

Future Networks

Accelerating Renewable Connections



Overall Aim of Project ARC is to accelerate the process & time to connect renewable generation.

How can DNOs improve the generation connections process?

- Time to connect
- Cost of connections
- Customer Service

Key Facts

- Cost £8m
- Covers 2700Km²
- Covers low voltage up to 33KVA applications
- 4 year trial concluding in December 2016
- Covers 2700Km² in East Lothian and Borders

Key Objectives

- Improve network access & capacity available to accommodate distributed generation
- Accelerate the time taken to connect distributed generation
- Enable connection of distributed generation to be facilitated around constraints; and
- Create an enduring process & learning tool that can be rolled out across our distribution networks and Great Britain

Key Elements of ARC & Trial Area



Empowering Customers Heat Maps



11kV Circuit Heat Map



Primary S/S Heat Map

Key Elements of ARC & Trial Area

Trial Location

East Lothian & Borders Region of Scotland that covers an area of 2,700km²

Characteristics

High penetration of existing generation, some of which is subject to operational constraints & existing generation capacity exceeds demand in parts of the region

Distribution Generation Potential

200MW of connected generation with a further 530MW of applications/enquires received

Network Trial

High level of existing pending generation at all voltage levels including those affected by Transmission Network constraints

Innovation Elements – Top-Down ANM

