



Request for Proposals
**Real-time Passive Acoustic Monitoring System
for Vessel Transit**

RFP OSW-2022-05

Date of Issue: November 1, 2022

Proposals Due: December 21, 2022

Total Grant Funding Available: \$1.5 million
through Grant Agreement with MassCEC and associated Services
Agreement(s) with Vineyard Wind 1 LLC

All proposals must be submitted to:

The MassCEC Offshore Wind Team
at
OffshoreWind@masscec.com

CONTENTS

I. Summary.....	3
II. About MassCEC.....	4
III. About Vineyard Wind	4
IV. BACKGROUND AND GOALS	5
The Vineyard Wind Offshore Wind Accelerator Program	5
Project Goals and Description.....	5
V. Applicant and PAM System Eligibility	6
VI. Estimated Timeline	7
VII. Scope of Work and Performance Specifications	8
VIII. How to Apply	11
IX. Selection Criteria	15
X. Budget and Cost Share REquirements.....	16
XI. Contact Information for Questions	16
XII. General Request for Proposals Conditions.....	17
Notice of Public Disclosure	17
Disclaimer & Waiver Authority	17
MassCEC Contract Requirements	17
Negotiation of Service Agreement(s) with Vineyard Wind	18
Attachment 1: Lease Area OCS-A 0501 and Vessel Transit Corridor.....	19
Attachment 2: Labor and DEI Reporting Requirements	20
Attachment 3: NMFS Requirements - Marine Mammal Acoustic Detections.....	21
Attachment 4: Project Regulatory Compliance Summary	22
Attachment 5: Authorized Applicant’s Signature and Acceptance Form	23
Attachment 6: Tasks, Deliverables, Schedule and MassCEC Payment.....	24
Attachment 7: Sample Agreement	25

I. Summary

Through this Request for Proposals (“RFP”), the Massachusetts Clean Energy Center (“MassCEC”), in collaboration with Vineyard Wind 1 LLC (“Vineyard Wind”), is seeking to competitively select and fund one (1) qualified applicant or applicant team (“Applicant”) to provide a real-time passive acoustic monitoring (“PAM”) and data transmission system with remote alert capabilities (the “PAM System”) that can be deployed in advance of transiting vessels during the construction of the Vineyard Wind 1 offshore wind project (the “Vineyard Wind 1 Project”) to monitor for North Atlantic right whales (“NARWs”). The Vineyard Wind 1 Project will provide a unique opportunity for the selected Applicant to demonstrate the capacity to supply and deploy this technology.

Through this joint initiative, MassCEC and Vineyard Wind seek to advance and demonstrate the technology readiness level (“TRL”) of real-time PAM technologies as a mitigation tool for vessel strike avoidance and thereby provide better protections for NARWs in the New England region. A secondary objective is to acoustically record and localize NARW and other mysticete vocalizations to enhance the general understanding of the species distribution and abundance. The initiative includes two phases:

1. In Phase 1, the selected Applicant will procure and/or assemble necessary components to constitute a fully functional PAM System and will conduct an ocean validation of the functionality and performance of the PAM System. This activity will be funded and performed under a grant agreement between MassCEC and the selected Applicant.
2. In Phase 2, the selected Applicant will utilize the PAM System to provide real-time whale detection services to Vineyard Wind for vessels transiting from New Bedford, MA to the Vineyard Wind 1 Project area during the period of approximately October 2023 through May 2024. These services will be funded under the MassCEC grant agreement but will be performed under a separate services agreement between the applicant and Vineyard Wind. MassCEC grant payments for Phase 2 activities will be contingent upon receipt of written notification from Vineyard Wind that the Applicant has performed its work to Vineyard Wind’s satisfaction.

As detailed below (Section VIII), Applicants must satisfy certain qualification criteria established by Vineyard Wind to be eligible for funding. Any grant award under this RFP will be contingent upon the ability of the selected Applicant to execute contracts with both MassCEC and Vineyard Wind through which the Applicant commits to execute the Scope of Work outlined in this RFP. Successful demonstration of the PAM System technology solution may lead to an extension of the work to the operations and maintenance phase of the Vineyard Wind 1 Project.

For this RFP, up to One Million Five Hundred Thousand Dollars (\$1,500,000) are available through a grant agreement with MassCEC. These funds are drawn from the Vineyard Wind Offshore Wind Accelerator Program (the “Accelerator Program”). Applicants are encouraged to include a cost-sharing element in their proposal but are not required to do so.

II. About MassCEC

MassCEC is a state economic development agency dedicated to accelerating the growth of the clean energy sector across the Commonwealth to spur job creation, deliver statewide environmental benefits and to secure long-term economic growth for the people of Massachusetts. MassCEC works to increase the adoption of clean energy while driving down costs and delivering financial, environmental, and economic development benefits to energy users and utility customers across the state.

MassCEC's mission is to accelerate the clean energy and climate solution innovation that is critical to meeting the Commonwealth's climate goals, advancing Massachusetts' position as an international climate leader while growing the state's clean energy economy. MassCEC is committed to creating a diverse, equitable, and inclusive organization where everyone is welcomed, supported, respected, and valued. We are committed to incorporating principles of diversity, equity, inclusion, and environmental justice in all aspects of our work in order to promote the equitable distribution of the health and economic benefits of clean energy and support a diverse and inclusive clean energy industry. MassCEC strives to lead and innovate in equitable clean energy and climate solutions.

III. About Vineyard Wind

Vineyard Wind is an offshore wind development company, jointly owned by Copenhagen Infrastructure Partners and Avangrid Renewables, LLC. Vineyard Wind was selected in the first Massachusetts competitive procurement process for long-term offshore wind energy contracts and is currently building the Vineyard Wind 1 Project, an 800-megawatt facility that will be the first commercial-scale offshore wind project in the United States ("US").

The Vineyard Wind 1 Project will be built in Bureau of Ocean Energy Management ("BOEM") Lease Area OCS-A 0501 (the "Lease Area"), which is in the Massachusetts Wind Energy Area ("MA WEA"). At its nearest point, the Lease Area is just over 14 miles from the southeast corner of Martha's Vineyard and a similar distance to Nantucket. Wind turbine installation activities in the Lease Area will occur within a 775,614-acre wind development area ("WDA"). Water depths in the WDA range from approximately 115 to 164 feet with depths gradually increasing as distance from land increases. A map of the Lease Area is provided as Attachment 1.

BOEM issued a Construction and Operations Plan (COP) Approval document in July 2021, after issuing a Record of Decision that approved the Vineyard Wind 1 Project in May 2021. The COP Approval document outlines several terms and conditions intended to avoid, reduce, mitigate, and monitor for potential impacts on the resources discussed in the Final Environmental Impact Statement for the Vineyard Wind 1 Project. Vineyard Wind will comply with these measures in addition to mitigation and monitoring measures listed under 40 Code of Federal Regulation § 1505.3. The PAM System contemplated in this RFP is one component of permit compliance for the Vineyard Wind 1 Project.

IV. BACKGROUND AND GOALS

The Vineyard Wind Offshore Wind Accelerator Program

As part of its selected bid in the first Massachusetts procurement for long-term energy contracts, Vineyard Wind committed to fund and otherwise support specific initiatives designed to maximize offshore wind industry development in Massachusetts and provide benefits to local Massachusetts communities. A central piece of these commitments was the establishment of a \$15 million Accelerator Program, which includes:

- (1) a \$10,000,000 Industry Initiative to accelerate the development of the offshore wind supply chain, businesses, and infrastructure in the Commonwealth by integrating existing and new Massachusetts businesses into the supply chain, and expanding offshore wind industry infrastructure and supply chain;
- (2) a \$2,000,000 Workforce Initiative to support recruiting, mentoring, and training of Massachusetts residents for careers in the Commonwealth's new offshore wind industry and to address key gaps and barriers in current offshore wind workforce development offerings in the Commonwealth; and
- (3) a \$3,000,000 Wind and Whales Initiative to develop and demonstrate innovative methods and technologies to enhance protections for marine mammals and support regional monitoring efforts as the Massachusetts and US offshore wind industry grows.

Vineyard Wind designated MassCEC to administer, manage, and oversee the Accelerator Program, and Vineyard Wind and MassCEC executed an agreement in September 2021 to guide the Accelerator Program.

Project Goals and Description

Through this RFP, MassCEC and Vineyard Wind seek to advance technologies that detect and localize the presence of NARWs and other marine mammals in near real-time and thereby reduce the risk of vessel strikes during the construction of offshore wind projects. The selected Applicant will have the chance to mobilize, deploy, and test a PAM System on the first commercial-scale offshore wind project in the US. By demonstrating the efficacy of the PAM System, the selected Applicant will be positioned to serve the broader US offshore wind market while supporting the commercialization of real-time PAM and data transmission system technology.

While the PAM System contemplated in this RFP is a component of permit compliance, the data collected are expected to be relevant for current and future offshore wind development in the New England region and will provide general information on the various anthropogenic and biological contributors to the local and regional acoustic environment (including the transit vessel itself). Proposals should also consider whether and how the PAM System might contribute to a general understanding of NARW and other mysticete behavioral ecology.

Scientific questions that are relevant to PAM data collection include, but are not limited to:

- What are the spatial and temporal distribution trends for NARWs and other marine mammals in the WDA, associated vessel transit lanes, and Lease Area OCS-A 0501 during the recording period?
- What is the approximate abundance of NARWs and other marine mammals within the recording zone of the PAM System at various times of the year?
- Can behavioral activity for certain species (e.g., NARW) at the time of detection be described based on vocalization characteristics?
- What are the monthly/annual biological contributors of sound?
- What are the monthly/annual anthropogenic contributors of sound (e.g., transiting vessel types, pile driving)?
- What are the monthly ambient sound levels in the recording area of the PAM System?
- What are the sound levels generated by the crew transfer vessels (“CTVs”) transiting to and from wind development areas?

To address these questions, the PAM System must have a minimum capability of detecting and storing low-frequency acoustic data (e.g., vessel noise and mysticete vocalizations). In addition to the passive acoustic data collection, the recording platform(s) may integrate complementary sensors relevant to answering the above questions. The PAM System must be capable of being deployed in varying locations on a relatively short timeframe.

V. Applicant and PAM System Eligibility

The Applicant may be a public or private academic or research institution, or a private organization, company or corporation. To be selected for an award under this RFP, the Applicant must apply for and successfully obtain a Qualification Certificate (as defined in Section VIII below) from Vineyard Wind. The qualification process involves demonstrating to the satisfaction of Vineyard Wind that the potential Applicant can meet legal, commercial, and technical specifications established by Vineyard Wind and can ultimately enter into a service agreement with Vineyard Wind to provide PAM System services. The qualification process includes entering into a **non-disclosure agreement (“NDA”)** with Vineyard Wind. This will provide the potential Applicant with access to technical and performance specifications as well as contractual documents, all of which are proprietary to Vineyard Wind.

Applicants may be a single entity or a team of co-Applicants. If submitting a joint application, the application must identify the lead Applicant. The lead Applicant will be the recipient of the MassCEC grant award, serve as the primary point of contact, and will be responsible for the overall administration of the award and the project. A co-Applicant could be an entity that has some form of joint control over the proposed supply and service and may be a major source of matching funds or provider of in-kind services or may be responsible for the implementation of key aspects of the project.

Joint applications must include a memorandum of understanding signed by the lead Applicant and all co-Applicants and include a description of the roles and responsibilities of each entity and describe the components of the proposed project that would be carried out by each party

and a description of the nature and status of any binding legal agreements setting forth the terms of the relationship between or among the lead Applicant and any co-Applicant(s).

To be considered for evaluation, the proposed PAM System must meet the following minimum criteria:

- the PAM System has a TRL of 4 or higher;¹
- the PAM System is sufficient to clear designated areas (e.g., vessel transit lanes) and, ideally, localize NARWs and other marine mammals in real-time; and
- the PAM System can be operational by May 2023.

Project Commitments. The selected Applicant will be expected to commit to and comply with the following requirements:

- Applicants must adhere to Vineyard Wind’s “Look Local First” commitment and utilize best efforts to localize project-related spending within the following geographic areas listed in order by ranked priority: (1) the Commonwealth of Massachusetts, (2) the northeastern US, and (3) elsewhere in the US. To the extent a selected Applicant is unable to localize project-related spending within the first-ranked geographic area, the selected Applicant should make best efforts to localize spending within the next-ranked geographic area, and so on.
- Applicants must demonstrate a significant commitment to anchoring the proposed business activities, equipment, and workforce in Massachusetts. Pursuant to contracts with MassCEC and Vineyard Wind, the selected Applicant will be required to be registered to do business in the Commonwealth.
- Vineyard Wind abides by [several business policies](#) including a Code of Business Conduct and Ethics. Applicants must be familiar, with and in compliance, with the Supplier Code of Ethics upon submission of the application.
- Upon execution of the agreements associated with an award pursuant to this RFP, the selected Applicant will provide MassCEC and Vineyard Wind with their anticipated sub-contracting and local resource and supply needs, including Jones Act and regulatory/health, safety, and environment-compliant vessels.
- Vineyard Wind is committed to diversity, equity, and inclusion (“DEI”) principles and to delivering significant economic benefits to the Commonwealth of Massachusetts. In line with these commitments, the company tracks and reports on certain labor and DEI metrics associated with all contracts with which the selected Applicant will have to comply. These labor and DEI reporting requirements are detailed in Attachment 2.

VI. Estimated Timeline

The following timeline is subject to change at MassCEC’s discretion.

¹ See <http://files.masscec.com/TECHNOLOGY%20READINESS%20LEVELS.pdf>.

RFP Release Date	November 1, 2022
Questions due to MassCEC	November 15, 2022
Questions with Answers Posted to MassCEC Website	November 30, 2022
Deadline for initiating the qualification process with Vineyard Wind	December 7, 2022
Proposals Due	December 21, 2022, 5:00 p.m. EST
Notification of Preferred Applicant(s) *	January 10, 2023
Contracting Completed *	February 10, 2023

** Dates after the proposal due date are anticipated.*

VII. Scope of Work and Performance Specifications

A real-time, rapidly deployable PAM System is required to monitor for NARWs to clear transit corridors used by CTVs and when Dynamic Management Areas (“DMAs”) or Slow Zones are established by the National Marine Fisheries Service (“NMFS”). During the Vineyard Wind 1 Project’s construction phase, the PAM System is likely to be in operation from at least October 1, 2023, through May 31, 2024. The PAM System will be deployed on an as-needed basis when established DMAs or Slow Zones overlap with the Project’s transit vessel corridor. The use of PAM for transit vessel corridors during the operations and maintenance phase will be defined at a later date based on the outcome of construction phase monitoring efforts.

During the Project’s construction phase, only one transit route from the port to the WDA will be used at a time. However, the location of the transit vessel corridor may vary, therefore, mobile platforms are preferred. For the purpose of this RFP, the Port of New Bedford should be assumed as the starting/docking point for transit to the WDA (see [Attachment 1](#)), a distance of approximately 40 nautical miles. Ideally, the PAM System will detect and localize NARWs in the general area, as opposed to simply confirming their presence or absence within a specific transit corridor or zone.

Phase 1 Scope – Establish and Validate the PAM System. The selected Applicant will perform all activities necessary to constitute a fully functional PAM System and validate the functionality and performance of the PAM System. This Phase 1 shall include:

- Identification and procurement of all necessary equipment;
- Integration of all components into an operational PAM System;
- Establishment of procedures for deployment, operation and retrieval of the PAM system;
- Conducting an ocean-based trial of the PAM System deployment, operation and retrieval; and

- Analysis and reporting of results of the ocean trial.

Phase 1 activities will be funded and performed under a grant agreement between MassCEC and the selected Applicant.

System Capabilities. The PAM System must have a minimum capability of detecting and storing low-frequency acoustic data (e.g., vessel noise and mysticete vocalizations). In addition to the passive acoustic data collection, the PAM System may integrate complementary sensors relevant to answering the scientific questions listed in Section V of this RFP. Underwater acoustic monitoring must follow standardized (ANSI/ISO) measurement, processing methods, visualization metrics, and NMFS's recommendations for marine mammal detections as summarized in Attachment 3.

Applicants must address the following PAM equipment, non-acoustic sensor, and data collection requirements in their proposals:

- omnidirectional hydrophone(s);
- continuous duty cycle, if possible (if duty cycling is required, please describe how data acquisition will be affected);
- sampling rate(s) to adequately cover the full spectrum of mysticete vocalizations that may be detected along a transit corridor as well as sounds from other natural biotic (fishes and invertebrates), abiotic (e.g., weather), and anthropogenic sources (e.g., vessels, pile driving)
- conductivity, temperature, depth; and
- dissolved oxygen.

Additional proposed sensors or equipment may be considered where a technical case for inclusion is presented.

Active acoustic sensors are outside the scope of this RFP.

The proposed PAM System technology should be configured to prevent the entanglement of marine fauna and to limit the extent to which deployment/retrieval vessels are used. Mobile PAM Systems must be equipped with sensors to prevent collision with other vessels operating in the vicinity of the PAM System. The selected Applicant will also be responsible for ensuring US Coast Guard District Local Notices to Mariners are communicated and updated with each deployment.

Proposals shall include a plan for the deployment of the minimum number of PAM systems/units required for real-time localization capability to fulfil the objective of localizing NARWs to provide advanced warning of their presence in the transit corridor. Sufficient consideration for spare systems is expected in proposals.

Successful proposals will have the following capabilities:

- easily and rapidly deployable within 48 hours;
- capable of operating 24 hours per day for several weeks at a time;

- capable of autonomous operation after deployment (i.e., an offshore crew is not required to operate the PAM System);
- able to provide data in real-time to a lead Protected Species Observer (“PSO”) and/or vessel captain once deployed;
- can detect NARWs within transit routes or designated project areas; and
- ideally, able to localize NARWs in real-time, regardless of their location relative to the area being cleared.

Phase 2 Scope – Provide PAM System Services for Vineyard Wind 1 Installation Campaign. In Phase 2, the successful Applicant will utilize the PAM System to provide real-time whale detection services to Vineyard Wind for vessels transiting from New Bedford, MA to the Vineyard Wind 1 Project area during the period of approximately October 2023 through May 2024 (the “Transit PAM Services Period”). This Phase 2 shall include:

- Prepare a draft PAM Plan as detailed below;
- Maintain communications with Vineyard Wind throughout the Transit PAM Services Period regarding needs for deployment, retrieval and/or relocation of the PAM Systems;
- Maintain the PAM System to be available for deployment upon notice from Vineyard Wind;
- Manage all aspects of PAM System deployment, retrieval and/or relocation;
- Manage all aspects of PAM System reporting in real-time to Vineyard Wind vessels during deployment; and
- Prepare an analysis and assessment of the functionality and performance of the PAM System during Phase 2.

These services will be funded under the MassCEC grant agreement but will be performed under a separate services agreement between the applicant and Vineyard Wind. MassCEC grant payments for Phase 2 activities will be contingent upon receipt of written notification from Vineyard Wind that the Applicant has performed its work to Vineyard Wind’s satisfaction

PAM Plan. Applicants should note that Vineyard Wind is required to submit a PAM Plan to BOEM before PAM System deployment. The PAM Plan must receive written concurrence from the Department of the Interior prior to the commencement of the work. Therefore, as part of Phase 2 and assuming the start date for PAM System deployment is October 1, 2023, the selected Applicant shall draft and provide a copy of the PAM Plan for review by Vineyard Wind on, or before, May 1, 2023. Work to complete this task shall be accounted for in the Applicant’s proposal.

The PAM Plan must describe all proposed PAM equipment, deployment procedures, and protocols. It should also include descriptions of the proposed data processing, analysis, deliverables/reports, and data sharing and archive plans. Data must remain accessible to regulatory agencies upon request, for the duration of Vineyard Wind’s lease agreement with BOEM for Lease Area OCS-A 0501. Additionally, established and publicly available protocols on how a species is determined present for the specific PAM equipment and software must be documented in the PAM Plan. The PAM Plan should provide clear documentation of the efficacy

of their detection capabilities and classification software for the specific signals of interest as per NMFS requirements.

VIII. How to Apply

To respond to this RFP, submit your proposal via email to the MassCEC Offshore Wind Team, at OffshoreWind@masscec.com. The words “**Response to RFP OSW-2022-05**” must appear in the email subject line. The proposal must be in electronic PDF file formatting, preferably no more than two (2) files, and be accompanied by a separate cost estimate in an Excel spreadsheet format. Applications should be concise, well organized, and address each of the elements outlined below.

*Notice to Applicants:
DO NOT submit confidential information pertaining to your business.*

The proposal must include the following elements:

Frontpage/Applicant Information. Provide a frontpage that includes the following information:

- Applicant name and address – company or organization;
- Partner names – company or organization;
- MassCEC RFP number (from the cover page of this RFP);
- Project Title
- Date submitted to MassCEC;
- Applicant contact person(s) – name, telephone, and e-mail; and
- Budget summary

Proposal Summary (one [1] page). Applicants should a brief background of their organization, a summary description of the proposed PAM System, and their proposed approach for deployment on the Vineyard Wind 1 Project.

Signature and Acceptance Form. Each Application must submit a signed Authorized Applicant’s Signature and Acceptance Form, which is found as Attachment 4 to this RFP.

NOTICE: All Applicants must initiate the Qualification Process with Vineyard Wind no later than the date shown in Section VI – Estimated Timeline.

Qualification Certificate. Provide a statement indicating that the Applicant has applied for a certificate (the “Qualification Certificate”) to be provided by Vineyard Wind demonstrating that, in the opinion of Vineyard Wind, the Applicant has the financial capacity and managerial and technical expertise to complete all tasks associated with Phase 1 and Phase 2. Applicants may initiate the process of obtaining a Qualification Certificate by contacting the Vineyard Wind Contact identified in Section XI of this RFP. Vineyard Wind will communicate with MassCEC as to whether or not the Applicant has applied-for and received a Qualification Certificate during the application review process detailed in Section IX of this RFP.

Statement of Qualifications and Experience (two [2] pages). Provide a description of the Applicant and any co-Applicant(s) or partner(s) and a statement of qualifications and experience to the services being provided, including the following:

- Provide a brief description of the Applicant and any partner organization(s) for the proposed services. Include types of services provided, date founded, history, number of employees, and location for providing services to MassCEC.
- Describe the overall qualifications and experience of the Applicant and all partners, including experience in ocean and nearshore waters in the vicinity of the MA WEA. Explain why the Applicant or team is well qualified to provide the proposed services. Include examples of related past work. Responses may include **appendices** with relevant supplemental material.
- List each team member on the project along with their role, qualifications, and geographic location. For key personnel, provide one-page resumes (as appendices) that include the following:
 - the institution and date of graduation for all academic degrees and a brief description of relevant work experience;
 - relevant organization certifications or qualifications; and
 - a list of successfully completed or in-progress projects of a similar nature.

Objectives and Technical Scope (up to three [3] pages). Applicants are required to provide the following information as part of their proposal:

- Clear and concise objectives along with expected project outcomes.
- A detailed description of the proposed PAM System technology.
- Clearly and concisely defined project tasks.
- Proposed improvements to existing PAM technology and the scientific/technical approach to achieving that advancement.
- How the proposed PAM System technology and deployment design meet the specific goals of this RFP.
- Proposed ocean validation procedures (Phase 1).
- Proposed PAM System operational procedures (Phase 2).
- A detailed maintenance plan and schedule.

Applicants should also indicate the most practicable response time for correcting a system failure, targeting no more than 24 hours.

Technical Feasibility (up to three [3] pages). Applicants must clearly demonstrate how their proposed PAM System will accurately localize NARWs in an offshore wind environment. This should include an evidence-based description of the proposed PAM System technology's capabilities and a description of how the Applicant plans to achieve the technology goals.

Applicants must also provide an assessment of the technical risks associated with the proposed PAM System technology and associated mitigation strategies. In addition, Applicants should identify any technological limitations that directly hinder the ability to detect and localize

NARW vocalizations and discuss relevant, alternative technologies or methodologies that could be considered. For all technologies, a TRL of 4 or higher is preferred.

For real-time marine mammal alert systems, the focus should be on the identification of acoustic detections to species level, especially NARW. Applicants must clearly describe how data relayed in real-time will be processed and analyzed to confirm species. Quality assurance of species identification during a post-processing stage is a requirement of this RFP and Applicants should specify the potential rate of false positives. Proposed automated detector systems are preferred, with NMFS requirements including comprehensively tested PAM software detector(s) for which performance is documented and the performance metrics are publicly available for external evaluation. In addition to any software detector(s) used, some level of visual confirmation by an acoustic expert is essential for quality assurance, to improve accuracy and minimize error in reported detections.

Proposals will need to include a data management and archive plan that enables future public access to multiple data streams (i.e., from various sensors on the real-time PAM system). A public access data portal option may be included in proposals for consideration.

In addition to the PAM System technology description, proposals must describe the vessel equipment required for PAM System deployment and include pricing for a local fishing vessel capable of deployment in the event Vineyard Wind does not have an appropriately geared vessel available. As per the COP Approval Terms & Conditions for the Project, all vessels will be required to have both an automatic identification system and a very high-frequency radio on board.

Project Schedule (one [1] page). Applicants are required to submit a schedule that delineates completion dates for the major project tasks that align with the relevant aspects of and requirements for the Vineyard Wind 1 Project's construction (see Table 1). The Applicant must also demonstrate that ample resources exist to meet the proposed schedule. Applicants should note that PAM System deployment will occur in advance of CTV transit.

Table 1 Requirements for CTV Transit during the Construction Phase

Time of Year	CTVs Inside Dynamic Management Areas	CTVs Outside Dynamic Management Areas
November 1, 2023 – May 14, 2024	Minimum two Visual Observers AND clearance of the transit route and WDA for two (2) consecutive days prior to transit , as confirmed by: <ul style="list-style-type: none"> vessel-based surveys conducted during daylight hours and real-time PAM, OR aerial survey 	Minimum of one Visual Observer AND simultaneous real-time PAM is conducted along the transit route
May 15, 2023 – October 31, 2023	Same requirements as November 1 – May 14	Minimum of one Visual Observer

Cost Estimate. Cost estimates should be provided for one PAM System and should include a cost breakdown for each proposal task along with the expected duration of the task. Cost estimates must be submitted in an Excel spreadsheet format.

Reporting Requirements (one [1] page). Applicants are required to describe how the project team will facilitate communication of real-time detections of Endangered Species Act-listed species, especially NARW, in near real-time to designated Vineyard Wind staff, a third-party PSO observer, and/or vessel captains on transiting CTVs and, potentially, other Project vessels. Vineyard Wind must report any sighting information to the NMFS NARW Sighting Advisory System, to the US Coast Guard, and through the WhaleAlert app. Applicants should therefore describe how their proposed methods will enable this reporting

Vineyard Wind is required to submit results from all PAM to regulatory agencies. Proposals should therefore also outline the deliverables available to Vineyard Wind and the timing of deliverable sharing after the data is collected. This will enable an assessment of suitability for regulatory reporting.

At the completion of the Vineyard Wind I Project's construction phase, Applicant shall submit reporting materials to MassCEC and Vineyard Wind that clearly outline how the monitoring conducted during the construction phase will inform the transit zone monitoring approach taken during the operations and maintenance phase.

Health, Safety, and Environmental Policy (one [1] page). Applicants must provide evidence of Health, Safety, and Environmental ("HSE") management systems and policies. Vineyard Wind is a member of ISNetWorld ("ISN"), an online contractor and supplier management platform. If Applicants are registered with ISN, they may provide HSSE materials through this system and contractors will be pre-qualified for the RFP through a review of the ISN scorecard. If Applicants are not registered with ISN, HSSE statistics and evidence of quality assurance/quality control processes may be provided in the proposal documents.

Applicants should demonstrate familiarity with and ensure proposals meet all environmental survey project regulatory compliance. A summary of conditions is provided in Attachment 5 for reference during proposal preparation.

Quality Assurance/Quality Control (one [1] page). The selected Applicant shall undertake quality assurance efforts to reduce the risk of HSE incidents before and during equipment deployment and turnover, and operations. Such measures include, but are not limited to, notification of nearby mariners operating in the vicinity of the PAM System equipment prior to and during its use. Applicants must include in their proposals a substantive discussion of proposed measures to provide evidence of quality management systems and/or assurance processes for field studies, data processing, and reporting.

Statement on Diversity, Equity, and Inclusion; Environmental Justice (one [1] page). Please provide a brief summary of your organization's commitment to DEI and/or environmental justice ("EJ") principles. If available, please provide or link to any relevant materials (e.g., organization guidance documents, mission/vision statements, etc.). Applicants may also include

brief examples of initiatives, projects, or other work in which the lead Applicant and/or partners have demonstrated a clear commitment to advancing DEI and/or EJ principles.

References. Provide references for at least three (3) clients of the Applicant, preferably those for which Applicant has provided services on matters related to the requested services. Include a contact person, email address, and phone number for each reference.

IX. Selection Criteria

All proposals will be reviewed together after the submission date specified in Section VII. There will be two phases of review: threshold review and technical and merit review. In the threshold review, MassCEC will review all applications for completeness, applicant and project eligibility, conformance with award targets, and general clarity and credibility. MassCEC staff may contact applicants to request supplemental information prior to technical and merit review. MassCEC reserves the right to accept, reject, or place applications on hold based on the threshold review.

During the technical and merit reviews, MassCEC and Vineyard Wind will evaluate each proposal that passes the threshold review according to the selection criteria presented below. MassCEC staff may contact Applicants to request supplemental information prior to formal review. MassCEC may also request an interview with applicants. All proposals submitted in response to this RFP that satisfy the threshold review will be reviewed based on the following criteria:

Criteria	Description
Project Summary and Scope	<ul style="list-style-type: none"> • The extent to which the proposal presents a clear strategy and work plan for undertaking the activities necessary to complete the Scope of Work. • The extent to which the proposed timeline aligns with the stated Project Schedule. • The extent to which the proposal anchors key business and activities and delivers economic and/or workforce benefits to the Commonwealth of Massachusetts.
Project Viability and Risks	<ul style="list-style-type: none"> • The extent to which the proposed PAM System technology meets or exceeds the minimum criteria. • The proposed PAM System technology's capabilities and ability to effectively monitor for NARWs to clear transit corridors in real-time. • Project and technology readiness, including feasibility, schedule, and financing.

Criteria	Description
Team Experience and Qualifications	<ul style="list-style-type: none"> • Applicant's and team members' experience and demonstrated ability to deliver high-quality work for relevant projects of similar complexity as described in this RFP. • Level and type of experience in ocean and nearshore waters in the vicinity of the MA WEA.
Budget	<ul style="list-style-type: none"> • The extent to which the requested information is provided in a complete and clear manner. • The extent to which the Applicant has a demonstrated need for grant funds. • The extent to which the Applicant demonstrates a cost-efficient approach to the proposed tasks and completion of the project at a reasonable cost. • The amount of the cost share, if any.
Commitment to DEI and EJ Principles	<ul style="list-style-type: none"> • The extent to which the Applicant and team members demonstrate a genuine and proactive commitment to DEI and EJ principles, through project execution, as appropriate, and hiring as well as internally within their organizations.

X. Budget and Cost Share Requirements

MassCEC and Vineyard Wind have allocated up to One Million Five Hundred Thousand Dollars (\$1,500,000) for this RFP. This dollar amount is intended to support development (Phase 1) and deployment (Phase 2) of PAM hydrophone arrays sufficient to monitor a vessel transit corridor in advance of and during vessel activity, remote PAM operator(s), real-time reporting software with client interface, deployment vessel, licensing fees, in-field and online technical support, and contingency.

Proposals are not required to demonstrate a commitment to cost-sharing; however, commitments to cost-sharing will be evaluated favorably.

XI. Contact Information for Questions

The MassCEC contact person for this RFP is:

Jess Hiltz, Program Administrator
 Massachusetts Clean Energy Center
 294 Washington Street, Suite 1150
 Boston, MA 02108
 Office: 857-415-6088
jhiltz@masscec.com

Potential Applicants may submit **questions** regarding this grant opportunity by email to the MassCEC RFP Manager by the date stated in Section VI above. Potential Applicants should review this RFP in its entirety. The words: “Question – RFP OSW-2022-05” must appear in the email subject line.

XII. General Request for Proposals Conditions

Notice of Public Disclosure

As a public entity, MassCEC is subject to Massachusetts’ Public Records Law, codified at Chapter 66 of the Massachusetts General Laws (“Public Records Law”). Applicant acknowledges and agrees that any documentary material, data, or other information submitted to MassCEC is presumed to be public records. An exemption to the Public Records Law may apply to certain records, including materials that fall under certain categories under a statutory or common law exemption, including the limited exemption at Massachusetts General Laws Chapter 23J, Section 2(k) regarding certain types of confidential information submitted to MassCEC by an Applicant for any form of assistance. Applicant acknowledges and agrees that MassCEC, in its sole discretion, shall determine whether any particular document, material, data, or other information is exempt from or subject to public disclosure. Thus, MassCEC urges applicant to carefully consider what documents, materials, data, and other information is submitted to MassCEC in connection with this RFP.

Disclaimer & Waiver Authority

This RFP does not commit MassCEC to award any funds, pay any costs incurred in preparing an application, or procure or contract for services or supplies. MassCEC reserves the right to accept or reject any or all applications received, waive minor irregularities in submittal requirements, modify the anticipated timeline, request modification of the application, negotiate with all qualified Applicants, cancel, or modify the RFP in part or in its entirety, or change the application guidelines, when it is in MassCEC’s best interests.

This RFP has been distributed electronically using MassCEC’s website. It is the responsibility of Applicants to check the website for any addenda or modifications to an RFP to which they intend to respond. MassCEC accepts no liability and will provide no accommodation to Applicants who submit an application based on an out-of-date RFP document.

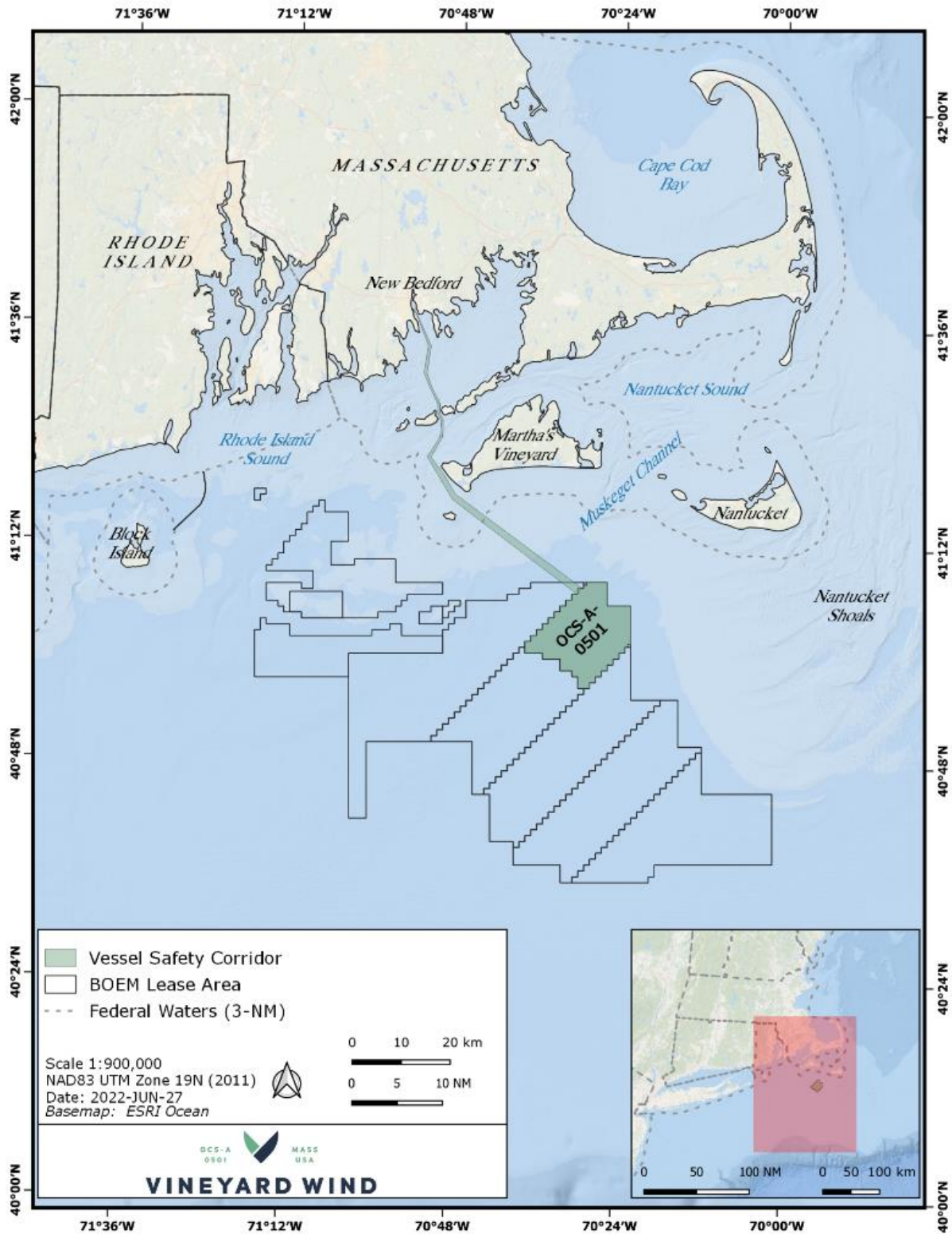
MassCEC Contract Requirements

Following a collaborative proposal evaluation and selection process between MassCEC and Vineyard Wind, MassCEC and the awarded Applicant will execute a Grant Agreement, in a format substantially similar to the Sample Agreement attached to this RFP as Attachment 7, which will set forth the respective roles and responsibilities of the parties. The template contract is provided separately.

Negotiation of Service Agreement(s) with Vineyard Wind

The selected Applicant will finalize negotiations and contract terms with Vineyard Wind through a service agreement for services during the construction phase of the Vineyard Wind 1 Project. Based upon the success of the construction phase deployment, Vineyard Wind, at its sole discretion, may request the Applicant to provide additional services during the Vineyard Wind 1 Project's operations and maintenance phase. Applicant and Vineyard Wind shall execute a second service agreement for this phase of the Vineyard Wind 1 Project.

Attachment 1: Lease Area OCS-A 0501 and Vessel Transit Corridor



Attachment 2: Labor and DEI Reporting Requirements

Prime contractor and supplier payroll and expenditures

- Address of headquarters
- Location where majority of work was performed
- For each person working on this project (including admin. and back-office support):
 - Hours devoted to this project
 - Hourly wage (for measuring induced impacts)
 - Occupation/role on project
 - Whether they have worked on another offshore wind project (yes/no)
 - Primary residency or zip code
 - Race, ethnicity, Tribal/First Nation affiliation, and gender (if provided by the employee)
- Is a woman-owned business* (as defined by the US Small Business Administration)
- Is a minority-owned business* (as defined by the Commonwealth of Massachusetts)
- Is a veteran-owned business
- Does the business have a DEI Plan?

All sub-contractor and suppliers' payroll and expenditures

- Address of headquarters
- Location where majority of work was performed
- For each person working on this project (including admin. and back-office support):
 - Hours devoted to this project
 - Hourly wage (for measuring induced impacts)
 - Occupation/role on project
 - Whether they have worked on another offshore wind project (yes/no)
 - Primary residency or zip code
 - Race, ethnicity, tribal/First Nation affiliation, and gender (if provided by the employee)
- Is a woman-owned business*
- Is a minority-owned business*
- Is a Veteran-owned business*
- Does the business have a DEI Plan?
- Names and locations of all component suppliers (Tier 2 or Tier 3 goods and material suppliers)

* Commonwealth of Massachusetts definitions for various business entities may be found here: [General Law - Part I, Title II, Chapter 7, Section 58 \(malegislature.gov\)](https://malegislature.gov/General-Law-Part-I-Title-II-Chapter-7-Section-58)

Attachment 3: NMFS Requirements - Marine Mammal Acoustic Detections

Equipment

- Proposed PAM Systems may be fixed, bottom-mounted archival recorders OR bottom-mounted/anchored acoustic recorders with real-time data relay capability OR mobile platforms with real-time data relay capability.
- If a surface expression is proposed with the PAM devices, a Private Aid to Navigation is required.
- Calibrated hydrophones and related hardware
- Low self-noise on hardware and mooring system
- Optimization for frequency bandwidths of interest to ensure recording of the following (at a minimum):
 - Low-frequency cetaceans
 - Sperm whales
 - Harbor porpoise
 - Vessel traffic
 - Pile driving
- A minimum of three omnidirectional hydrophones with placement enabling localization
- Duty cycling to maximize recording

PAM Data Processing

PAM data analyses for species presence should occur through either:

- a) visual processing of data by an acoustic expert familiar with the call types of the species of interest, or
- b) by comprehensively tested PAM software detector(s) for which performance has been documented and the performance metrics are publicly available for outside evaluation and have been reviewed and deemed acceptable by a panel or group of experts.

PAM Data Archiving

Raw acoustic recordings and associated metadata.

Derived analytical products, such as the software program used and evaluation of efficacy of species detection, number of hourly or daily species detections, sound source levels, and other relevant measured sound parameters.

PAM Scientist Requirements

A PAM expert is defined as a scientist who has six months or more of experience working with the call types of the species of interest, who can distinguish between confounding sounds ([Kowarski et al. 2020](#)), and who has experience working with the relevant detection software.

Attachment 4: Project Regulatory Compliance Summary

The selected Applicant will be required to familiarize appropriate team members with the Vineyard Wind 1 Project's permit conditions prior to PAM System deployment.

Project Documentation (to be provided with upon award)

Relevant Vineyard Wind 1 Project permits:

- COP Approval Terms & Conditions
- Section 106 Memorandum of Agreement
- Army Core of Engineers Section 10/404 Rivers and Harbors
- Biological Opinion

Atlantic Reference Guide (species identification)

Communication Protocol

Visual Observer/Trained Lookout Log

Bureau of Safety and Environmental Enforcement-approved material regarding NARW Seasonal Management Areas, sightings information, and reporting.

Vineyard Wind induction training slide deck

Attachment 5: Authorized Applicant's Signature and Acceptance Form

Real-time Passive Acoustic Monitoring System for Vessel Transit (the "RFP")

RFP OSW-2022-05

The undersigned is a duly authorized representative of the Applicant named below. The undersigned has read and understands the RFP requirements and acknowledges and confirms that the Applicant and each member of its team has read and understands the RFP Requirements. The undersigned acknowledges and agrees that all of the terms and conditions of the RFP are mandatory.

The undersigned and each Applicant and each member of its team acknowledges and agrees that (i) all materials submitted as part of the application are subject to disclosure under the Massachusetts Public Records Law, as explained in the RFP; (ii) that the Massachusetts Clean Energy Technology Center ("MassCEC") has no obligation, and retains the sole discretion to fund or choose not to fund the application set forth herein; and (iii) that MassCEC's receipt of the application does not imply any promise of funding at any time.

The undersigned and each member of the Applicant's team understands that, if the Application is selected by MassCEC pursuant to this RFP, the Applicant will execute and deliver an agreement to be provided by MassCEC that shall set forth the terms and conditions, together the respective roles and responsibilities of the Applicant, and each member of its team, and MassCEC, with respect to the project described in the RFP.

I certify that the statements made in this Application, including all attachments and exhibits, are true and correct.

Applicant: _____
(Printed Name of Applicant Company or Organization)

By: _____
(Signature of Applicant or Authorized Representative)

Name: _____

Title: _____

Date: _____

Attachment 6: Tasks, Deliverables, Schedule and MassCEC Payments

MassCEC will provide this Attachment in Word format.

Task Number	Task Name	Milestone/Deliverable	Completion Date	MassCEC Payment Amount
1.	Just the name here; description will be elsewhere.		_____	\$_____
2.			_____	\$_____
3.		<i>For substantial reports, include a draft report, one month for MassCEC review/comment, and a final report.</i>	_____	\$_____
4.	Periodic Reporting	Periodic Report 01 Periodic Report 02 Periodic Report 03 <i>E.g. quarterly or semi-annual.</i>	_____ _____ _____ _____	<i>Payments could be linked to these reports, or other deliverables, or both.</i>
5.				
			Total	\$_____

Attachment 7: Sample Agreement

MassCEC will provide this Attachment in Word format.