

# Shetland HVDC Link Project Update

February 2018



**Scottish & Southern**  
Electricity Networks

# Meet the team

- Daryn Lucas – Lead Project Manager
- Craig Taylor – Project Manager
- Kelly Scott – Community Liaison Manager
- Ivan Williamson – Land Manager
- Alasdair Barnett – Lead Engineer
- Darren Richardson – Civil Project Engineer
- Peter Curtis – Electrical Project Engineer
  
- Julie Tuck – Environmental Project Manager
- Peter Watson – Marine Consents Manager
- Richard Hanson – HVDC Engineering Manager



# Project background

Scottish Hydro Electric Transmission Plc (SHET) is a part of the SSE Group.

SHET has a transmission licence requirement to provide connection to the UK's network when requested by a generator.

The weather in and around the Shetland Isles is considered to be very productive for renewable energy generation.

There is >500MW of generation proposed that would require a connection to the mainland if constructed.

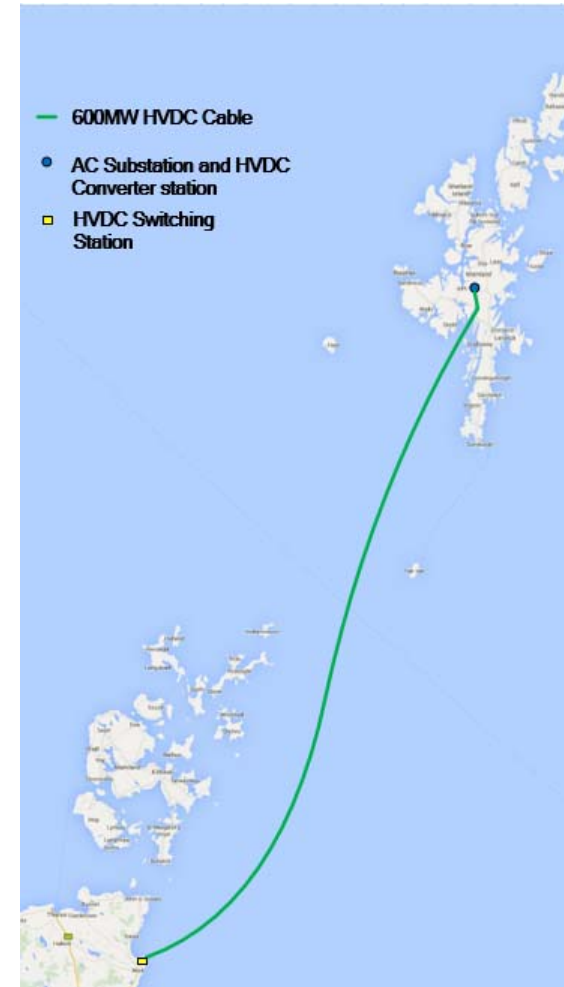
Recent developments in relation to available government funding for generators on islands has increased the possibility that these generation projects will be progressed.

The logo for Ofgem, consisting of the word "ofgem" in a bold, orange, lowercase sans-serif font.

HM Government

# What is the purpose of the project?

- Main driver:
  - Export of renewable electricity generation from Shetland to the UK mainland
- Secondary drivers:
  - To provide an alternative source of electricity supply for Shetland if required by Ofgem/National Grid
  - To provide reinforcement of the existing Shetland electricity network



# Where does Viking Energy fit in?

- Viking Energy Wind Farm (VEWF) is a proposed generation scheme on central Shetland
- VEWF is the main generator proposed for the Shetland Isles with 103 turbines (412MW)
- Without VEWF progressing, there is currently no export need for the Shetland HVDC link
- SHET and VEWF are working closely together on both technical interfaces, access arrangements and land negotiations

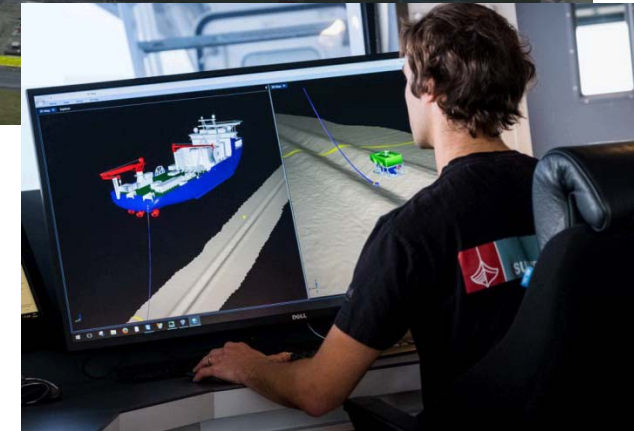
# What does the project consist of?

## Main High Voltage Direct Current Link:

- Approximately 260km of cabling
  - 250km subsea & 10km on land
- HVDC Converter Station at Upper Kergord
- 320/132kV substation at Upper Kergord
- HVDC Switching Station at Noss Head, Caithness (connection point)

## Shetland Network Upgrade (TBC):

- 132/33kV substation proposed as an upgrade to existing network
- 33kV overhead line connection



# Timeline

Activity	Expected Date(s)
Refinement of the project	Now and ongoing until execution
Ofgem Needs Case Submission	September 2018
Marine License Application Submission	October 2018
Ofgem Project Assessment Submission	January 2019
Construction start	Q2 2020
Construction Completion	Q2 2023 – accelerated option Q2 2024 – non-accelerated option