



ORKNEY CONNECTION OPTIONS (MAY 2023)

The Orkney Islands are currently supplied by two 33kV cable circuits connected to mainland infrastructure at Thurso South Grid Supply Point (GSP). There is currently no transmission infrastructure on the island.

Due to the extent of generation on the islands in 2009, SSEN developed Britain's first Active Network Management (ANM) system. This successfully allowed the connection of 21.8MW of renewable generation to an electricity network that was at full capacity. By 2012, the ANM system on Orkney had reached its limit and a suspension on connections greater than single G98 installations of up to 3.68kW per phase was announced until significant network investment progressed between Orkney and the mainland.

In July 2020 further development of the ANM system enabled SSEN to release limited additional headroom on the distribution network depending on connection location, diversity in the generation mix, and current restrictions to export.

While work has continued with Ofgem over this time to progress a Needs Case for a new 220MW electricity transmission link between Orkney and mainland Scotland, Orkney's Distribution Network remains constrained. In December 2022 Ofgem issued their minded-to position which was to approve the project.

The following guidance will apply for your Generation connection, for more information please contact our Account Management Team via this email address - commercial.contracts@sse.com

The proposed transmission link will not remove all Distribution constraints; therefore, local network reinforcement may still be required to achieve connection despite the transmission link being connected.

Small Generation Installations (G98)

To establish whether your connection is classified as single or multiple installations please see the following Distributed Generation Connection Guides.

[G98 for Single Premises](#)

[G98 for Multiple Premises](#)

Permitted to connect with no Distribution network studies required:

Single G98 up to 3.68kW per phase under 'connect and notify'.

Connections determined upon outcome of Distribution network studies:

Multiple G98/2 up to 50kW

Connections determined upon outcome of Distribution network studies, which may require wider network reinforcements including Transmission:

Multiple G98/2 over 50kW



Where reinforcements are identified, depending on network location, you will be required to wait for reinforcement to be completed at Distribution, Transmission, or both.

Large Generation Installations (G99)

To establish your G99 connection type please see the following Distributed Generation Connection Guides.

[G99 Type A](#)

[G99 Type B to D](#)

G99 generation installations can opt for either of the following application options on Orkney; both require network studies.

1. Active Network Management (ANM) Connection
- A connection may be possible to the existing ANM system, please contact our Account Management team to request a pre-application meeting.
2. Connections can be applied for under normal G99 process.
- Currently dependent upon completion of Transmission reinforcements.