



## Understanding the R&D and Testing Needs of Future PacWave Clients and Marine Energy Stakeholders

This request for information (RFI) solicits feedback from wave energy converter (WEC) technology developers and marine energy stakeholders on how the PacWave facility can best support the development of WEC technologies.

The **PacWave** and **Pacific Marine Energy Center (PMEC)** teams will use responses to this RFI for strategic planning to help ensure testing opportunities align with industry needs and that PacWave's capabilities are developed to meet testing support needs. Information we receive in response to this RFI will *not* be published or distributed publicly and will be used for internal planning purposes only.

To start with we ask some general questions and then, if you are developing a technology, we will ask you about potential testing plans at PacWave in the 3-5 year and 6+ year timeframes, and we end with some funding/financing questions.

Please provide feedback on as many of the following questions as possible. If you have any feedback that is not specifically requested, please provide your feedback with your RFI responses.

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### Section 1

#### Q1.1 Company information:

Your Name \_\_\_\_\_  
Position/Title \_\_\_\_\_  
Company/affiliation \_\_\_\_\_

#### Q1.2 Please briefly describe your relationship to the wave energy converter (WEC) industry (e.g., developer, community stakeholder, researcher).

#### Q1.3 What type of tests should PacWave support in the near term (3–5 years) to best support the development of the wave energy converter industry, marine energy industry, and the blue economy?

**Q1.4** What type of tests should PacWave support in the long term (6+ years) to best support the development of the wave energy converter industry, marine energy industry, and the blue economy?

**Q1.5** Are there additional capabilities or support infrastructure you would like to see PacWave and P MEC provide that have not been described in the PacWave RFI?

*Examples could include vessel availability and access; access to anchors and mooring systems; permanent anchor systems; barge for on-site system and component testing; engineering support; and deployment, operations, recovery, and decommissioning support.*

**Q1.6** What information does PacWave need to make publicly available to support the development of projects at PacWave?

**Q1.7** What type of support would you like to see P MEC, U.S. marine renewable energy centers, or universities provide to PacWave testing projects?

**Q1.8** What type of support would you like to see U.S. national laboratories provide to PacWave testing projects?

**Q1.9 What types of workshops should PacWave hold to educate the WEC industry and other stakeholders on PacWave and its capabilities?**

**Q1.10 Beyond testing WEC technologies, what R&D and testing could be performed at PacWave to support the development of WEC technologies, the marine energy industry, and the blue economy?**

**Q1.11 How important is it that testing performed at PacWave is accredited to IEC, IEEE, ABS, DNV-GL or other relevant third-party standards?**

- Extremely important
- Very important
- Moderately important
- Slightly important
- Not at all important

**Q1.12 Please provide any other feedback you have regarding PacWave.**

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## Section 2

The following questions are targeted toward individuals, universities, and companies developing WEC technologies.

**Q2.1 Are you developing a WEC system or related technology?**

- Yes
- No

**Q2.2** Please provide a high-level description of your systems and the intended market(s).

**Q2.3** Do you plan on testing at PacWave in the next \_\_\_\_\_ years? Select all that apply.

- 3-5 years *if checked, fill in Section 3*
- 6-10 years *if checked, fill in Section 4*
- Other / Don't know *if checked, fill in Section 5*

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**Section 3 – Fill in if you plan to test at PacWave in the next 3-5 years**

**Q3.1** Describe the type of test(s) you would like to perform in the next 3–5 years.

**Q3.2** What are the measurements that you plan to make?

*Examples include power performance, structural and drivetrain loads, and power quality.*

**Q3.3** What do the tests need to achieve or demonstrate?

**Q3.4 At what rated capacity, physical size, or annual average power output do you anticipate needing to test your technology?**

**Q3.5 Do your testing requirements include specific testing durations and/or particular sea states (e.g., summer, winter, or year-round testing)?**

**Q3.6 As described in the PacWave RFI, will PacWave provide all the testing support you need? If not, what further testing support will you need?**

**Q3.7 How much do you anticipate it will cost to perform the tests you would like to perform?**

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**Section 4 – Fill in if you plan to test at PacWave in the next 6-10 years**

**Q4.1 Describe the type of test(s) you would like to perform in the next 6-10 years.**

**Q4.2 What are the measurements that you plan to make?**

*Examples include power performance, structural and drivetrain loads, and power quality.*

**Q4.3 What do the tests need to achieve or demonstrate?**

**Q4.4 At what rated capacity, physical size, or annual average power output do you anticipate needing to test your technology?**

**Q4.5 Do your testing requirements include specific testing durations and/or particular sea states (e.g., summer, winter, or year-round testing)?**

**Q4.6 As described in the PacWave RFI, will PacWave provide all the testing support you need? If not, what further testing support will you need?**

**Q4.7** How much do you anticipate it will cost to perform the tests you would like to perform?

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Section 5 – Fill in if you plan to test at PacWave but are unsure when

**Q5.1** Describe the type of test(s) you would like to perform even if you are unsure if or when you might test at PacWave.

**Q5.2** What are the measurements that you plan to make?

*Examples include power performance, structural and drivetrain loads, and power quality.*

**Q5.3** What do the tests need to achieve or demonstrate?

**Q5.4** At what rated capacity, physical size, or annual average power output do you anticipate needing to test your technology?

**Q5.5** Do your testing requirements include specific testing durations and/or particular sea states (e.g., summer, winter, or year-round testing)?

**Q5.6** As described in the PacWave RFI, will PacWave provide all the testing support you need? If not, what further testing support will you need?

**Q5.7** How much do you anticipate it will cost to perform the tests you would like to perform?

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## Section 6

**Q6.1** Will/does your company have devices that could be tested at PacWave when the facility becomes operational in 2023?

*For example, will/do you have a device that was used in a previous test that would benefit from being retested at PacWave? If so, please describe the device and the type of testing you would like to perform using this device.*



**Q6.2 How do you anticipate your testing activities at PacWave, including device fabrication, will be funded?**

**Q6.3 If you anticipate costs will come from multiple sources, what are these sources, and what contributions do you anticipate from each source? Please provide as much information as you feel comfortable sharing.**

**END OF SURVEY**

The PacWave and PMEC teams would like to thank you for completing this survey.

We will use responses to this RFI for strategic planning to help ensure testing opportunities align with industry needs and that PacWave’s capabilities are developed to meet testing support needs. Information we receive in response to this RFI will not be published or distributed publicly and will be used for internal planning purposes only.

Please send a copy of this completed PDF survey to: [bids@oregonstate.edu](mailto:bids@oregonstate.edu) by **February 12, 2021 2:00 PM Pacific Time (UTC-8)**