## **APPENDIX E**

**Pre-Application Consultation Report** 



## **Scottish Hydro Electric Power Distribution**

**Pre-application Consultation Report** 

Skye – Harris 33kV Submarine **Cable Replacement** 



## Skye – Harris 33kV Submarine Cable Replacement

Applies to		
Distribution	Transmission	
✓		

Revision: FINAL Classification: Public Issue Date: May 2021 Review Date: May 2021

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#### 1 Foreword

- 1.1 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 so as to ensure a safe, secure and reliable supply to customers.
- 1.2 A replacement for the existing submarine electricity distribution cable between Ardmore on Skye and Beacravik on Harris is proposed. The cable faulted on Friday 16th October 2020. Location testing investigations from each shore end, have identified that the fault is located approximately 15km from the Skye shore, with the cable sitting at a depth in excess of 100m.
- 1.3 According to Scottish and Southern Electricity Network's (SSEN) Vulnerability Mapping tool, the Western Isles are within the highest quartile for Fuel Poverty in Scotland. Combined, Lewis and Harris have more than 340 homes on the Priority Service Register (PSR). Around a third of the population are in low income employment. With some of the most remote communities in the country, the Western Isles have a Social Isolation score of 6.6 (South Lewis), and ranked in the highest decile for Combined Distance to Services and Distance to Health Services.
- 1.4 Communities are currently being supplied from diesel power stations at Battery Point and Arnish, with support from on-island renewable generation. Additional back-up mobile generation has also been provided to help ensure security of supply to homes and businesses on the islands.
- 1.5 The cable will help to support SSEN's ambition of a transition to net zero carbon emissions and will play an active role in delivering the UK and Scottish Governments' respective 2050 and 2045 targets.
- 1.6 This Pre-application Consultation Report has been prepared to accompany an application for a proposed licensable marine activity in accordance with section 24 of the Marine (Scotland) Act 2010.
- 1.7 As part of the marine licencing process, SHEPD has undertaken engagement with the general public and all interested stakeholders. This report demonstrates how all views have been considered and influenced this application.
- 1.8 The output of the CBA model helps to demonstrate to stakeholders that the method(s) proposed for installing this submarine electricity cable justifies the expenditure and



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provides best value. We define best value as the method(s) of installation which satisfy all current legislation and provides a sustainable balance of economic, safety and wider social and economic impacts. The CBA model supports our marine licence application by illustrating how we consider the cumulative impact of our engineering design.

- 1.9 This document should be read in conjunction with the:
  - Marine Licence Application Form
  - Project Description
  - Environmental Supporting Information
  - Fishing Liaison and Mitigation Action Plan (covering all legitimate sea users)
  - Construction Environment Management Plan
  - Operation, Inspection, Maintenance and Decommissioning Strategy

## 2 Proposed licensable marine activity

- 2.1 Scottish Hydro Electric Power Distribution plc (SHEPD) proposes to install a replacement 33kV submarine electricity cable between Ardmore on Skye and Beacravik on Harris. This replacement submarine electricity cable is essential to securing power supplies to the Western Isles.
- 2.2 The application for the Marine Licence is being submitted to permit the cable to be installed within a 500m wide corridor. A summary of the proposal is provided in *Table 1: Cable installation, burial and protection*, but more detail can be found in the *Project Description*.

## 3 Applicant details

3.1 Scottish Hydro Electric Power Distribution plc

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Head of Subsea Cable Project Delivery

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3.2 Scottish Hydro Electric Power Distribution plc a company registered in Scotland under number SC213460.

## 4 Proposed licensee details

4.1 As per applicant details.

## 5 Pre-application Consultation (PAC) Event

5.1 Due to the COVID-19 pandemic and the current physical distancing guidance in place, regulations for a pre-application consultation event to be held at suitably accessible venue were amended under the Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013 ("the 2013 PAC Regulations"). Provisions have been amended by The Marine Works and Marine Licensing (Miscellaneous Temporary Modifications) (Coronavirus) (Scotland) Regulations 2020, which came into force on the 20 May 2020. Under these amending regulations, where a pre-application consultation event must be held, this this was now to be held online.

SHEPD therefore went to great efforts to identify the most robust of formats through which to best deliver the event. The consultation was to be held through a series of 50-minute long sessions and advertised as a public notice six weeks in advance of the event, as required by Marine Scotland. A copy of the PAC event notice can be found in Appendix A: Pre-application Consultation Notice.

- 5.2 The PAC event notice was published:
  - In the local newspaper, the Stornoway Gazette<sup>1</sup>, on 28<sup>th</sup> January 2021.
  - on the project website (https://www.ssen.co.uk/subseacables/)

In order to promote the online PAC event to a wider audience the consultation was promoted to a wider audience, using other print and broadcast advertising platforms:

- a run of paper advert (ROP) was published in the Stornoway Gazette<sup>2</sup> on 25<sup>th</sup> February 2021
- a radio advert was broadcast on two radio stations<sup>3</sup> between 4<sup>th</sup> and 10<sup>th</sup> of March

1.1

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 $<sup>^{\</sup>mathrm{1}}$  Copies of the PAC Public Notices can be found in *Appendix A Section 1*.

<sup>&</sup>lt;sup>2</sup> Copies of the ROP adverts can be found in *Appendix B 1*.

<sup>&</sup>lt;sup>3</sup> Copies of the Radio Adverts can be found in *Appendix B Section 3*.

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- Isles FM
- Skye FM

Direct mailings<sup>4</sup> were sent to more than thirty local community councils and key stakeholders. The email contained a reply button which made registration for the event a single click. The event was also publicised through the specialist pages of our website<sup>5</sup>. Working closely with colleagues in Corporate Communications, a press release had also been developed to promote the event<sup>6</sup>.

- 5.3 The Pre-application events took the format of an online presentation. The Learning Tree platform had been identified as the best resource for engagement. The platform offered the following features:
  - Clear presentation area
  - Chat box for ongoing engagement throughout
  - Potential for Break Out Rooms to better discuss key issues eg. Fisheries,
     Environment etc
  - Live video Question and Answer sessions
  - Chime In button to identify request to ask questions/raise points during presentation
  - Support button allowing participants to have technical issues addressed by Learning Tree team
  - Recording of the full meeting for potential future use<sup>7</sup>

The main presentation element was followed by a question and answer session, with the presentation slides covering the following areas:

- location of the existing cable to be replaced
- the corridor in which it is proposed to lay the replacement cable
- methods of cable installation and protection suited to the cable location
- Environmental and Marine Environment considerations
- how stakeholders could provide comments and the date for final submission

1.1

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<sup>&</sup>lt;sup>4</sup> Copies of Direct Mailing invites can be found in *Appendix B Section 4*.

<sup>&</sup>lt;sup>5</sup> Copy of Website analytics *Appendix B Section 5*.

<sup>&</sup>lt;sup>6</sup> Copy of Press Release Appendix B Section 6.

<sup>&</sup>lt;sup>7</sup> Recording of Skye-Harris Online Consultation Event can be found in *Appendix C Section 1*.

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 how the Cost Benefit Analysis model works and how it will form part of the evidence to be used in the licence application to balance stakeholder views and inform the cable installation and protection designs

## 6 Pre-application Consultation Stakeholder/Consultee Meetings

6.1 A series of stakeholder events has been held in parallel with the planning and delivery of the online PAC event, as detailed in Table 2: Stakeholder Project Consultation Events.

These online meetings were held to enable interested organisations, particularly consultees, to comment on our proposed cable replacement programme. Meetings were targeted at statutory consultees, legitimate sea user organisations, environmental organisations, marine bodies, and non-governmental organisations. Due to current Covid-19 restrictions, meetings were held online utilising the Microsoft Teams platform.

Following these meetings consultees were issued with specially designed Feedback Forms<sup>8</sup> to allow them to more easily provide their views and opinions on the project. Minutes of these meetings were also recorded and distributed to the participant organisations along with a copy of the presentation. This was in order to allow them to better distribute the messaging with their colleagues/members.

Our online Pre-application consultation Stakeholder/Consultee meetings used a standard slide deck to enable relevant information to be shared with delegates. *Table 1:* Stakeholder/Consultee Project Engagement Meetings provides information on those organisations directly engaged regarding the project, the meeting participant, date of meeting and links to associated minutes should they be required. The table outlines the breadth of consultation undertaken above and beyond the online community engagement event held on Thursday 11<sup>th</sup> of March 2021.

1.1



<sup>&</sup>lt;sup>8</sup> Feedback form example can be found in *Appendix D Section 1*.

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**Table 1: Stakeholder/Consultee Project Engagement Meetings** 

Organisation	Attendees	Date	Minutes <sup>9</sup>
SEPA	Alex Candlish	21/04/2021	https://imscs16/otcs/llisapi.dll/ link/38544473
Scottish Fisherman's Federation  Scottish White Fish Producers Association	Malcolm Morrison Femke De Boer	19/04/2021	https://imscs16/otcs/llisapi.dll/ link/38553979
Maritime and Coastguard Agency	Thomas Bulpit	08/04/2021	https://imscs16/otcs/llisapi.dll/ link/38403008
Northern Lighthouse Board	Gillian Burns	08/04/2021	https://imscs16/otcs/llisapi.dll/ link/38403008
NatureScot	Erica Knott Kirstie Dearing Ian Cornforth	08/04/2021	https://imscs16/otcs/llisapi.dll/ link/38411121
Western Isles Fishermen's Association	Duncan Macinnes	31/03/2021	https://imscs16/otcs/llisapi.dll/ link/38373667

1.1



<sup>&</sup>lt;sup>9</sup> Minutes of meetings available on request.

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Ross, Sutherland, Skye & Lochalsh Fishermen's Association	Neil Robertson	31/03/2021	https://imscs16/otcs/llisapi.dll/ link/38373667
Scottish White Fish Producers Association	Femke De Boer	31/03/2021	https://imscs16/otcs/llisapi.dll/ link/38373667
Crown Estates Scotland	Darren Hirst	25/02/2021	https://imscs16/otcs/llisapi.dll/ link/38277205

6.2 Working closely with our colleagues in the Corporate Communications team, we were able to widen our circle of consultation, engaging with the Scottish Government, MSPs, MPs and senior Council officials in Comhairle nan Eilean Siar. A number of renewable energy bodies have also been directly engaged with throughout the programme. A more detailed list of these discussions is available in Table 2: Political Stakeholder Engagement below.

**Table 2: Political Stakeholder Engagement** (through Corporate Communications)

Stakeholder	Feedback/Notes
Conversations with Scottish Government officials, requested briefing to the Minister	No material concerns/feedback. Lead official identified and briefing produced
Notification to BEIS Resilience Team	Notification of fault
	Mr MacNeil raised the need to communicate what we are doing to allow renewable generators to contribute to meeting demand
Meeting with Angus MacNeil MP	MP recognised need for system stability but said environmental groups would raise concerns
	Mr MacNeil also raised why there wasn't a 'loop' in the circuit between Harris and North Uist to allow islands to be back fed in such a scenario

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He asked about impact on Transmission link

Meeting with Alasdair Allan MSP	Mr Allan asked that should a replacement cable be necessary 'serious thought was given' on size of cable for export
	He raised that public may see Battery Point as aged asset and encouraged SSEN to reassure that facility can meet needs
	Mr Allan asked about timing – we said it was likely over six months at best-case scenario. His initial perception was 'years' because of Transmission link timings

SG comfortable with network resilience and steps taken.

Questioned if Battery Point fails, would Arnish and additional generation cover demand.

Meeting with Scottish Government Resilience and Energy policy teams

Minister Wheelhouse is 'very interested' in the impact - particularly on the support for generators. Concerned at renewables unable to export, from a community revenue and renewables' targets sense.



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	CNES asked if largest 33kV cable available, rated at 30W would provide all community generators in Lewis and Harris with firm connections.
Meeting with Comhairle nan Eilean Siar	They asked if we could use the hydro station at Gisla during the current situation and, if so, to what extent
	CNES asked for clarification on the infrastructure required on either side for a larger capacity 132kV cable.
Meeting with Uist and Barra Community Energy Forum	Significant concerns around the resilience of the connection from Skye - Uist
Meeting with Comhairle nan Eilean Siar	Update and discussions on proposed Emergency Support Fund
Meeting with Alasdair Allan MSP	Update provided
Written response to Angus MacNeil MSP	Impact on local renewable generators and community services
Written response to Rhoda Grant MSP	Update on proposed replacement, timescales and reparations for the community on loss of earnings. Seeking reassurance on security of supply.
Written response to Angus MacNeil MSP	Clarification on use of power station vs curtailment to generators, update on Point and Sandwick Trust's Battery Energy Storage System
Meeting with Community Energy Scotland	Ongoing discussions
Meeting with Comhairle nan Eilean Siar	Engagement on proposed 33kV replacement

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М	leeting with Alasdair Allan MSP	Engagement on proposed 33kV replacement
M	leeting with Angus MacNeil MP	Engagement on proposed 33kV replacement
	leeting with Community Energy cotland	Engagement on proposed 33kV replacement
	ritten response to Community Energy cotland	Follow-up on 33kV decision
M	leeting with Angus MacNeil MP	Update provided

## 7 Information received by prospective applicant at Pre-application Consultation Events

7.1 Information received across all the Pre-application Consultation events is summarised below:

#### 7.2 Health and Safety

- Northern Lighthouse Board (NLB) requested that Notice to Mariners and Radio Navigation Warnings are issued advising the mariners prior to, during and on completion of the works
- NLB has also asked that the 'as-laid' survey data for each of the cables should be forwarded to the UK Hydrographic Office to ensure chart updates are completed
- Should any Cable Marker Boards (CMB) be installed/replaced/ moved or removed,
   NLB has also requested that information is updated with the UK Hydrographic Office
- Scottish Fishermen's Federation (SFF) has requested that Post-Lay Survey information and the as-laid RPL listing (Excel) should be submitted to Marine Scotland and SFF once completed



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- Western Isles Fisheries Association (WIFA) advised that scallop dredging was likely to be more of a potential issue but considered that the main hotspots for this activity were closer to shore
- WIFA stated that they were unaware of any previous snagging events with fishing gear and the existing cable
- WIFA advised that there was interest in making sure that local boats know when we are in the area carrying out cable installation, protection or surveys

#### 7.3 Socio-economic

- Ross, Sutherland, Skye & Lochalsh Fisherman's Association (RSSLA) were encouraged by SSEN's recognition that any necessary disruption to local commercial fishing activities would be considered for appropriate financial redress, and that this matter is being actively explored
- Stakeholders generally accepted that maintaining power supplies to the islands is important, and welcome that cost impacts to SHEPD consumers and the environmental impacts have been considered within the proposal
- None of the marine users attending our Pre-application Consultation Event expressed concern about the existing cable location

#### 7.4 Environmental

- NatureScot highlighted that early dialogue and engagement has enabled any
  potential issues to be discussed, solutions found where appropriate and clarity on
  the process and works going forward by all parties
- Early engagement and a growing working relationship between the SSEN teams and NatureScot staff was also welcomed as part of the Skye-Harris consultation activities. The environment organisation outlined that this had enabled good discussion and a stronger understanding of the issues each organisation is facing in carrying out their responsibilities
- SSEN provided information to SEPA on a watercourse at the Harris landfall. SEPA requested an update prior to works, for further feedback
- SSEN highlighted that wet heath peat is known to be in the area as identified by NatureScot local officer in prior engagement meeting. Advised that a peat survey report would be provided, however de-pendent on results a Peat Management Plan may be required



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- Western Isles Fishermen's Association (WIFA) requested information on the Skye-Harris cable route
- WIFA requested information on burial of the Skye-Harris cable
- WIFA advised that the area outlined in the presentation was heavily fished by prawn and shrimp fishermen
- SSEN outlined that identified AToN would be relocated away from the line of sight of a local resident should it be possible to connect behind substation
- SSEN provided further detail on the geography of the landing site and proximity of rock and cliffs
- Crown Estates Scotland (CES) shared that they had no concerns with the landing site, however sought more information on ground investigation work
- RSPB thanked SSEN for engaging early in the process; and hoped to continue engagement throughout the programme. RSPB welcomed timing of 2021 projects, avoiding breeding birds' season

#### 7.5 Wider engineering and economic

- RSSLA fully appreciate the need for the cable replacement and are impressed with the planned routing in so far it will follow existing infrastructure pathways upon the seabed wherever possible
- RSSLA is very grateful to have been consulted in a professional and timely manner and will work closely and appropriately with all SSE subcontracted cable-laying vessels to ensure minimum disruption to both parties commercial interests
- SFF asked whether the Skye-Harris project would impinge on any fishing activity
- SFF advised softer sediment coincided with dredging for scallop, prawn etc, while harder ground coincides with static gear
- WIFA advised that up to 20 vessels could have static gear on the cable route



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 Information from WIFA on trawl direction at Skye-Harris site was that this was multidirectional and dependent on the sea conditions and tide

CES is looking for any potential cable conflicts with other utilities etc.

#### 7.6 Decommissioning

 WIFA stated that they were unaware of any previous snagging events with fishing gear and the existing cable. During the survey phase for the present replacement project they had had no negative feedback from their members

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# 8 Clarifications to the application following comments and/or objections received at the Pre-application Consultation Events

The following amendments have been made following comments received at Pre-application Consultation Events (PAC Events):

#### 8.2 Health & Safety

- SSEN advised NLB that Notice to Mariners and Radio Navigation Warnings will be issued in advance, during and on completion of the works to advise mariners
- SSEN confirmed that the 'as-laid' survey data for the cable would be forwarded to the UK Hydrographic Office to ensure chart updates on project completion
- SSEN advised NLB that should any Cable Marker Boards (CMB) be installed/ replaced/ moved or removed, that information would be updated with the UK Hydrographic Office
- SSEN confirmed to SFF that Post-Lay Survey information and the as-laid RPL listing (Excel) would be submitted to Marine Scotland and SFF on project completion
- WIFA were advised by SSEN that because of the size of the cable lay vessel, activities closer to shore would keep disruption to a minimum
- SSEN advised WIFA that they would keep local fishermen informed on project vessel movements directly through FIRs, by issue of NtMs and other through other channels of communication

#### 8.3 **Socio-economic**

- SSEN welcomed RSSLA's comments on engagement and pledged to continue building close working relationships with the organisation supporting the framework for financial redress
- SSEN advised that its priority was to restore normal working power supplies to its customers and communities as quickly and safely as possible
- SSEN also advised that cost impacts to SHEPD customers and environmental impacts have been thoroughly considered throughout its proposal

#### 8.4 Environmental

SSEN has advised SEPA that mitigation measures will be carried out, such as silt traps
to prevent run-off and the mitigation plan for working in this area will be submitted
prior to start of works



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- SSEN provided WIFA with outline information, and will provide more detailed information
- SSEN advised WIFA further to survey findings, a significant length of the centre section had good burial potential
- SSEN thanked WIFA for the information and advised that they were aware of the trawling activity in the area and would liaise appropriately through their Fishing Industry Representative (FIR) and advise local fishermen of compensation actions
- SSEN has provided CES with further information on ground investigation work

#### 8.4 Wider economic and engineering

- SSEN advised SFF that where softer sediment was present (in sufficient depth), the cable would be buried, and where harder ground concrete mattresses/rock bags would be required subject to the outcome of ongoing engineering studies
- SSEN advised WIFA that scouting survey work had already been carried out in the immediate area and that there had been the necessity for gear clearance as part of this activity. Ongoing monitoring and communication was also assured

#### 8.5 **Decommissioning**

- SSEN advised that Fisheries Liaison contractor, Brown and May had one-to-one conversations with local fishermen and were similarly not aware of any interactions
- It is not the intention of SHEPD to decommission the existing cable. The only exception to this is the potential removal of short sections on approach to landfall in order to facilitate installation of the replacement cable



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## 9 Explanation of approach taken where, following comment and/or objection, no relevant amendment has been made

9.1 The output of SHEPD's Cost Benefit Analysis Methodology<sup>10</sup> helps to demonstrate to stakeholders that the method(s) proposed for installing this submarine electricity cable justifies the expenditure and provides best value. We define best value as the method(s) of installation which satisfy all current legislation and provides a sustainable balance of economic, safety and wider social and economic impacts. The CBA model supports our marine license application by illustrating how we consider the cumulative impact of our engineering design.

#### 9.2 Health & Safety

- The Cost Benefit Analysis methodology, used to model the impact of this cable, provides an overview of how SHEPD measure the impact of their cables on health and safety (human life). Based on the current Marine Accident Investigation Board evidence the rate of incidences is low; but the risk remains and so it is included within the Cost Benefit Analysis model as an impact. This means that SHEPD has considered the less serious, but probably more frequent, interactions with our cables and the socio-economic impact that this has for marine users.
- No works that reduce chart datum by greater than 5% will be undertaken without express agreement of Marine Scotland and Maritime Coastguard Agency.
- The Operation, Inspection, Maintenance and Decommissioning Strategy commits to providing Route Position Lists (RPLs) of cables and landfall locations to the UK Hydrographic Office (UKHO) and Kingfisher Information Service Offshore Renewables and Cables Awareness (KIS-ORCA) in order that relevant charts are updated after cable inspections. Where our inspection programme identifies that the cable has become a danger to navigation or protection of legitimate users of the sea, we will immediately inform Marine Scotland, Maritime and Coastguard Agency, UKHO, Northern Lighthouse Board and the KIS-ORCA to communicate the hazard to the maritime community.

#### 9.3 Socio-economic

The Fishing Liaison Mitigation Action Plan summary assessment of potential interactions with legitimate sea users showed low levels of activity for recreational sailing in the proximity of the cable as well as this, the spatial distribution of recreational canoeing, sea angling, motor cruising and scuba diving did not directly overlap with the Skye-Harris cable route.

<sup>10</sup> Which we define as best balancing the health and safety, environmental, socio-economic, wider-engineering and economic considerations whilst meeting regulatory obligation.



1.1

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- A volume of shipping activity around the Skye-Harris cable was recorded using AIS data from Marine Scotland and individual scouting surveys in preparation of the works. It is for those reasons that the replacement cable will broadly follow the route of the existing cable which feedback suggested was generally acceptable
- It is proposed that the contractor will carry out a post-lay inspection within a period of six months after the completion of the planned installation to firstly ensure the installation meets the expectations of SHEPD internal standards and specifications and those of Marine Scotland but also to ensure the safety of navigation for legitimate users of the sea
- Ofgem, as SHEPD's economic regulator, has the primary responsibility to ensure that SHEPD utilise bill payers' funds in an economic and efficient way. SHEPD continues to work with Ofgem to identify the best value solution that will balance the needs of all stakeholders, including marine users and our customer so that any investment in the distribution network is economic and efficient
- SHEPD's approach to protection is to follow the Cables 2 policy of Scotland's National Marine Plan. Where burial is not demonstrated to be feasible, we will consider all other practicable protection solutions and compare them through our cost benefit analysis model to identify the one which delivers best value

SHEPD defines best value as the method(s) of installation which satisfy all current legislation and provide(s) a sustainable balance of health and safety; socioeconomic; environment; and wider economic and engineering impacts. In turn, this will help demonstrate why SHEPD believes this cable replacement proposal represents best value for customers, regulators and business. SHEPD has developed a Cost Benefit Analysis Model to help quantify which installation/protection method is best for each cable. The Cost Benefit Analysis Model has been used to quantify the impacts of the cable.

#### 9.4 Environmental

- Ecological protected sites and marine archaeological sites as well as priority marine features and receptors have been considered in this application.
- Potential impacts of benthic and intertidal ecology have been minimised through very small area of impact through cable installation methodology. A corridor 500m wide applied for within the *Marine Licence Application* will enable micro-routeing to avoid key features of conservation interest.
- The Environmental supporting information and Construction environment management plan and the Cost Benefit Analysis model consider the project with respect to the policies from the National Marine Plan



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#### 9.5 Wider economic and engineering

- The proposed Skye cable landfall will receive minor adjustment in order to better meet the existing substation. The Beacravik landfall on Harris remains unchanged. Other landfall positions were reviewed and discounted due to a number of factors.
- From initial site investigations and historic inspections of the cable shore ends it has been confirmed that split pipe protection will be required on both shore ends, for all installation scenarios. This will provide additional protection in the inshore area and minimise damage from abrasion. Additionally, this will increase cable stability.
- Given that the current unprotected installation has survived for 30 years and providing that the new cable will be suitably stabilised and include areas of burial and or protections along with shore end split piping, minimal mechanical damage from abrasion should be expected, this again forms part of the assumption that cable life could be extended for the new cable. Additionally, the existing install has a high duty factor which could be reducing the cables electrical life, this new cable has a higher rating and future reinforcement schemes are anticipated which should reduce the duty factor on this cable, which could further improve chances of cable life being extended
- The CBA model has considered the societal value of different installation methods for the Skye - Harris submarine electricity cable. It is understood that other externalities not modelled need to be considered. These include marine planning policy, final engineering design requirements including any requirements for shore end protection and the cumulative impact of our submarine electricity cables on other legitimate marine users
- The CBA model therefore proposes, at this stage, that a combination of 0.3km of split pipe protection, 24.1km of post lay jetting and 7.6km of surface lay (option 1G) is put forward for further design consideration
- The replacement submarine electricity cable will also contain embedded fibre optics within its construction which assists with network management and monitoring of the cable condition. There is additional fibre optic capacity in our cables due to the number and type of fibre optics within our cable. A "Network Provider" can request access to infrastructure under the Communications (Access to Infrastructure) Regulations 2016 to any "Infrastructure Operator" in this case the proposed SHEPD cable.

#### 9.6 **Decommissioning**

With the high costs associated with a cable recovery and disposal operation, the overall project costs would increase and be passed on to SHEPD distribution customers. This cost increase will impact on fuel poverty and this affect has been modelled in the Cost Benefit Analysis.

Instead, the *Operation, Inspection, Maintenance and Decommissioning Strategy* commits to continuing to inspect the existing cable within the marine environment



## Skye – Harris 33kV Submarine Cable Replacement

Арр	lies to
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Revision: FINAL Classification: Public Issue Date: May 2021 Review Date: May 2021

and at shore landfall locations in accordance with inspection requirements for the proposed cable.

### 10 Certification

10.1 Kevin Galbraith

Head of Subsea Cable Project Delivery

Scottish Hydro Electric Power Distribution plc

**Inveralmond House** 

200 Dunkeld Road

Perth

PH1 3AQ

- 10.2 I certify that I have complied with the legislative requirements relating to pre-application consultation and that the pre-application consultation has been undertaken in accordance with statutory requirements.
- 10.3 Signature



Date 18th May 2021



**Revision: FINAL** 

## Skye – Harris 33kV **Submarine Cable Replacement**

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## Appendix A

## **Pre-Application Consultation Event Public Notice**

Issue Date: May 2021

## 1. Statutory Public Notices

Classification: Public



The Gazette says well done to Stornoway Police for treating such breaches with the seriousness they deserved

# Islander fined by officers three times for breaching rules

BY JOHN A. MACINNES

dmsøbindscuk

Police in the Western Isles have issued three Covid (Breach of Regulations) tick-ets to a female following of-ficers finding her at a number of addresses in Stornoway over a 10-day period during

Officers use an Engage, Ed-ucate, and Encourage ap-proach and then, if required, use enforcement action which can in clude issuing fines for breaches of the Covid regula-tions.

tions. On January Hofficers were called to an address in Stornoway when they had cause to Engage, Educate and Encourage one of the persons present in relation to the Covid regulations. They left the address at that time having provided advice.

on January 14 officers wereagain called to attend at an address on an unrelated

matter and the female was again present within the ad-dress, and thatmeantshe had a gain breached the restric-tions. As she had previously been warned about this she was issued with a ticket by of-ficers.

sued two previous tickets. A male who had previously been warned about the regulations was also ticketed for a breach. As such officers is sued the fe-

male with a third ticket for

maie with a third theet for 1920. Western Isles Area Com-mander, Chief Inspector Ian Graham commented: "Offic-ers have throughout the Covid pandemic either been called to numerous addresses with concerns a but eithernessi-

was issued with a ticket by officers.

A number of other persons also visiting that addres sweeting iven guidance asper theregulations.

On January 17 officersonce more attended on an unrelated matter at an address in Stornoway and traced the female who had been issued with a ticket a number of days before. Asshe had no ras some bleek cuse to have been at that address she had no resonable excuse to have been at that address she was insued with a further ticket but this time for the higher amount as it was a second offence.

On January 21 officers were called to an address and within the house, again in breach of Covid regulations, was the

"I would like to reassure the public that the approach of the police has always been to support our NHS and CnES colleagues as they deal with the effects of the Covid pan-demic and we continue to do



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**PUBLIC NOTICES** 

GENERAL NOTICES

Notice is investig given that Scottish Hydro Electric Power Distribution pic a company registered in Scottished under number SC210-490 having its egistered office at Investment House, 200 Darkeld Road, Peth PH1 300 plans to hold order pro-application consultation event between 2pm and §pm on Thurs day 11th of March.

Apm and digm on this and 1 time of Macro.

The meading is in singular this proposal installation of a submishine electricity cable across the Life Much from And Baug, Sliye is Louch Chassonable, Harris. The replacement cable is critical for a soils and salief a supply of electricity to our uniconess. The area of anisoth carried for the proposal automatics ocide in defend by the approximate codes in defend by the approximate codes in defend by the approximate contribution basis.

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2	57146.2764 N	6°51.1402W
3	57°45.1088°N	6°51.2885W
4	57140.08201N	8'49.8085W
5	57°33.4813°N	6140.6865W
6	57°32.9338'N	8140.0875W
7	57°33 AGMN	8°37.8899 W
B	57"34.3040"N	6"38.6211W
9.	57 '40 £ 153 N	6147.2489W
10	57'45.1557'N	6148.7655W
11	57'47.3782'N	6°48.5604W
12	57148.89981N	WE199.08'8
13	57'48.3 154'N	6°51.7951W
14	57507 7.464 N	8792 8 101 W

CROFTING COMMISSION IMBEAN NA CROITEARACHD DECROFTING DIRECTIONS ISSUED

K Medianzie, 51 Upper Bayble, 0.123 ha, Edeling oroft house site & garden ground, Fending conditions (102081)

2. D Machines, 15 Beleshare, 0.091 ha, Croft se alter and garden ground, with fending ditions (105808)

Full details at www.crofting.scotland.govuk

#### PLANNING NOTICES

## COMHAIRLE NAN EILEAN SIAR

Classification: Public

#### own & Country Planning (Development Management

cedure) (Scotland) Regulations 2013

he planning application(s) listed below may be examined in line at http://planning.cne-siar.gov.uk/PublicAccess/ 0/00562/PPD, Isle Of Harris Distillers, BottlingAnd ogistics Centre, Urgha, Erection of Bottling & Logistics entre and maturation warehouse for late of Harris Distillery, th associated access, carparking and turning areas and ervice yard --- 21/00013/PPD, Ath Taigh, Perceval Road, fornoway, Change of use from opticians premises to welling house including porch extension ~ 21/00016/PPD, pedialist Welding Services, Workshop, Blackwater, Install kternal fire escape ~~21/00017/PPD, Hotel Hebrides, Pier oad, Tarbert, Replace existing second floor Velux roofights th storm windows -- 21/00/021/PPD, Scaliscro Lodge, caliscro, Uig, Partial demolition, alteration and renovation Scaliscro Lodge ~

ritten comments must be made within 14 days of ublication of this notice, addressed to Director for ommunities, Communities Dept., Sandwick Rd, Stomo le of Lewis HS1 2BW or Balivanich, Isle of Benbecula HS7 .Aor by email to planning@cne-siar.gov.uk.

ue to gurrent restrictions on a goess to Comhairle offices. ated to COVID-19, hard copies of applications and plans re not available to view. However we have limited access to mebasedA4 printing and on request can, in exceptional currestances, print and post out copies of plans. Please none 0 1851 8 22690 or 0187 0 604990 and leave a voice

#### IBLIC NOTICES

#### **Public & Legal Notice COVID-19 UPDATE** FROM JPI MEDIA:

If you require a Public & Legal notice, our team is still on hand to assist you with this, business hours and deadlines will remain the sam For any enquiries in the first place please email ublicnotices@jplmedia.co.uk with your requirements

- Including your full name,
- Full business address including post code,
- A contact telephone number
- Full wording for the notice you require
- Newspaper title and date required.
   For further advice please call the team on

0207 023 7931 jpimedia

#### PUBLIC NOTICES

Issue Date: May 2021

MAISNE (SCOTLAND) ACT 2910 COMM BROAL MOORINGS, LOCH CARNAN, BLE OF SOUTH UIST

Notice is hereby given that Loch Duert Ltd has applied to the Scottish Ministers of the Scottish Government, under Part 4 of the Marine (Scotland) Act 2010, in respect of the deposit of commercial minorings at:

Cost		
Location	Latitude	Longitude
Loch Caman, bis	57 22 292 N	007" 15.750 W
of South Ulat	57"22.325 N	007" 16.767 W
	57 22 320 N	007" 16.808 W

Objections relating to safety of revigetic environmental bosses in respect of the applic should be media by errell to: MS Marinel, loan sing Oppov. soot

reference: 00.003004 and Loch Quert Ltd.

Fair Promission Notice
The Soddish Covernment's Metrics Sodiend
Lloranity Operations Team (MS-LOT) determins
applications for markes Iconosis under the Metric
(Sodiend) Act 2010 and the Metric and Cossist
Access Act 2020. During the considerion process
any paraon having as interest in the outcome of
the application may make representation to MS-LOT. The representation may contain paraonal
information, the coorpie is marked or substitution. This
representation will only be used for the purpose of
determining an application and will be stored. representation will only be used for the purpose of determining an explosion and will be stored security in the Southin Governments official corporate record. Representations will be shread with the applicate and or agent acting on behalf of the explosion, say people or organizations that we consult in relation to the application and, where moscoarsy the published online, however personal information will be removed before sharing or publishing.

A full privacy notice can be found at: http://www.gov.ace/Topiculmetrael.lossuing/med-nat/Theophicities If you are unable to ecoses they or you have any queries or concerns about how your personal information will be handled, contact

#### First Registration of a Croft Patrick de la Lanne in his capacity as the

Patrick de la Lanne in his oppachy so the Executor of the late Rebbit Situart de la Lanne Minhouse has registered critis? I Accidate, Ug on the Creding Register haid by the Registers of Excitant. Any person who wishes to rehistenge the registration on may apply to the Sontiah Land Court by 5° August 2021. Details of the registration one beforms at:

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#### osed Assignation of a Croft

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Truncky, February 25, 2001 www.storrowaygaretts.co.uk

## Skye - Harris 33kV **Submarine Cable Replacement**

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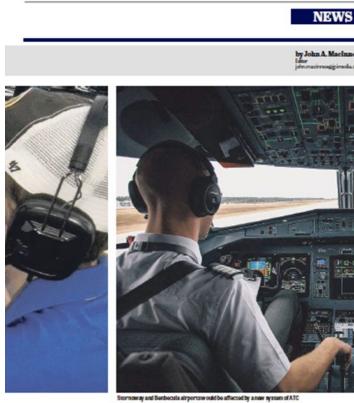
Distribution

Transmission

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#### **Appendix B Pre-Application Consultation Event Further Promotion**

#### 1. **Additional Newspaper Advertisement**



thing I have put to HIAL many times.
In a meeting with Usst Councillor sin January, HIAL Management said the removal of ATC from Benbecula is a necessary step due to changing regulatory requir emel.

roquirements.
However Prospect Un-

roquirements. However Prospect Union has con firmed with the CAA that may not in the installed and the content of the content





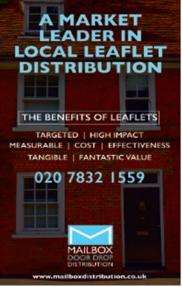
Scottish and Southern Electricity Networks (SSEN) is seeking your views on the planned replacement of the 33 kilovolt (kV) cable which runs from Ardmore, Skye to Beacravik,

In order to gather your views, SSEN is holding an online Pre-Application Consultation event during the following times:

2pm to 6pm

Thursday 11 March 2021





Page 25 of 68 © Scottish and Southern Electricity Networks Uncontrolled if Printed



## Skye – Harris 33kV Submarine Cable Replacement

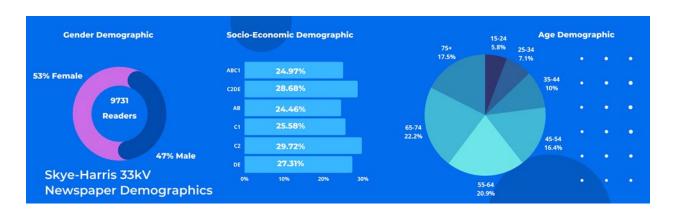
Applies to

Distribution Transmission

✓

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## 2. Newspaper Demographics



### 3. Additional Radio Advertisement



Please click on the image above to listen to our advert. Alternatively visit:

https://vimeo.com/539179595/2101d1d278

## Skye – Harris 33kV Submarine Cable Replacement

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## 4. Direct Mailing Invite



Skye, Lewis and Harris communities encouraged to have their say

Good morning,

Scottish and Southern Electricity Networks (SSEN) Distribution is hosting an online consultation event on the planned replacement of the 33 kilovolt (kV) subsea cable which faulted on 16 October.

Customers and stakeholders across Skye, Lewis and Harris are being encouraged to sign up to the event and have their say on the replacement project.

Since SSEN Distribution's <u>announcement in December</u>, which followed extensive consideration and stakeholder engagement, SSEN's Submarine Cables team has been developing a programme to replace the 33kV cable which runs from Ardmore, Skye to Beacravik, Harris.

As part of that development, the project team is looking to engage with local customers, communities and stakeholders to seek their views as they finalise the details and prepare the necessary applications process.

A representative from our RIIO-ED2 team will also be present to capture views on our 2023 to 2028 investment programme.

A series of four hourly online consultation events are being planned for the following date:

Time: 2pm to 6pm Date: Thursday 11 March

Should you be interested in participating, then please register by emailing <u>submarinecables@sse.com</u> or clicking on the button below:



## Skye - Harris 33kV **Submarine Cable Replacement**

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Search news

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#### **Website Article and Statistics** 5.



### SSEN Distribution to proceed with replacement cable between Skye and Harris

Scottish and Southern Electricity Networks (SSEN) Distribution has today confirmed its decision to proceed with the replacement of the 33 kilovolt (kV) cable which runs from Ardmore, Skye to Beacravik, Harris following the recent subsea cable fault on 16

Following analysis of procurement, cable manufacture and licensing considerations, it is expected that the replacement cable will be energised and operational by end August 2021. The replacement 33kV cable, which will provide increased capacity of between 8 and 10MW compared to the existing link, is expected to arrive in the UK in late May.

In reaching this decision, SSEN Distribution worked with SSEN Transmission to undertake a whole system analysis of a range of technical options for the cable replacement. Following extensive consideration, including engagement with local stakeholders and affected parties, the decision in favour of a 35KV replacement has been made to protect against further security of supply risk to customers on Lewis and Harris and to limit environmental and community impacts.

Detailed analysis of alternative solutions, including a new 132kV link, presented replacement timescales of February 2023 at the earliest, leaving customers and communities exposed to undue risk over three winters as well as being unable to resume renewable electricity export. The decision to proceed with the replacement at 35kV also avoids up to 200,000 tonnes of CO2 emissions from the back-up stations during the timescale projected for larger cable option.

"Faced with considering replacement options in an emergency scenario, we've had to balance the opportunity to progress whole system solutions with the need to restore Lewis and Harris to normal supply and generation conditions in reasonable timescales, limiting impacts where possible.

"We recognise from our engagement with the community there are a range of views about the optimum solution, each with its own trade-offs. In exploring options, it became clear that the conditions and timescales related to a larger solution posed a number of challenges which could not be reconciled without leaving customers and network users exposed to significant risk.

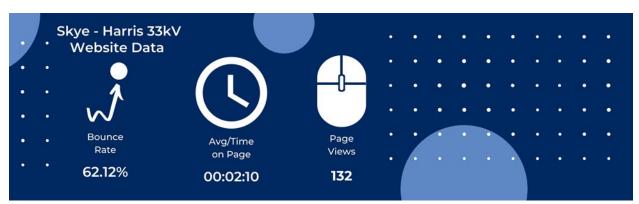
"Our priority as distribution network operator remains to ensure a safe and secure supply of electricity to homes and businesses on the islands whilst limiting any risk to supply wherever possible. Today's decision supports that outcome."

Whilst SSEN acknowledges recent calls from some stakeholders for a larger capacity cable to be installed and ringfenced for community renewable schemes, it is important to note that this is not permitted under industry rules and regulations. Any additional capacity must be allocated in line with the contracted position of developers on a first-come, first-served basis and network operators cannot discriminate between ownership models or technologies.

Separately, SSEN Transmission has confirmed that it remains committed to take forward a transmission link to the Western Isles with its progression remaining subject to regulatory approval. This, in turn, requires sufficient levels of renewable electricity generation on the Western Isles to demonstrate commitment to take projects forward, in line with Ofgem's expectations.

Community developers with a significant interest in connecting are therefore encouraged to make a formal application to secure their place in the queue to connect, which will support the investment case to take forward the link:





## Skye – Harris 33kV Submarine Cable Replacement

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#### 6. Press Release

#### SSEN seeks views on Skye - Harris subsea cable replacement

Scottish and Southern Electricity Networks (SSEN) Distribution is holding a virtual consultation event on Thursday 11 March to seek feedback on its project to replace the 33 kilovolt (kV) subsea cable connecting Lewis and Harris to the Scottish mainland.

In December 2020, following extensive consideration and stakeholder engagement, SSEN <u>confirmed its decision</u> to proceed with the replacement of the 33kV subsea cable which runs from Ardmore, Skye to Beacravik, Harris, following a fault which occurred on 16 October.

The replacement cable, which will provide increased capacity of between 8MW and 10MW compared to the existing link, is expected to arrive in the UK in late May and be energised by the end of summer 2021.

SSEN's Submarine Cable project team is looking to engage with local customers, communities and stakeholders to seek their views and develop and refine plans prior to submitting a Marine Licence Application to Marine Scotland in April 2021.

Kevin Galbraith, SSEN's Acting Head of Subsea Cable Project Delivery, said:

"Ahead of our application to Marine Scotland, we're keen to give local communities and interested parties an opportunity to learn more about the project and comment on how we are planning to carry out this essential cable replacement.

"We have developed our proposals based on a balance of environmental, engineering and economic considerations and we're committed to consulting with everyone who has an interest – from the homes and businesses relying on the electricity the subsea cable delivers, to the marine industry who may be impacted by essential work, and we look forward to welcoming everyone along to our virtual event."

SSEN's project team will be holding a series of four, hourly consultation events online on:

Date: Thursday 11 March

• Time: 2pm to 6pm

For more information, please visit <a href="mailto:ssen.co.uk/subseacables">ssen.co.uk/subseacables</a> and to register your interest in participating, please email <a href="mailto:submarinecables@sse.com">submarinecables@sse.com</a>.



## Skye – Harris 33kV Submarine Cable Replacement

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## **Appendix C** Pre-application Consultation Event

#### 1. Online PAC Event Video



Please click on the image above to view our Skye-Harris Online Project Consultation Event video. Alternatively visit:

https://anyware3.learningtree.com/px02vge8mz7d/



## Skye – Harris 33kV **Submarine Cable Replacement**

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#### **Appendix D Pre-application Consultation Feedback**

## 1. Feedback Form

omplete this short qu Consultation ev				
		ts, if so how did you find	d out about it?	
ocal newspaper ocal website etter Other	0000	SSEN website Word of mouth Poster	000	
Replacing the o	able	thods proposed for repla	ocing this cable	are acceptable. Strongly agree
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Strongly disagree  Please include any furn  Our proposal	Disagree  ther comments here:	Not sure	Agree	Strongly agree

## Skye – Harris 33kV **Submarine Cable Replacement**

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## 2. Stakeholder/Consultee Feedback

Stakeholder/Organisation	Feedback
Gillian Burns Northern Lighthouse Board	Northern Lighthouse Board (NLB) are statutory consultees regarding safe navigation and do not have any comment on the proposed routing of the cables at each of the sites and will respond to any Marine Licence Exempted Activities and / or Marine Licence application consultation requiring that Notice to Mariners and Radio Navigation Warnings are issued advising the mariners prior to, during and on completion of the works. The 'as-laid' survey data for each of the cables should be forwarded to the UK Hydrographic Office to ensure chart updates are completed. This also applies to any Cable Marker Boards (CMB) if they are installed/ replaced/ moved or removed. The Statutory Sanction of the NLB is required to install a new CMB or substantially alter an existing CMB (i.e. moving position), and Sanction is also required if a CMB is permanently removed. Please contact us on navigation@nlb.org.uk to discuss. Please review the navigation charts and if noted that there is a discrepancy regarding the installed CMB please bring this to the attention of both NLB and UKHO.
Erica Knott  NatureScot	Having early dialogue and engagement enables any issues to be discussed, solutions found where appropriate and clarity on the process and works going forward by all parties. We very much welcome the early engagement and growing working relationship between the SSEN teams and NatureScot staff. This has enabled good discussion and a stronger understanding of the issues each organisation is facing in carrying out their responsibilities. We hope to continue this working relationship into future projects. We very much welcome any feedback on our input to these projects and if there is anything we can do to also enable good discussions going forward.
Neil Robertson	RSSLA fully appreciate the need for the cable replacement and are impressed with the planned routing in so far it will follow existing

## Skye – Harris 33kV **Submarine Cable Replacement**

**Applies to** 

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Ross, Sutherland, Skye & Lochalsh Fisherman's Association (RSSLA)	infrastructure pathways upon the seabed wherever possible. RSSLA are very grateful to have been consulted in a professional and timely manner and will work closely and appropriately with all SSE subcontracted cable-laying vessels to ensure minimum disruption to both parties commercial interests. We were further encouraged by SSE's recognition that any necessary disruption to local commercial fishing activities would be considered for appropriate financial redress, and this matter is being actively explored.
From meeting minutes	
Alex Candlish SEPA	SEPA welcomed opportunity to engage on Skye-Harris, Carradale-Arran and Mull-Coll.  SSEN provided information on a watercourse at the Harris landfall. The business outlined that mitigation measures would be carried out, such as silt traps to prevent run-off and the mitigation plan for working in this area will be submitted to SEPA prior to works, for feedback.  SSEN highlighted that wet heath peat is known to be in the area as identified by NatureScot local officer in prior engagement meeting. Advised that a peat survey report would be provided, however dependent on results a Peat Management Plan may be required.
Malcolm Morrison & Femke De Boer Scottish Fishermen's Federation	SFF welcomed opportunity to engage on Skye-Harris, Carradale-Arran and Mull-Coll.  Following presentation, SFF enquired as to Post-Lay Survey works. SSEN advised that this would be completed, and that the as-laid RPL listing (Excel)be submitted to Marine Scotland and direct to SFF.  SFF asked whether the Skye-Harris project would impinge on any fishing activity. SSEN responded that where softer sediment was present (in sufficient depth), the cable would be buried, and where harder ground concrete mattresses/rock



## Skye – Harris 33kV **Submarine Cable Replacement**

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	bags would be required subject to the outcome of the ongoing engineering studies. SFF advised softer sediment coincided with dredging for scallop, prawn etc, while harder ground coincides with static gear.
Thomas Bulpit  Maritime and Coastguard  Agency	MCA was satisfied with response from SSEN.
Duncan Macinnes Western Isles Fisheries Association	Discussion around route of Skye-Harris cable. WIFA requested information on the route. SSEN provided outline information, and have taken an action to follow up with more detailed information.
	WIFA asked whether the cable would be buried. SSEN responded that the full information on burial of the cable would depend on the survey findings, however believed that along a significant length of the centre section there was likely to be good burial potential. SSEN also advised that the original cable had been surface-layed but had self-buried over time.
	WIFA advised that the area outlined in the presentation was heavily fished by prawn and shrimp fishermen. SSEN concurred with this information and were aware that some trawling activity also took place in the area.
	WIFA also explained that scallop dredging was likely to be more of a potential issue but considered that the main hotspots for this activity were closer to shore. SSEN requested that, where possible, WIFA shared any information or knowledge that they may have in order to support the project team as they progress the design of the cable route and installation methods. WIFA



## Skye – Harris 33kV **Submarine Cable Replacement**

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	offered to provide information on scallop dredging subject to the consent of their members.
	WIFA stated that they were unaware of any previous snagging events with fishing gear and the existing cable. During the survey phase for the present replacement project they had had no negative feedback from their members. SSEN advised that Brown and May had one to one conversations with local fishermen and were not aware of any interactions.
	WIFA advised that up to 20 vessels could have static gear on the cable route. SSEN informed attendees that scouting survey work had already been carried out in the immediate area and that there had been the necessity for gear clearance as part of this activity.
	Information from WIFA on trawl direction at Skye- Harris site was that this was multi-directional and dependent on the sea conditions and tide.
	CES is looking for any potential cable conflicts with other utilities etc.
Darren Hirst  Crown Estates Scotland	SSEN outlined that identified AToN would be relocated away from the line of sight of a local resident should it be possible to connect behind substation. SSEN provided further detail on the geography of the landing site and proximity of rock and cliffs. CES shared that they had no concerns with the landing site. SSEN agreed to provide further information on ground investigation work.



## Skye – Harris 33kV **Submarine Cable Replacement**

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#### 3. Political Stakeholder Engagement (through Corporate Communications)

Stakeholder	Feedback/Notes
Conversations with Scottish Government officials, requested briefing to the Minister	No material concerns/feedback. Lead official identified and briefing produced
Notification to BEIS Resilience Team	Notification of fault
	Mr MacNeil raised the need to communicate what we are doing to allow renewable generators to contribute to meeting demand
Meeting with Angus MacNeil MP	MP recognised need for system stability but said environmental groups would raise concerns
	Mr MacNeil also raised why there wasn't a 'loop' in the circuit between Harris and North Uist to allow islands to be back fed in such a scenario
	He asked about impact on Transmission link
Meeting with Alasdair Allan MSP	Mr Allan asked that should a replacement cable be necessary 'serious thought was given' on size of cable for export
	He raised that public may see Battery Point as aged asset and encouraged SSEN to reassure that facility can meet needs
	Mr Allan asked about timing – we said it was likely over six months at best-case scenario. His initial perception was 'years' because of Transmission link timings
Meeting with Scottish Government Resilience and Energy policy teams	SG comfortable with network resilience and steps taken.



### Skye - Harris 33kV **Submarine Cable Replacement**

**Applies to** Distribution Transmission

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> Questioned if Battery Point fails, would Arnish and additional generation cover demand.

Minister Wheelhouse is 'very interested' in the impact - particularly on the support for generators. Concerned at renewables unable to export, from a community revenue and renewables' targets sense.

	CNES asked if largest 33kV cable available, rated at 30W would provide all community generators in Lewis and Harris with firm connections.
Meeting with Comhairle nan Eilean Siar	They asked if we could use the hydro station at Gisla during the current situation and, if so, to what extent
	CNES asked for clarification on the infrastructure required on either side for a larger capacity 132kV cable.
Meeting with Uist and Barra Community Energy Forum	Significant concerns around the resilience of the connection from Skye - Uist
Meeting with Comhairle nan Eilean Siar	Update and discussions on proposed Emergency Support Fund
Meeting with Alasdair Allan MSP	Update provided
Written response to Angus MacNeil MSP	Impact on local renewable generators and community services
Written response to Rhoda Grant MSP	Update on proposed replacement, timescales and reparations for the community on loss of earnings. Seeking reassurance on security of supply.
Written response to Angus MacNeil MSP	Clarification on use of power station vs curtailment to generators, update on Point and Sandwick Trust's Battery Energy Storage System

## Skye – Harris 33kV Submarine Cable Replacement

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Meeting with Community Energy Scotland	Ongoing discussions
Meeting with Comhairle nan Eilean Siar	Engagement on proposed 33kV replacement
Meeting with Alasdair Allan MSP	Engagement on proposed 33kV replacement
Meeting with Angus MacNeil MP	Engagement on proposed 33kV replacement
Meeting with Community Energy Scotland	Engagement on proposed 33kV replacement
Written response to Community Energy Scotland	Follow-up on 33kV decision
Meeting with Angus MacNeil MP	Update provided

SSEN has also been in regular contact with local generators and representative bodies, including Community Energy Scotland, throughout the duration of the project.



#### Skye – Harris 33kV Submarine Cable Replacement

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# **Appendix E** Pre-application Consultation Presentation

1. Pre-Application Consultation Event Presentation





## Making sure everyone's voice is heard











To avoid bandwidth issues, please only use video during Q&A sessions

Please stay on mute whilst presentations are delivered

Please participate freely in the discussions, using the chat box at any time If you have any technical queries let us know through the chat function



#### Skye - Harris 33kV **Submarine Cable Replacement**

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#### **Todays Agenda**



Time	Торіс	Presenter
5 mins	Welcome, Introduction, Housekeeping	Chris
15 mins	Skye – Harris 33kV Presentation	Chris & Alex
10 mins	Shaping Our Future Network – RIIO – ED2 Presentation	ED2 Team
15 mins	Answering Your Questions	All
5 mins	Conclusions and Final Questions	Submarine Cables Team
	Close and Keep in Touch	Chris

# **Purpose of Presentation**



#### In today's event, we want to:

- 1. Share your views on the planned subsea cable replacement project
- 2. Discuss how SSEN Distribution can better engage with your community
- 3. Understand your wider priorities to help shape our next business plan for RIIO-ED2, which starts in 2023.







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Applies to

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# Who we are

We are your Distribution Network Operator or DNO, responsible for delivering electricity at a local level.

Our electricity distribution networks carry electricity to over 3.8 million homes and businesses across the north of Scotland and central southern England.

We don't supply or generate electricity. Although part of the same SSE group, we are separate to SSEN Transmission, who own and manage the electricity transmission network in the north of Scotland.

As a natural monopoly, our investments and activities are regulated by the energy regulator, Ofgem through our network licence.





650,000+ vulnerable customers identified on our Priority Services



over **3,500 employees** across the country



130,000km of overhead lines and underground cables



106,000 substations



100+ subsea cables powering island communities



#### What we do - our role as a DNO







Network Regulation The RIIO model

Scottish & Southern

**Electricity Networks** 





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#### Skye - Harris 33kV **Submarine Cable Replacement**

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**Our Work** 





A link to the video is available here: https://vimeo.com/241188747

# Proactive replacement programme



- · We have replaced around 84km of cable during this price control period based on inspection programmes, risk assessments, and faults.
- · We plan to proactively replace a further 52km of cable in the remainder of the period.

#### Replaced to date:

	Current Length (km)	Project Status
Lerwick - Bressay	0.50	Replaced
Rousay - Westray	10.45	Replaced
Harris - Scalpay	0.77	Replaced
Bute - Cumbrae	4.92	Replaced
Mossbank - Yell	3.88	Replaced
Yell - Unst 1	2.13	Replaced
Yell - Unst 2	1.77	Replaced
Shapinsay - Stronsay	14.77	Replaced
Mainland - Jura	8.09	Replaced
Mainland - Pentland Firth East	37	Replaced
10 cables	84.02km	

#### Proactive future programme to 2022:

	Current Length (km)	Project Status
Mainland Orkney - Hoy (centre)	4.66	Replacement 21/22
Mainland Orkney - Hoy (north)	4.42	Replacement 21/22
Mull - Coll	15.31	Replacement 21/22
Carradale - Arran (north)	6.10	Replacement 21/22



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#### **Our Regulators**





#### **Our Consultees**























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# Supporting our customers...

Classification: Public





## **Cost Benefit Analysis**





#### Skye – Harris 33kV Submarine Cable Replacement

Applies to

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#### **Consents Timeline**





#### Skye - Harris Cable Replacement



- Cable faulted on morning of Friday 16<sup>th</sup> October 2020
- · Business investigation into why cable faulted
- · Business considered multiple replacement options
- Replacement 33kV cable announced 17<sup>th</sup> December 2020
- Project design and contractor identified
- Consultation with regulator and key stakeholders
- Consultation with customers and communities



#### Skye – Harris 33kV Submarine Cable Replacement

Applies to

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Transmission

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# **Skye Harris Cable Facts**



32 kilometres/19.9miles



Depth - 150 metres



59 kilograms/metre in air



- 3x Copper wire cores
- Fibre Optic elements
- Polyethylene insulation
- · Polyurethane covering
- Galvanised wire braid protection



Diameter about same as small dinner plate



# **Project Overview**

- The existing 33kV power cable connecting the Isle of Skye with the Isle of Harris has been identified as requiring replacement
- Replacement of this cable is essential to securing power supplies to the isle of Harris

### **Project Operations Include**

- Pre-Installation Surveys to identify most effective cable lay route
- · Landfall establishment will use the existing landfall sites at each end of the cable route
- Cable Installation cable lay operations from cable lay vessel
- Cable Protection Post-Installation Surveys installation rock bags/concrete mattresses for cable protection and record location of cable
- · Landfall re-instatement return the work sites to original or agreed state





#### Skye – Harris 33kV Submarine Cable Replacement

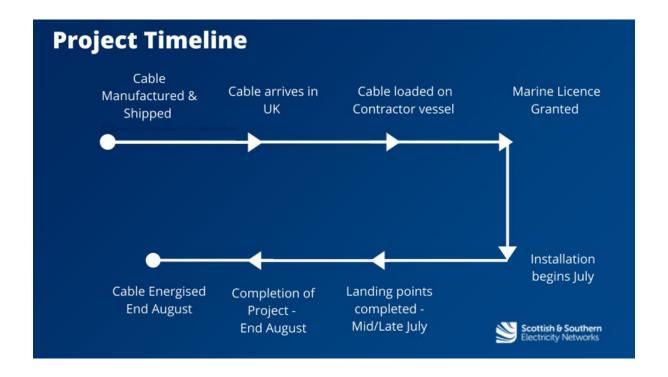
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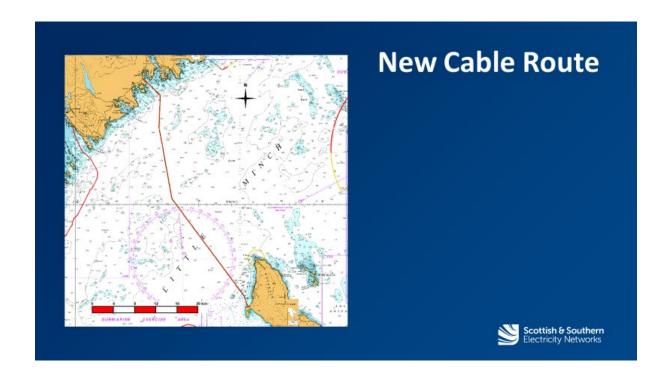
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#### Skye - Harris 33kV **Submarine Cable Replacement**

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# **Key Considerations**

- Seabed characteristics
- Oceanography and meteorology
- **Fishing**
- Other human hazards
- Protected areas
- Permitting and licences
- Route engineering
- Terrestrial Connectivity





## Skye - Harris 33kV **Submarine Cable Replacement**

Applies to

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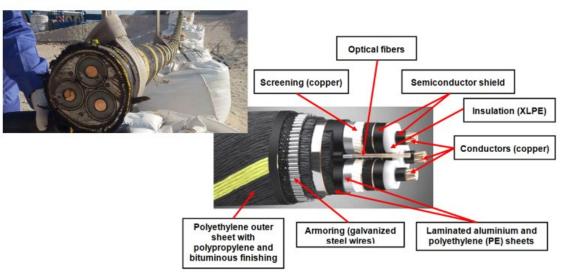
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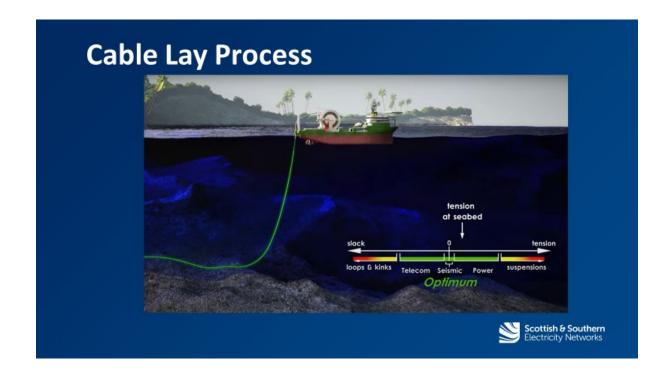
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#### **Our Cables**







#### Skye - Harris 33kV **Submarine Cable Replacement**

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#### Skye – Harris 33kV Submarine Cable Replacement

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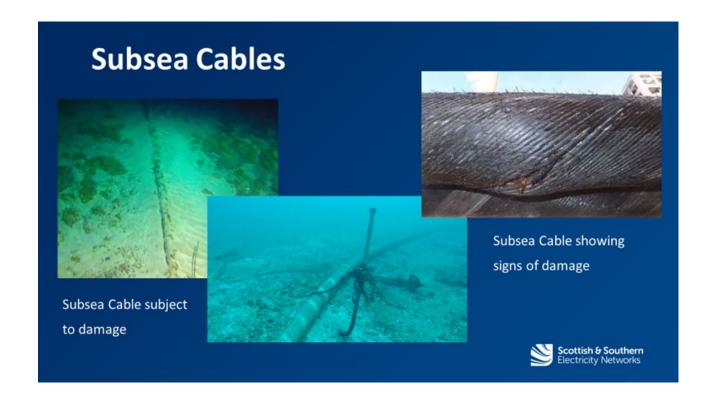
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# Remote Operated Vehicle The Remote Operated Vehicle (ROV) is launched from the Cable Lay Vessel. It is used to monitor the cable during the laying operation and to perform survey works afterwards. The ROV can also be used to support Rock Bag/Concrete Mattress Installation.





#### Skye – Harris 33kV Submarine Cable Replacement

**Applies to** 

Distribution

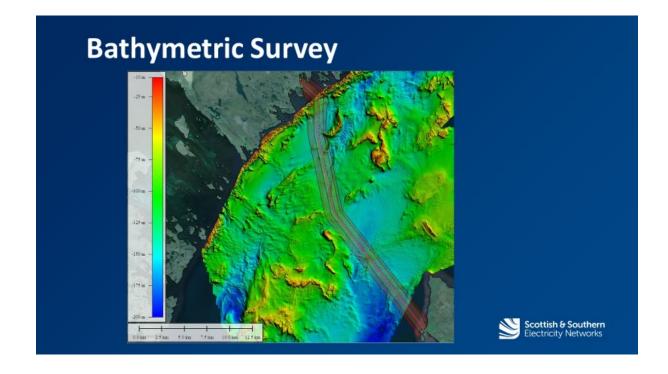
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# Cable Protection & Stabilisation Rock Bags Trenching Concrete Mattress For Rock Bags, Concrete Mattresses and Trenching will be used for Stabilisation and Protection of the subsea cable following installation.



#### Skye – Harris 33kV Submarine Cable Replacement

Applies to

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Transmission

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## **Protecting Our Onshore Environment**



- · Vegetation surveys
- · Ecological walkover surveys
- · Archaeological walkover surveys
- · Otter surveys
- Breeding bird surveys (March-September)
- Peat Survey (Harris Landfall)
- Pre-condition and Post-condition surveys for landfall sites



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#### Skye – Harris 33kV Submarine Cable Replacement

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#### **Protecting Our Marine Environment**

Classification: Public



- Designated Sites
- Physical environment (water quality and sediments)
- Marine Megafauna
- · Benthic and Intertidal Ecology
- · Ornithology
- · Marine Archaeology
- · Fish and Shellfish
- · Commercial Fisheries
- · Shipping and Navigation
- · UXO and existing utilities





#### Skye – Harris 33kV Submarine Cable Replacement

**Applies to** 

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# **Onshore Works and Equipment**

Tracked Excavator





Tracked Winch for beach pull







Articulated Pipe Protection at near shore and beach areas

TJB (Transition Joint Bay) between offshore and onshore cable sections







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#### **Communications**





## **Stakeholder Questions and Discussion**





- What are your views on the project and the considerations made?
- · Did the presentation provide you with relevant information?
- Is there anything else we should consider?
- Have you found this event useful?

#### Skye - Harris 33kV **Submarine Cable Replacement**

Applies to

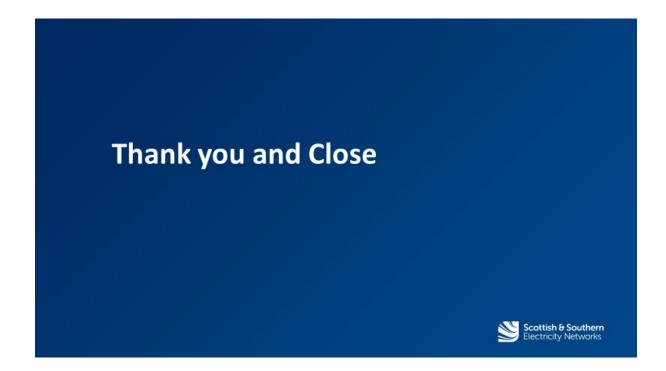
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#### Applies to Skye - Harris 33kV Distribution Transmission 39055585 **Submarine Cable Replacement** Classification: Public **Review Date: May 2021 Revision: FINAL** Issue Date: May 2021

# 2. Pre-Application Consultation Stakeholder Engagement

Skye-Harris Stakeholder Project Consultation Presentation as delivered to the following recipients on the dates recorded below:

Date	Organisation	Attendees
	The Scottish White Fish Producers Association Ltd	Femke De Boer
31/03/2021	Western Isles Fisherman's Association	Duncan Macinnes
	Ross, Sutherland, Skye & Lochalsh Fisherman's Association	Neil Robertson
		Erica Knott
08/04/2021	NatureScot	Kirstie Dearing
		Ian Cornforth
08/04/2021	Northern Lighthouse Board	Gillian Burns
	Maritime & Coastguard Agency	Thomas Bulpit
19/04/2021	Scottish Fishermen's Federation	Malcolm Morrison
21/04/2021	Scottish Environment Protection Agency	Alex Candlish

#### Skye - Harris 33kV **Submarine Cable Replacement**

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## 3. Pre-Application Consultation Stakeholder Presentations









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#### Skye - Harris 33kV **Submarine Cable Replacement**

Issue Date: May 2021

Applies to

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#### Skye - Harris Cable Replacement



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Classification: Public

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# **Skye Harris Cable Facts**



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59 kilograms/metre in air



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#### Skye – Harris 33kV Submarine Cable Replacement

Applies to

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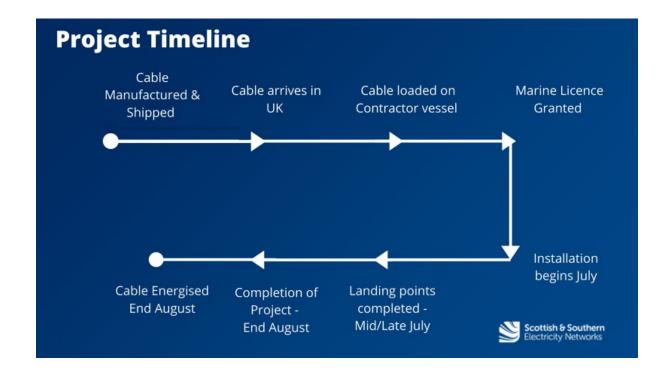
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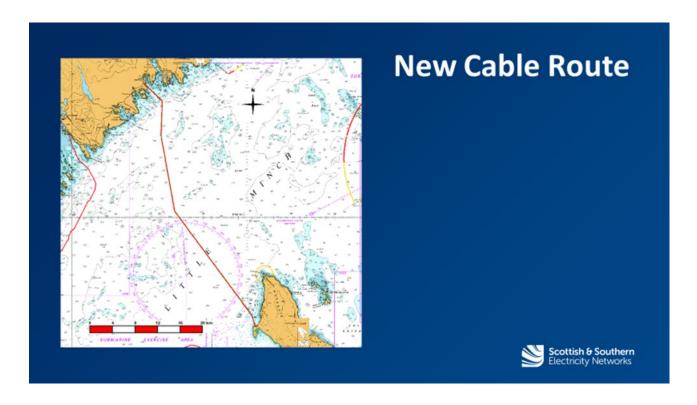
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#### Skye - Harris 33kV **Submarine Cable Replacement**

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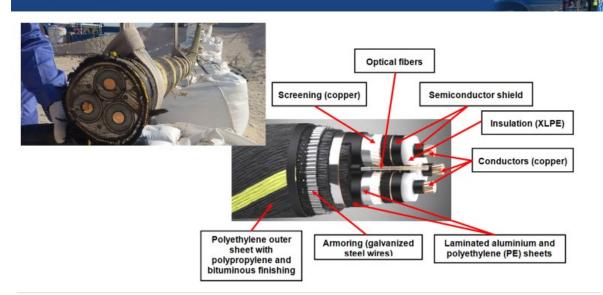
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#### **Our Cables**





### Skye - Harris 33kV **Submarine Cable Replacement**

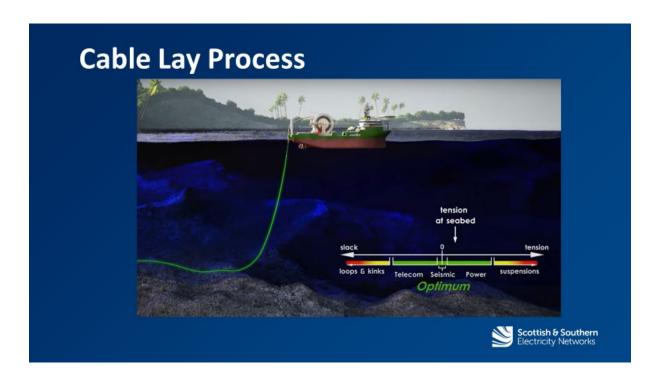
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#### Skye – Harris 33kV Submarine Cable Replacement

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# **Remote Operated Vehicle**



The Remote Operated Vehicle (ROV) is launched from the Cable Lay Vessel.

It is used to monitor the cable during the laying operation and to perform survey works afterwards.

The ROV can also be used to support Rock Bag/Concrete Mattress Installation.



# **Cable Protection & Stabilisation**

**Rock Bags** 



Trenching



Concrete Mattress



Rock Bags, Concrete Mattresses and Trenching will be used for Stabilisation and Protection of the subsea cable following installation.



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### Skye – Harris 33kV **Submarine Cable Replacement**

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