

ANNEX C Decision Notice and Conditions

E: MarineRenewables@gov.scot



Mr Neil Kermode
The European Marine Energy Centre
The Charles Clouston Building
O.R.I.C, Back Road
Stromness
Orkney
KW16 3AW

Our ref: EMEC/BC/Section 36

21 December 2022

Dear Mr Kermode

THE ELECTRICITY ACT 1989

THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017

DECISION NOTICE FOR THE SECTION 36 CONSENT FOR THE EXISTING BILLIA CROO WAVE TEST SITE, APPROXIMATELY 2.2KM WEST OF THE ORKNEY COASTLINE

1. Application and description of the Development

- 1.1 On 24 June 2019, The European Marine Energy Centre (“EMEC”) Ltd (“the Company”), (Company Number SC249331) having its registered office at The Charles Clouston Building, O.R.I.C., Back Road, Stromness, Orkney, Scotland, KW16 3AW, submitted to the Scottish Ministers an application under the Electricity Act 1989 (“the Electricity Act 1989”) for:
- 1.2 The Company applied for consent under section 36 (“s.36 consent”) of the Electricity Act 1989 for the construction and operation of an existing wave test site at Billia Croo, approximately 2.2km west of the Orkney mainland coastline (“the Application”).
- 1.3 The Application was accompanied by an Environmental Impact Assessment Report (“EIA Report”) (referred to by the Company as an Environmental Statement), as required under the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (“the 2017 EW Regulations”) and an Environmental Appraisal which included a Habitats Regulations Appraisal (“HRA”) as required under the Conservation of Habitats and Species Regulations 2017 (“the Habitats Regulations”). An Addendum of Additional Information to include impacts on aquaculture, updated visual

representations of the proposal and an updated Economic Impact Report to support the Application was submitted by the Company on 23 June 2021.

- 1.4 The Scottish Ministers carried out two consultation exercises:
 1. A consultation on the Application (“the Original Consultation”); and
 2. A consultation on the Addendum of Additional Information (“the Additional Information Consultation”).
- 1.5 The existing, operational Billia Croo Wave Energy Test Site (“the Development”) consists of up to ten test berths; including five deep water test berths with associated pipelines and cables to shore, and two inshore test berths. This location was selected based upon close proximity of both wave and tidal currents, the shorter distance offshore to exploit these resources, the availability of onshore facilities such as offices, storage and berthing and suitable connection to power lines.
- 1.6 The Company has previously been granted all necessary marine licences, to establish this ancillary infrastructure in the marine area, which supports the operation and testing of individual Offshore Renewable Energy Infrastructure (“OREI”) projects constructed in the Development.
- 1.7 The purpose of the Application is to achieve consent under the Electricity Act 1989 for a maximum output of up to 20 megawatt (“MW”) of electricity. This is a maximum combined capacity generated from individual OREI installed at the Development, which will streamline the marine licensing process by reducing the potential for multiple s.36 consent applications for the same area. Individual developers (“developers”) enter into a contractual agreement with the Company to construct individual OREI at the Development and the consent granted to the Company extends to developers. The Company is responsible for ensuring that developers, and any contractors or sub-contractors, comply with the conditions attached to consent. Developers will still be required to apply separately for a marine licence under the Marine (Scotland) Act 2010 to construct an OREI at the Development as required.
- 1.8 The Application was accompanied by a device and operations envelope (“the Project Envelope”) which describes wide ranging design parameters comprising of worst case-scenarios of the number and type of projects and infrastructure likely to utilise the Development, as detailed in Annex 1. The Application aims to gain s.36 consent for the Development and the activities and parameters set out within the Project Envelope, removing the need for full public consultation for marine licence applications that fit those parameters. Any marine licence applications that are outside the parameters of the Project Envelope will require full public consultation; if these applications are for a device over 1MW then they would require an additional s.36 consent application.
- 1.9 The total area of the Development site boundary is approximately 11km². This is shown in Annex 2, Figure 1. This area includes an extension to the Development site boundary which is pending approval from Crown Estate Scotland.

This decision notice contains the Scottish Ministers' decision to grant consent for the Development detailed above, in accordance with regulation 21 of the 2017 EW Regulations.

2. Summary of environmental information

2.1 The environmental information provided was:

- An [EIA Report](#);
- An [Environmental Appraisal](#);
- A [Seascape, Landscape and Visual Impact Assessment](#) ("SLVIA");
- [EMEC Socio Economic Report](#);
- [Economic Impact Assessment of the Billia Croo Proposals at EMEC – June 2021](#), ("Economic Impact Assessment"), as a result of advice from the Marine Scotland Marine Analytical Unit ("MAU"); and
- Billia Croo [Section 36 Addendum](#) (Addendum Report") as a result of advice from Marine Scotland Science ("MSS") and the consultation response from Orkney Islands Council Planning Authority.

2.2 The Company decided not to conduct a screening or scoping exercise prior to submitting the Application on the basis that the outputs that would normally be acquired through scoping exercises have been informed by the regular consultations that have taken place with stakeholders for individual marine licences granted for the Development.

2.3 The EIA Report and Addendum Report assessed the impact pathways identified in the Environmental Appraisal and was prepared in accordance with the terms of the 2017 EW Regulations in the context of the Project Envelope.

2.4 A summary of the environmental information provided in the EIA Report is given below.

2.5 Hydrodynamic and Physical Processes

2.6 The EIA Report and Addendum Report assessed the impacts on receptors and associated effect pathways during the installation, operation and decommissioning phases. The effect pathways assessed within the EIA Report were changes to sedimentary processes and changes to erosive forces and patterns.

2.7 Seabed disturbance and sediment suspension was considered to be highly localised in nature and temporary, recovering to its original state in medium term of months to years.

2.8 The North West Orkney Nature Conservation Marine Protected Area ("NCMPA") was considered to have high sensitivity to changes in sediment regime due to activities at the Development. However increased volumes of

transported sediment within the water column due to device installation at the Development was considered unlikely as the NCMPA is situated more than 9km from the Development.

2.9 The Stromness Heaths and Coast Site of Special Scientific Interest (“SSSI”) was considered sensitive to changes in sediment transport and to have a high sensitivity to impacts from the Development. However, the EIA Report concluded the potential disturbance to sediment during the installation and operation phases was unlikely to have an adverse impact on the sediment regime and would not adversely impact the SSSI.

2.10 The EIA Report considered the cumulative impacts of the Development with other projects in the area but concluded that these were not significant.

2.11 Benthic Environment

2.12 Using remotely operated vehicle surveys and previous samples taken from the site, the impacts on the benthic environment during the construction, installation, operation, maintenance and decommissioning phases were assessed in the EIA Report. The impact pathways of the project identified within the EIA Report were habitat loss/damage; smothering by resettlement of disturbed sediments and drill cuttings; introduction of non-native species; changes to hydrodynamic and sediment regime; and electromagnetic field effects.

2.13 There are no designated sites for benthic ecology which overlap with the Development or could be connected to it.

2.14 The EIA Report concluded that any potential impacts on benthic habitats and species from the Development alone and cumulatively with other projects were not significant.

2.15 Fish and Shellfish Ecology

2.16 The Development overlaps with areas recognised as having potential spawning sites for a number of marine species. The nature of the seabed is also identified as an ideal habitat for a number of shellfish species.

2.17 The EIA Report assessed the impacts of the Development on the fish and shellfish ecology in the vicinity, specifically changes to the sedimentary regime, smothering, benthic habitat loss, introduction of marine non-native species (“MNNS”), electromagnetic fields and habitat creation.

2.18 The EIA Report identified that the River Thurso Special Area of Conservation (“SAC”), designated for Atlantic salmon, and the North West Orkney NCMPA designated for sandeel, are in the proximity of the Development. No Likely Significant Effect (“LSE”) pathways on Atlantic salmon as qualifying features of any SAC in Scotland was identified. Given the localised nature and small scale of predicted seabed disturbance, the potential for significant impacts to sandeel within the NCMPA is assessed as unlikely within the EIA Report.

2.19 The potential impacts on shellfish and marine and diadromous fish were not regarded as important in the EIA Report at a Scottish population level, however some monitoring and research in the context of the test site would

have merit and good practice should be adopted to reduce any risk of introducing MNNS.

2.20 The EIA Report concluded that cumulative impacts may arise due to disturbance and noise where there are a number of simultaneous installation operations, however this will only take place for a limited time and would therefore not be significant.

2.21 Aquaculture

2.22 The Addendum Report focused on the potential impacts of disturbing hydrodynamic processes which may impact nearby aquaculture sites and concluded that although large scale construction projects within the marine environment is very likely to cause a disturbance to the benthic environment, in particular the resuspension of sediment, the Development activities will not be of a scale that will significantly re-suspend sediment or alter hydrodynamic processes to a degree that it would affect aquaculture sites as far away as the identified aquaculture at the east coast of Hoy.

2.23 The Addendum Report concluded that scientific studies are not currently focused on this impact pathway for small scale installations. Therefore the issue of sedimentation and altered hydrodynamic processes from the Development is not be considered a significant impact on aquaculture.

2.24 Marine Mammals

2.25 Potential impacts on basking shark and marine mammals, (cetaceans, grey seal, harbour seal and European otter) from the Development were assessed within the EIA Report.

2.26 The EIA Report concluded that there could be disturbance to basking shark and cetaceans through underwater noise, however these impacts will not negatively effect the conservation status of these species. The EIA Report also identified that there are no protected sites designated for cetaceans or basking sharks in the vicinity of the development and there will be no connectivity with any designations around Scotland.

2.27 The EIA Report assessed the impacts of the Development on grey and harbour seals. Higher densities of harbour seal were found than of grey seal, but both occur in relatively low densities within the Development area. The EIA Report concluded that injuries and disturbance from activities on site are unlikely, therefore impacts to the conservation status of seal populations are low.

2.28 The Development is not directly connected with any designated seal haul out sites or SACs with seals as a qualifying feature. However, there is the possibility of connectivity with the Sanday SAC or Faray and Holm of Faray SAC, but injury and disturbance impacts are not anticipated to occur on a scale as to adversely impact these qualifying features and therefore no LSE was identified.

2.29 To mitigate the risk of entanglement and disturbance of all marine mammals trained marine mammal observers and emergency shut down procedures will be used.

- 2.30 European otters occur infrequently at the Development site and any potential disturbance is limited to those from vessel presence. There are no designated sites for otters in the vicinity of the Development and no likely connectivity with the Isbister Loch SAC. The EIA Report assessed the impact as negligible with mitigation and monitoring strategies.
- 2.31 Cumulative disturbance impacts from commercial or recreational vessel presence or construction activities near the Development site and surrounding waters were assessed to be minimal and not detrimental to the maintenance of the population of the species concerned.
- 2.32 Ornithology
- 2.33 The EIA Report assessed potential impacts of the Development on the qualifying interests of the Scapa Flow Special Protection Area ("SPA"), the North Orkney SPA and the Hoy SPA as well as the Hoy and Marwick Head SSSIs.
- 2.34 The EIA Report stated that the Development would potentially expose European shag and black guillemot to vessel disturbance, localised changes to seabed foraging habit and accidental contamination. However both species are rated as having low vulnerability to impacts from wave energy devices and other associated infrastructure and vessel activity. The risks of accidental contamination are low due to embedded mitigation measures within the Development to prevent release of contaminants, and the protocols in place to respond to any incidents. The EIA Report concluded that any potential impacts to European shag and black guillemot are not regarded as important at an Orkney regional level.
- 2.35 Analysis indicated there is potential for conservation objectives to be undermined within the Hoy SPA and the Scapa Flow SPA in respect of the breeding red-throated diver. Particular attention was drawn within the EIA Report to the potential for project vessel activity to cause disturbance to breeding red-throated divers foraging in the Development and its immediate vicinity.
- 2.36 With the exception of breeding red-throated diver, the EIA Report concluded that the Development would have either no or negligible impacts on seabird species.
- 2.37 Developments or activities that involve operation vessels within the Scapa Flow SPA will potentially contribute to a cumulative disturbance effect on red-throated diver qualifying interests of the Scapa Flow SPA and the Hoy SPA. Due to uncertainty concerning this species' response to the vessel activity during the breeding season, and whether the breeding sites of individuals using the Development are within the Hoy SPA. The EIA Report suggested monitoring to address gaps in knowledge.
- 2.38 The EIA Report stated that mitigation in the form of reducing vessel speeds to under 10 knots when diving birds are present will reduce disturbance response.

2.39 Commercial Fisheries

2.40 The EIA Report assessed potential impacts on aquaculture, static and mobile fishing gear from the Development during pre-installation, installation, operation and maintenance, and decommissioning phases for individual projects. The potential of exclusion from fishing grounds, snagging gear, and increased transit times as a result of the extension area was also assessed in the EIA Report. There are no aquaculture sites in the vicinity of the Development.

2.41 The Development represents a relatively small area suitable for creel fishing. The inshore area is utilised for storage of static fishing gear and the Development is on a transit route for static and mobile gear vessels transiting to fishing areas further north of the Development. The Development does not exclude fishing within its boundaries however the Navigation Risk Assessment (“NRA”) does highlight that due to the presence of cables, devices and the associated infrastructure that fishermen tend to avoid the Development to avoid damage to vessels and gear.

2.42 Increased transit time of fishing vessels to other fishing areas will occur as a result of the extension of the test site area to the north. The EIA Report concluded that the increase in distance between the current offshore route to take account of the extension was considered to be minimal at 0.21nm and that if fishermen choose to avoid the Development it does not represent a significant impact on commercial fisheries. No potentially important impacts on commercial fisheries were predicted in the EIA Report as a result of the Development.

2.43 The cumulative impact assessment considered the potential for the Scottish and Southern Energy (“SSE”) proposed cable between Orkney and mainland Scotland to exclude fisheries operators from the same area as the Development especially where activities may occur simultaneously. The SSE proposed cable is located approximately 1km from the Development at the closest point and it is anticipated there will be an exclusion zone for both fishing and vessel transit around the area of cable lay which may lead to two areas of exclusion if the cable lay occurs simultaneously with an installation at the Development, however any exclusion would be temporary. The EIA Report concluded that due to the short duration of projects occurring in a similar area simultaneously, the cumulative impact would not be important at an industry level.

2.44 Shipping and Navigation

2.45 The existing Navigation Risk Assessment (NRA) for the Development was updated as part of the Application and its findings were summarised within the EIA Report.

2.46 The updated NRA reviewed the potential impact of the site extension on navigational safety and identified recommendations. The NRA is device neutral and assumes a range of possible devices as described in the Project Envelope. Developers wishing to install OREI at the Development will be expected to produce an NRA addendum to address specific navigational implications of their particular project and device when installed in the Development area.

- 2.47 Vessel traffic analysis determined there is very little commercial shipping activity near to the Development. Impact to vessel routing was considered and the NRA concluded that most vessels currently avoid passing within the Development and the orientation of traffic flow with the Development extension will create little impact on future vessel traffic. The inshore route will be unaffected by the Development extension.
- 2.48 Contact risk with devices was analysed and showed a very low likelihood of a passing or disabled vessel making contact with a device and risks were not considered to increase due to the wind, wave and tides. The NRA identified 11 hazards, but it was determined that all hazards were low risk. A number of risk controls, in addition to the risk controls already in place at the Development site, were identified to enhance the safety of each device.
- 2.49 The NRA did not identify any existing activities at the Development or any new developments that could result in a cumulative or in-combination effect on marine traffic.
- 2.50 Archaeology (Cultural Heritage)
- 2.51 The EIA Report assessed the potential impacts on military remains and other (non-designated) archaeological features.
- 2.52 Orkney waters have the potential for shipwreck and aircraft discoveries due to the islands' history. However, there are no known historic environment assets in the Development area.
- 2.53 The EIA Report concluded that the likelihood of impacts on historic environment assets both from the Development alone and cumulatively with other projects in the area were negligible to low. In order to manage the potential for impacting unknown heritage, EMEC have an Archaeological Discoveries Standard Operating Procedure. Should any cultural heritage sites be reported during marine works, it is recommended that they are investigated by a qualified marine archaeologist as the potential for retaining cultural heritage information could be high.
- 2.54 Seascape and Landscape Visual Impact Assessment ("SLVIA")
- 2.55 To inform the EIA report, a SLVIA was carried out. The SLVIA assessed the potential effects on landscape and visual receptors within the study area (defined as a 5km radius around the boundary of the Development). The receptors assessed were effects on coastal character; landscape character; views and special qualities of the National Scenic Area ("NSA").
- 2.56 The Development and the future operational activities were judged to be long term and fully reversible. The worst case scenario presented in the SLVIA is predicted to give rise to a number of moderate effects, and a smaller number of major effects, on landscape and visual receptors in a localised area of the west mainland coast, with reduced effects across the wider study.
- 2.57 The effects on coastal character were judged to be moderate, largely due to the highly sensitive nature of these coastal character areas, as a result of being remote with elevated views over the sea. The magnitude of effect in

this area was also judged to be higher due to the close proximity to the Development site. The level of effect was anticipated to be minor across the rest of the study area.

- 2.58 Effects on onshore landscape character were found to be limited to the western edge of the mainland where the strong coastal influence defines the landscape of the cliff landscapes. Effects on landscape character across other parts of the study area were found to be minor or negligible.
- 2.59 Viewpoint assessments indicated a moderate level of effect likely to be experienced from elevated positions along the west mainland coast, in close proximity of the Development. Effects at lower elevations on the mainland coast from Hoy were expected to be minor due to partial or distant views.
- 2.60 Effects on views varied depending on the viewpoints used in the SLVIA. From major as a result of sequential and sustained views of devices and activities within the Development site, and moderate due to the Development presenting an alternative focal point in the high value view offered, and as a result of the lighting used at night associated with the Development site.
- 2.61 The effect on recreational receptors in other areas were deemed to be minor, due to the devices and activities being a small element of the wide scenic views that characterise this area.
- 2.62 The Development area is located in Hoy and West Mainland NSA. The SLVIA concluded that the Development will not have any unduly adverse effects on the integrity of the NSA.
- 2.63 There are no other developments within the vicinity of the Development therefore no cumulative impacts were identified.
- 2.64 Socio-Economics
- 2.65 The Socio-economic Report submitted with the Application concluded that the Company has impacted Orkney and the UK in terms of investment and job creation, with a total local spend in Orkney of over £16 million, equating to 50% of all of EMEC spend for the period 2004 to 2017. The Socio-economic Report stated that as of 2017, approximately 200 people were employed in Orkney in the marine and renewables sector with £23 million invested by Orkney Island Council (“OIC”) and Highlands and Islands Enterprise in supporting infrastructure for the sector in Orkney.
- 2.66 The overall employment impact on Orkney (as of 2017) was estimated to be 1,653 Full Time Equivalent (“FTE) job years equating to an average of 110 FTEs annually over the 15 year period (2003-2017); 131 in the Highlands and Islands as a whole 131 FTEs annually, 216 FTEs per year in Scotland and in the UK 282 FTEs per year. Gross Value Added (“GVA”) was estimated as £98.3 million for Orkney, £116.3 for the Highlands and Islands as a whole, £213.6 million for Scotland, and overall £284.7 million for the UK.
- 2.67 The June 2021 Economic Impact Report submitted by the Company estimated the impact on job creation and GVA from EMEC up to 2040, from a combination of direct and staff spending, supply chain to EMEC, deployment and removal of devices, investment in upstream research and

development and jobs from developers benefiting from positive outcomes from testing devices at EMEC.

2.68 Key findings of the Economic Impact Report concluded that, if the s.36 consent is granted, EMEC will generate £40 million GVA each year, supporting 270 jobs. Should the s.36 consent not be granted the findings stated that the impact of EMEC will decrease by £10 million in GVA for Scotland and reduce supported jobs by 60 FTEs by 2040. The most conservative scenario concluded that granting the s.36 consent will generate £10 million GVA for Scotland each year and support 70 jobs.

2.69 By 2040 the additional jobs created is estimated to be a total of approximately 100 FTEs for Orkney, 140 FTEs overall for Highlands and Islands, 270 FTEs for Scotland and 380 FTEs for the UK. GVA by 2040 is estimated to be approximately £11 million for Orkney, £16 million overall for Highlands and Islands, £40 million for Scotland and £60 million for the UK.

3. Consultation

3.1 In accordance with the 2017 EW Regulations, on 24 June 2019, the Company submitted an EIA Report and an Environmental Appraisal describing the Development and giving an analysis of its environmental effects. On 23 June 2021 the Company submitted the Addendum Report to provide a more detailed seascape, landscape and visual assessment and a new Economic Impact Assessment Report to provide further information to support the EMEC Socio-Economic Report that was submitted with the Application.

3.2 Advertisement of the Application was made in the local and national press and on the Company website. The notices were placed in the public domain and the opportunity was given to those wishing to make representations.

3.3 The dates of the consultation exercise are given below. The regulatory requirements regarding consultation and public engagement have been met and the responses received taken into consideration. Where matters have not been fully resolved, conditions have been included to ensure appropriate action is taken.

Document	Date Received	Dates of consultation	Publication
EIA Report and Application	24 June 2019	1 July 2019 – 16 August 2019 1 July 2019 – 25 October 2019 (for planning authority)	The Press & Journal (2 July 2019 & 9 July 2019) The Edinburgh Gazette (1 July 2019 & 10 July 2019) The Orcadian (4 July 2019 & 11 July 2019)

Document	Date Received	Dates of consultation	Publication
Additional Information Consultation (Addendum Report & Economic Impact Assessment)	23 June 2021	27 August – 9 October 2021	The Edinburgh Gazette (25 August 2021 & 1 September 2021) The Orcadian (26 August 2021 & 2 September 2021)

3.4 **Summary of statutory consultee responses**

3.5 Under the 2017 EW Regulations, the statutory consultees are as follows:

- NatureScot (formerly known as Scottish Natural Heritage);
 - Scottish Environment Protection Agency (“SEPA”); and
 - Historic Environment Scotland (“HES”).

3.6 The planning authority whom the Scottish Ministers considered appropriate to consult in respect of the Development is Orkney Islands Council.

3.7 In addition the Maritime & Coastguard Agency (“MCA”) and Northern Lighthouse Board (“NLB”) are statutory consultees under the Marine (Scotland) Act 2010.

3.8 Orkney Islands Council

3.9 Orkney Islands Council (“OIC”) responded to the Original Consultation but did not respond to the Additional Information Consultation.

3.10 OIC raised no objection to the Application but did raise significant concerns because SLVIA did not provide any visualisations of the worst case scenario as described in the Application.

3.11 OIC was therefore limited in its ability to fully assess the visual impact of the Development on the special qualities of the NSA and limited in its ability to fully consider this against the relevant policy considerations of the Pilot Pentland Firth and Orkney Waters Marine Spatial Plan, Orkney Local Development Plan and Scottish Planning Policy.

3.12 OIC also commented that further information was required regarding the potential impacts on pier and harbour infrastructure resulting from the Development and the capacity of the pier and harbour to service infrastructure.

3.13 The Company updated the SLVIA to include visualisations of the worst case scenario, following discussions with OIC.

3.14 OIC provided a further response stating that it has concerns regarding how the proposal would impact on the special qualities of Hoy and West Mainland NSA and wider seascape and landscape. OIC accepted the conclusion of the updated SLVIA that the precise arrangement of shapes and forms depicted

would be unlikely to occur but noted the importance of having measures in place to mitigate effects. OIC recommended reviewing the continual deployment of devices within the site and their relationship to the coast and to review the most sensitive impacts to decide whether a particular device is appropriate for its location based on visual impacts.

3.15 NatureScot

3.16 NatureScot did not object to the Application and advised that the worst case scenario detailed in the Project Envelope can be implemented without adversely affecting natural heritage.

3.17 NatureScot advised that the Project Envelope is likely to have a significant effect on the following European sites and qualifying features:

- red throated diver as a qualifying interest of the Hoy SPA and the Scapa Flow SPA; and
- harbour seal as a qualifying interest of the Sanday SAC.

3.18 Consequently, Marine Scotland as competent authority and in accordance with regulation 63 of the the Habitats Regulations, is required to carry out an Appropriate Assessment (“AA”) in view of the site’s conservation objectives for these qualifying features.

3.19 NatureScot provided detailed advice on these qualifying interests and concluded that the Project Envelope will not adversely affect the integrity of either of the European sites listed above.

3.20 NatureScot advised that the Development area does not overlap with any seal haul-out sites designated under the Protection of Seals (Designation of Haul-Out Sites) (Scotland) Order 2014. Any possible offence could be easily mitigated against by using a 500m buffer around a designated haul-out site and this should be detailed in a site wide Vessel Management Plan (“VMP”).

3.21 NatureScot advised that a European Protected Species (“EPS”) and/or basking shark licence may be required to address potential disturbance of EPS and/or basking shark from underwater noise emitted during use of geophysical and other noisy positioning equipment or during some works detailed in the Project Envelope. Entanglement or entrapment in wave energy converters was also identified as a potential threat.

3.22 NatureScot advised that these disturbance effects would however, not affect the favourable conservation status of EPS or basking sharks.

3.23 Nature Scot advised that the site wide VMP should also cover principles of appropriate vessel behaviour both within the Development site and for likely transit routes to and from the Development site, in order to reduce potential effects on marine mammals.

3.24 NatureScot advised that the greatest cumulative impacts on the designated sites are likely to arise during simultaneous operations in the Development and the potential for vessel transits through the Development during sensitive times and at sensitive locations.

3.25 NatureScot advised that its assessment of the SLVIA Report concluded that the Application will have no adverse effect on the special qualities of the Hoy and West Mainland NSA.

3.26 NatureScot responded to the Additional Information Consultation and stated its advice given on the Original Consultation had not changed.

3.27 SEPA

3.28 SEPA responded to the Original Consultation and advised that the Application was covered under its [standing advice](#) which states that SEPA has no objection to the Application and no site specific advice or comment to make on the installation of tidal, wave and wind devices (and any associated infrastructure) below Mean High Water Springs (“MHWS”).

3.29 Historic Environment Scotland

3.30 HES did not object to the Application. HES advised that the Application sufficiently assessed the impacts on the historic environment but would require further consultation on any amendment to the Development.

3.31 Maritime Coastguard Agency

MCA had no objection to the Application provided all maritime and safety legislation is followed by the Company and by developers. The MCA requested that the following conditions be placed on any marine licences granted to developers of OREI utilising the Development (“the Licensee”):

1. The Licensee must ensure that local mariners and fishermen's organisations are made fully aware of the activity through local notices to mariners.

2. The Licensee must ensure that HM Coastguard, in this case Shetland Coastguard Operations Centre, zone2@hmcg.gov.uk is made aware of the works prior to commencement.

3. The Licensee must notify the UK Hydrographic Office to permit the promulgation of maritime safety information and updating of nautical charts and publications through the national Notice to Mariners system.

4. The Emergency Response Co-operation Plan (“ERCoP”) must be completed to the satisfaction of the MCA prior to any construction work commencing.

5. All devices tested at the site are subject to a device specific NRA, in consultation and agreement with the MCA.

6. Floating devices and any suspended in the water column must have a third party verification of the mooring arrangements prior to construction to provide assurance against loss of station.

7. Multiple devices in an array must have a layout plan agreed with MCA prior to deployment.

- 3.32 MCA also advised that an approved ERCoP will need to be in place prior to the Development becoming fully operational and should be included as a formal condition on marine licences.
- 3.33 Individual marine licence applications made for the Development will include adherence to the ERCoP and the marine licence conditions as detailed above, in consultation with the MCA.
- 3.34 Northern Lighthouse Board
- 3.35 NLB responded that it had no objection the Application.
- 3.36 NLB is satisfied with the content of the NRA in how it addresses concerns relating to navigational lighting and marking, device monitoring and contingency planning.
- 3.37 NLB stated it was content with the removal and relocation of West and North cardinal buoys and is willing to discuss preferred positioning options of the North cardinal buoy.
4. **Summary of non-statutory consultee responses**
- 4.1 Ministry of Defence (“MOD”)
- 4.2 MOD responded that it had no objection or comment to the Original Consultation or the Additional Information Consultation.
- 4.3 Orkney Fisheries Association (“OFA”) and the Scottish Fishermen’s Federation (“SFF”)
- 4.4 OFA and the SFF objected to the Application on the basis that the proposed extension to the existing test site causes a further cumulative loss to fishing grounds when considered alongside other developments and aquaculture operating in Orkney waters. OFA and SFF raised concerns that vessels will be directed to steer west of the Development adding to transit times and increasing accident potential, and that excluding transit would not be acceptable. OFA and SFF requested that any consent granted be limited to five years so that any change in circumstances, for example inactivity in the extension area, might return the fishing grounds to them.
- 4.5 SFF responded to the Additional Information Consultation and objected to the Application on the basis that it disagreed with the conclusions in the EIA Report, that the potential effects on commercial fisheries are not important, and that whilst local fishermen have previously adapted to loss of fishing grounds is not a reason to expect them to do so again. SFF also raised concerns about the impact activities from the Development will have on herring spawning and referenced the International Council for Exploration of the Sea advice which states that activities that have a negative impact on herring spawning grounds should not occur. SFF also stated that it continued to have concerns regarding the increase in transit times around the site causing safety problems and did not accept the Company’s assessment of the hydrodynamic impact of the Development on aquaculture.

- 4.6 Royal Yachting Association (“RYA”)
- 4.7 RYA did not object to the Application and confirmed that it agreed with the conclusions of the NRA.
- 4.8 UK Chamber of Shipping (“UK CoS”)
- 4.9 UK CoS responded to the Original Consultation that it had no comment on the Application but would welcome involvement in any future discussion on any changes.
- 4.10 Visit Scotland
- 4.11 Visit Scotland responded to the Original Consultation and did not object to the Application, but recommend that, given the importance of the Scottish tourism industry to the economy and the fact that the landscape of Scotland attracts visitors, any detrimental impact from the Development on tourism whether visually, environmentally and/or economically should be identified and considered in full, and recommended that an independent tourism impact assessment should be carried out for each site considered.
5. **Representations from other organisations and members of the public**
- 5.1 No representations were made by other organisations or members of the public.
6. **Advice from third parties**
- 6.1 Marine Scotland – Licensing Operations Team (“MS-LOT”) sought advice from the Marine Analytical Unit (“MAU”) Marine Scotland Science (“MSS”), and Transport Scotland (“TS”) on the Application.
- 6.2 Marine Mammals
- 6.3 MSS was broadly supportive of the activities assessed in the EIA Report and those activities that are subject to project specific assessment but noted there was no information about vibro piling and requested confirmation if this installation technique would be used, and if so whether it would be assessed on a project specific basis or should be assessed as part of the EIA.
- 6.4 MSS agreed with the identified pathways to potential impact from installation/decommissioning and operation/maintenance phases of projects at the Development.
- 6.5 MSS agreed there is no likely significant effect of the Development on the site integrity of any SAC for cetaceans, alone or in combination with other developments and that the risk of injury or disturbance to EPD from operation noise and entanglement will not be detrimental to the favourable conservation status of species. MSS advised that developers should consider the requirement for an EPS licence on a project by project basis and agreed that the potential for barrier effects caused by devices at the Development is negligible.

- 6.6 MSS agreed there is negligible risk of death or injury to seals from project activity and that there will be no harassment of seals at designated haul-out sites.
- 6.7 Ornithology
- 6.8 MSS agreed in general that the conclusions of the EIA Report are likely to hold throughout the consent period, however there are likely to be some changes in bird populations and potentially also designated site protections.
- 6.9 MSS agreed with the conclusions of the EIA Report that the assessed effects would not negatively impact on the conservation objectives of breeding red throated diver as a qualifying feature of either the Hoy SPA or the Scapa Flow SPA which is based on the low use by the species of the Development site.
- 6.10 Given that vessel disturbance on red throated diver is a key potential impact pathway, MSS agreed with the assessment by NatureScot that a site wide VMP would be useful to cover vessel operations during the breeding period both for vessels on site and during transit to/from the Development, which may have transit routes that pass through the Scapa Flow SPA. MSS advised that the Company have correctly considered current SPA sites.
- 6.11 The EIA Report stated that the Company should support the routine monitoring of numbers and productivity of red-throated divers breeding in Hoy. MSS advised it would be useful to have this monitoring in place and to clarify if this will be achieved by monitoring work for individual projects to consider or by another means.
- 6.12 Marine Fish Ecology
- 6.13 MSS was content with the assessment of the potential effects on fish and shellfish and noted that spiny lobsters are encountered on the Development and recommended that rocky reef habitats be avoided through micro siting where possible.
- 6.14 MSS was content with the conclusions that there was no connectivity and no impact pathway to negatively impact basking shark features of the Sea of Hebrides proposed Marine Protected Area. MSS welcomed the practice of recommending that individual clients apply for a basking shark licence for activities within the Development and welcomes standard operating procedures including the implementation of a VMP and adherence to the Scottish Marine Wildlife Watch Code to mitigate against collision risk to basking sharks. Potential for entanglement of in mooring lines or cabling is expected to be a consideration of marine licence applications for any future installations at the Development.
- 6.15 Diadromous Fish
- 6.16 MSS was content with the conclusions of the EIA Report and that any potential impacts on diadromous fish would not be important at a Scottish population level. MSS noted there is a need for better information as to the extent to which sea trout and adult salmon spawning in rivers of the Scottish mainland or elsewhere are present in Orkney and that clients are required to submit a project specific environmental monitoring programme which

provides detail on the mitigation, monitoring and research measures being executed.

6.17 MSS advised that from a diadromous fish viewpoint there could be a need for cameras, sonar (including Didson) and acoustic tag detection receivers.

6.18 Commercial Fisheries

6.19 MSS was content with the conclusion of the EIA Report that none of the potentially important impacts of exclusion from fishing grounds, risk of snagging and increased transit time as a result of the Development would have a significant impact on any fishing activity in the area.

6.20 Benthic Ecology

6.21 MSS advised that impacts on stoney/rocky reefs and kelp forest clearance should be minimised or avoided where possible. MSS advised that micro siting of individual installations would provide suitable mitigation.

6.22 MSS noted that fan mussels are found in the area and are listed as a priority marine feature which is rare, slow growing and very sensitive to habitat removal and siltation/smothering. MSS recommended that a comprehensive benthic survey for locating specific devices and any cable route is undertaken to minimise removal of these sensitive habitats.

6.23 Physical Processes

6.24 MSS agreed that there are no important hydrodynamic and physical impacts to consider from the Development and welcomed the suggestion to monitor the hydrodynamic and wave fields to provide important evidence for future/larger developments.

6.25 MSS advised that the impact of the Development at the aquaculture site should ideally be considered and proposed that the Company to add an appraisal to the EIA Report outlining that the impacts from the Development on aquaculture is considered to be extremely low and the reasons why.

6.26 The Company included an assessment outlining the impacts from the Development on aquaculture within the Addendum Report.

6.27 Socio-economics

6.28 MAU advised that the EMEC Socio-Economic Report should be updated to provide more detailed information on the direct and induced impacts of the Company's activities in and beyond Orkney and show separately the direct impacts along with the indirect/induced impacts for each of the economic impacts considered. MAU requested that sensitivity analysis be carried out using the Green Book¹ principles on any assumptions made, in order to understand the implications of the results.

6.29 MAU also advised that the report should include evidence of the impact on the average full time salary for EMEC staff in comparison to the Orkney and Highlands and Islands median.

¹ [The Green Book \(2020\) - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

- 6.30 The Company responded that sensitivity analysis was not applicable to the EMEC Socio-Economic Report as it is based on past data, and disagreed with the use of Green Book principles which it stated are applicable to the economy at a UK level rather than for the Highland and Islands economy. The Company was unable to update the EMEC Socio-Economic Report to separate direct impacts along with indirect/induced impacts on the basis that this would require significant further analysis.
- 6.31 The Company decided to commission an additional Economic Impact Report to address the concerns raised by the MAU which assessed the current and potential future impacts of the s.36 consent and the Company activities on the Orkney, Highland and Islands, Scotland and UK economies.
- 6.32 MAU reviewed the Economic Impact Report and did not request any further information and had no further comment to make.
- 6.33 TS responded to the Original Consultation and the Additional Information Consultation and had no objection to the Application.

7. **Summary**

- 7.1 The Scottish Ministers have considered the advice provided in their decision.

7.2 **Public Inquiry (“PI”)**

- 7.3 The Scottish Ministers did not require a PI to be held.

8. **The Scottish Ministers Considerations**

8.1 Environmental Matters

- 8.2 The Scottish Ministers are satisfied that an environmental impact assessment has been carried out. Environmental information including the EIA Report has been produced and the applicable procedures regarding publicity and consultation laid down in regulations have been followed. The environmental impacts of the Development have been assessed and the Scottish Ministers have taken the environmental information into account when reaching their decision.

- 8.3 In accordance with their obligations under paragraph 3(2) of Schedule 9 of the Electricity Act 1989, the Scottish Ministers have considered and are satisfied that (a) the Company, when formulating its proposal to construct the generating station, has had sufficient regard to the desirability of preserving natural beauty, of conserving flora, fauna, and geological and physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic, or archaeological interest and; (b) the Company, in having regard to these matters, have reasonably sought to mitigate any effect which their proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects.

- 8.4 The Scottish Ministers have considered fully and carefully the Application, EIA Report, Environmental Appraisal, Seascape, Landscape and Visual Impact Assessment, the EMEC Socio-Economic Report, the Economic

Impact Assessment, the Addendum Report, and all relevant representations from consultees, and advice from MSS, MAU and TS.

8.5 Main Determinative Issues

8.6 The Scottish Ministers, having taken account of all relevant information, consider that the main determining issues are:

- The extent to which the Development accords with and is supported by Scottish Government policy and the terms of the National Marine Plan (“NMP”) and relevant local development plans;
- Renewable energy generation and associated policy benefits;
- Economic impacts; and
- The main effects of the Development on the environment, which are in summary impacts on:
 - marine mammals and seabirds including impacts on European sites and European offshore marine sites;
 - commercial fisheries; and
 - seascape, landscape and visual amenity.

9. **Scottish Government Policy Context**

9.1 The National Marine Plan (“NMP”), formally adopted in 2015, and reviewed in Spring 2018, provides a comprehensive statutory planning framework for all activities out to 200nm. The Scottish Ministers must take authorisation and enforcement decisions, which affect the marine environment, in accordance with the NMP.

9.2 Of particular relevance to this proposal are:

- Chapter 4 policies ‘GEN 1-21’, which guide all development proposals;
- Chapter 6 Sea Fisheries, policies ‘FISHERIES 1-3’ and 5;
- Chapter 8 Wild Salmon and Diadromous fish, policy ‘WILD FISH 1’;
- Chapter 11 Offshore Wind and Marine Renewable Energy, policies ‘RENEWABLES 1, 3-10’;
- Chapter 12 Recreation and Tourism, policies ‘REC & TOURISM 2 and 6’;
- Chapter 13 Shipping, Ports, Harbours and Ferries, policies ‘TRANSPORT 1 – 4 and 6’;
- Chapter 14 Submarine Cables, policies ‘CABLES 1 – 4’; and
- Chapter 15 Defence, policy ‘DEFENCE 1’.

9.3 The Development therefore aligns with the NMP by contributing to the sustainable development of wave and tidal energy in the most suitable locations and expansion of test and demonstration facilities for marine renewable energy devices.

9.4 The Pilot Pentland Firth and Orkney Waters (“PPFOW”) Marine Spatial Plan is an integrated planning policy framework to guide marine development, activities and management decisions within the Pentland Firth and Orkney

Waters area. The PPFOW Marine Spatial Plan also sets an objective to support the transition to a low carbon economy.

9.5 Of particular relevance to this proposal are:

- Section 4 General Policies 1A-9 which guide all development proposals;
- Sectoral Policy 1: Commercial fisheries points 1 and 5;
- Sectoral Policy 4: Renewable energy generation;
- Sectoral Policy 6: Marine Transport; and,
- Sectoral Policy 8: Pipelines, electricity and telecommunications infrastructure

9.6 The areas identified in the PPFOW Marine Spatial Plan are at the forefront of wave and tidal energy developments and contribute to decarbonisation and climate change targets. Therefore, the PPFOW Marine Spatial Plan supports the Development.

9.7 The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 commits us to reach net zero emissions of all greenhouse gases by 2045, ahead of the UK target of 2050. It includes bold interim targets to reduce emissions by 75% by 2030, against a 1990 baseline, and to reduce emissions by 90% by 2040. These targets are in line with what is required to meet Scotland's commitments under the 2015 Paris Agreement, to limit global average temperature increases to 1.5 degrees Celsius or less. The Glasgow Climate Pact keeps alive this target of limiting global warming to 1.5 degrees. The Development will therefore contribute to the direct reduction of emissions from energy and further advance the technology and understanding of wave energy. In addition, the Development complies with the 2019 Act.

9.8 The works within the Development will contribute to Scotland's renewable energy targets and will provide wider benefits to the wave and tidal sector which are reflected within the Scottish Energy Strategy, which states that the Scottish Ministers will continue to champion the Scottish wave and tidal energy sector – supporting the research, development, innovation and demonstration that will maintain Scotland's competitive advantage.

9.9 Scottish Planning Policy 2014 ("SPP") sets out the Scottish Government's planning policy on renewable energy development. Efficient supply of low carbon and low cost heat and generation of heat and electricity from renewable energy sources are vital to reducing greenhouse gas ("GHG") emissions and can create significant opportunities for communities. Renewable energy also presents a significant opportunity for associated development, investment and growth of the supply chain, particularly for ports and harbours. Communities can also gain new opportunities from increased local ownership and associated benefits.

9.10 Whilst the SPP makes clear that the criteria against which applications should be assessed will vary depending upon the scale of the development and its relationship to the characteristics of the surrounding area, it states that these are likely to include: impacts on landscapes and the historic environment; ecology (including birds, mammals and fish); biodiversity and nature conservation; the water environment; communities; aviation;

telecommunications; noise; shadow flicker and any cumulative impacts that are likely to arise. It also makes clear that the scope for the development to contribute to national or local economic developments should be a material consideration when considering an application, in addition to supporting the development of a diverse range of electricity generation from renewable energy technologies.

- 9.11 Scotland's National Planning Framework 3 ("NPF3") sets out the ambition for Scotland to move towards a low carbon country, placing emphasis on the development of onshore and offshore renewable energy. NPF3 aims for Scotland to be a world leader in offshore renewable energy and expects that, in time, the pace of onshore wind development will be overtaken by the development of marine energy including wind, wave and tidal power.
- 9.12 The Revised Draft National Planning Framework 4 ("NPF4") was laid in the Scottish Parliament on 8 November 2022 for consideration and approval. The revised policy will not apply until approved by the Scottish Parliament and adopted. On adoption, the provisions in the 2019 Planning Act will be commenced which will make the NPF4 part of the statutory development plan. NPF3 and Scottish Planning Policy will remain in force until NPF4 is adopted. The Revised Draft NPF4 sets out our proposals for future consideration of planning matters and as such it may be taken into account by planning authorities on a case-by-case basis. The Revised Draft NPF4 signals a turning point for planning, placing climate and nature at the centre of the planning system and making clear Scottish Government support for all forms of renewable, low-carbon and zero emission technologies.

10. **Impacts of the Development on the environment**

- 10.1 *Impacts on marine mammals, seabirds, European sites and European offshore marine sites*
- 10.2 The Habitats Regulations require the Scottish Ministers to consider whether the proposed Development would be likely to have a significant effect on a European site or European offshore marine site (either alone or in combination with other plans or projects), as defined in the Habitats Regulations.
- 10.3 Owing to NatureScot's view that the Development will have a LSE on the qualifying interests of the Hoy SPA, the Scapa Flow SPA and the Sanday SAC, MS-LOT, on behalf of the Scottish Ministers, as the "competent authority", was required to carry out an AA.
- 10.4 The EIA Report concluded that there could be disturbance to cetaceans, basking sharks and seals from underwater noise, generated from commercial and recreational vessel presence, marine works, equipment and Wave Energy Converters ("WECs"), and entanglement or entrapment from WECs.
- 10.5 For the Sanday SAC qualifying interest, namely harbour seal, NatureScot advised there would be no adverse effect on site integrity of the SAC. The AA considered the conservations objectives, the population at the sites, the predicted levels of effect and populations consequences, and the advice from Nature Scot. The Scottish Ministers concluded that the Development, subject to the application of conditions as outlined in Annex 2, would not adversely affect the site integrity of the Sanday SAC.

- 10.6 For bird species, the main impact would be from the proposed extension to the Development area and vessel disturbance.
- 10.7 For the Hoy SPA and the Scapa Flow SPA qualifying interest, namely the breeding red throated diver, Nature Scot advised there would be no adverse effect on site integrity of the SPAs.
- 10.8 The AA considered the conservation objectives, the populations at the sites, the predicted levels of effect and population consequences, and the advice from NatureScot. The Scottish Ministers concluded that the Development, subject to the application of conditions, would not adversely affect the site integrity of the Hoy SPA or the Scapa Flow SPA.
- 10.9 NatureScot advised that cumulative impacts are likely to arise for red throated divers and marine mammals during simultaneous operations and potential vessel transits during sensitive times and locations.
- 10.10 Conditions requiring the Company to prepare, consult on and adhere to a Development wide VMP, ERCoP, and to develop an Acoustic Monitoring Plan, have been attached to the s.36 consent to mitigate these concerns.
- 10.11 The Scottish Ministers consider that, having taken into account the information provided by the Company, the responses of the consultative bodies, and having regard to the conditions attached, there are no outstanding concerns in relation to the impact of the Development on marine mammals, seabirds, European sites or European offshore marine sites which would require consent to be withheld.
- 10.12 *Impacts on commercial fisheries*
- 10.13 No potentially significant effects were identified by the Company on commercial fishing interests from the Development.
- 10.14 The OFA and the SFF did not agree with the conclusions of the EIA Report and objected to the Application due to the loss of access to fishing grounds, additional transit times around the proposed extension area, and the ability to transit through the Development and proposed extension area. The OFA and SFF also objected to the length of consent that the Company has applied for and requested that this be limited to five years.
- 10.15 The SFF also objected on the basis that it disagreed with the conclusions of the potential impacts within the EIA Report, concerns over the impacts that activities within the Development will have on herring spawning grounds and disagreed with the Company's assessment of the hydrodynamic impacts of the Development activities on aquaculture.
- 10.16 To mitigate the concerns raised, the Company advised that the extension area will still be available for vessels as a passage but may become restricted during installation and testing activities within the Development. The Company also confirmed that a Notice to Mariners would be issued prior to activities taking place in the Development site. The OFA and the SFF will be consulted on any marine licence applications within the Development. A condition requiring the Company to prepare, consult on and adhere to a site wide VMP has been added to the s.36 consent to mitigate these concerns.

- 10.17 The OFA stated it was content with the response to its concerns regarding any exclusion from the Development.
- 10.18 The Scottish Ministers consider that, having taken into account the information provided by the Company, the responses of the consultative bodies, and having regard to the condition attached, there are no outstanding concerns in relation to the impact of the Development on commercial fisheries which would require a s.36 consent to be withheld.
- 10.19 *Impacts on seascape, landscape and visual amenity*
- 10.20 SLVIA was undertaken for the Development and identified a number of effects on coastal character and on visual amenity primarily along limited sections of coastal landscape in close proximity to the Development with higher sensitivity receptors. Overall effects of the Development on the majority of landscape and visual receptors were assessed as likely to be minor with the devices and activities within the Project Envelope being fully reversible.
- 10.21 Predicted effects on the special qualities of the NSA designation and the majority of special landscape qualities with reference to the sea coast were anticipated to be minor by the devices and activities within the Project Envelope. Overall no unduly adverse effects on the integrity of the NSA were predicted.
- 10.22 OIC raised concerns on its limited ability to assess the visual impact of the Development based on the information provided. The Company provided updated visuals of the worst case scenario which underwent further consultation.
- 10.23 Visit Scotland recommended that any detrimental impact on tourism whether visually, environmentally and/or economically should be considered in full and recommended that an independent tourism impact assessment should be carried out for each site considered.
- 10.24 The Company responded that the SLVIA fully assessed the potential visual impacts, concluding that the overall effects of the Development site are likely to be minor, and that a full environmental impact appraisal has been conducted for the Development to assess the potential environmental impact. The Company deemed that an independent tourism assessment was not appropriate at this stage as the Application relates to a change in consenting procedure for an existing and operational test site but that mitigation and monitoring measures, as detailed within section 9 of the EIA Report, will be implemented to ensure adverse effects on seascape, landscape and visual receptors are appropriately managed.
- 10.25 The Company stated that the social and economic benefits of the marine renewable sector in Orkney was detailed within the EMEC Socio-Economic Report submitted with the Application.
- 10.26 The Company submitted an Economic Impact Assessment Report with further information to further support the EMEC Socio-Economic Report and an updated SLVIA. Visit Scotland did not respond to the Additional Information Consultation which included this information.

- 10.27 The Scottish Ministers consider that that, having taken into account the information provided by the Company, the responses of the consultative bodies, and having regard to the condition attached, there are no outstanding concerns in relation to the impact of the development on seascape, landscape and visual receptors which would require a s.36 consent to be withheld.
- 10.28 *Economic benefits*
- 10.29 SPP and NPF advises that economic benefits are material issues which must be taken into account as part of the determination process. SPP also confirms the Scottish Ministers' aim of achieving a thriving renewables industry in Scotland. Further, national policy and strategies, such as NPF3, draft NPF4 and The Scottish Energy Strategy: The Future of Energy in Scotland (Scottish Government, 2017), support the role of renewable energy development in achieving socio-economics benefits and supporting the growth of the low carbon economy.
- 10.30 The EIA Report stated that the Company, of which the Development is one site, would support the development of wave energy by enabling clients to bring their device into real sea testing environments to build towards commercial scale arrays, and that lessons learned can be applied to the development of large scale arrays around Scotland and internationally. The EIA Report also concluded that the installed capacity of the Development will make a contribution toward achieving targets set out in key legislation, particularly the UK Climate Change Act 2008 and the Climate Change (Scotland) Act 2009.
- 10.31 The Company has estimated that the net economic impact by 2040, when balancing the various impact scenarios, will be 30 FTE jobs and £1 million GVA from direct and staff spending, 40 jobs and £2 million GVA in the supply chain to EMEC, 30 FTEs and £2 million GVA from the deployment and removal of devices, £7m invested in upstream research and development occurring in Scotland, generating £5 million GVA, and supporting 80 FTEs, and £30 million GVA and 90 FTEs from positive outcomes from testing devices at EMEC.
- 10.32 Overall additional employment from EMEC is estimated to be 140 FTEs for Highlands and Islands, 270 FTEs for Scotland and 380 FTEs for the UK by 2040 with the Company generating £40 million GVA each year, supporting 270 jobs. Wider overall impacts on GVA from EMEC is £60 million for the UK.
- 10.33 *Renewable energy generation and associated policy benefits*
- 10.34 The Development will contribute to Scotland's renewable energy targets and will provide wider benefits to the wave and tidal sector which are reflected within the Scottish Energy Strategy, which states that the Scottish Ministers will continue to champion the Scottish wave and tidal energy sector – supporting the research, development, innovation and demonstration that will maintain Scotland's competitive advantage.

11. **The Scottish Ministers' Determination**

- 11.1 The Scottish Ministers are satisfied that an environmental impact assessment has been carried out, and that the applicable procedures regarding publicity and consultation in respect of the Application have been followed.
- 11.2 When formulating proposals for the construction of the proposed generating station, the Company must comply with paragraph 3 of Schedule 9 to the Electricity Act 1989. Paragraph 3(1)(a) of Schedule 9 requires the Company in formulating such proposals to have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest. Paragraph 3(1)(b) requires the Company to do what it reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects. Under paragraph 3(3) of that Schedule, the Company must also avoid, so far as possible, causing injury to fisheries or to the stock of fish in any waters.
- 11.3 Under paragraph 3(2) of Schedule 9, the Scottish Ministers must have regard to the desirability of the matters mentioned in paragraph 3(1)(a) of that Schedule and the extent to which the Company has complied with its duty under paragraph 3(1)(b). Under paragraph 3(3) the Scottish Ministers must avoid, so far as possible, causing injury to fisheries or to the stock of fish in any waters.
- 11.4 In considering the Application, the Scottish Ministers have had regard to the desirability of the matters mentioned in paragraph 3(1)(a) of Schedule 9 and the extent to which the Company has complied with its duty under paragraph 3(1)(b). Ministers consider that the Company has done what it reasonably can to mitigate the effect of the proposed Development on the matters mentioned in paragraph 3(1)(a). The Scottish Ministers are content that the requirements of paragraph 3 of Schedule 9 are satisfied.
- 11.5 The Scottish Ministers have weighed the impacts of the proposed Development, and the degree to which these can be mitigated, against the economic and renewable energy benefits which would be realised. The Scottish Ministers have undertaken this exercise in the context of national and local policies.
- 11.6 The Scottish Ministers have considered the extent to which the Development accords with and is supported by Scottish Government policy, the terms of the SPP, the NMP, local development plans and the environmental impacts of the Development, in particular: impacts on seabirds and marine mammals (including impacts on European sites and European offshore marine sites), impacts on commercial fisheries, impacts on seascape, landscape and visual amenity. The Scottish Ministers have also considered the socio-economic and the renewable energy benefits of the Development.
- 11.7 The Scottish Ministers are satisfied that the environmental issues have been appropriately addressed by way of the design of the Development and through mitigation measures, and that the issues which remain are, on balance, outweighed by the benefits of the Development. In particular, the Scottish Ministers are satisfied that the proposal will not adversely affect the

integrity of the Hoy SPA, the Scapa Flow SPA, the Sanday SAC or the special qualities of the Hoy and West Mainland NSA.

- 11.8 In their consideration of the environmental impacts of the Development, the Scottish Ministers have identified conditions to be attached to the s.36 consent to reduce and monitor environmental impacts (these conditions are outlined in Annex 2). These includes a requirement for a Development wide VMP, Marine Mammal Reporting Protocol and Acoustic Monitoring Plan.
- 11.9 Under section 36B of the Electricity Act 1989, the Scottish Ministers may not grant a consent in relation to any particular offshore generating activities if they consider that interference with the use of recognised sea lanes, essential to international navigation is likely to be caused by the carrying on of those activities or is likely to result from their having been carried on. The Scottish Ministers, when determining whether to give consent for any particular offshore generating activities, and considering the conditions to be included in such consent, must have regard to the extent and nature of any obstruction of or danger to navigation which, without amounting to interference with the use of such sea lanes, is likely to be caused by the carrying on of the activities, or is likely to result from their having been carried on. In determining this consent, the Scottish Ministers must have regard to the likely overall effect (both while being carried on and subsequently) of the activities in question and such other offshore generating activities which are either already the subject of s.36 consent or activities for which it appears likely that such consents will be granted. The appropriate consultation was carried out on the Application, consultation responses were received from MCA, NLB, OFA, SFF, Orkney Islands Council and RYA. Concerns were raised around navigation in the vicinity of the Development, and access to fishing grounds. The Scottish Ministers have concluded that the Company has had regard to the potential interference of recognised sea lanes essential to international and national navigation and has discharged its responsibilities in terms of section 36B to the Electricity Act 1989.
- 11.10 The Scottish Ministers are satisfied, having regard to current knowledge and methods of assessment, that this reasoned conclusion, as required under the 2017 EW Regulations, is valid.
- 11.11 Subject to the conditions set out in Annex 2, the Scottish Ministers grant consent under s.36 of the Electricity Act 1989 for the construction and operation of the Billia Croo Wave Energy Test Site (as described in Annex 1).
- 11.12 The embedded mitigation and any additional mitigation identified in the EIA Report has been incorporated into the conditions of this s.36 consent. The conditions also capture monitoring measures required under Regulation 22 of the 2017 EW Regulations.
- 11.13 In accordance with the 2017 EW Regulations, the Company must publicise notice of this determination and provide that a copy of this decision letter may be inspected on the Application website, in the Edinburgh Gazette and a newspaper circulating in the locality to which the Application relates is situated. The Company must provide copies of the public notices to the Scottish Ministers.
- 11.14 Copies of this letter have been sent to the public bodies consulted on the Application, including the relevant planning authority, NatureScot, SEPA and

HES. This letter has also been published on the [Marine Scotland Information](#) website.

- 11.15 The Scottish Ministers' decision is final, subject to the right of any aggrieved person to apply to the Court of Session for judicial review. Judicial review is the mechanism by which the Court of Session supervises the exercise of administrative functions, including how the Scottish Ministers exercise their statutory function to determine applications for consent. The rules relating to the judicial review process can be found on the [Scottish Courts and Tribunals](#) website.
- 11.16 Your local Citizens' Advice Bureau or your solicitor will be able to advise you about the applicable procedures.

Yours sincerely,

Ben Walker

Project Leader (Consenting), Marine Scotland Licensing Operations Team

A member of staff of the Scottish Ministers

21 December 2022

ANNEX 1 – DESCRIPTION OF THE DEVELOPMENT

The Application for the construction and operation of a wave powered generating test site with a combined maximum generating capacity of 20 MW. The wave powered generating stations shall comprise of:

1. Wave Energy Converters (“WEC”s)

1.1 No more than 20 WECs, excluding moorings and foundations, each either:

- a) a maximum length of 200 metres; and
- b) a maximum width of 12 metres.

Or

- a) a maximum length of under 50 metres; and
- b) a maximum width of 30 metres.

and

a maximum distance from the sea surface of 12 metres above Mean Low Water Springs for surface piercing elements (excluding navigational and communication equipment)

and

consisting of the following maximum materials per WEC:

- i. Concrete/denscrete – 2000 tonnes;
- ii. Steel/carbon steel – 2000 tonnes; and
- iii. Plastic/synthetic – 100 tonnes.

1.2 The design of each WEC will be chosen from the following options:

- i. Over-topping Device;
- ii. Oscillating Wave Surge Converter;
- iii. Submerged Pressure Differential;
- iv. Oscillating Water Column;
- v. Attenuator;
- vi. Point Absorber;
- vii. Bulge Wave;
- viii. Rotating Mass;

All as described in the Project Envelope submitted with the Application.

2. **WEC Moorings**

2.1 A maximum weight of seabed attachment mechanism of 4000 tonnes per device.

2.2 The design of WEC moorings will be chosen from the following options:

- i. Tension legged;
- ii. Taut-legged;
- iii. Catenary;
- iv. Single point.

2.3 The design of WEC substructure will be chosen from the following options:

- i. Gravity base;
- ii. Pins/Piles with non percussive drilling;
- iii. Rock anchors;
- iv. Suction anchors;
- v. Embedment anchors;
- vi. Pin/rock bolts; or
- vii. Other mooring structure pinned using non-percussive drilling or gravity held;

All as described within the Project Envelope submitted with the Application.

3. **WEC Foundations**

A maximum weight of 4000 tonnes of seabed attachment (excluding foundation substructure) and total area of 750m² per WEC consisting of the following maximum materials;

- i. Concrete/denscrete – 4000 tonnes;
- ii. Steel/Carbon – 4000 tonnes;

As described within the Project Envelope submitted with the Application.

4. **Electrical Hubs**

4.1 No more than 10 electrical hubs each a maximum seabed coverage of 400m² and with maximum distance from the sea surface of 12 metres above Mean Low Water Springs, consisting of the following maximum materials per hub:

- i. Concrete/denscrete – 500 tonnes;
- ii. Steel/carbon steel – 1000 tonnes; and
- iii. Plastic/synthetic – 100 tonnes;

As described within the Project Envelope submitted with the Application.

ANNEX 2 – CONDITIONS

The consent granted under Section 36 of the Electricity Act 1989 is subject to the following conditions:

Part 1 – Conditions Attached to Section 36 Consent

1. Duration of the Consent

The consent is for a period of 18 years from the date of this consent.

Reason: To define the duration of the consent

2. Assignment

This consent must not be assigned without the prior written authorisation of the Scottish Ministers. The Scottish Ministers may authorise the assignment of the consent (with or without conditions) or refuse assignment as they may see fit. The consent is not capable of being assigned, alienated or transferred otherwise than in accordance with the assignment procedure as directed by the Scottish Ministers.

Reason: To safeguard the obligations of the consent if transferred to another company.

3. Incident Reporting

In the event of any breach of health and safety or environmental obligations relating to the Development during the period of this consent, the Company must provide written notification of the nature and timing of the incident to the Scottish Ministers within 24 hours of the incident occurring. Confirmation of remedial measures taken and/or to be taken to rectify the breach must be provided, in writing, to the Scottish Ministers within a period of time to be agreed by the Scottish Ministers.

4. Implementation in accordance with approved plans and requirements of this consent

Except as otherwise required by the terms of this consent, the Development must be constructed and operated in accordance with the Application and any other supplementary and supporting information lodged in support of the Application (such as the additional environmental information (“Addendum Report”), submitted by the Company on 23 June 2021.

Reason: To ensure that the Development is carried out in accordance with the approved details.

5. Submission and approval of plans

The Company must submit the requested plans as detailed in the conditions, in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with any such advisors or organisations as detailed in the conditions or as may be required at the discretion of the Scottish

Ministers. Commencement of activities in the extension area of the Development cannot take place until such approvals are granted.

The Development must, at all times, be operated in accordance with the approved plans as updated or amended.

Any updates or amendments made to the approved plans must be submitted, in writing, to the Scottish Ministers for their prior written approval.

Reason: To ensure that the Development is constructed and operated in accordance with the approved details

6. Compliance with this consent

The Company must ensure that all developers, and/or contractors or sub-contractors are aware of and comply with the extent of the Development for which this consent has been granted, the activity which is consented and the terms of the conditions attached to this consent. The Company must also ensure that all developers, and/or contractors and sub-contractors permitted to engage in the Development abide by the conditions set out in this consent.

Reason: To ensure that the Development is constructed and operated in accordance with the approved details

7. Reporting on generating capacity

The Company must, at least 1 month prior to the construction of new Offshore Renewable Energy Infrastructure (“OREI”), or alteration to existing OREI within the Development, submit a development wide generating capacity report. The generating capacity report must detail the OREI, proposed date of construction or alteration, and generating capacity in MW. The generating capacity report must also provide a summary detailing the current combined generating capacity of all OREI constructed or awaiting construction within the Development.

Reason: To ensure that the combined generating capacity of OREI installed in the Development is within the maximum consented generating capacity for the Development

8. Vessel Management Plan

The Company must, within 3 months of the date of this consent and prior to the extension area becoming operational, or at an alternative date as agreed with the Scottish Ministers, submit a Development wide Vessel Management Plan (“VMP”), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with NatureScot, MCA, NLB, Orkney Islands Council Harbour Authority, SFF, OFA and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers.

The VMP must include, but not be limited to, the following details:

- a) The number, types and specification of vessels required during construction, operation and maintenance activities;

- b) The manner in which vessel management will be coordinated, during simultaneous construction, operation and decommissioning activities on the Development;
- c) Define principles of appropriate vessel behaviour (including the Scottish Marine Wildlife Watching Code) during sensitive breeding periods for the red throated diver and to avoid potential entanglement/injury to marine mammals;
- d) Define a 500 meter buffer around all designated haul-out sites;
- e) Location of working port(s), the routes of passage, the frequency with which vessels will be required to transit between port(s) and the site and indicative vessel transit corridors proposed to be used during construction and operation of activities on the Development;

The VMP must, so far as is reasonably practicable, be consistent with the Navigation Risk Assessment.

Reason: To mitigate impacts of vessels

9. Emergency Response Co-operation Plan

The Company must, within 3 months of the date of this consent and prior to the extension area becoming operational, or at an alternative date as agreed with the Scottish Ministers, submit a Development wide Emergency Response Co-operation Plan (“ERCoP”) for construction, operation and decommissioning activities within the Development, in writing to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the MCA and any other navigational advisors or organisations as may be required at the discretion of the Scottish Ministers.

The ERCoP must include the Development extension area and be agreed with the Offshore Energy Liaison Officer, HM Coastguard, MCA, prior to submission. The ERCoP must be approved before activities can commence within the extended area of the Development.

The ERCoP must be reviewed every 12 months by the Company in consultation with the MCA. The Company must submit the updated ERCoP to the Scottish Ministers following each review after it has been agreed with the MCA.

Reason: To ensure appropriate emergency response measures are in place

10. Navigation Risk Assessment

The Company must comply with the risk controls identified within the Navigation Risk Assessment (“NRA”) for the Development. The NRA must be reviewed every two years by the Company and submitted to the Scottish Ministers for their written approval. Such approval will only be granted following consultation with the MCA, NLB and any such other advisers as may be required at the discretion of the Scottish Ministers.

The Company must consult with the NLB regarding the positioning of cardinal buoys to incorporate the extended area of the Development.

Reason: To mitigate navigational risks to sea users

11. Acoustic Monitoring Plan

The Company must, no later than 3 months from the date of this consent and prior to the extension area becoming operational, or at an alternative date agreed with the Scottish Ministers, submit an Acoustic Monitoring Plan in writing to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with NatureScot and any such other advisers as may be required at the discretion of the Scottish Ministers.

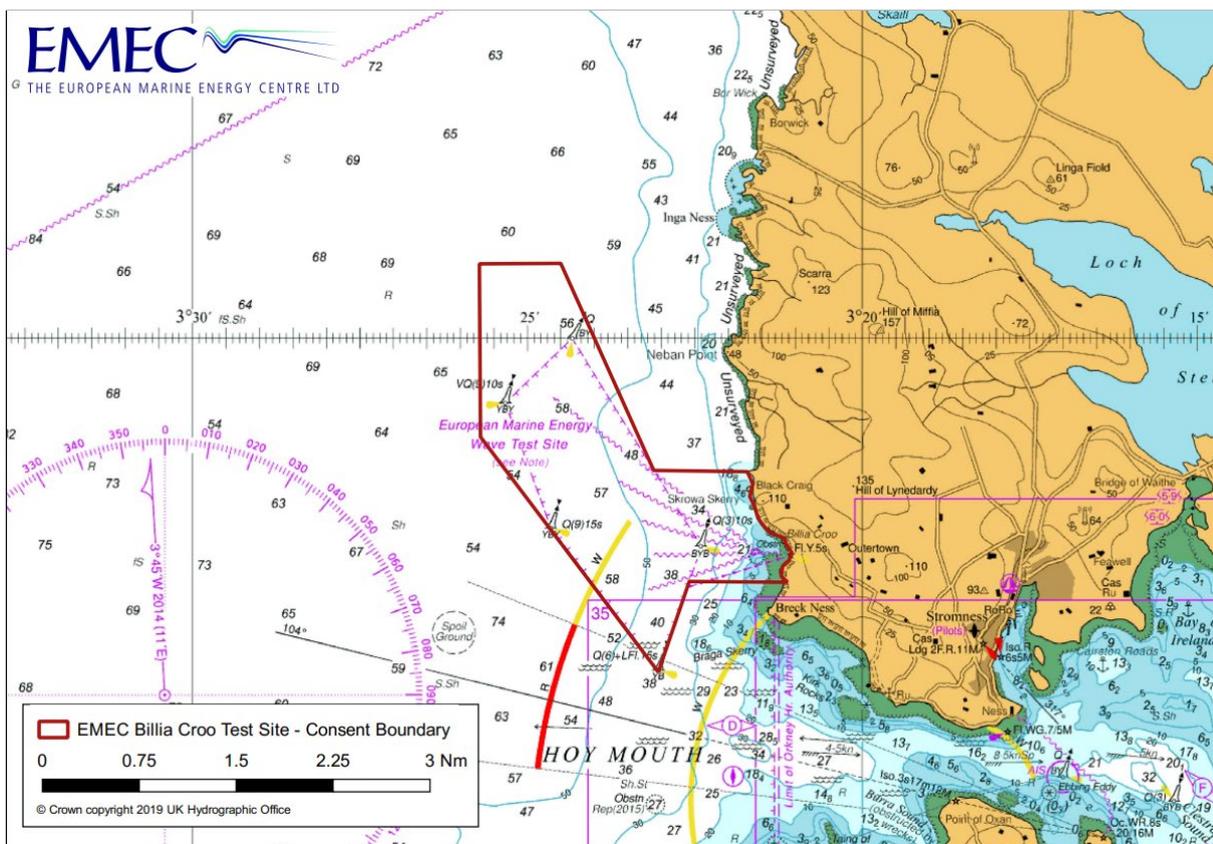
Reason: *To monitor noise disturbance on marine mammal and ornithology receptors*

12. Marine Mammal Recording Protocol

The Company must ensure that the Marine Mammal Recording Protocol (“MMRP”) for the Development, submitted with the Application, is available to all users of the Development. The MMRP must be reviewed every two years and any updated versions of the MMRP must be submitted to the Scottish Ministers for their written approval. Such approval may only be granted following consultation with NatureScot and any such other advisers as may be required at the discretion of the Scottish Ministers.

Reason: *To ensure users of the Development are aware of the protocols for marine mammal recording*

Figure 1 EMEC Billia Croo Test Site - Consent Boundary



Source: [Billia Cross Section 36 Application](#)

PART 2 - DEFINITIONS AND GLOSSARY OF TERMS - In the decision notice attached at Annex C

“AA” means the Appropriate Assessment;

“Addendum Report” means the Billia Croo Section 36 Addendum;

“Application” means the EIA Report, the Environmental Appraisal, the Seascape, Landscape and Visual Impact Assessment, the EMEC Socio-Economic Report; the Economic Impact Report and the Billia Croo Section 36 Addendum;

“ the Additional Information Consultation” means the consultation on the Billia Croo Section 36 Addendum and the Economic Impact Report;

“the Company” means the European Marine Energy Centre Limited, The Charles Clouston Building, O.R.I.C, Back Road, Stromness, Orkney KW16 3AW (Company Number SC249331) or such other person for the time being entitled to the benefit of the consent under section 36 of the Electricity Act 1989;

“the Development” means the Billia Croo Wave Energy Test Site, approximately 2.2km west of the Orkney mainland coastline;

“EIA” mean Environmental Impact Assessment;

“EMEC” means the European Marine Energy Centre;

“EPS” means European Protected Species;

“ERCoP” means Emergency Response Co-operation Plan;

“FTE” means Full Time Equivalent;

“GVA” means Gross Value Added;

“HES” means Historic Environment Scotland;

“HRA” means Habitats Regulations Appraisal;

“km” mean kilometres;

“Licensee” means developers of OREI granted a marine licence to utilise the Development;

“LSE” means Likely Significant Effect;

“MAU” means Marine Analytical Unit;

“MCA” means Maritime and Coastguard Agency;

“MHWS” means Mean High Water Springs;

“MOD” means Ministry of Defence;

“MNNS” means Marine Non Native Species;

“nm” means nautical mile;

“MMRP” means Marine Mammal Recording Protocol;

“MSS” means Marine Scotland Science;

“MS-LOT” means Marine Scotland - Licensing Operations Team;

“MW” means megawatt;

“NCMPA” means the North West Orkney Nature Conservation Marine Protected Area;

“NPF3” means Scotland’s National Planning Framework 3;

“NPF4” means Scotland’s draft National Planning Framework 4;

“NLB” means Northern Lighthouse Board;

“NMP” means National Marine Plan;

“NRA” means Navigation Risk Assessment;

“NSA” means National Scenic Area;

“OFA” means Orkney Fisheries Association;

“OIC” means Orkney Islands Council;

“OREI” means Offshore Renewable Energy Infrastructure;

“the Original Consultation” means consultation on the Application for s.36 consent, EIA Report, the Environmental Appraisal, the Seascape, Landscape and Visual Impact Assessment and the EMEC Socio-Economic Report;

“PLI” means Public Local Inquiry;

“PPFOW” means Pilot Pentland Firth and Orkney Waters;

“Project Envelope” means the document describing the worst case-scenario and design parameters of the number and type of projects and infrastructure likely to utilise the Development;

“RYA” means Royal Yachting Association;

“s.36” means Section 36;

“SAC” means Special Area of Conservation;

“SEPA” means Scottish Environment Protection Agency;

“SFF” means Scottish Fishermen’s Federation;

“SLVIA” means Seascape, Landscape and Visual Impact Assessment;

“SPA” means Special Protected Area;

“SPP” means Scottish Planning Policy 2014;

“SSE” means Scottish and Southern Energy;

“SSSI” means Site of Special Scientific Interest;

“TS” means Transport Scotland;

“UK CoS” means UK Chamber of Shipping;

“VMP” means Vessel Management Plan;

“WEC” means Wave Energy Converter;

“the 2017 EW Regulations” means the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended);

“the Habitats Regulations” means the Conservation of Habitats and Species Regulations 2017;

and

“the Electricity Act” means the Electricity Act 1989.