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Marine Scotland  
Licensing Operations Team  
PO Box 101  
375 Victoria Road  
Aberdeen  
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12 December 2019

Our ref. SHEPD Section ID 133 Marine Licence Application  
Your ref.

Dear Anni

### **Mainland-Jura Emergency Replacement**

Scottish Hydro Electric Power Distribution plc (SHEPD) holds a licence under the Electricity Act 1989 for the distribution of electricity in the north of Scotland including the Islands. It has a statutory duty to provide an economic and efficient system for the distribution of electricity and to ensure that its assets are maintained to ensure a safe, secure and reliable supply to customers.

The islands of Jura and Islay are normally fed by a 33kV circuit from Lochgilphead. This 33kV circuit is comprised of overhead line, underground cable and submarine cable sections. Further dependant on the 33kV circuit is the island of Colonsay which is supplied by the 11kV network from Islay. In total 3,070 customers are supplied on Jura, Islay and Colonsay.

On 20 November 2019 at 07:26, the existing submarine cable between the Mainland at Tayvallich and Jura faulted in service. During the time of fault, Bowmore Power Station was operational and maintaining supplies to customers on Islay and Colonsay whilst 33kV overhead line refurbishment works were being carried out on Jura. Therefore 199 customer electricity supplies on Jura were impacted by the initial fault.

Bowmore Power Station is now maintaining customer supplies to the islands of Jura, Islay and Colonsay. Electricity is now considered to be an essential service for communities. This cable distributes electricity to domestic and business customers; providing a long term economic

and social benefit to the communities. This now means that there is an increased reliance upon fossil fuels to maintain electricity supplies to the islands through the use of the embedded power station at Bowmore. This places electricity supplies at significant risk if any further faults occur on the SHEPD electricity network infrastructure.

Network testing has confirmed that there is a submarine cable fault located 4.670 km from the Mainland end and 3.338 km from the Jura end. Attempting an offshore piece-in repair is possible however there is significant concern with the water depth at this location (approximately 80 m). At this cable location, the water depth reaches a maximum of 200 m at its deepest point.

SHEPD applied for authorisation to carry out an emergency inspection, survey, repair and possible replacement of this cable under The Marine Licensing (Exempted Activities) (Scottish Inshore Region) Order 2011 – Article 32 Cables and Pipelines. An exemption was granted for the inspection and survey elements of the application. The installation of a replacement cable requires a marine licence under Part 4 of The Marine (Scotland) Act 2010.

The marine licence application form for this cable replacement is supported by the following documents:

- **Project Description**

The cable protection design and construction methodology are presented in the Project Description and considers the seabed conditions, a risk assessment of other marine users and stakeholder feedback, whilst also providing a cost effective approach which ensures a safe, reliable supply. It also contains the scheduling of works, construction techniques and the unexploded ordnance management strategy.

The detailed Project Description will be of interest to all parties.

- **Pre-application Consultation Report (appended by Cost Benefit Analysis Model)**

As SHEPD have previously been granted a marine licence for the construction of a cable greater than 1853 m in length which crosses the intertidal area at this site, then section 23 of the Marine (Scotland) Act 2010 does not apply and we have not had to carry out formal Pre-Application Consultation, however we have consulted stakeholders and include a report summarising how their views have influenced our application.

The Pre-application Consultation Report is required by the Marine (Scotland) Act 2010: Section 24; and will be of interest to Marine Scotland Licensing Operations Team (MS-LOT).



#### ▪ **Marine Environmental Appraisal**

Whilst a full Environmental Impact Assessment is not required for submarine cables, Marine Scotland advises, in their Guidance for Marine Licence Applicant Version 2 June 2015 (Marine Scotland, 2015), that “applicants for marine licences for submarine cables should consider the scale and nature of their projects and give consideration to the need for a proportionate environmental assessment”.

For larger projects, where there is potential for the subsea cable to impact key environmental receptors, it is recommended by Marine Scotland (Marine Scotland, 2015), that an assessment of potential impacts on these receptors is carried out. Results from this assessment along with other relevant information about the Project should then be provided to support the Marine Licence application. This is detailed within the Environmental Supporting Information document (should be read in conjunction with the Fishing Liaison and Mitigation Action Plan) which makes a proportionate environmental assessment of the project against receptors in the vicinity of the works.

The Environmental Supporting Information document will be of interest to MS-LOT, Scottish Natural Heritage, Scottish Environment Protection Agency, Historic Environment Scotland, and other environmental parties.

#### ▪ **Fishing Liaison and Mitigation Action Plan covering all legitimate sea users**

The purpose of the FLMAP Argyll Jura-Islay Finalised 080818 is to a) illustrate the associated risks to the commercial fisheries industry (and other legitimate sea users), address the potential effects (highlighted in the marine licenced evidence) b) Identify how to minimise and mitigate potential impacts on local communities. A summary assessment of all the potential marine interactions and activities which could influence or affect the proposed cable works are is given in Chapter 8.

The FLMAP Delivery Programme Mainland Jura Fault sets out how the CFLO and FIR will communicate during the emergency works and how the deliverables, set out in the Fishing Liaison Mitigation Action Plan, will be measured and fulfilled. This document will also highlight any regional specific communication and consultation that is required, which may extend the notice period required to issue notice to mariners and communicate upcoming works. It will also highlight any ongoing issues which may arise throughout the emergency repair works.

How Scottish Hydro Electric Power Distribution co-exists with other marine users details how we plan to co-exist with other marine users as we carry out these works and follows on from the recent consultation with fishermen in early 2019.

This documentation is of interest to MS-LOT, Maritime Coastguard Agency, Northern Lighthouse Board and legitimate sea users.

▪ **Construction Environment Management Plan**

Mitigation measures, monitoring and reporting procedures which have been incorporated into the design and installation of the replacement cable in order to prevent or reduce adverse environmental affects as much as possible are detailed with the Construction Environment Management Plan.

This document is of interest to MS-LOT, Scottish Natural Heritage, Scottish Environment Protection Agency, Historic Environment Scotland and other environmental parties.

▪ **Operation, Inspection, Maintenance and Decommissioning Strategy**

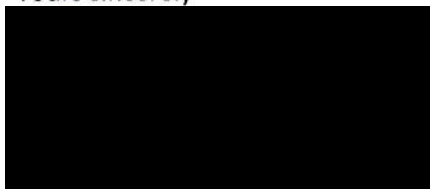
The Operation, Inspection, Maintenance and Decommissioning Strategy sets out the approach to:

- Operation: following installation of the cable, connection and energisation to the network
- Inspection: the visual inspection or tracking of the cable following installation
- Maintenance: remedial works driven by condition based information or following inspections in the marine and/or land environments
- Decommissioning: follows de-energisation of the cable at the end of its operational life

This document will be of interest to MS-LOT.

Additionally SHEPD is seeking an EPS Licence to enable them (and their contractors) to use an Ultra-Short Baseline (USBL) system for subsea positioning of the replacement cable.

Yours sincerely



Head of Subsea Cable Projects