c) Appendix C – Site Specific Conditions

SITE SPECIFIC CONDITIONS

Public consultation process, and Accuracy of information provided

 The lessee shall provide an information centre on the shoreline at a location in accordance with the requirements of Galway Co Council, including any Planning Permission consent. The centre will provide information about the various devices and instruments being tested at the site as well as information about the activities being undertaken at the site including current operations and expected future operations.

Reason: To inform the local community of on-going operations and promote and enhance the wider understanding of the development.

2. The lessee shall appoint a communications officer to liaise with the local community regarding on-going operations at the site. The applicant will engage with the local community via mediums suitable to the demographic of the area. This may include but not be limited to email, website, local newsletter, bulletins, public meetings and social media.

Reason: To inform the local community of on-going operations and promote and enhance the wider understanding of the development.

3. The Lessee shall use that part of the Foreshore the subject matter of this lease for the purposes of the testing of prototype scaled wind, wave, and tidal devices, marine sensors and marine scientific instruments and the deployment of associated site infrastructure, as set out in the Application Documents and for no other purpose whatsoever.

Reason: To promote orderly development in strict accordance with the Application Documents and prototype test device specifications contained therein.

4. The Lessee may use the adjacent foreshore but only to the extent necessary for the purpose of the completion of the installation of the above works and shall restore the said foreshore to its proper condition immediately after such use.

Reason: To promote orderly development in strict accordance with the Application Documents and test device specifications contained therein.

5. A maximum of three test devices shall be deployed at the test site at any time and these shall only be deployed for a maximum duration of 18 months, with the exception of any floating wind device which may be deployed for a maximum of 12 months.

Reason: To promote orderly development in strict accordance with the Application Documents and prototype test device specifications contained therein.

6. The Lessee shall appoint a Fisheries Liaison Officer who will co-ordinate, as relevant, any cable installation, test device deployment or vessel movement with the relevant stakeholders in order that appropriate actions may be taken to avoid or minimize any interaction with on-going fishing activities in the area. This shall also include where appropriate the notification to relevant fishermen's organisations, in good time, of the exact location of the test device and associated cables as well as any addition to or amendments of existing aids to navigation.

Reason: In the interest of fishing and navigational safety

7. Prior to the deployment of any test device in the test area, the Lessee shall develop, in consultation with relevant fishermen's organisations, an operational emergency response plan which will include actions to be taken in the event of a test device losing its mooring and posing a risk to fishing gear.

Reason: In the interest of fishing safety

8. The Lessee will ensure that all Mitigation Measures as set out in Section 6.7 of the Environmental Report are implemented in full subject to the timing of the installation of any test device being agreed in advance in consultation with Inland Fisheries Ireland.

Reason: In the interest of environmental protection and control

Potential impacts on navigational safety;

9. Marine notices shall be issued advising of deployment and recovery operations for all ocean energy test devices. All vessels employed in relation to the development shall comply with all statutory regulations and shall be of sufficient size to cope with both the works and any potential adverse weather conditions. 10. The Lessee shall liaise with the Irish Coast Guard to arrange appropriate radio or navigational text broadcast warnings to advise mariners approaching the works area in respect of deployments of test devices within the test area.

Reason: In the interest of navigational safety

11. The Lessee shall arrange the publication of a marine notice through the Maritime Safety Directorate giving a general description of operations to include approximate dates of commencement and completion in respect of the deployment of test devices within the test area.

Reason: In the interest of navigational safety

12. Prior to the deployment of any test devices, the Lessee shall comply with the requirements of the Commissioners of Irish Lights, the Irish Coastguard and the Irish Aviation Authority in respect of the marking and lighting of the test area and individual test devices (if so required) in accordance with the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) recommendations. In addition suitable arrangements of additional navigational marks such as navigation buoys, AIS Transponders, racons etc. should be agreed with the Commissioners of Irish Lights. Navigation buoys used should be suitable for the sea conditions in the area.

Reason: In the interest of navigational safety

13. Prior to the deployment of any devices in the test area, the Lessee shall develop, in agreement with the Irish Coastguard, a detailed contingency plan to respond to incidences where devices become either partially or fully adrift.

Reason: In the interest of navigational safety

14. The Lessee shall provide advance notice of the development to the UK Hydrographic Office. This information shall identify the exact location of the test site, or amendments of existing aids to navigation. Subject to the agreement of the Commissioner of Irish Lights, the lessee should propose the area for designation as a precautionary area or safety zone or area to be avoided for the purposes of navigation and notify this to the UK Hydrographic Office for marking onto the appropriate Nautical Charts.

Reason: In the interest of navigational safety

15. The Lessee shall ensure that all vessels or floating plant has appropriate certification from the Marine Survey Office.

Reason: In the interest of navigational safety

16. The Lessee shall ensure that all mitigation measures as set out in Section 13.8 of the Environmental Report submitted in support of this application shall be implemented in full.

Reason: In the interest of navigational safety

17. The Lessee shall ensure that equipment associated with the devices, in particular parts that may cause a hazard to navigation if not removed, are recovered and accounted for on completion of each testing programme.

Reason: In the interest of navigational safety

- 18. The Lessee shall, prior to authorising the placing of each individual device in the Lease area for testing:
 - Ensure that each device is applied for and vetted in accordance with the Galway Bay Test and Demonstration Site Procedure Manual (Version 3 dated 27th November 2014);
 - b. Provide the consenting authority with details of each device;
 - c. Ensure that the anchor or moorings required for each separate testing device are certified by a chartered engineer or other competent authority as fit for the purpose intended in terms of device to be used, structural integrity and site conditions.

Reason: In the interest of navigational safety

Potential impact on marine mammals

19. Prior to the deployment of any test device in the test area the Lessee shall develop, in consultation with NPWS and other relevant stakeholders, a marine mammal and underwater noise monitoring programme using up to date equipment and validation techniques and to be agreed by the consenting authority. The findings of this monitoring programme should be disseminated in both scientific journal format and also a format that is readily intelligible to the public.

Reason: In order to protect marine mammals, in the interest of environmental protection and control and in order to disseminate information of broad relevance and interest.

20. Full reporting of marine mammal observer operations and any mitigation measures undertaken must be made to NPWS of the Department of Arts,

Heritage, Regional, Rural and Gaeltacht Affairs In order to protect marine mammals and comply with the Birds and Habitats Directive

Reason: In order to protect marine mammals and in the interest of environmental protection and control

21. Knowledge of the interaction between renewable energy devices (WECs) and marine mammals is largely based on a limited number of reviews, inference from studies on other marine renewable energy projects (e.g. wind farms, tidal energy etc.) and expert opinion. Until such a time as full scale devices are deployed at sea and their effects monitored, predicting impacts is considered speculative. In the event that unacceptable impact on the environment is observed, the Minister reserves the right to modify/restrict testing practices and deployment schedule as necessary.

Reason: In order to protect marine mammals

Potential impacts on seabirds;

22. The Lessee shall develop prior to the installation of any infrastructure on site or to the deployment of any test devices a comprehensive environmental monitoring plan to be developed in consultation with the National Parks and Wildlife Service and BirdWatch Ireland and to be agreed by the consenting authority.

This programme should include continued onsite observations of seabirds when devices are operational. Such a programme should include an appraisal of the impact, if any, on seabirds and make recommendations for alterations to the operation of the test facility, up to and including the removal of specific test device from the site, and future deployments within the test facility. The findings of this monitoring programme will be disseminated in both scientific journal format and also in a format that is readily intelligible to the public.

Reason: In the interests of environmental protection and control and protection of bird species and to disseminate information of broad relevance and interest

23. As part of the overall Environmental Monitoring Plan, the Lessee shall undertake ornithological survey work to determine bird species, abundance and behavior in and around the test site in accordance with the guidance and direction of BirdWatch Ireland. In addition the frequency of, timelines for and the agreed reporting format for presenting the results of the survey work shall also be developed in consultation with BirdWatch Ireland.

Reason: In the interests of environmental protection and control and protection of bird species

Term of lease;

24. The following restrictions shall apply to the term of this lease:

d) Test site area	35 yea	
e) Test and Demonstration Devices (ref S4.3.4 of Env	. Report)	10 years
f) Site Infrastructure within test site		35 years

25. The following restrictions shall apply to the term of deployment of equipment within the test site area:

Device Type	No Months
Oscillating Water Column Wave Energy Converter (WEC)	0-18 (max)
Point Absorbers WECs	0-18 (max)
Attenuating WECs	0-18 (max)
Oscillating Wave Surge Converters	0-18 (max)
Pressure Differential WEC	0-18 (max)
Water Pressure/Bulge System WEC	0-18 (max)
Rotating Mass point absorber	0-18 (max)
Floating Wind Turbine	0-12 (max)
Innovative Projects	0-12 (max)

- 26. The following restrictions shall apply to the deployment of devices within the test site area:
 - a. All test devices with exception of a floating wind turbine
 b. Floating wind turbine max height above sea surface to be 35m 1 No Max
 c. Other test devices if floating wind turbine is also deployed
 2 No Max
- 27. The lessee shall on an annual basis submit an Annual Report outlining details of all test devices types which were used at the test site, locations where deployed, timelines for their operations (subject to not exceeding the maximum period as set out in S 4.3.4 of the Environmental Report), name of developer for each test device deployed during the period and a brief outline and summary as to the outcome/results of the test device operation. The report shall be made available to the wider local community in a timely manner via mediums suitable to the demographic of the area. This may include but not be limited to email, website, local newsletter, bulletins, public meetings and social media
- 28. Any devices not covered in the current submitted Foreshore Application (i.e. as set out in section 4.3.4 of the Environmental Report) will require a separate

foreshore licence in advance of their deployment within the Test Site area. It will be the responsibility of the Marine Institute as holders of the foreshore lease for the test site to make the application on behalf of the developer (for the test device) who intends to deploy these test devices within the test site area and submit any incumbent additional environmental and scientific reports or documents as considered necessary to support and progress the application.

29. The management and operation of the Test Site shall be undertaken as set out in Section 17 HSEQ Management System of the Environmental Report dated February 2016. In this regard any method statements prepared in accordance with Section 17.7.5 (Method Statement) should be included in the Annual Report to be submitted to the Department as part of Condition 29. Details for the proposed removal of any redundant mooring/anchoring structures where no longer required should also be included.

Reason -For proper management control and reporting of test site operations

Other

30. All mitigation and best practice measures as set out in Section 16 of the Environmental Report shall be implemented in full subject to the timing of the installation of any test device being agreed in advance in consultation with Inland Fisheries Ireland.

Reason: In the interest of environmental protection and control

31. The Lessee shall notify the Department of Housing, Planning, Community and Local Government at least 14 days in advance of the commencement of the deployment of any test device and any associated works on the foreshore.

Decommissioning of site

32. Decommissioning of the test site will be subject to consultation and agreement with the consenting authority at the appropriate time and may include a period of post project monitoring, the removal of the test device anchoring system, removal of the cardinal and other special marker buoys, removal of the interconnecting cables and all other associated infrastructure.