



NYSERDA

Digital Aerial Baseline Survey of Marine Wildlife in Support of New York State
Offshore Wind Energy
Program Opportunity Notice/Request for Proposal (PON) 3179
\$3,500,000 Available

Proposals Due: February 9, 2016 by 5:00 PM Eastern Time*

There is growing interest in developing offshore wind (OSW) energy in New York and elsewhere. However, it is still unclear what impacts such development could have on wildlife, including corals and other invertebrates, birds, bats, sea turtles, fish, and marine mammals. Data gaps and unmet research needs hamper the efforts of federal and state regulators to avoid or minimize potential impacts to wildlife from OSW development. There have been several efforts in New York and elsewhere along the Atlantic coast to identify and fill these gaps in recent years, but many research needs are still unmet.

One of the most pressing research needs is baseline data on potential wildlife exposure. Knowledge about species presence and absence in development areas helps regulators form appropriate site specific questions to be addressed by developers. Regional-scale baseline information on wildlife distributions, abundance, and movements by season can inform the relative biodiversity of the development sites. These types of surveys can also provide a better understanding of the potential effects of individual projects, as well as any potential cumulative effects of multiple projects.

This solicitation seeks proposals to collect spatial data using high-definition digital aerial surveys of wildlife (birds, marine mammals, sea turtles, and others) in the New York Planning Area. For the purposes of this project the New York Bight is defined as the area of the ocean from the south shore of Long Island to the continental shelf break, matching the New York Department of State's "Offshore Planning Area". The approximate size of this area is 12,650 square nautical miles and includes state and federal waters. Four seasonal surveys per year are requested to capture the seasonal variations in wildlife distributions, and three consecutive years of data to capture inter-annual variability. Images must be identified to the lowest possible taxonomic group and geo-referenced. The objectives are to determine the distribution and estimate relative abundance of wildlife, and to determine the seasonal and inter-annual variability of the distribution. Digital and observer approaches, when coordinated, provide a clearer understanding of what species are present in the study area, their relative density, and what they are doing at the time of observation. Given these parameters, the work must be coordinated with the planned New York State Department of Environmental Conservation's (DEC) aerial and shipboard visual surveys of whales and sea turtles.

Proposal Submission: Electronic submission is preferable. NYSERDA will also accept proposals by mail or hand-delivery. If submitting electronically, proposers must submit the proposal in either PDF or MS Word format with a completed and signed Proposal Checklist and Disclosure of Prior Findings of Non-Responsibility, in PDF format. Proposal PDFs should be searchable and should be created by direct conversion from MS Word, or other conversion

utility, rather than scanning. For ease of identification, all electronic files must be named using the proposer's entity name in the title of the document. Proposals may be submitted electronically by following the link for electronic submissions found on this PON's webpage, which is located in the "Current Opportunities" section of NYSERDA's website (<http://www.nyserda.ny.gov/Funding-Opportunities/Current-Funding-Opportunities.aspx>). Instructions for submitting electronically are located as Attachment G to this PON.

If mailing or hand-delivering, proposers must submit (2) paper copies of their proposal with a completed and signed Proposal Checklist, along with a CD or DVD containing both a PDF and MS Word digital copy of the proposal, following the above guidelines. Mailed or hand-delivered proposals must be clearly labeled and submitted to:

Roseanne Viscusi, PON 3179
NYS Energy Research and Development Authority
17 Columbia Circle
Albany, NY 12203-6399

If you have technical questions concerning this solicitation, contact Gregory Lampman at (518) 862-1090, ext. 3372 or gregory.lampman@nyserda.ny.gov. If you have contractual questions concerning this solicitation, contact Elsyda Ahmed at (518) 862-1090, ext. 3232 or elsyda.ahmed@nyserda.ny.gov.

No communication intended to influence this procurement is permitted except by contacting Gregory Lampman (Designated Contact) at (518) 862-1090, ext. 3372 or gregory.lampman@nyserda.ny.gov. Contacting anyone other than this Designated Contact (either directly by the proposer or indirectly through a lobbyist or other person acting on the proposer's behalf) in an attempt to influence the procurement: (1) may result in a proposer being deemed a non-responsible offerer, and (2) may result in the proposer not being awarded a contract.

* Late proposals will be returned. Incomplete proposals may be subject to disqualification. It is the proposer's responsibility to ensure that all pages have been included in the proposal. Faxed or e-mailed proposals will not be accepted. Proposals will not be accepted at any other NYSERDA location other than the address above. If changes are made to this solicitation, notification will be posted on NYSERDA's web site at www.nyserda.ny.gov.

I. Introduction

There is growing interest in developing OSW in New York and elsewhere. However, it is still unclear what impacts such development could have on wildlife, including corals and other invertebrates, birds, bats, sea turtles, fish, and marine mammals. Data gaps and unmet research needs could hamper the efforts of federal and state regulators to avoid or minimize—or even to understand—potential impacts to wildlife from OSW development. There have been several efforts in New York and elsewhere along the Atlantic coast to identify and fill these gaps in recent years, but there are still many research needs.

To help regulators and developers respond to permitting needs and requirements, NYSERDA developed a two-phase project to understand site-specific information needs, and focus on the specific gaps in knowledge surrounding marine wildlife impacts resulting from OSW development. The first culminated in the report “Advancing the Environmentally Responsible Development of Offshore Wind Energy in New York State: A Regulatory Review and Stakeholder Perceptions” <http://www.nyserdera.ny.gov/-/media/Files/Publications/Research/Environmental/Advancing-Environmental-Response-Development-Off-Shore-Wind-New-York.pdf> . The second phase resulted in an Environmental Research Plan for Marine Wind and Wildlife (Research Plan) <http://www.nyserdera.ny.gov/-/media/Files/Publications/Research/Environmental/NYSERDA-Environmental-Research-Program-Research-Area-4-Marine-Wind-Wildlife.pdf> .

The Research Plan was developed with input from state and federal regulators, academia, nonprofit organizations, industry, and other stakeholders. The top research needs identified in the Research Plan, along with their relative prioritization, were judged to be best addressed at this time, at the state scale, and with some involvement of state agencies, rather than being more appropriate to address at larger or smaller geographic scales (perhaps by federal agencies, private developers, or other entities) at some point in the future.

The most pressing research need at this time was identified as baseline data on potential wildlife exposure. Knowledge about species presence and absence in development areas helps regulators form appropriate site specific questions to be addressed by developers. Regional-scale baseline information on wildlife distributions, abundance, and movements by season are beyond the geographic scope of individual projects, and thus may not be required of individual developers during the permitting process. However, regional-scale data can identify the relative biodiversity of the development sites.

Well planned aerial transects flown over regions of interest by aircraft outfitted with high definition cameras is a relatively new technique that holds great promise. This approach to conducting surveys of birds, sea turtles and marine mammals can be accomplished without disturbance to wildlife below the aircraft, providing information over a broad area during daylight and good visibility conditions.

II. Program Requirements

This solicitation will provide the successful proposer with up to \$3,500,000 to conduct three-years of seasonal, high resolution digital surveys of wildlife in the New York Bight. The primary objectives are to determine the distribution, and estimate the relative abundance/density of wildlife, specifically marine mammals, sea turtles and birds, but also bats and cartilaginous fishes in the New York Bight.

The requested work includes four (4) seasonal surveys per year, conducted over the course of three (3) years in the New York Bight. For the purposes of this project the New York Bight is defined as the area of the ocean from the south shore of Long Island to the continental shelf break, matching the New York Department of State's (DOS) "Offshore Planning Area". The approximate size of this area is 12,650 square nautical miles and includes state and federal waters as described in the 2013 "New York Department of State Offshore Atlantic Study" available at:

http://docs.dos.ny.gov/communitieswaterfronts/ocean_docs/NYSDOS_Offshore_Atlantic_Ocean_Study.pdf. Proposed spatial subsampling should not be less than 5% of the entire study area (10% preferred) with an image resolution equal to or finer than 2cm² (1cm² preferred) at the ocean surface.

The successful proposer will identify captured images of wildlife to the lowest possible taxonomic group and provide the outputs in narrative, mapped and GIS formats that inform the objectives of the solicitation. Data outputs should be provided no less than on a semi-annual basis and include narrative, spreadsheets, mapped, and GIS outputs of completed surveys as appropriate. Weekly status reports should be provided on a weekly basis beginning the week prior to each planned seasonal flight operation and continuing until the week following the flight operation. These weekly status reports will include a summary of information on survey activities planned for the weeks ahead, those conducted the week before, actual transects flown, reason if no survey was flown, and a summary of other issues and relevant information. NYSERDA reserves the right to have access to all collected data (e.g. images) upon request.

NYSERDA staff will oversee the project, with the support of a Project Advisory Committee (PAC) to be developed by NYSERDA and comprised of approximately ten (10) representatives of New York State and federal regulatory agencies and others deemed appropriate by NYSERDA. The successful proposer will be expected to coordinate their efforts with the New York State Department of Environmental Conservation's (DEC) planned aerial and shipboard visual surveys of marine mammals and sea turtles and other relevant work in the region. The successful proposer will be required to provide regular reporting of data and progress, and periodic project status presentations to the PAC and a general stakeholder group comprised of a broader group of regulators, developers, engineering firms and non-governmental organizations.

III. Proposal Requirements

Proposals must follow the format provided below and should include sufficient, succinct information to support the proposed approach and answer the questions described in the Proposal Evaluation Criteria listed in Section VI. Proposals should not be excessively long or submitted in an elaborate format. Unnecessary attachments beyond those sufficient to present a complete, comprehensive, and effective response will not influence the evaluation of the proposal. The maximum length of each proposal section is shown and should not be exceeded. If the proposer wishes to provide alternative options to those presented here for consideration by the reviewers, they may be presented along with appropriate justification and sufficient cost implications. NYSERDA reserves the right to negotiate changes to the proposed project approach, deliverables and deliverable formats with the selected proposer.

Each page of the proposal should state the name of the proposer, the PON number i.e. "PON3179", and the page number. Proposers may contact Gregory Lampman at (518) 862-

1090 extension 3372 or gregory.lampman@nyserda.ny.gov before preparing a proposal to discuss PON goals and proposal requirements.

Proposal Checklist Cover Sheet

A completed and signed Proposal Checklist must be attached as the front cover of your proposal. Late proposals will be returned and proposals lacking the appropriate completed and signed Proposal Checklist may be returned. Faxed or e-mailed copies will not be accepted. (1 page)

Project Summary, Background and Objectives

Briefly describe the proposed project approach and the objectives of the approach. Provide context for the project in relation to completed and ongoing relevant work in the region. Summarize how the project will build on, and coordinate with or leverage these existing activities. Describe how coordination with the planned DEC supported aerial and shipboard visual surveys of marine mammals and sea turtles will be accomplished. Include a description of the limitations of the project. The Project Summary should be a complete, stand-alone summary of the project on a single page (1 page).

Survey Plan

Describe the details of the survey plan including the imaging equipment, minimum resolution (cm² at the ocean surface), camera type, mounting systems and onboard recording systems. Provide the type of aircraft to be employed, airports used, flight elevation and aircraft speed during surveys. Provide proposed transects/grid sampling plan or describe how transects/grid sampling plan will be developed. Provide the minimum area to be surveyed (km² and percent of the study area), camera swath width (meters), proposed survey time per day (hours), anticipated timing and duration of each seasonal survey (days), the proposed approach to dealing with glint/glare, and other relevant technical information that will help ensure project success. Describe how representative sub-sampling will be addressed. Describe any proposed deviations from what is required by the solicitation. Justify the selection of each of the proposed survey plan components. (4-6 pages).

Wildlife Identification Plan

Describe the process by which collected data will be reviewed to discover and extract all images of wildlife captured in the surveys (human reviewers and any automated wildlife recognition algorithms), along with all relevant metadata. Describe how species identification will be ascertained. Describe the quality control checks that will be employed at all levels of wildlife identification. Provide any additional information that will be, or will attempt to be captured to further advance the goals of this project (e.g. flight height, sex, age etc.). Describe any proposed deviations from what is required by the solicitation. (2-3 pages).

Data Management Plan

At a minimum the successful proposer will be required to provide: maps and associated GIS data files of all survey track lines that were flown; distribution maps and associated GIS data files for each species by season and year; estimates of relative abundance or density for each species by season; estimates of inter-annual variability for each species; and all associated GIS data files and metadata.

Describe the data management plan in detail, including specifically what data will be provided, when it will be provided, and in what formats. Provide a proposed schedule of data delivery and reporting. Describe how relative abundance or density will be calculated. Describe how factors such as glare and the ability to detect/identify wildlife will be addressed. Describe how seasonal

and inter-annual variability will be calculated and provided. Describe any proposed deviations from what is required by the solicitation. All GIS data will be required to be provided, in appropriate forms, directly to any New York State or federal entities interested (e.g. NOAAs Atlantic Marine Assessment Program for Protected Species (AMAPPS)), as well as provided to relevant national geospatial data portals (e.g. Mid-Atlantic Regional Council on the Ocean (MARCO) Mid-Atlantic Ocean Data Portal) for public access. Describe the entities and data portals to which data will be provided and the timing of that data provision. Describe the approach to keeping the PAC and general stakeholder group apprised of progress and the project status. (1-2 pages).

Project Management Plan and Qualifications

- Briefly describe the Project Management Plan at a high level that includes the Project Manager and all key personnel, along with their role in the project. List the organizations participating in the project, the contact for each organization and describe the role that each will play. (1 page)
- Include an organizational chart showing all key personnel and any subcontractors or other involved entities (if applicable). (1 page)
- Include a one-paragraph description of a sample of related projects that have been undertaken by the key personnel that demonstrates experience with the proposed project area. (up to 3 pages)
- Include description of education and experience of key personnel that are relevant to the proposed work. (1 page each – not included in page count)

Master Schedule

Complete a schedule showing start and completion times for all major tasks, in terms of months after project initiation. Include sampling dates or periods, planned meetings, data analysis, deliverable release and other key events. (1-2 pages)

Contract Pricing Proposal Form

Complete the attached Contract Pricing Proposal Form for the entire project, including any in-kind contributions and other cost-sharing. Include any supplemental information necessary to fully understand the project on a separate sheet, including any deviations from what is requested and a rationale for the deviation. Care should be taken to provide sufficient information to allow reviewers to understand what each of the components (e.g. personnel, equipment, survey plan, wildlife identification), and each of the years of the project is expected to cost as project modifications may be negotiated based on feedback from the PAC. Any proposed sub-contractor costs should be similarly broken out (3-5 pages).

Indirect Cost (Overhead) Rate(s)

Attach documentation to support indirect cost (overhead) rate(s) included in your proposal as follows:

- Describe the basis for the rates proposed (i.e., based on prior period actual results; based on projections; based on federal government or other independently-approved rates).
- If rate(s) is approved by an independent organization, such as the federal government, provide a copy of such approval.
- If rate(s) is based on estimated costs or prior period actual results, include calculations to support proposed rate(s). Calculation should provide enough information for NYSERDA to evaluate and confirm that the rate(s) are consistent with generally accepted accounting principles for indirect costs.

NYSERDA reserves the right to audit any indirect rate presented in the proposal and to make adjustment for such difference. Requests for financial statements or other needed financial information may be made if deemed necessary.

Letters of Support

If the proposer is relying on other organizations or businesses to do work, provide services or equipment, data or share in the non-NYSERDA cost, include a letter from that organization or business describing their commitment. The absence of letters of commitment or support will be interpreted as the proposer not having commitment/support from those parties (1-page each, not included in page count).

IV. Proposal Evaluation

Proposals that meet Proposal Requirements will be reviewed by a Technical Evaluation Panel (TEP) using the Evaluation Criteria below, provided in the order of importance.

Soundness of Project Methods and Research Design, Tasks and Schedule

How suitable are the proposed project methods and overall research design for meeting the project objectives? How comprehensive, realistic, and explicit are the project tasks with respect to the project objectives and timeline? Are the Survey Plan, Wildlife Identification Plan and Data Management Plan appropriate, well thought out, justified, and clearly presented? Does the proposed project consider and coordinate with existing and planned activities in the New York Bight and elsewhere? Are specific measurable targets of success provided where applicable?

Management Plan and Qualifications

How well has the proposer organized a management plan and a project team with the necessary technical, operations, and administrative experience for successfully completing the project? Does the proposer have direct and relevant experience with this type of work? Does the proposer demonstrate an understanding of the state of the technology and ongoing work in the offshore region? Does the proposer include strategic partnerships with other entities (if appropriate)? Have letters of support from sub-contractors been included (if appropriate)?

Cost Criteria

How competitive are the proposed services to other proposals? How justifiable and reasonable are the project overall costs? Is the level of effort and overall duration of the project appropriate to the goals? How justified and reasonable are the proposer's cost allocations? Is the overall cost per year, cost per activity and cost for alternatives (if appropriate) clearly delineated? Does the proposed approach consider how to maximize the value of the project? Does the proposal include leveraging of other work and/or meaningful cost-sharing in some form?

Responsiveness of the Proposal

Is the proposal presented clearly? Does the proposal include all of the relevant information to understand what is being proposed? Are project costs broken out to allow consideration of cost in relation to each activity? Does the proposal include all of the required information? Does the proposal stay within the page limit guidelines?

V. General Conditions

Proprietary Information - Careful consideration should be given before confidential information is submitted to NYSERDA as part of your proposal. Review should include whether it is critical for evaluating a proposal, and whether general, non-confidential information, may be adequate for review purposes. The NYS Freedom of Information Law, Public Officers law, Article 6, provides for public access to information NYSERDA possesses. Public Officers Law, Section 87(2)(d) provides for exceptions to disclosure for records or portions thereof that "are trade secrets or are submitted to an agency by a commercial enterprise or derived from information obtained from a commercial enterprise and which if disclosed would cause substantial injury to the competitive position of the subject enterprise." Information submitted to NYSERDA that the proposer wishes to have treated as proprietary, and confidential trade secret information, should be identified and labeled "Confidential" or "Proprietary" on each page at the time of disclosure. This information should include a written request to exempt it from disclosure, including a written statement of the reasons why the information should be exempted. See Public Officers Law, Section 89(5) and the procedures set forth in 21 NYCRR Part 501 <http://www.nyserda.ny.gov/About/-/media/Files/About/Contact/NYSERDA-Regulations.ashx>. However, NYSERDA cannot guarantee the confidentiality of any information submitted.

Omnibus Procurement Act of 1992 - It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority- and women-owned business enterprises, as bidders, subcontractors, and suppliers on its procurement Agreements.

Information on the availability of New York subcontractors and suppliers is available from:

Empire State Development
Division For Small Business
625 Broadway
Albany, NY 12207

A directory of certified minority- and women-owned business enterprises is available from:

Empire State Development
Minority and Women's Business Development Division
625 Broadway
Albany, NY 12207

State Finance Law sections 139-j and 139-k - NYSERDA is required to comply with State Finance Law sections 139-j and 139-k. These provisions contain procurement lobbying requirements which can be found at

<http://www.ogs.ny.gov/aboutogs/regulations/advisoryCouncil/StatutoryReferences.html>

The attached Proposal Checklist calls for a signature certifying that the proposer will comply with State Finance Law sections 139-j and 139-k and the Disclosure of Prior Findings of Non-responsibility form includes a disclosure statement regarding whether the proposer has been found non-responsible under section 139-j of the State Finance Law within the previous four years.

Tax Law Section 5-a - NYSEDA is required to comply with the provisions of Tax Law Section 5-a, which requires a prospective contractor, prior to entering an agreement with NYSEDA having a value in excess of \$100,000, to certify to the Department of Taxation and Finance (the "Department") whether the contractor, its affiliates, its subcontractors and the affiliates of its subcontractors have registered with the Department to collect New York State and local sales and compensating use taxes. The Department has created a form to allow a prospective contractor to readily make such certification. See, ST-220-TD (available at http://www.tax.ny.gov/pdf/current_forms/st/st220td_fill_in.pdf).

Prior to contracting with NYSEDA, the prospective contractor must also certify to NYSEDA whether it has filed such certification with the Department. The Department has created a second form that must be completed by a prospective contractor prior to contacting and filed with NYSEDA. See, ST-220-CA (available at http://www.tax.ny.gov/pdf/current_forms/st/st220ca_fill_in.pdf). The Department has developed guidance for contractors which is available at <http://www.tax.ny.gov/pdf/publications/sales/pub223.pdf>.

Contract Award - NYSEDA anticipates making one award under this solicitation. It may award a contract based on initial applications without discussion, or following limited discussion or negotiations pertaining to the Statement of Work. Each offer should be submitted using the most favorable cost and technical terms. NYSEDA may request additional data or material to support applications. NYSEDA will use the Sample Agreement to contract successful proposals. NYSEDA reserves the right to limit any negotiations to exceptions to standard terms and conditions in the Sample Agreement to those specifically identified in the submitted proposal (see Proposal Checklist). Proposers should keep in mind that acceptance of all standard terms and conditions will generally result in a more expedited contracting process. NYSEDA expects to notify proposers in approximately 8 weeks from the proposal due date whether your proposal has been selected to receive an award. NYSEDA may decline to contract with awardees that are delinquent with respect to any obligation under any previous or active NYSEDA agreement.

Limitation - This solicitation does not commit NYSEDA to award a contract, pay any costs incurred in preparing a proposal, or to procure or contract for services or supplies. NYSEDA reserves the right to accept or reject any or all proposals received, to negotiate with all qualified sources, or to cancel in part or in its entirety the solicitation when it is in NYSEDA's best interest. NYSEDA reserves the right to reject proposals based on the nature and number of any exceptions taken to the standard terms and conditions of the Sample Agreement.

Disclosure Requirement - The proposer shall disclose any indictment for any alleged felony, or any conviction for a felony within the past five years, under the laws of the United States or any state or territory of the United States, and shall describe circumstances for each. When a proposer is an association, partnership, corporation, or other organization, this disclosure requirement includes the organization and its officers, partners, and directors or members of any similarly governing body. If an indictment or conviction should come to the attention of NYSEDA after the award of a contract, NYSEDA may exercise its stop-work right pending further investigation, or terminate the agreement; the contractor may be subject to penalties for violation of any law which may apply in the particular circumstances. Proposers must also disclose if they have ever been debarred or suspended by any agency of the U.S. Government or the New York State Department of Labor.

Annual Metrics Reports – If awarded, the proposer will be required to submit to NYSEDA's Project Manager on an annual basis, a prepared analysis and summary of metrics addressing the anticipated energy, environmental and economic benefits that are realized by the project. All

estimates shall reference credible sources and estimating procedures, and all assumptions shall be documented. Reporting shall commence the first calendar year after the contract is executed. Reports shall be submitted by January 31st for the previous calendar years activities (i.e., reporting period). Please see Attachment (insert Attachment Letter): Sample Metrics Reporting Guides for the metrics that you will be expected to provide and the reporting duration. NYSERDA may decline to contract with awardees that are delinquent with respect to metrics reporting for any previous or active NYSERDA agreement.

VI. Attachments:

Attachment A - Proposal Checklist

Attachment B - Disclosure of Prior Findings of Non- Responsibility

Attachment C - Acceptance of Standard Terms and Conditions

Attachment D - Contract Pricing Proposal Form (CPPF)

Attachment E - Sample Agreement

Attachment F - Metrics Reporting Guide: Information Dissemination

Attachment G - Instructions for Submitting Electronic Proposals