

NEW YORK POWER AUTHORITY DISTRIBUTED WIND POWER INITIATIVE REQUEST FOR INFORMATION “RFI – NYPA DISTRIBUTED WIND”

1 INTRODUCTION

The New York Power Authority (“NYPA” or the “Authority”) is the nation's largest state-owned power supplier, providing low-cost electricity to government agencies, municipal electric systems, rural electric cooperatives, and to private utilities for resale—without profit—to their customers across New York State. NYPA operates 18 generating facilities and more than 1,400 circuit-miles of transmission lines. NYPA is also a national leader in promoting energy efficiency and the development of clean and renewable energy technologies, committing over \$100 million a year to energy services.

As part of its commitment to the environment and in support of New York State’s renewable and clean energy goals, NYPA is interested in developing distributed wind power systems (“WPS”) at select facilities throughout New York State. The projects would involve the installation of a wind turbine, or a set of wind turbines on facility grounds interconnected into the facility’s electrical distribution system in a grid parallel configuration. The energy generated by the turbine(s) would be used on-site to offset grid-supplied electrical energy.

Responses to this RFI for both design-build and power purchase agreement (“PPA”) projects are of interest.

Host sites have been identified which include university campuses as well as municipal facilities such as wastewater treatment plants. Wind turbine capacity ratings may be considered from 100 kW to 1.5 MW.

For PPA projects all WPS equipment installed at host sites will be owned and operated by the provider, who will be responsible for all WPS costs associated with design, permitting, equipment, materials, and labor, including installation and operation and maintenance. The capacity and/or energy produced by such WPS for PPA projects will be sold to the host site, as set forth in a PPA to be executed between NYPA, the host site and the provider.

For design-build projects, the provider shall be responsible for WPS design, permitting, equipment delivery, installation, start up and commissioning as well as a long-term service plan. Upon start up the WPS shall become the property of the host site.

It is anticipated that the wind power systems would be installed and become

operational during 2010.

Prior to issuing a formal Request for Proposals (RFP) for the WPS, NYPA is issuing this Request for Information (RFI). The purpose of the RFI is to solicit information from the wind power industry in order to prepare an RFP with appropriate terms, conditions and other information to encourage the submission of high quality proposals from capable wind power developers. **Responses are due by April 10, 2009. Please direct all questions about this RFI and all responses to this RFI to:**

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NYPA will entertain telephone discussions with regard to any sensitive information. However, NYPA prefers to receive as much information in writing as possible, so that it can be shared accurately with those who are developing the RFP.

Neither NYPA nor the host sites will be responsible for any costs or expenses incurred in preparing and submitting information to this RFI. All material submitted will become the property of NYPA.

Responders to this RFI are cautioned to clearly label as “proprietary” and “confidential” any specific information or other material that responders consider to be confidential. NYPA is subject to the New York State Freedom of Information Law (“FOIL”) which provides, as a general rule, that NYPA records are accessible to the public, subject only to exceptions enumerated in FOIL which include, but are not limited to, an exception protecting trade secrets. After receipt of a FOIL request for information provided by a responder to this RFI, NYPA, to the fullest extent permitted by FOIL, would seek to protect the information submitted by the RFI responder that is marked “confidential” and “proprietary”.

2 KEY ITEMS FOR RESPONDER FEEDBACK

NYPA seeks information from entities that are knowledgeable and experienced in the successful design, SEQRA process, permitting, installation, operation and maintenance of WPS. Information, feedback, clarifying comments, questions and specific suggestions from these entities on any and all of the following sections is welcome. These responses will help NYPA develop an RFP that addresses key concerns and facilitates high quality proposals.

Responders are requested to provide a point of contact and background information about their company or organization and whether or not they intend to respond to the subsequent RFP. Responses should include a summary of the responder's qualifications and prior experience in distributed wind power projects.

2.1 Project Build-out and Pricing

NYPA has performed an evaluation of host site facilities and identified five initial sites for implementation of WPS. These locations were chosen based on availability of open space, wind resource, electric load and host site interest in hosting or owning a WPS. The list of host sites, not included as part of this RFI, will be included in the RFP and is subject to change.

For PPA proposals NYPA intends to request pricing broken down by fixed monthly capacity price [\$/kW-mo] and/or fixed annual price of energy delivered each month [\$/MWh], for PPA term of 10, 15 and 20 years, or various term and pricing proposals for each site. Comments on the economic value of electric capacity from an intermittent resource are of interest to NYPA. NYPA is willing to consider a range of payment structures, including buyout terms, and is interested in receiving information about various options recommended by responders as well as a summary of the rationale generally used to justify indexed pricing. NYPA is also requesting responders to provide proposed generic PPA terms for consideration in structuring the RFP, including terms dealing with occupancy of host site property.

For design-build proposals NYPA intends to ask that proposals include a complete pricing schedule similar to Attachment A – Pricing Schedule. NYPA is requesting comments or suggestions on this pricing schedule.

As part of the subsequent RFP, NYPA will provide an opportunity for bidders to visit each host site. In addition, for each site NYPA will provide the following information (“Site Info”) to be used in bid preparation:

- Proposed location of WPS installation, including geotechnical report
- Wind resource report similar to Attachment B – Site Wind Resource Report
- Point of interconnection for the WPS, including electrical specifications
- 12 months of site utility demand information

NYPA is interested in receiving comments on the Site Info including comments on what additional information should be provided in the RFP.

2.2 Other Pricing Assumptions

- 2.2.1 For PPA proposals: NYPA intends to request pricing with and without environmental attributes, i.e. Renewable Energy Credits (REC), and with and without carbon credits. NYPA is interested in comments on how pricing with and without these attributes and credits will affect pricing.
- 2.2.2 For PPA proposals: NYPA is interested in receiving clarification on how clean energy tax credits may be applied, and how these tax credits will impact PPA pricing, and any potential circumstances which could jeopardize the tax credits and any associated liabilities.
- 2.2.3 NYPA shall require that pricing reflect the use of prevailing wages pursuant to New York State Labor Law Section 220 for all on-site labor in implementation of all WPS projects.
- 2.2.4 NYPA generally requires a form of performance and payment bond or letter of credit to insure timely completion of projects. NYPA is interested in receiving comments on how this requirement may affect proposals and pricing.

2.3 Technical Specifications

NYPA intends to require that proposals submitted in response to the RFP include:

- 2.3.1 Performance: for each site describe the performance of the WPS, including: (a) anticipated monthly energy and peak power values for the duration of your proposed term(s) subject to the provided wind resource report (Attachment B); (b) identification and discussion of any variables that would affect your response to (a), and the impact thereof, such as system degradation, scheduled and unscheduled system downtime, and (c) where applicable, your proposed approaches to minimizing the adverse impact of the variables.

Note: Listing a host site does not constitute a warranty or representation by NYPA that such site is suitable for a proposer's purposes. NYPA intends to provide a site walkthrough of each host site and require that the proposer be responsible for evaluating and determining the suitability of a specific site for installation of the WPS based upon its own independent investigation. A proposer may submit a request for additional information about a site to the NYPA point of contact. The host site list is subject to change. As part of this RFI NYPA is interested in feedback on how multiple site inspections should be coordinated, what facility information should be provided and which parts of each facility should be inspected.

- 2.3.2 Scope of Work and Schedule: as part of a response to this RFI, NYPA is

interested in receiving a generic WPS project implementation scope of work, including design, pre-construction environmental resource impact surveys (including noise, visual, bird and bat, wetlands, stream crossing, cultural resources, etc.), permitting (including State Environmental Quality Review Act (SEQRA)), start-up and commissioning items, post-construction environmental resource impact surveys and an implementation timeline schedule.

- 2.3.3 Service Plan: As part of a response to this RFI NYPA is interested in receiving a full and complete description of responder's operation and maintenance plan (e.g., company and/or individuals involved; how such operation will be performed; type of access required to the site; anticipated role of host site in operation and maintenance phase) for either/both PPA and design build scenarios. Responders shall include a summary of plans for locally-based technicians and an estimated response time to emergency or unscheduled turbine service needs.
- 2.3.4 Detailed plans for interconnection, net metering and billing: as part of a response to this RFI NYPA is interested in receiving comments and recommendations on the following:
- WPS interconnection technical specifications
 - Net metering and billing practices
 - Recommendations on practices for effectively balancing facility loads with grid supplied power as well as methodologies for analyzing the impact of the WPS on balance of power costs.
 - Voltage flicker.
- 2.3.5 NYPA is interested in learning about WPS technologies that may be suitable for this initiative. Responders are requested to list proposed WPS equipment, technologies, and integration strategies for this initiative. Technical specifications of equipment are sought, including those that may affect the site such as turbine operating noise, ice throw considerations and control strategies, and microwave or cell tower interferences.
- 2.3.6 Permitting: As part of a response to this RFI NYPA is interested in receiving comments on the local zoning issues that may affect this initiative, including considerations on public input and environmental reviews, as well as recommendations on the best practices for dealing with these issues. Guidelines regarding turbine setbacks from buildings and roads are of interest to NYPA. Guidelines regarding areas of New York State that may be problematic for wind turbines regarding bird and bat populations are also of interest.

3 ADDITIONAL ITEMS

- 3.1 NYPA is interested in receiving information about the status of the wind power industry as it relates to availability of turbines, power electronics and qualified labor in order to complete the build-out plans of this initiative. Also of interest is the availability of qualified labor to maintain wind turbines.

Mandatory format for RFI Responses

- Section 1: Introduction
 - Respondents' business model(s)
 - Does your firm limit itself to design-build projects or purchase power agreements? Or does your firm do both?
- Section 2: Responder feedback
 - List your firm's qualifications and prior experience in distributed wind projects.
- Section 2.1: For PPA proposals
 - Comment on pricing for electrical capacity and the suitability of such pricing to intermittent wind generation.
 - Comment on preferred length of contract: 10, 15 or 20 years.
 - Describe potential buyout terms
 - Provide proposed PPA terms including host site occupancy agreement (costs for power or energy do **not** need to be included at this time).
- Section 2.1: For PPA proposals
 - Comment on pricing schedule attachment A
 - Comment on suitability of data NYPA plans to provide bidders.
 - Comments on planning the site visits: What requirements do bidders have to collect the information they need to bid the project?
- Section 2.2: Pricing assumptions for PPA proposals
 - Comments on benefits of pricing with and without environmental attributes (RECs)
 - Comments on benefits of pricing with and without carbon credits
 - Comments on mechanism for taking advantage of clean energy tax credits
- Section 2.2: Other
 - Comments regarding prevailing wage requirement
 - Comments regarding performance and payment bond requirement
- Section 2.3: Technical Specifications
 - Discuss expected system performance, degradation and other performance limitations.
 - Include a generic scope of work for a distributed wind project with implementation timeline.
 - Describe a description of a proposed long-term turbine service plan. Include the length of the contract. Specify staffing and response time to operational emergencies or unscheduled maintenance events.

- Comment on potential interconnection and billing issues.
- List recommended turbine technologies and implementation strategies.
- Provide guidelines for specifying turbine noise, ice throw avoidance, and EMI.
- Provide a summary of considerations NYPA should make regarding the permitting phase of the project. Include general guidelines for turbine setbacks.
- Section 3: Additional items
 - Provide a summary of the status of the wind power industry as it relates to distributed wind projects, including availability of appropriate wind turbines and qualified installation and servicing labor.

ATTACHMENT A

DISTRIBUTED WIND SYSTEM PRICING SCHEDULE

	Design-Build Pricing	Power Purchase Agreement Pricing
Installation Design - design work up to final connections	\$	Not applicable
Turbine; purchase and delivery (FOB Destination):	\$	Not applicable
Balance of System Components		
a) Tower structure; purchase and delivery (FOB Destination):	\$	Not applicable
b) Data Acquisition System, including sensors	\$	Not applicable
c) Turbine Mounting System	\$	Not applicable
d) Miscellaneous (wiring, conduit, disconnect switches, circuit breakers, circuit breaker panels, etc.)	\$	Not applicable
Permits and Interconnection Filing and Approvals, including, but not limited to, environmental impact surveys and SEQRA environmental impact assessment	\$	Not applicable
Installation Labor, Rigging and Crane Rental Costs	\$	Not applicable
Utility Inspection and Start-up, and O&M Training Course and Manuals and post-construction environmental monitoring	\$	Not applicable
Warranty and long-term maintenance contract (specify length of term):	\$	Not applicable
Performance Bond Premium (see RFP Additional Terms & Conditions)	\$	Not applicable
Total	\$	Not applicable
Indicate incentive payments the project may qualify for:	\$	\$
Total, less incentive s	\$	Not applicable
For Power Purchase Agreement – cost per kW	Not applicable	\$
For Power Purchase Agreement – cost per kWh	Not applicable	\$

ATTACHMENT B

CONTENTS OF WIND RESOURCE REPORTS

Wind resource report specification

- Site coordinates
- Sample turbine model
- Sample tower height

Wind data report shall include (but not be limited to) the following items:

- Annual mean wind speed frequency distribution
- Monthly mean wind speed frequency distribution
- Diurnal mean wind speed curves (includes hourly data points for a 24 hour period) for each of the 4 seasons and an annual mean diurnal wind speed curve
- Wind rose diagram
- Monthly mean air temperature data
- Monthly mean air pressure data
- Monthly mean air density data
- An annual energy production estimate for the turbine specified for this site
 - Estimate shall specify annual energy production for sample turbine and tower
 - Estimate shall include energy production on a monthly basis for sample turbine and tower
 - Estimate shall include a discussion of anticipated system losses for sample turbine and tower
 - Estimate shall include a chart showing the turbine manufacturer's power output curve for sample turbine and tower
- The estimated uncertainty of the wind speed data
- An estimate of the wind turbine capacity factor
- A brief discussion on the methodology used to calculate the results