**Response to MassCEC Request for Information:**

**Testing and Validation Assets for Ocean Renewable Energy**

Please refer to the Massachusetts Clean Energy Center’s (MassCEC) Request for Information Testing and Validation Assets for Ocean Renewable Energy (RFI OSW-2023-09) before completing this form. Please submit an electronic file of your response in PDF format by Friday, February 9, 2024 at 4:00 pm to offshorewind@masscec.com with the subject line: Testing and Validation Assets for Ocean Renewable Energy.

**Name:**

**Organization:**

**Email address:**

**Website:**

***RESPONSE PART* A. Answer for use cases involving testing activities for your company or organization**

1. What types of equipment, systems, or processes will your company or organization need to test?
2. What types of testing and validation activities will your company or organization conduct on the equipment described above?
3. For what purposes will your company or organization use results of those tests and validation activities?
4. Is accreditation of the test facility required for your purposes?
	1. **If yes**: To what standard is your company or organization held?
5. What types of equipment are necessary to run those tests?
6. What pieces of equipment would your company or organization typically provide for use in the testing campaign?
7. How frequently would your company or organization run the tests?
8. How long is a typical testing campaign or validation cycle?
9. What is your company or organization doing now to test and validate your company’s, organization’s, or vendor’s equipment?

**If your company or organization is currently testing equipment or processes or ACTIVELY planning FOR SUCH TESTS, please respond to the following questions:**

1. In what facilities is the testing being performed? Location?
2. Who is running the testing and validation process (e.g., your own staff, an outside contractor, testing center staff)?
3. Is the facility accredited?
	1. **IF YES:** To which standards?
4. How much does your company or organization pay for these testing and validation services in a typical year?
5. In the past two years, have you experienced difficulties in meeting your company’s testing and product validation needs due to any of the following reasons: [Please indicate YES or NO at the end of items a – c below.]
	1. Appropriate testing facilities were not available in the timeframe required.
	2. Appropriate testing facilities were available, but not accessible due to transportation and other locational issues.
	3. Appropriate testing facilities were available, but the facility fees were too high.
6. **[IF YOU ANSWERED YES TO 14a, 14b, OR 14c:]** What types of equipment or processes were you seeking to test?
7. How would access to an offshore testing and validation site(s) improve your company’s or organization’s prospects for success in achieving your broader mission and business goals?

## ***Response Part* B. Answer for use cases involving sale or provision of testing services to other organizations**

1. What types of organizations will purchase or otherwise use the testing services your organization would provide using the offshore test platform?
2. What types of testing and validation services will your company or organization offer?
3. What types of equipment is required to provide your company or organization’s testing and validation services?
4. Is your company or organization currently offering these testing and validation services?
5. How long does a typical test and validation campaign run? What is the frequency of testing offered?
6. How would access to an offshore testing and validation site improve your company’s or organization’s testing and validation services?

**If your company or organization is currently offering these testing and validation services, please respond to the following questions:**

1. In what facilities is the testing or validation being performed? Location?
2. Who is running the testing and validation process (e.g., your own staff, an outside contractor, testing center staff)
	1. Is the facility accredited?
		1. **IF YES:** To which standards?
	2. How much does your company or organization charge for these testing and validation services in a typical year? Please be as specific as possible, including fixed fee or price per test, set up fees, etc.

## ***Response Part* C. Platform characteristics, location, and willingness to pay (answer for all use cases)**

This RFI is also seeking information on potential locations, desired characteristics, and willingness to pay for potential testing site(s) and assets in state waters. MassCEC has defined the following base-level characteristics:

* Location in state waters (preferred) or, if not feasible or adequate, in federal waters, that would be available to qualified entities to deploy and/or operate technologies for the purposes of testing, calibrating and validating in representative environments
* Need to avoid and minimize any potential adverse effects on existing resources and uses
* Access and proximity to existing port infrastructure
1. Based on your company’s or organization’s functional testing and validation requirements, what asset and site characteristics are necessary for ORE testing and validation?
2. Are there any unique natural conditions required for testing such as depth, current, or wind?
3. Does your company or organization prefer a specific port from which to access the testing and validation assets? Why is it a preferred port’s geographic location?
	1. Are there specific port characteristics and assets that are required? (i.e., berth space, depth, laydown, cranes or lifts etc.)
4. Is there an optimal or desired distance from shore for your intended uses?
5. Are anchors and moorings needed (either at the asset location or in the vicinity) for the range of use cases under consideration?
	1. **IF YES:** For what specific purposes and at what locations?
	2. **IF YES:** How many anchors and/or moorings are needed?
	3. **IF YES:** What size, scale, and materials are needed?
6. Would a barge that could be moored at the site or stand-alone buoys/moorings add value for the range of use cases under consideration?
	1. **IF YES:** For what specific purposes?
7. What provisions for on-site power generation and supply would be useful? Would connection to onshore electric transmission or distribution grid add value for the range of use cases under consideration?
8. What on-site reference data collection would be useful, e.g., wind, wave, current, oceanographic conditions?
9. Would a LIDAR buoy or similar measurement device be useful?

* 1. **IF YES:** For what specific applications?
1. Are there testing and validation site or asset attributes that have not been mentioned in this RFI that would significantly affect its value to your organization or to MassCEC’s broader mission to support the development of ORE industries in the Commonwealth?
	1. **IF YES:** Please list those attributes.
2. Would your company or organization be willing to pay to use an offshore testing and validation site assuming it included the features you require for your testing needs?
	1. **If yes**: Would your organization need to raise funds from external sources, such as government research grants, to pay for use of the testing site?
	2. **If yes**: Based on your experience, what would you expect to pay for access to the offshore testing and validation site for a typical test or testing campaign?
	3. **If no,** why not?