a conversation with BOEMRE to discuss potential assistance in satisfying the requirements of the Final Rule, including the preparation of necessary documentation to satisfy environmental review requirements. Jill Anderson, Director of Supply Acquisition and Renewable Energy (jill.anderson@nypa.gov) will serve as NYPA's primary point of contact for the Proposed Project and will follow up with your office regarding this request.

Sincerely,

Gil C. Quiniones Chief Operating Officer New York Power Authority

Enclosures:

Attachment 1	Proposed 700 MW Project Area for the Long Island – New York City Offsho Wind Collaborative, Map 1	re
Attachment 2	Proposed 700 MW Project Area for the Long Island – New York City Offsho Wind Collaborative, Map 2	re
Attachment 3	Interconnection Feasibility Study, March 2009	
Attachment 4	Fatal Flaw Assessment, June 2009	

- Attachment 5 Summary of the Physical and Environmental Qualities of the Proposed Long Island – New York City Offshore Wind Project Area, October 2010
- Attachment 6 Economic Impact Assessment, Long Island New York City Offshore Wind Project, November 2010
- Attachment 7 Feedback from United States Coast Guard and Port Authority of New York and New Jersey

Attachment 8 Letters of Support from: Consolidated Edison, Inc. Long Island Power Authority Environmental Groups: Alliance for Clean Energy New York Citizens Campaign for the Environme

Citizens Campaign for the Environment Environmental Defense Fund Environmental Advocates of New York National Wildlife Federation Natural Resources Defense Council New York League of Conservation Voters Pace Energy and Climate Center Renewable Energy Long Island Office of the Mayor of the City of New York Office of the Governor of New York Port Authority of New York and New Jersey

Attachment 9 NYPA Board of Trustees Resolution, June 29, 2010

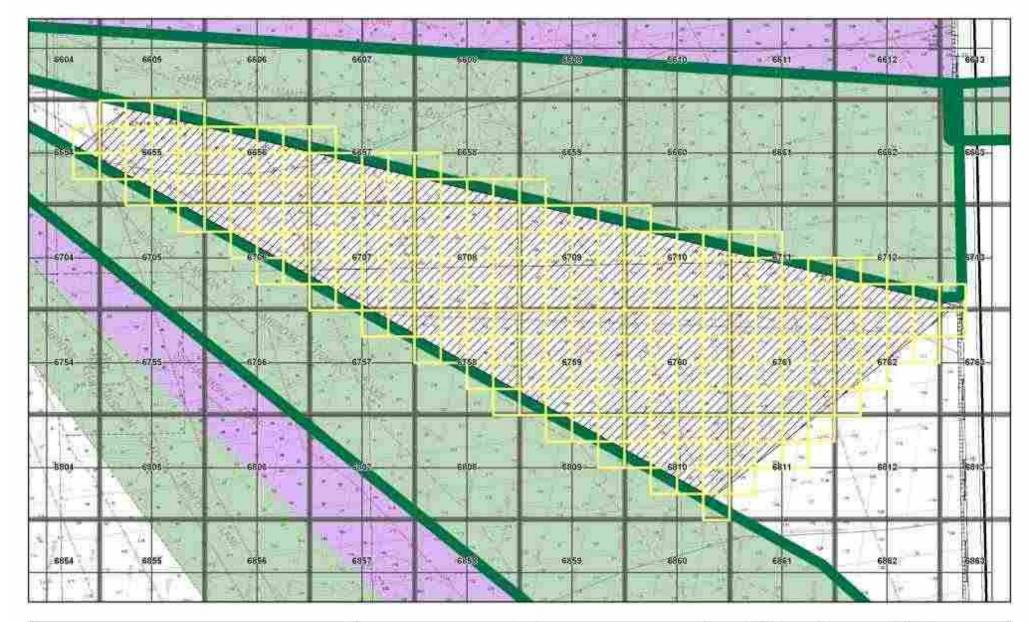
Attachment 10 Technical and Financial Qualifications

Attachment 11 New York Power Authority 2010 Audited Financial Statements

Attachment 12 Receipt of BOEMRE Acquisition Fee Payment

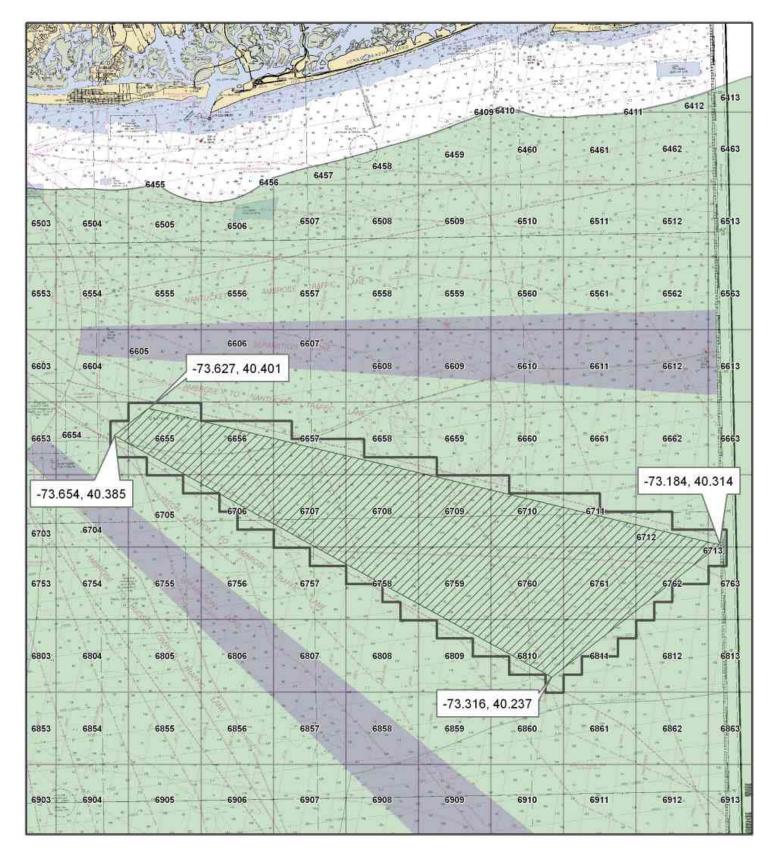
cc:

Kevin Burke, Consolidated Edison, Inc. Michael Hervey, Long Island Power Authority Thomas Congdon, Office of the Governor of New York Caswell F. Holloway, Deputy Mayor for Operations Francis Murray, New York State Energy Research and Development Authority George Stafford, NYS Department of State Christopher Ward, Port Authority of New York and New Jersey Jeff Yunker, United States Coast Guard Attachment 1 Proposed 700 MW Project Area for the Long Island – New York City Offshore Wind Collaborative, Map 1





Attachment 2 Proposed 700 MW Project Area for the Long Island – New York City Offshore Wind Collaborative, Map 2

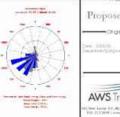


PROPOSED 700 MW PROJECT AREA FOR THE LONG ISLAND-NEW YORK CITY OFFSHORE WIND COLLABORATIVE

Minerals Management Services Blocks
Z
700 MW Area
MMS Lease Blocks for 700 MW Area

- Lugarit

*Blocks broken into 16ths



Proposed Area		
Dignata Sec. 2000 Dignata (Colona) (Colona) (Colona)	A 49 L 7 3. contrare general FPE Line Descention (Line) California -	Ĭ
AWS Truewind	•	

Attachment 3 Interconnection Feasibility Study, March 2009

Available by link:

http://www.linycoffshorewind.com/pdf/feasibility%20study.pdf

Attachment 4 Fatal Flaw Assessment, June 2009

AWS Truewind performed a fatal flaw analysis of the proposed project location. Fifteen potentially fatal flaws were analyzed. Data sources for the analysis included personal communications with subject matter experts, literature reviews, and more than 25 years of institutional experience conducting technical services consulting for the wind energy industry. Findings from the analysis suggest there is no fatal flaw associated with the development. AWS Truewind recommends the Collaborative move forward with considering the proposed project location near Cholera Banks.

Торіс	Potentially Fatal Flaw	Findings	Fatal Flaw?
Wind Resource	Excessive wind speeds, turbulence, and extreme gusts could exceed turbine structure specifications	 Anticipated average wind speeds of 8.5-9 m/s at typical turbine heights (~90 m) are consistent with offshore projects in Europe Ambient wind turbulence levels are low and not of concern Expected 100-year extreme wind gust is less than design survival speed of offshore wind turbines 	No
Waves and Currents	Wave action may exceed turbine specifications or cause bottom scouring	 The predicted extreme wave height is 15-17 m (50-55 ft). Foundation designs can accommodate this height. Extreme seas could cause minor seabed scouring, which can be minimized with rip-rap or other anti-scouring materials. 	No
Water Depth	Water depths could exceed state- of-the-art practices for offshore wind projects	 Water depths in the proposed location range from 18 m to 37 m (60-120 ft). Offshore wind turbines have been built in Europe in waters as deep as 40 m using jacketed multi-leg foundations. European offshore wind projects have demonstrated the technical feasibility of deploying multi-megawatt turbines in water depths of up to 40 m. Several foundation designs—monopile, gravity bases and jackets—are currently available for these water depths. Proven deeper water foundation technologies are available from the oil & gas industries; prototype floating technologies for offshore wind are now emerging. 	No
Sea Bed Geology	Unsuitable sub-seabed conditions could inflate construction costs.	 Seabed is expected to be glacial outwash, which is generally suitable for turbine foundations No bedrock is anticipated There may be some filled in paleo-channels that can be avoided when determining turbine placements 	No

Summary Table of Fatal Flaw Analysis Results



Торіс	Potentially Fatal Flaw	Findings	Fatal Flaw?
Shipping Lanes	Turbines may pose a navigation hazard or a homeland security liability	 A conversation with the Waterways Management Coordinator of the US Coast Guard, Sector New York, confirmed that navigation channels and separation zones should be considered exclusion areas. A Harbor Operations Committee exists to facilitate communication amongst the various agencies (Coast Guard, Army Corps, NY Department of State, etc.). They have recently established an Alternative Energy Sub-committee which will review projects such as offshore wind farms. This group should be contacted before the permitting phase begins. 	No
Military and Commercial Aviation	Turbines may cause radar interference or adversely impact military exclusion zones	 A representative of FAA's Eastern Terminal Operations indicated that there were no immediate FAA issues that would constitute a fatal flaw The closest Early Warning Radar is 300 km to the NE on Cape Cod and is assumed not to be an issue for the target area A Terminal Doppler Weather Radar (TDWR) station in Brooklyn, NY may be adversely impacted by the turbines. However, personnel at the FAA's JFK Air Traffic Control office indicated that this issue has not arisen since the TDWR has been in operation (since early 2003). Furthermore, commercial aircraft would be flying at a minimum height of about 900 m when passing over the offshore wind facility, thus radar interference, as implied by the discussion above with FAA personnel, in not likely to be an issue for operational purposes 	No
Commercial and Recreational Fishing	Regional fishing industry may be adversely impacted	 The presence of wind turbines would not preclude fishing activity within the facility but would impose some navigational limitations. Turbines are expected to be spaced one-third to one-half mile apart Bottom dragging may be a concern for buried electrical cabling if it becomes exposed Foundations may have habitat benefits similar to artificial reefs 	No
Cables and Pipelines	Infrastructure may impose constraints on turbine siting	 Some cables/pipelines cross through the target area. These can be avoided with proper turbine siting and cable placement Cables associated with the project should be buried in the seabed at sufficient depth to minimize risk of exposure over time 	No



Торіс	Potentially Fatal Flaw	Findings	Fatal Flaw?
Historical and Archaeological Resources	An abundance of such resources could significantly impact the siting of turbines	 The Archaeological and Historic Preservation Act provides for the preservation of historic and archaeological data that might otherwise be lost or destroyed as a result of any Federal construction project or federally licensed or assisted undertaking. Any previously undiscovered ship wrecks or evidence of now submerged prehistoric archaeological deposits would have to be investigated. Turbines can be sited adjacent to historic/archaeological sites 	No
Other Water and Seabed Uses	Competing uses for water or seabed may cause conflict	• There are two proposed Liquid Natural Gas (LNG) facilities in the western portion of the target area. The Atlantic Sea Island Group proposes "Safe Harbor Energy," an artificial island for an LNG terminal. Exxon Mobil proposes "Blue Ocean Energy", a floating LNG terminal. If these projects are approved, an exclusion zone or setback will likely be necessary when siting turbines.	No
Public Acceptance	Visual impacts may cause public to react negatively to the development	• Distance from shore is expected to have minimal visual impact from shore	No
Avian	Adverse impacts to bird populations may threaten development	 Offshore studies off the southern Long Island and New Jersey coasts indicate that bird activity and diversity drop dramatically beyond a few miles from shore The endangered Roseate tern may forage in area in summer Very little bird activity in winter expected Impacts of offshore wind facilities in Europe indicate no significant impact on birds 	No



Торіс	Potentially Fatal Flaw	Findings	Fatal Flaw?
Marine Mammal Protection	Adverse impacts to marine mammals may slow or arrest development	 The endangered Right Whale has been sighted in the waters in and around the proposed offshore location Other whales that may migrate through the area include sperm, blue, humpback, finback, northern right, and sei. Sea turtles may be present too. Potential impacts anticipated only during construction and for O&M activities Adaptive procedures include reduced vessel speeds during applicable times of the year, limiting construction activity to certain time periods, and using acoustic deterrents (pingers) within the project's vicinity during construction, particularly pile driving. Similar practices are employed by European offshore projects. 	No
Regulatory Concerns	Legal and regulatory concerns could slow or arrest development	 LIPA previously conducted legal and regulatory analyses setting forth a road map for the permitting process Since these analyses were conducted, the Energy Policy Act of 2005 delegated authority over leasing, easement and right-of-way activities on the Outer Continental Shelf to the Minerals Management Service (MMS) A final rule detailing process and procedure was published in the Federal Register on April 29th, 2009. The rule calls for commercial leases for full development and power generation, and limited leases for resource assessment and technology testing There is nothing in the present MMS rule that would suggest a significant impediment to project development 	No
Staging Area Availability	Lack of appropriate port facilities could make an offshore wind facility impractical	• Major ports in close proximity to the target area include the Port of New York and New Jersey (having over 1,100 waterfront facilities, most of which have direct rail and highway connections) and Atlantic City	No

June 24, 2009

Prepared by AWS Truewind



Attachment 5 Summary of the Physical and Environmental Qualities of the Proposed Long Island – New York City Offshore Wind Project Area, September 2010

Available by link:

http://www.nyserda.org/publications/li-nyc-collaborative-summaryreport-physical&environmentalqualities-acc.pdf

Attachment 6 Economic Impact Assessment, Long Island – New York City Offshore Wind Project, November 2010

Available by link:

http://www.linycoffshorewind.com/PDF/Economic%20Benefits%20of%20LI%20NYC%20OSW.PDF

Attachment 7 Feedback from United States Coast Guard and Port Authority of New York and New Jersey

Long Island - New York City (LI-NYC) Offshore Wind Project

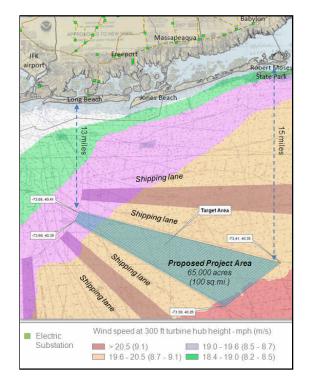
Summary of Considerations Raised by United States Coast Guard (USCG) August 30, 2010

Background:

A Collaborative consisting of Con Edison Company of New York, Inc (Con Edison), the Long Island Power Authority (LIPA), and the New York Power Authority (NYPA), are evaluating the feasibility of installing offshore wind generating capacity of 350 megawatts (MW) up to 700 MW approximately 13 miles southeast of Jones Beach, Long Island, New York. Pending the outcome of their feasibility review, the Collaborative plans to submit a commercial lease application to the Bureau of Ocean Energy Management Regulation and Enforcement (BOEM) to acquire development rights to up to 64,000 acres in the Outer Continental Shelf (OCS) BOEM advised the Collaborative to solicit feedback from the United States Coast Guard (USCG) among other agencies, in order to identify all issues known at this point to be considered as part of the OCS lease application.

Proposed Site:

The Collaborative identified an area of approximately 100 square miles in a wedge shape between two established shipping lanes south of Long Island, pictured below.



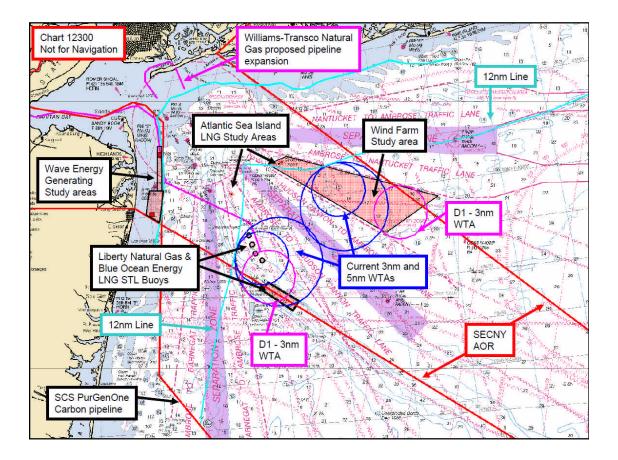
Summary of Considerations Raised by United States Coast Guard (USCG) August 30, 2010

Considerations Raised:

No fatal flaws were identified during initial discussions with the USCG, however, several issues require attention and resolution in order for the proposed wind project to be successful in the location proposed.

1. **TRAINING AREAS:** USCG current uses several designated areas in the Atlantic Ocean for training exercises, as illustrated on the following map ("WTA" stands for Weapons Testing Areas). The WTAs must be located at least 12 nautical miles offshore, as is represented by the blue line on the following map. The Collaborative and the USCG will need to work together during turbine siting in order to accommodate dual use of the site, or carve out an area of the proposed site for USCG use with no electrical equipment installed.

In the definition of the 700 MW project area, the Collaborative examined several wind turbine models and identified the one requiring the largest footprint to define the size of the project area. This was done so as to not exclude any of the leading offshore turbine models from consideration. Hence, there is some flexibility within the existing project area to allow for more open space to accommodate the needs of the USCG or others while still being able to attain all or most of the 700 MW max capacity.



Long Island - New York City (LI-NYC) Offshore Wind Project

Summary of Considerations Raised by United States Coast Guard (USCG) August 30, 2010

- 2. BUFFER ZONES: The USCG suggested at least a one-quarter nautical mile spacing between the shipping lane and any wind turbines. The Collaborative has included this spacing consideration in its theoretical layout. A 10 by 10 rotor diameter spacing was assumed. With turbine rotors likely to be in the 100-130 meters (328 426 feet) range, the separation distance between turbines would be 1.0 1.3 km (3,280 4,260 feet; 0.5 0.7 nautical mile; 0.6 0.8 statute mile). Developers may choose alternative (wider or closer) spacing scenarios, but closer spacing will mean lower energy production.
- 3. **SECURITY:** Security of the wind project assets would be the responsibility of the project developer and owner, and not the responsibility of the USCG. The Collaborative should ensure during its competitive solicitation process that the selected developer is prepared to provide the necessary site security.
- 4. CONTINGENCY PLANS: If damage occurs to wind project assets resulting in debris in the water, the project owner must have a contingency plan in place for providing safety to the area and removing the debris. The Collaborative acknowledges this necessary and expects the details of this and other necessary contingency plans will be developed as part of the commercial lease applications during the Construction and Operation Plan (COP) stage of the BOEM process.
- 5. **BENEFITS OF WIND TURBINES:** USCG suggested the Collaborative consider ways the wind project could be of a benefit to ocean users and marine operations, including:
 - a. Data collected from metrological buoys and towers that would be installed for the wind project development can be shared with the USCG and also with members of the public who rely on this information to plan their own activities.
 - b. The project developer could install cellular phone service repeaters and wireless networking capabilities in the wind farm to provide service to nearby boaters.
 - c. Emergency phones could be installed near the turbine base to assist boaters in the area.
 - d. Turbines on the outer edge of the field should be made Automatic Identification System (AIS) targets to assist in navigation.

Long Island - New York City (LI-NYC) Offshore Wind Project

Summary of Considerations Raised by Port Authority of New York and New Jersey (PANYNJ) September 24, 2010

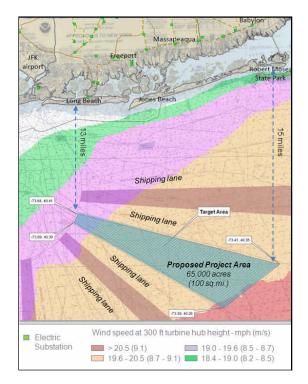
Background:

A Collaborative consisting of Con Edison Company of New York, Inc (Con Edison), the Long Island Power Authority (LIPA), and the New York Power Authority (NYPA), are evaluating the feasibility of installing offshore wind generating capacity of 350 megawatts (MW) up to 700 MW approximately 13 to 15 miles off the south shore of Long Island, New York. Pending the outcome of their feasibility review, the Collaborative plans to submit a commercial lease application to the Bureau of Ocean Energy Management Regulation and Enforcement (BOEM) to acquire development rights to up to 64,000 acres in the Outer Continental Shelf (OCS) BOEM advised the Collaborative to solicit feedback from several agencies that could be affected by the project, or whose active participation will be required, in order to identify all issues known at this point to be considered as part of the OCS lease application.

On September 24, representatives of the Collaborative met with PANYNJ staff representing, among others, the Port and Aviation departments.

Proposed Site:

The Collaborative identified an area of approximately 100 square miles in a wedge shape between two established shipping lanes south of Long Island, pictured below.



Summary of Considerations Raised by Port Authority of New York and New Jersey (PANYNJ) September 24, 2010

Considerations Raised:

No fatal flaws were identified during initial discussions with the PANYNJ, however, certain issues require attention and resolution.

1. AVAILABLE PORT FACILITIES: The desktop Economic Impact Assessment included a survey of existing facilities, principally those currently in use as Marine Terminals, in the greater New York harbor. The objective was to identify a potential site to off-load equipment and supplies and serve as a lay-down and storage area to support the project during (and possibly post-) construction. The study identified a set of criteria used to assess the viability of the potential sites. These criteria, along with the study's findings were shared with the Port Authority.

The study tentatively identified the Howland Hook terminal on Staten Island as the most suitable facility to support construction of the project. Several others were identified as potentially viable.

The Port representatives indicated that there could be concerns stemming from the magnitude of the acreage required, and in consideration of competing uses for the real estate, that would impair the viability of Howland Hook and other terminal facilities. They did identify, however, two possible sites that are not currently in use as Marine Terminals (and therefore were not picked up in the reconnaissance that informed the desktop study). One is the former Military Operations Terminal in Bayonne and the other is a tract of land on Staten Island immediately south of the Goethals Bridge / Staten Island Expressway approach.

Summary of Considerations Raised by Port Authority of New York and New Jersey (PANYNJ) September 24, 2010



- 2. **AVIATION IMPACTS:** The representative from Aviation indicated the possibility of adverse impacts on aircraft navigation and avionics stemming from radio and EM emissions reflecting from the wind turbines themselves. The likelihood of such effects was not seen as particularly high, however due diligence will require further investigation.
- 3. **VISUAL IMPACT:** The Collaborative shared an example of the visualization studies that have been prepared for the various Long Island south shore vantage points. PANYNJ posed the possibility of the need to examine in addition the potential visibility of the project from Sandy Hook, New Jersey, which is at a distance from the project comparable to those that are shown in the simulations. It was pointed out that the Long Island viewpoints show a wide reach of the tower array across the horizon, while, in addition to being farther away, the New Jersey view is "edge on" to the proposed project. The projection on the shore view is, accordingly, significantly diminished.

Attachment 8 Letters of Support from:

Consolidated Edison, Inc. Long Island Power Authority Environmental Groups: Alliance for Clean Energy New York Citizens Campaign for the Environment Environmental Defense Fund Environmental Advocates of New York National Wildlife Federation Natural Resources Defense Council New York League of Conservation Voters Pace Energy and Climate Center Renewable Energy Long Island Office of the Mayor of the City of New York Office of the Governor of New York Port Authority of New York and New Jersey



Joseph P. Oates Vice President

August 2, 2011

Ms. Maureen A. Bornholdt, Program Manager Office of Offshore Alternative Energy Programs United States Bureau of Ocean Energy Management, Regulation and Enforcement Mail Stop 4090 381 Elden Street Herndon, VA 20170-4817

Dear Ms. Bornholdt,

Consolidated Edison Company of New York (Con Edison) is sending this letter in support of the Lease Application for the Long Island – New York City Offshore Wind Collaborative (Collaborative) of which Con Edison is a member.

Because the lease is required by the United States Bureau of Ocean Energy Management, Regulation and Enforcement (BOEM) to be held in the name of one entity, the New York Power Authority (NYPA) will be submitting the application of the Collaborative on a non-competitive basis. The intent of the Collaborative is to sign over the lease rights to a developer selected by the Collaborative through a competitive solicitation process.

As a member of the Collaborative, Con Edison supports the Long Island – New York City Offshore Wind Project and believes it has the potential to be a viable option to meet both New York State's and New York City's environmental goals. We look forward to working with the members of the Collaborative and other interested stakeholders to further the development of this offshore wind project.

If you have any questions, please do not hesitate to contact me at (212) 460-6417 or <u>oatesj@coned.com</u>.

Cc: Kevin Burke

Sincerely, epli Mates



333 Earle Ovington Blvd. Suite 403 Uniondale, NY 11553 Tel : 516-719-9862 Fax: 516-719-9137 mhervey@lipower.org

> Michael Hervey Chief Operating Officer

November 17, 2010

Ms. Maureen A. Bornholdt, Program Manager Office of Offshore Alternative Energy Programs United States Bureau of Ocean Energy Management, Regulation, and Enforcement Mail Stop 4090 381 Elden Street Herndon, Virginia 20170-4817

Dear Ms. Bornholdt,

The Long Island–New York City Offshore Wind Collaborative (Collaborative), which consists of Consolidated Edison Company of New York, Inc. (Con Edison), the Long Island Power Authority (LIPA), the New York Power Authority (NYPA), and other New York City and New York State governmental entities, is evaluating the development of between 350 megawatts (MW) up to a total of 700 MW of offshore wind. This project has the potential to be the largest offshore wind energy facility in the United States. This letter is sent in support of the Lease Application for the LI-NYC Offshore Wind Collaborative of which the Long Island Power Authority (LIPA) is a key partner.

Given that the United States Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEM) requires that the lease be held in the name of one entity, NYPA will be submitting the application on behalf of the Collaborative on a non-competitive basis. A noncompetitive process will allow the Collaborative to use its own competitive solicitation process to select the project developer. Once a developer is selected, the intent is to sign over the lease rights to that entity.

The Collaborative's project site incorporates an area of approximately 64,500 acres of underwater land that is 13-to-15 nautical miles off the south shore of Long Island in a southeastern direction from the Rockaway Peninsula in the Atlantic Ocean's Outer Continental Shelf (OCS), an area under the jurisdiction of BOEM. BOEM is responsible for granting leases for environmentally responsible renewable energy, including the sites for offshore wind facilities on the OCS. The application for a lease is a necessary measure to pursue evaluating the feasibility of an offshore wind project such as the one being pursued by this Collaborative.

To date, the Collaborative has completed technical, economic costs and benefits, and visualization simulation studies. Additionally, there are a series of ongoing studies to evaluate issues including; transmission interconnection, geophysical, geotechnical, economic, environment, and met-ocean. No significant challenges were identified in the feasibility

studies conducted by the Collaborative thus far. The water depth at the identified site is within reach of today's technology and the distance from shore is similar to existing projects in Europe. Expected wind, waves and ocean currents are indicative of a successful project. A preliminary economic benefit study estimated a 350 MW offshore wind project results in \$1.35 billion in sales, 8,700 new job-years created, and \$612 million in wages. More in-depth analyses of the benefits and impacts will be performed as part of the lease application process however, this project has proven to be viable thus far and we believe it is worth awarding the land lease that is being requested.

Reducing the use of fossil fuels for electricity production has generated interest in all types of renewable energy options. For Long Island and New York City, the potential use of offshore wind power would provide a significant amount of clean energy proximate to consumers in a downstate load pocket. Assessing the practicality of harnessing wind and the feasibility of putting a successful wind project into commercial service have been the objectives of the Collaborative whereby we are now at a point that the next level of feasibility is necessary beginning with the land lease process.

The New York Public Service Commission estimates that every megawatt-hour of displaced fossil power in the state is equivalent to 900 pounds of carbon dioxide (CO2). Therefore, a 350 MW wind facility would displace about 540,000 tons of CO2 annually, equivalent to removing 120,000 cars from local roads. New renewable resources will help meet the guidance provided by the New York State Energy Plan, recently released New York State Climate Action Plan, LIPA's Electric Resources Plan, and other state and federal renewable energy goals, while providing for added fuel diversity. In addition, since the New York City and Long Island regions of the state are in a federal non-attainment zone, the project would help to address ozone and other local emission challenges.

In theory, any successful wind generation project for the New York metropolitan area must be centralized and large enough to be cost effective. It must interact with the electric grid at a high-voltage transmission level, and provide power on the order of hundreds of MWs. It must also be close enough to where electricity is used, so that energy produced can more economically offset high in-city capacity and energy costs, and where it can be more feasibly harnessed due to lower transmission infrastructure requirements.

The Long Island–New York City Wind Project warrants an offshore location due to the size and number of wind turbines, and availability of strong, consistent and unobstructed wind. Wind's relative low-energy density makes it necessary to build wind turbines offshore in order to generate reasonable amounts of wind power. An offshore wind facility of this size has distinct advantages over land-based options. Ocean-based wind power is stronger, more consistently available, and is closer to the load centers of New York City and Long Island. Also, land-based wind power availability, unlike offshore facilities, tends to drop off during the hottest part of a summer day, which is precisely the time that New York City and Long Island customers use the most electricity.

It is based on the qualities and characteristics of this project and the determinations that have been made thus far in assessing its overall feasibility that the Long Island Power Authority, as a member of the Collaborative, fully supports the granting of a land lease for the LI-NYC Offshore Wind Project by the United States Bureau of Ocean Energy Management, Regulation, and Enforcement.

If you have any questions or need additional information, please do not hesitate to contact me at 516-719-9862 or <u>mhervey@lipower.org</u> or LIPA's Vice President of Environmental Affairs, Michael Deering at 516-719-9811 or <u>mdeering@lipower.org</u>.

Thank you for your consideration.

Sincerely,

2014

Michael D. Hervey Chief Operating Officer

Cc: Richard Kessel, NYPA Kevin Burke, Con Ed August 2011

Maureen A. Bornholdt, Program Manager United States Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) Mail Stop 4090, 381 Elden Street Herndon, Virginia 20170-4817

RE: Letter of Support for LI-NYC Offshore Wind Project Lease Application

Dear Ms. Bornholdt:

The listed conservation and community organizations with over 250,000 New York members and supporters are writing to express our support for the Long Island–New York City Offshore Wind Collaborative's (Collaborative) lease application moving forward. New Yorkers want aggressive action on clean energy initiatives that will reduce harmful air emissions and produce good-paying jobs right here in New York. Offshore wind is clearly such a technology – reducing pollution from fossil fuel fired electric generating plants, and creating construction and long term operational jobs. Offshore wind also holds the potential to make a significant contribution to the electrification of the transportation sector which is urgently needed to create energy independence, improve air quality and reduce greenhouse gas emissions.

The State of New York has established a goal of meeting 45 percent of its electricity needs through improved energy efficiency and renewable sources by 2015. A NYSERDA Renewable Energy Assessment found that offshore wind production is well correlated with the region's peak demand. Thus, while energy efficiency, solar and other technologies will also be essential to achieve these targets, it is critical that offshore wind energy move ahead and become a major provider of electricity in the State in order to fully achieve these goals.

The United States Department of Interior and the Department of Energy also have ambitious clean energy goals. Secretary Salazar has made his support for offshore wind very clear, saying that: "Appropriate development of Outer Continental Shelf wind power will enhance regional and national energy security and create American jobs through the development of energy markets and investments in renewable energy technologies." The United States Department of Energy (USDOE) has recently proposed the development of 10 GW of commercially-competitive offshore wind by 2020 and 54 GW by 2030.

These goals and statements are very important, but to make them a reality, federal officials will need to continue to work with the States, project developers, environmental groups, conservation and community organizations and other stakeholders to start the permitting and design of actual projects. Our organizations have been long-time supporters of advancing clean energy policies and projects on a local, state, regional and federal levels. The status quo is no longer acceptable. The State of New York, and the Atlantic region as a whole, must advance offshore wind in a coordinated, comprehensive and environmentally sustainable fashion. Moving forward as expeditiously as possible with the approval process for the Collaborative's lease application will be consistent with this vision.

Our organizations intend to play an important part in the development of the research and outreach efforts surrounding this project. BOEMRE and the Collaborative's process should be inclusive and seek input from a full range of stakeholders, including our organizations and other members of the community and the general public. We understand that the process will include both environmental review of the lease application and a full environmental review of the specific project that is actually proposed after the feasibility work is concluded. Many additional studies are needed, including wildlife and other ocean resource impacts, potential recreational and commercial fishing conflicts and market dynamics, before a final position can be established on this project, but it is clear that the Collaborative project approval process should move forward at this time.

We look forward to working with you and others to advance the important goals of this project. If we can provide any additional information, please contact Gordian Raacke at 631-329-8888 or Adrienne Esposito at 516-390-7150.

Sincerely,

Adrienne Esposito Executive Director Citizens Campaign for the Environment

Curtis Fisher Regional Executive Director Northeast Regional Center National Wildlife Federation

Jamie Van Nostrand Executive Director Pace Energy and Climate Center

Marcia Bystryn President New York League of Conservation Voters

Jim Tripp General Counsel Environmental Defense Fund Gordian Raacke Executive Director Renewable Energy Long Island

Rob Moore Executive Director Environmental Advocates of New York

Carol E. Murphy Executive Director Alliance for Clean Energy New York

Kit Kennedy Counsel to the Air and Energy Program Natural Resources Defense Council



THE CITY OF NEW YORK OFFICE OF THE MAYOR NEW YORK, N.Y. 10007

STEPHEN GOLDSMITH DEPUTY MAYOR FOR OPERATIONS

August 2, 2011

Honorable Ken Salazar Secretary U.S. Department of the Interior 1849 C. Street N.W. Washington, DC 20240

Re: New York Power Authority Application for Underwater Federal Land Lease to Support Offshore Wind Energy

Dear Secretary Salazar:

On behalf of Mayor Michael R. Bloomberg and the City of New York, I am writing to express strong support for the application filed by the New York Power Authority (NYPA) with the Interior Department Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) for a lease in federal waters to support the development of offshore wind energy.

The City is an active party in the Offshore Wind Collaborative with NYPA, Consolidated Edison, and the Long Island Power Authority. The Collaborative is currently working toward issuance of a formal request for proposals to develop a large-scale offshore wind facility in federal waters 13 to 15 miles south of the Rockaways peninsula in the Borough of Queens. The NYPA lease application is intended to facilitate the work of the Collaborative, and to permit the solicitation of meaningful development plans from the renewable energy community.

As the country's commercial and financial center, New York City has a vital interest in fostering the development and maintenance of reliable energy sources. It also remains subject to significant electric system constraints, and would benefit from a greater diversity of energy resources. Moreover, Mayor Bloomberg's long-term sustainability program, *PlaNYC*, expressly recognizes that "offshore wind projects present a potentially transformative opportunity to develop utility-scale renewable energy that will feed directly into the city."

In addition, New York City is ideally positioned with a wide range of port facilities that could support wind turbine foundation fabrication, construction staging, and ongoing operation and maintenance work. These facilities include the Howland Hook Marine Terminal in Staten Island, and the Red Hook Terminal in Brooklyn. Moreover, largescale properties such as the Brooklyn Army Terminal and the South Brooklyn Marine Terminal can provide available expansion space, a highly qualified workforce, and closer proximity than any other maritime facility in the New York metropolitan area to federal waters.

The proposed offshore wind initiative would serve as a major source of environmentally benign energy that would be directly accessible to the New York metropolitan region – an area that has been historically largely underserved by renewable power resources. The addition of an estimated 350-700 megawatts of emission-free electricity would represent a very significant step toward achieving our long-range energy goals.

The large scale of the Rockaways project would also permit us to learn valuable information concerning the prospects for the wider use of ocean wind energy. Analyses conducted by the U.S. Department of Energy and a number of other parties suggest that much of the Mid-Atlantic region has enormous potential for the wide installation of offshore wind facilities, and that electricity production from such sources can be expected to greatly exceed that of comparable land-based wind farms. This view is supported by the greater consistency and higher velocity typically found in ocean winds; but it will need to be tested in practice, and the New York City-Long Island Offshore Wind Collaborative project will provide a unique opportunity to do so.

The City urges favorable action by BOEMRE on the NYPA lease application. We remain committed to working with you and your team to develop the safe, reliable, clean, and affordable energy that is vital to the continued growth and prosperity of New York City, as well as the nation at large.

Very truly yours,

Stephen Goldsmith Deputy Mayor for Operations

cc:

Michael R. Bromwich, Director, BOEMRE Maureen A. Bornholdt, Manager of Offshore Alternative Energy Programs, BOEMRE



STATE OF NEW YORK

EXECUTIVE CHAMBER

ALBANY 12224

ANDREW M. CUOMO GOVERNOR

August 19, 2011

HOWARD B. GLASER DIRECTOR OF STATE OPERATIONS/ SENIOR POLICY ADVISOR

Ms. Maureen A. Bornholdt Program Manager Office of Offshore Alternative Energy Programs Bureau of Ocean Energy Management, Regulation, and Enforcement Mail Stop 4090 381 Elden Street Herndon, Virginia 20170-4817

Dear Ms. Bornholdt:

I am writing this letter to offer my support of the New York Power Authority's request, on behalf of the Long Island-New York City Offshore Wind Collaborative, for lease of lands beneath the Atlantic Ocean for development of the Long Island-New York City Offshore Wind Project.

New York State has a demonstrated commitment to the advancement of clean energy technologies through its '45 by '15 initiative, which sets the goal for the State to meet 45 percent of its electricity needs through energy efficiency and renewable energy technologies by the year 2015. Likewise, the State and City of New York are working on short-term and long-term strategies to reduce greenhouse gas emissions. The Collaborative's project, which would develop between 350 to 700 megawatts of wind power approximately 13 miles off the Long Island coastline, is an important component in meeting both of these goals. Additionally, this project may also represent a significant economic development opportunity, with the potential of creating an estimated \$1.35 billion in sales, 8,700 new job-years created, and \$612 million in wages based on the project studies to date.

The Collaborative has conducted a number of initial feasibility analyses, including technical, economic costs and benefits, environmental and visualization simulation studies, which have indicated this is a viable project. I encourage the Bureau of Ocean Energy Management, Regulation, and Enforcement to award a lease to the New York Power Authority to allow the Collaborative to move forward with its feasibility studies, including with respect to the cost of power generated, and consider selecting a site developer through a competitive bid process.

Sincerely,

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Howard Glaser Director of State Operations



November 4, 2010

Christopher R. Zeppie Director, Office of Environmental & Energy Programs

Ms. Maureen A. Bornholdt Program Manager Office of Offshore Alternative Energy Programs Bureau of Ocean Energy Management, Regulation, and Enforcement Mail Stop 4090 381 Elden Street Herndon, Virginia 20170-4817

Re: <u>Support for New York Power Authority's Lease Application for Underwater</u> Federal Lands for a Wind Power Project

Dear Ms. Bornholdt:

The Port Authority of New York and New Jersey, a bi-state agency responsible for maintaining and enhancing facilities of transportation and commerce within the Port District (Port Authority), supports the application by the New York Power Authority (NYPA) to secure a lease for the Long Island-New York City (LI-NYC) Offshore Wind Project. NYPA is part of the Long Island–New York City Offshore Wind Collaborative (Collaborative), which also includes the Port Authority, Consolidated Edison Company of New York, Inc., the Long Island Power Authority, and other New York City and New York State governmental entities.

The Collaborative is evaluating the development of between 350 megawatts (MW) to 700 MW of offshore wind by 2016/2017 in the Atlantic Ocean offshore of Long Island. The area under consideration is approximately 64,500 acres of underwater land and is 13 to 15 miles offshore in the Atlantic Ocean's Outer Continental Shelf (OCS) which is under the Bureau's jurisdiction.

We understand the application for a lease is a critical step in pursuing the feasibility of an offshore wind project in federal waters and we are aware that in June 2010, NYPA received authorization from its Board of Trustees to pursue a lease from the Bureau on behalf of the Collaborative.

The Port Authority recognizes that new renewable sources of energy are a likely way forward to both improve domestic energy independence and reduce the environmental impacts of our energy supply.

225 Park Avenue South New York, NY 10003 T: 212 435 4415 F: 212 435 4455

czeppie@panynj.gov



November 4, 2010 Page 2

In July 2006, the Port Authority adopted a sustainability policy to address the adverse environmental impacts of the design, construction, operation and maintenance of Port Authority facilities, and in March 2008 the Port Authority's Board of Commissioners adopted a policy of reducing greenhouse gas emissions by 80% by 2050 from 2006 levels. To that end, the Port Authority, among other things, has embarked on programs of purchasing carbon offsets, increasing energy efficiency, and purchasing Renewable Energy Certificates from projects supplying power in the New York/New Jersey area. The Port Authority is also in the process of identifying and implementing a variety of renewable energy projects at its facilities, including a multiple-megawatt wind energy project in New Jersey.

While both New York and New Jersey have adopted aggressive renewable portfolio standard programs mandating minimum thresholds of renewable energy, most of the projects developed by these programs are located well away from the densely populated areas of southeastern New York and northeastern New Jersey. As a result, the New York/New Jersey Port District continues to rely primarily on fossil-based sources of power. If found to be economically feasible and environmentally acceptable, a 350 to 700 MW wind project in the waters off Long Island, would inject clean power directly into the regional electricity grid and would represent an approximate 70- to 140-fold increase in the total renewable power capacity of the New York City area.

In addition to providing a sizable amount of clean energy consistent with long-term state and local plans for renewable energy and greenhouse gas mitigation, the project has the potential to generate economic benefits for the region. Consultants to NYPA estimate that a 350 MW offshore wind project would result in approximately 8,700 new job-years and \$612 million in wages. Much of this economic activity would occur within the Port District in the form of onshore activities associated with the installation, operation and maintenance of the proposed wind farm.

To date, initial technical, economic and visualization studies for the project have been completed, thereby demonstrating the commitment of Collaborative members to advance the consideration of this project. Moreover, at the Collaborative's request, the New York State Energy Research and Development Authority sponsored a series of environmental studies to evaluate avian and marine habitats, geophysical, geotechnical and met-ocean issues. This research identified no fatal flaws and results indicate that conditions are compatible with existing offshore turbine and foundation technologies.

While more in-depth analysis of the project's feasibility, potential benefits and impacts will be conducted as part of the lease application process, we believe the initial results are promising.

THE PORT AUTHORITY OF NY & NJ

November 4, 2010 Page 3

The water depth at the identified site – ranging from 60 to 130 feet – is within reach of today's technology and the 13 to 15 mile distance from shore is consistent with projects currently operating in Europe. Although new 138-kilovolt cables will be required to transmit the power to shore, a 350 MW project will not likely require additional utility substations.

As with any power supply project, the cost of electricity will be a critical factor for moving an offshore wind project forward. Awarding the lease to NYPA on a non-competitive basis will allow the Collaborative to move forward with a competitive solicitation to select a project developer and will help spur a more favorable purchase price for electricity produced.

While the United States leads the world in the development of onshore wind power, it has yet to develop any offshore wind generating capacity. To date, offshore wind energy development has been exclusively a European practice, with more than 35 projects and over 1,500 MW of capacity currently operating offshore in northern Europe. Offshore wind represents a significant and untapped renewable energy resource for the US, particularly for urban areas along the eastern seaboard that have significant and growing demands for electricity.

In light of the foregoing, the Port Authority requests that the Bureau consider awarding this lease on a non-competitive basis. A timely decision by the Bureau will allow the Collaborative to conduct the necessary additional site assessment in furtherance of this project.

Sincerely, Christopher Zeppie

Director of the Office of Environmental and Energy Programs

cc: Jordan Brandeis, NYPA Jill Anderson, NYPA Attachment 9 NYPA Board of Trustees Resolution, June 29, 2010

CERTIFICATION

THIS IS TO CERTIFY that at a regular meeting of the Power Authority of the State of New York held on June 29, 2010, a resolution of which the following is a duplicate original, was duly adopted by the Authority:

RESOLVED, That the President and Chief Executive Officer or the Vice President – Power Resource Planning and Acquisition be, and hereby is, authorized to enter into a lease with the Bureau of Ocean Energy Management, Regulation and Enforcement, formerly known as the Minerals Management Service, on substantially the terms set forth in the foregoing report of the President and Chief Executive Officer, subject to the approval of the lease documents by the Executive Vice President and General Counsel or her designee; and be it further

RESOLVED, That the Vice President – Power Resource Planning and Acquisition be, and hereby is, authorized on behalf of the Authority to execute any and all agreements, papers or instruments that may be deemed necessary or desirable to carry out the foregoing, subject to the approval of the form thereof by the Executive Vice President and General Counsel or her designee; and be it further

RESOLVED, That the Chairman, the Vice Chairman, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any and all things and take any and all actions and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel.

THIS IS TO CERTIFY FURTHER that the resolution set forth above has not been modified, amended, or repealed and is in full force and effect.

THIS IS TO CERTIFY FURTHER that pursuant to Article IV, Sec. 6J of the By-Laws of the Power Authority of the State of New York, I am authorized to give certificates, under seal of the Authority, to the effect that such copies are true copies and all persons dealing with the Authority may rely on such certificate.

Karen/Delince

Corporate Secretary

Dated: White Plains, New York July 11, 2011

[SEAL]

Attachment 10

Technical and Financial Qualifications

Table of Contents

Introduction
Authority Project Personnel
Jordan Brandeis, Senior Vice President, Power Resource Planning and Acquisition
Jill C. Anderson, Director, Supply Acquisition and Renewable Energy
Carl Courant, Lead Analyst, Supply Acquisition and Renewable Energy
Robin Shanen, Project Manager, Supply Acquisition and Renewable Energy4
Technical Consultants
Prior or Current Projects
Authority Generating Facilities
Adverse Legal Proceedings
Financing Plan and Experience Raising Capital
Company Location, Profile, and Structure
Adverse Financial Proceedings
Bank References
Years in Operation
Current Audited Financial Statements

Introduction

The Power Authority of the State of New York (the "Authority") submits the following summary of technical and financial qualifications per "Qualification Guidelines to Acquire and Hold Renewable Energy Leases and Grants and Alternate Use Grants on the U.S. Outer Continental Shelf," dated March 1, 2011, published by the Bureau of Ocean Energy Management Regulation and Enforcement.

Authority Project Personnel

Jordan Brandeis, Senior Vice President, Power Resource Planning and Acquisition

Mr. Brandeis was appointed to his current position in July 2010. He is responsible for the Authority's long-term supply planning process, the acquisition of capacity, energy and renewable resources, and development of potential off-shore wind power projects in the Great Lakes and in the Atlantic Ocean. Mr. Brandeis joined the Authority in 1981 and throughout his tenure has held positions of increasing managerial responsibility in Marketing and Development, Fuels, Strategic Planning, and Energy Resource Management. In 2000, he headed the Supply Planning Division to address the need to replace electric capacity lost after the Authority's sale of the Indian Point #3 and the James A. FitzPatrick nuclear power plants. Since that time, the division headed by Mr. Brandeis has been responsible for acquiring the supply needed to meet the needs of the Authority's customers. Mr. Brandeis also represents the Authority on the New York City Energy Planning Board. He earned a Bachelor of Electrical Engineering degree from City College of New York and a Master of Business Administration degree in Finance from Rutgers University.

Jill C. Anderson, Director, Supply Acquisition and Renewable Energy

Ms. Anderson joined the Authority in her current position in 2009. She is responsible for conventional and renewable power supply acquisition projects on behalf of Authority customers. Ms. Anderson oversees the issuance of requests for proposals, evaluation of bid responses, stakeholder management, contract negotiations, and project management. Prior to joining the Authority, Ms. Anderson was the Project Office Manager for Hess Corporation. Prior to Hess she worked for Consolidated Edison Company of New York in various positions of increasing responsibility including field operations and smart grid. Ms. Anderson holds a Bachelor of Science degree in Mechanical Engineering from Boston University and a Master of Business Administration degree from New York University.

Carl Courant, Lead Analyst, Supply Acquisition and Renewable Energy

Mr. Courant joined the Authority in 1981 and joined the Supply Planning division in 2000. He assumed his current position in 2010. Mr. Courant's prior experience at the Authority includes fuel economics, strategic planning and capital budgeting. As part of his current function he is responsible for managing offshore wind visualization studies, renewable project cost impact analysis and the management of competitive solicitations for energy, capacity and related products. Mr. Courant holds a Bachelor of Arts degree in Economics from Swarthmore College and a Master of Science degree in Public Policy Analysis from the University of Rochester.

Robin Shanen, Project Manager, Supply Acquisition and Renewable Energy

Ms. Shanen joined the Authority in 1987 and joined the Supply Planning Division in 2002. She has most recently been responsible for Great Lakes Offshore Wind ("GLOW") project bid evaluation. Previously she managed procurements for environmental attributes and land-based wind. Ms. Shanen's prior experience at NYPA includes energy risk management policy development, cost management and budgeting for Energy Services Division and implementation of financial accounting systems in the Controller's Division. Prior to joining the Authority, she worked in financial accounting for banking, publishing, and arts organizations. Ms. Shanen is a Certified Public Accountant in New York State. She holds a Bachelor of Arts degree from State University at Binghamton and a Master of Business Administration in Accounting from Baruch College at CUNY.

Technical Consultants

The New York Power Authority (the "Authority") has five consulting firms with offshore wind expertise on retainer to assist in the evaluation of offshore wind in the Great Lakes and the Atlantic Ocean: AWS Truepower, LLC, Albany, New York; DNV, Global Energy Concepts, Inc., Seattle, Washington, and Lowell, Massachusetts; ESS Group, Inc., East Providence, Rhode Island; Germanischer Lloyd Industrial Services, Hamburg, Germany with several North American offices; and Hatch Acres Corporation, Amherst, Massachusetts.

Prior or Current Projects

The Authority owns and operates five major generating facilities, 11 small electric generating facilities, and five small hydroelectric facilities, with a total installed capacity of 6,054 megawatts ("MW"), and a number of transmission lines, including major 765-kilovolt ("kV") and 345-kV transmission facilities.

The Authority's generating facilities consist of two large hydroelectric facilities (Niagara and St. Lawrence-FDR), a large pumped-storage hydroelectric facility (Blenheim-Gilboa), two gas-and-oil-fired facilities (Flynn and the combined-cycle electric generating plant located in Queens, New York, referred to herein as the "500-MW Plant"), 11 small electric generating facilities, and various small hydroelectric facilities. The Authority's net generation in 2010 by energy source was as follows: hydroelectric 82%; and gas/oil 18%. In 2010, the Authority generated approximately 15% of the electric energy used in New York State. The Authority also supplied a significant portion of its customers' needs through purchased power. Although the Authority's rates for power and energy vary depending upon a number of factors, overall, the Authority provides low cost power and energy to its customers.

The Authority's generating facilities and certain related capacity and generation information are listed in the following table:

Authority Generating Facilities

	Туре	First Year of Operation	Total Installed Capability-MW	Net Dependable Capability-MW ⁽¹⁾	2010 Net Generation MWh ⁽²⁾
St. Lawrence-FDR	Hydro	1958	912	735	6,611,236
Niagara	Hydro	1961	2,755	2,674	13,241,815 ⁽³⁾
Blenheim-Gilboa	Pumped Storage	1973	1,160	1,140	$(145,911)^{(3)}$
Flynn	Gas/Oil	1994	170	135	942,487
SCPPs ⁽⁴⁾	Gas	2001	517	443	508,120
Small hydroelectric ⁽⁵⁾	Hydro	See note ⁽⁵⁾	40	$12^{(6)}$	155,903
500-MW Plant	Gas/Oil	2005	500	462	2,944,714
Totals			6,054	5,601	24,258,364

(1) Summer capability period rating.

(2) Subject to New York Independent System Operation (NYISO) adjustments.

(3) Net of pumping energy.

(4) Consists of 10 generating units located in New York City and one located in the service territory of Long Island Power Authority (LIPA).

(5) Consists of Ashokan and Kensico facilities, which were placed in service in 1982 and 1983, respectively, and facilities at the Hinckley (Jarvis plant), Crescent and Vischer Ferry sites, which are part of Small Hydroelectric Development Project No. 1 and which went into commercial operation on July 1, 1991.

(6) Consistent with NYISO filed tariff revisions to modify methodologies in calculating capability limited control run of river small hydros.

Adverse Legal Proceedings

There are no significant, relevant and adverse legal or regulatory actions taken against the Authority in the last 5 years to report.

Financing Plan and Experience Raising Capital

The Authority and Collaborative members LIPA and Con Edison will equally share the costs associated with filing for the lease application and pursuing the desktop and initial field studies associated with site assessment using current operating funds. The subsequent phases of the project, including construction, operation, and maintenance, will be funded by the entity or entities selected to develop the project. The selected entity will also be responsible for raising the capital necessary to develop the project. The Authority and the Collaborative will apply stringent criteria in selecting such entity, including minimum thresholds of financial robustness and provision of adequate collateral or other means of credit protection.

Company Location, Profile, and Structure

The Authority is a corporate municipal instrumentality and political subdivision of the State created in 1931 by Title 1 of Article 5 of the Public Authorities Law, Chapter 43-A of the Consolidated Laws of the State of New York, as amended from time to time (the "Act"), which has its principal office located at 30 South Pearl Street, Albany, New York 12207-3425. The Authority generates, transmits and

sells electric power and energy, principally at wholesale, as permitted or required by applicable law. The Authority's primary customers are municipal and investor-owned utilities and rural electric cooperatives located throughout New York State, high load factor industries, other businesses, various public corporations located within the metropolitan area of New York City, including The City of New York, and certain out-of-state customers.

Adverse Financial Proceedings

There are no bankruptcy or other adverse financial proceedings within the last 5 years to report.

Bank References

Not applicable.

Years in Operation

The Authority has been in operation for 80 years. The Authority was created in 1931 by Title 1 of Article 5 of the Public Authorities Law, Chapter 43-A of the Consolidated Laws of the State of New York, as amended from time to time.

Current Audited Financial Statements

The Authority's 2010 audited financial statements are included under separate cover as Attachment 11.

Attachment 11 New York Power Authority 2010 Audited Financial Statements

Available by link:

http://www.nypa.gov/about/documents/Financials2010.pdf

Attachment 12 Receipt of BOEMRE Acquisition Fee Payment

Shanen, Robin

From:	paygovadmin@mail.doc.twai.gov
Sent:	Friday, September 02, 2011 9:40 AM
To:	Shanen, Robin
Subject:	Pay.Gov Payment Confirmation

THIS IS AN AUTOMATED MESSAGE. PLEASE DO NOT REPLY.

Your transaction has been successfully completed.

Transaction Summary

Application Name: ONRR Renewable Energy Non-Competitive Leasing Acquisition Fees Pay.gov Tracking ID: 254B6Q09 Agency Tracking ID: 74234161930

Transaction Date: Sep 2, 2011 9:40:20 AM Number of Payments Scheduled: 1 Frequency: OneTime

Company Name - no: New York Power Authority - Contact Name - Phone no: Robin Shanen, 914-287-3764

Description: New York NK 18-12, BOEMRE North Atlantic planning area:Partial blocks 6654, 6655, 6656, 6657, 6658, 6659, 6705, 6706, 6710, 6711, 6712, 6713, 6757, 6758, 6762, 6763, 6809, 6810, 6811;Entire blocks 6707, 6708, 6709, 6759, 6760, 6761 Renewable Energy Resource to be Developed: Electricity from wind turbines No. of Whole Blocks/Acres Calculated: 6 - 34160 No. of Partial Blocks/Acres Calculated: 133 - 47326

1



UNITED STATES DEPARTMENT OF THE INTERIOR Office of Natural Resources Revenue

RENEWABLE ENERGY Non-Competitive Acquisition Fees

* BOEM Region/Office:	OGOM	O AK		
*Company:	New York Power Authority			
Company Number:				
* Contact Name:	Robin	Shanen		
• .	(First Name)	(Last Name)		
*Email Address:	robin.shanen@nypa.gov			
*Phone Number:	914-287-3764			
*Description: (including Official Protraction Diagram name, number and respective whole and/or partial block	New York NK 18-12, BOEMRE North Atlantic planning area: Partial blocks 6654, 6655, 6656, 6657, 6658, 6659, 6705, 6706, 6710, 6711, 6712, 6713, 6757, 6758, 6762, 6763, 6809, 6810, 6811; Entire blocks 6707, 6708, 6709, 6759, 6760, 6761			
*Renewable Energy Resource to be developed:				
	Electricity from wind turbines			
. *	Le,	Number of Acres Calculated:		
Number of Whole Blocks:	6	34160		
Number of Partial Blocks: (in 1/16th block increments)		47326		
	For questions about the calculations, please call 703-787-1300			
· · · · · · · · · · · · · · · · · · ·		rn Gulf of Mexico, Central Gulf of Mexico, or Western (ntact BOEM at (504) 736-5722 before submitting your		
*Cost per Acre:	0.25			
Total Payment:	20371.50			
	Upon submission, please email confirmation receipt to: ren@boemre.gov			

Submit Data

()

(_____)

Online Payment Step 3: Confirm Payment	1 2 3
Thank you. Your transaction has been successfully c	ompleted.
Pay.gov Tracking Information Application Name: ONRR Renewable Pay.gov Tracking ID: 254B6QO9 Agency Tracking ID: 74234161930 Transaction Date and Time: 09/02/2011 09:40 E Payment Summary	Energy Non-Competitive Leasing Acquisition Fees
	Payment Date: 09/06/2011 Company Name - no: New York Power Authority -
Account Holder Name: New York Power Authority Payment Amount: \$20,371.50 Account Type: Business Checking Routing Number: 031100267 Account Number: ***********8509 Check Number: 1183	Contact Name - Phone no: New York NK 18-12, BOEMRE North Atlantic planning area:Partial blocks 6654, 6655, 6656, 6657, 6658, 6659, 6705, 6706, 6710, 6711, 6712, 6713, 6757, 6758, 6762, 6763, 6809, 6810, 6811;Entire blocks 6707, 6708, Description: 6709, 6759, 6760, 6761 Renewable Energy Resource to be Developed: No. of Whole Blocks/Acres 6 - 34160 Calculated: No. of Partial Blocks/Acres 133 - 47326 Calculated: