



ORKNEY

ISLANDS COUNCIL

Orkney's Community Wind Farm Project

Faray Marine Licence Application

Pre-Application Consultation

Guide to the Consultation Boards

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Introduction

This document accompanies the consultation presentation for the marine licence pre-application consultation for the marine infrastructure associated with Orkney's Community Wind Farm Project – Faray.

You should have it to hand whilst you are looking through the consultation presentation.

Both documents are part of the arrangements that have been put in place by Orkney Islands Council for consulting with the public and interested parties on proposed plans for the development.

A marine licence is required for the following proposed marine infrastructure, which is associated with the proposed Faray onshore wind farm, as they extend below mean high-water springs (MHWS):

- Installation of a new extended slipway to replace the existing slipway on Faray
- Installation of a new landing jetty to allow for abnormal load deliveries to Faray

These proposed marine infrastructure works require an Environmental Impact Assessment (EIA) under the Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017.

In addition to the marine licence, a planning application will be submitted for the onshore aspects of the Proposed Development, namely the onshore wind turbines and associated onshore infrastructure.

One EIA Report is being prepared to accompany both the planning application and marine licence application.

The purpose of this consultation is to discuss the marine infrastructure associated with the Faray project. A separate consultation for the onshore aspects of the project (namely the onshore wind turbines and associated onshore infrastructure) was undertaken in late 2020

The marine licensable activities (i.e. the new slipway and landing jetty) require pre-application consultation under the Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013 which usually would include a public event or exhibition. However, we are unable to do this due to the ongoing coronavirus pandemic.

The objective of the pre-application consultation (PAC) event is for communities to be better informed about the marine proposals and to have an opportunity to contribute their views before a formal marine licence application is submitted to Marine Scotland.

It should be noted that comments made to OIC through this PAC process are not representations to Marine Scotland. If a marine licence application is subsequently

submitted, there will be a separate opportunity for representations to be made to Marine Scotland on the application.

All consultation material, including options for discussing the project with the project team and for submitting comments is available at: www.orkney.gov.uk/FarayMarine. For further enquiries please contact Kirsty Groundwater, Project Officer, Orkney Islands Council by email on kirsty.groundwater@orkney.gov.uk or by phone on 07818508323.

The deadline for submitting comments to the Project Team will be Thursday 18 March 2021.

Why are we consulting online and not face to face?

This consultation is part of the pre application consultation process in advance of submission of a marine licence for the new slipway and landing jetty associated with Orkney's Community Wind Farm Project – Faray.

The marine licensable activities require pre-application consultation under the Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013 which usually would include a public event or exhibition. However, we are unable to do this due to the ongoing coronavirus pandemic.

We are hugely disappointed that we can't hold a face to face event to discuss the plans, but given the current situation we hope you can understand why it wouldn't be possible or sensible to do so.

The Scottish Government recently introduced legislation which allows pre-application consultation to take place without a physical public event, recognising the economic need to keep the planning system functioning, and also the uncertainty around when restrictions might be lifted.

That is particularly important for this project given the tight deadline we have been given if we want to meet the Needs Case conditions set out by OFGEM to secure a new electricity interconnector for Orkney. If we don't keep moving towards project consent now, we significantly risk wasting the resources that have been put into this project to date.

As an alternative, we have put considerable effort into designing a consultation which we hope can reach as many people as possible and give everyone the opportunity to understand the proposals and to make their opinions heard.

What we are doing includes:

- Making project information and feedback sheets available online at www.orkney.gov.uk/FarayMarine, by email or by post, answering questions, and taking comments via those channels as well.
- Offering one to one discussions on the phone or via Microsoft Teams where we can talk through the proposals and any questions you might have, and take feedback.
- Holding a live and interactive web based event where people can hear from the project team and ask questions.

All of the details for this have been published in the local press, on social media and is available on the project pre application consultation webpage: www.orkney.gov.uk/FarayMarine

What is the Proposed Development?

The first page of the consultation material is titled 'What is the proposed development?' and includes a map showing the location of the proposed Faray wind farm and the associated marine infrastructure which is subject to a marine licence.

The marine infrastructure comprises:

- A new extended slipway, this will replace the existing facility, which is damaged.
A new landing jetty which will accommodate vessels carrying large (abnormal) loads to Faray (e.g. wind turbines).

You can see the location of Faray and the new marine structures located on the map, highlighted with a red mark.

In terms of the onshore aspects of the Faray project, at this stage of the design the site has the potential capacity for six turbines at approximately 150m and a generating capacity of approximately 28MW.

The purpose of this consultation is to discuss the marine infrastructure associated with the Faray project. A separate consultation for the onshore aspects of the project (namely the onshore wind turbines and associated onshore infrastructure) was undertaken in late 2020.

The improved access from the proposed marine infrastructure will ensure continued access to Faray for general works and to facilitate future developments, such as the proposed Orkney's Community Wind Farm Project – Faray.

What will be included on the site?

The second page of the consultation material is titled 'What will be included on the site?' and describes more specifics around the proposed marine infrastructure.

We are currently finalising the design of the marine infrastructure, which includes having ongoing discussions with the planning authority, Marine Scotland, and statutory consultees, such as NatureScot. The current proposal is in two stages - a new extended slipway, which will be constructed first, followed by a landing jetty.

The installation of a new extended slip and new landing jetty will ensure general continued access to Faray and would facilitate future development, such as the proposed Orkney's Community Wind Farm Project – Faray.

A new slip, for example, would provide access for construction equipment and vehicles, allowing preliminary site works to be undertaken. The landing jetty would facilitate the delivery of large wind turbine components.

You will see an image showing the maximum dimensions of the proposed marine infrastructure. This includes an indicative abnormal load vessel delivering turbine blades to the landing jetty. Key facts on both pieces of infrastructure are also provided.

New extended slipway

Access to Faray is currently taken from a small slipway located to the south of the island. This slipway is in a dilapidated condition and currently only suitable for small landing craft style vessels.

The new extended slipway will be in the same location as the existing slipway, which will allow access onto the existing track.

The slipway has been designed to accommodate standard local vessels up to the size of the MV Thorsvoe. The exact vessels will not be known until post-consent when a construction contractor(s) is selected.

The existing slipway will be used for deliveries of construction materials for the slipway via landing craft.

Once constructed, the new extended slipway will be used for primary access of construction materials for the wind farm and for staff access during both construction and operation.

Examples of the vessels which will use the new extended slipway are provided on Page 3 of the consultation presentation.

New landing jetty

Following slipway construction, the jetty will be installed. It will comprise a causeway measuring a maximum of 55 m long by 10 m wide, terminating in a square docking structure measuring a maximum 20 m by 20 m. The causeway will be in-filled and

capped-off with concrete batched onsite. It is likely that the jetty will be constructed using sheet piles.

Sheet piling provides walls in construction; it is used as excavation support and for sediment retention. It creates a border which keeps sediment back, away from the structure. Sheet piles are designed to interlock with each other and are installed in sequence along the planned excavation perimeter. When arranged together, they form a wall along with anchors to provide extra support. Sheet piles are installed using hammers which can result in underwater noise - this is discussed in more detail in the 'What are the key design considerations' section.

Why was the location chosen?

A marine access review was undertaken to identify the best location for the infrastructure. This concluded that the south of the island is the optimum access location, which is where the existing, damaged, slipway is. Locating the slipway in the same location as the existing slipway will allow access onto the existing track. Locating the jetty close to the slipway will help to shelter it. In addition, it will take advantage of the good water depths to allow for larger vessel access and will allow for linking into the existing access track.

Will dredging be required?

Localised dredging will be required to construct the new slipway and landing jetty. Channel dredging may also be required to allow for large vessel access to the landing jetty (i.e. abnormal load vessels delivering large turbine components). We are still finalising the area in which dredging may be required. It will be limited to around the structures and to a small channel leading to the jetty, so will be relatively small in comparison to the surrounding available seabed. A plan showing the extent of the dredging works will be provided once available.

Sampling of the sediments will be undertaken to determine the sediment physical and chemical (physo-chemical) properties (sediment type, any contaminants present etc.). A sampling plan will be agreed with Marine Scotland prior to sampling taking place and a dredging assessment will be undertaken and included in the EIA Report.

Dredged material will be disposed of in line with the Pilot Pentland Firth and Orkney Waters Marine Spatial Plan (recycled or disposed of in appropriate locations).

How will the new slipway and landing jetty be used?

The third page of the consultation material is titled ‘How will the new slipway and landing jetty be used?’

The slipway has been designed to accommodate standard local vessels up to the size of the MV Thorsvoe, and the landing jetty has been designed to accommodate vessels up to the size of the MV Meri. The exact vessels will not be known until post-consent when a turbine contractor is selected.

Turbine loads will be brought to Hatston Pier on the Mainland of Orkney by an ocean-going vessel and the turbine components will be stored at OIC controlled storage areas to the west of the pier. They will then be loaded onto the specialist vessel for transport to Faray.

As agreed with Orkney Island Council’s Marine Services, a Port Management Plan will be required to ensure there are no detrimental impacts to current operations at Hatston pier.

An estimate of vessel movements during construction is provided below. Note, no vessel movements will take place between mid-September and the end of December in order to avoid the grey seal breeding/pupping season, which is discussed further in ‘What are the key design considerations?’ section.

The bulk of vessel movements will be associated with construction, with any operational movements limited to maintenance. It is estimated that up to two vessel movements per week would be required for maintenance purposes. Occasional abnormal load movements will also be required to deliver replacement turbine components.

Estimated Vessel Arrivals at Faray per Day

Vessel	Purpose	Structure used	Mar	Apr	May	Jun	Jul	Aug	Mar	Apr	May	Jun	Jul	Aug
Landing craft	Slipway construction materials	Existing slipway	1	4	10	0	0	0	0	0	0	0	0	0
MV Thorsvoe or similar	Wind farm construction materials	New slipway	0	0	0	2	2	1	3	3	2	1	2	1
Staff work boat	Construction staff access	New slipway	4	6	6	6	6	6	6	6	6	6	6	6
MV Meri or similar	Abnormal loads (e.g. turbine blades)	New landing jetty	0	0	0	0	0	0	0	0	0	1	1	1

What are the key design considerations (Part 1)?

The fourth page of the consultation material is titled 'What are the key design considerations?' and includes a guide to the site with the Faray and Holm of Faray Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI).

There is quite a lot to consider when analysing the potential impact to the local area from the installation of marine structures. For example, the marine infrastructure overlaps with the Faray and Holm of Faray SAC and SSSI, with the qualifying feature being grey seals.

The site supports the second-largest grey seal breeding colony in the UK. As such, we are proposing that no construction takes place from mid-September to the end of December (i.e. during grey seal breeding/pupping season).

Marine mammals such as whales, dolphins and porpoises (collectively known as cetaceans) are likely to be within the area. All cetaceans are classified as European Protected Species (EPS).

In addition to the above information on marine mammals (seals, known as pinnipeds and cetaceans), the key design considerations are listed in the key on the left-hand side of this page.

In optimizing the design of the site, and producing the EIA report, we will take all these aspects into consideration.

What are the key design considerations (Part 2)?

Pages 5 to 10 of the consultation material, are also titled 'What are the key design considerations?'. They explore our design considerations in more detail across five broad headings –marine ecology and water quality, underwater noise, archaeology, navigation and fishing.

Marine Ecology and Water Quality (Pages 5 & 6)

Impacts to marine mammals from underwater noise will be assessed and the appropriate mitigation measures identified.

In addition to marine mammals, the construction of the marine infrastructure, including dredging, will result in localised disturbance to seabed communities (known as benthos). The area of dredge is shown on page 6. There is also the potential for the dredging to result in temporary and localised impacts to water quality.

There are no seabed protected or priority marine features within the area of construction and dredging, therefore significant impacts are not expected. However, a dredging assessment will be undertaken and included in the EIA Report, the scope of which will be agreed with Marine Scotland and NatureScot.

Underwater noise (Pages 7 – 9)

Underwater noise associated with sheet piling causes high-amplitude, impulsive sounds that can result in a range of impacts to marine mammals, from behavioural changes to injury.

Modelling is being undertaken to identify potential impacts to marine mammals within the area. Full details of the modelling will be provided in the EIA Report and a summary is provided on pages seven to nine of the consultation material.

Modelling is being undertaken to determine the potential for impacts to the following hearing groups of marine mammals:

- Pinnipeds (seals)
- Low frequency cetaceans (baleen whales)
- Mid frequency cetaceans (common dolphin, bottlenose dolphin, Atlantic white-sided dolphin, orca, long-finned pilot whale, minke whale, Risso's dolphin, white-beaked dolphin)
- High frequency cetaceans (harbour porpoise)

Three impact thresholds are being assessed, with the modelling identifying the area where these thresholds would be exceeded:

- Potential for permanent impacts, known as Permanent Threshold Shift (PTS). PTS is where permanent impacts to hearing sensitivity could occur (note this is any permanent change to hearing sensitivity, not just total loss of hearing)

- Potential for temporary impacts, known as Temporary Threshold Shift (TTS). TTS is where temporary injury would occur, i.e. temporary impacts to hearing sensitivity which will return to normal overtime.
- Potential for behavioural changes. At sound levels lower than those that can cause injury, impacts may also occur due to behavioural disturbance to marine mammals. Possible behavioural changes may include startle response, extended cessation or modification of vocal behaviour, brief cessation of reproductive behaviour or brief separation of females and dependent offspring.

From this, the number of individuals that could potentially be impacted will be identified and then impacts to local, regional and population levels of each species identified.

The modelling and above impact threshold assessment methodology has been agreed with NatureScot.

Various mitigation scenarios are being modelled, including both standard mitigation and additional mitigation, as detailed on page 7.

Example modelling outputs from the assessment are provided on the seventh and eighth pages of the consultation materials. The standard mitigation model scenario includes the soft-start procedure. This is where the piling power is gradually ramped up to allow any marine mammals to move away from the noise source.

As part of standard mitigation, a pre-piling search of the 500m mitigation zone will also be undertaken to ensure the zone was clear of marine mammals prior to the soft-start commencing. This cannot be accounted for in the model as the aim of the model is to determine the area over which the impact thresholds (PTS, TTS and behavioural changes) would be exceeded. As such the EIA will represent conservative worst-case impacts.

With this in mind, modelling using additional mitigation, should they be required, is being undertaken specifically, the use of bubble curtains. Compressed air is injected through a perforated ring laid on the seabed around the pile, creating a ring of air bubbles which rise to the surface. The difference in impedance between water and air results in sound being absorbed and scattered as it passes from the water into the air bubbles.

Marine Archaeology (Page 10)

As noted above, the construction and dredging activities will result in a small area of seabed disturbance. A desk-based assessment is being undertaken and there are no recorded wrecks, including Historic Marine Protected Areas (HMPA) within the area of activities. As such, we do not consider that the installation of the marine infrastructure, including localised dredging, to present a significant impact to marine archaeology.

Navigation (Page 10)

The structures, themselves, will be within very close proximity to Faray; they will not interact with the existing Kirkwall - Papa Westray and North Ronaldsay - Kirkwall routes.

The construction works, including localised dredging, will be temporary in nature and contained within the bay, in close proximity to Faray.

Orkney Island Council Marine Services and Orkney Ferries Limited were consulted on the onshore aspects of the proposed development, including vessel movements to and from Faray. The outcome of the consultation was that no impacts or potential effects are anticipated on marine radar due the Proposed Development.

We can also confirm that a Port Management Plan will be prepared to manage abnormal load deliveries and other marine traffic at Hatston Pier to ensure that there will be no interruption to existing operations.

As such we do not consider that the installation or operation of the new extended slipway and landing jetty to present significant impacts to navigation.

Fishing (page 10)

The structures, themselves, will be within very close proximity to Faray. Furthermore, the construction works, including localised dredging, will be temporary in nature and contained within the bay, in close proximity to Faray.

We have undertaken a desk-based assessment of fishing effort within the local area using Scottish Government data, which indicates that fishing effort within the area surrounding Faray is relatively low.

There are no fish landings to Faray and the Proposed Development would only result in temporary exclusion of fishing activities within the immediate area of the jetty and slipway during the construction phase, including the localised dredging works.

Due to the temporary and localised nature of the works, in combination with the relatively small contribution to the wider region's fish landings, significant impacts to fishing are not expected as a result of the new extended slipway and landing jetty.

‘Where are we at in the process and how can you make your views known?’

The tenth page of the consultation material is titled ‘Where are we at in the process and how can you make your views known?’. It shows a timeline of where the marine infrastructure project is currently at and the opportunities for you to contribute your views.

As you can see from the timeline, we have selected the location of the marine infrastructure and are currently working on the EIA.

The EIA is an in-depth analysis of all the potential impacts that our project may have on the local area. This process helps us to determine the best design for all parties involved and takes into account site surveys, desk top studies and multiple expert consultations.

As noted previously, one EIA for the project as a whole, is being undertaken. This will assess the impacts associated with the wind farm on Faray and the associated marine infrastructure that is required to provide access to Faray. It will accompany both the planning application (made for the wind farm and associated onshore infrastructure) and the marine licence application (made for the marine infrastructure, i.e. the new slipway and landing jetty).

As part of this process, we are also carrying out pre-application consultation process which these documents are a key part of.

The objective of the PAC is for communities to be better informed about major and national development proposals and to have an opportunity to contribute their views before a formal planning application is submitted to the planning authority.

It should be noted that comments made to Marine Scotland through this PAC process are not representations to the planning authority. If a marine licence application is subsequently submitted, there will be a separate opportunity for representations to be made to Marine Scotland on the application.

All consultation material, including options for discussing the project with the project team and for submitting comments is available at: www.orkney.gov.uk/FarayMarine. For further enquiries please contact Kirsty Groundwater, Project Officer, Orkney Islands Council by email on kirsty.groundwater@orkney.gov.uk or by phone on 07818508323.

The deadline for submitting comments to the Project Team will be Thursday 18 March 2021.

Please note, a separate consultation session for the onshore aspects of the proposed development (i.e. the onshore wind turbines and associated onshore infrastructure) has already been undertaken (in late 2020) and comments received.

The next stage of the process is the submission of the marine licence application. Once Marine Scotland has validated the application all relevant documentation will

be made available to the public and it is at this point that you can submit your letters of support or objection to Marine Scotland.

Marine Scotland or the Scottish Government will then determine if the marine licence application for the marine infrastructure is to be approved.