

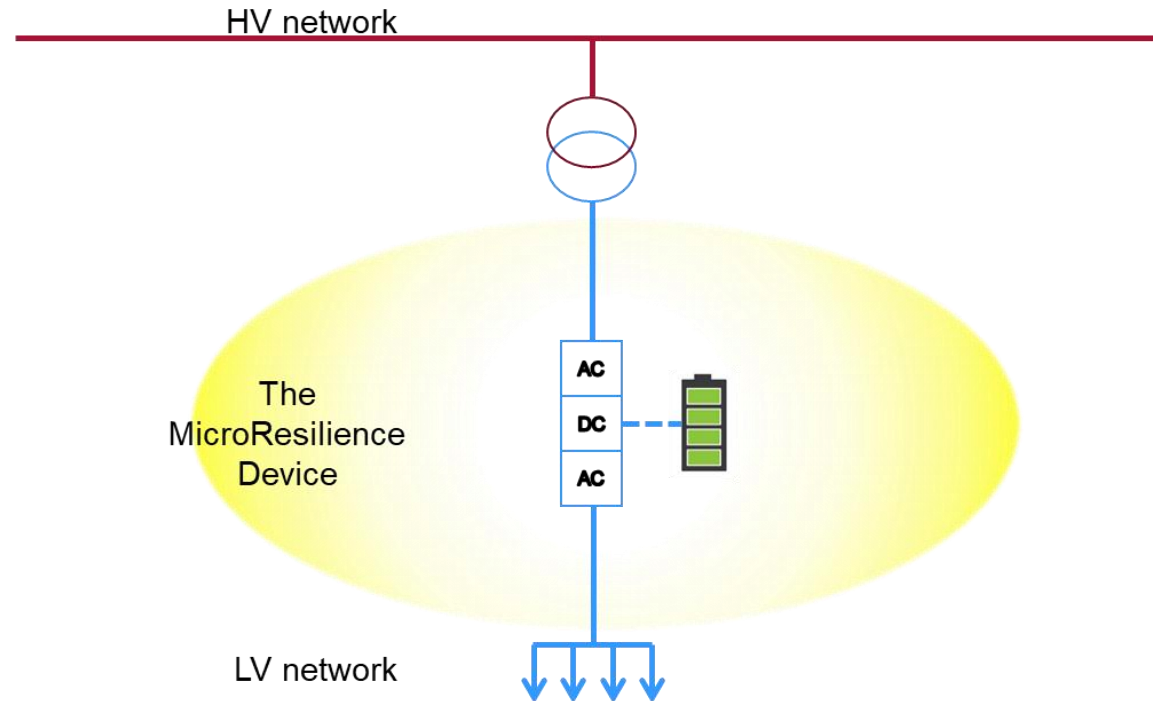


# Northern Powergrid MicroResilience

**Andrew Webster** | Project Manager, Northern Powergrid

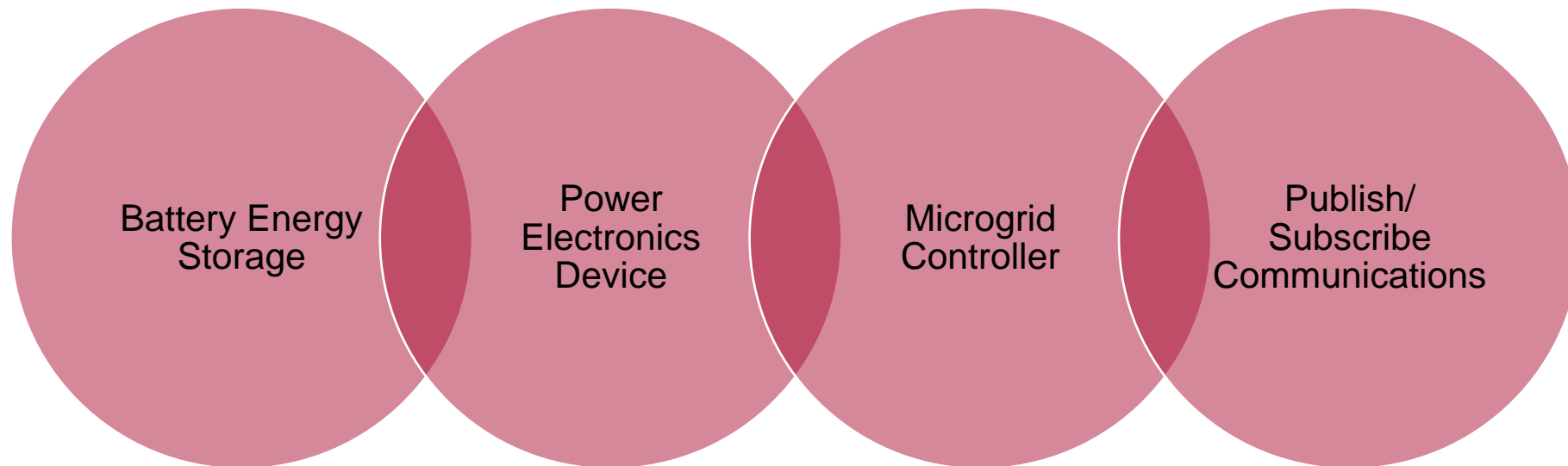
**Robert MacDonald** | EVP of Consultancy and UK Sales, SGS

# Microresilience - an innovation trial

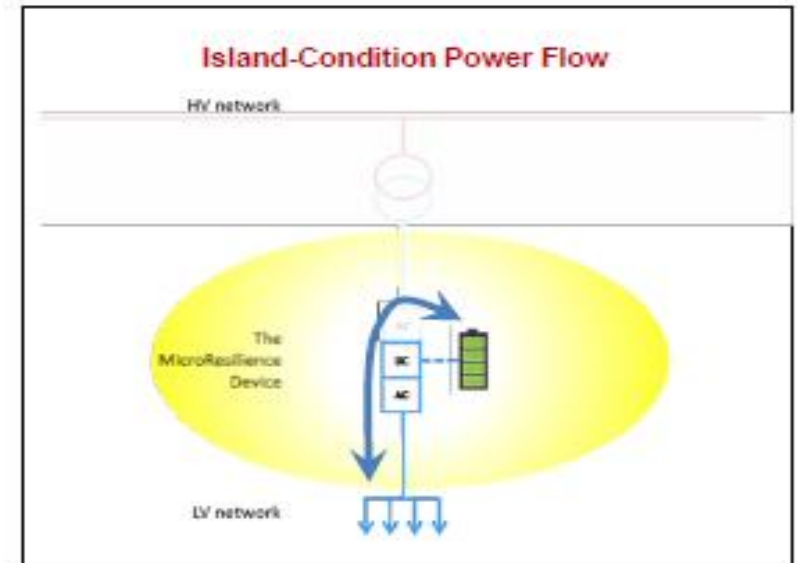
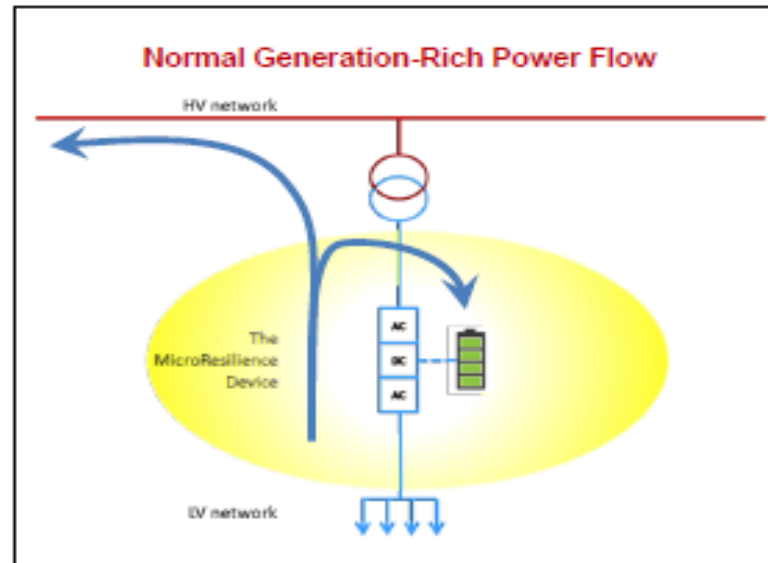
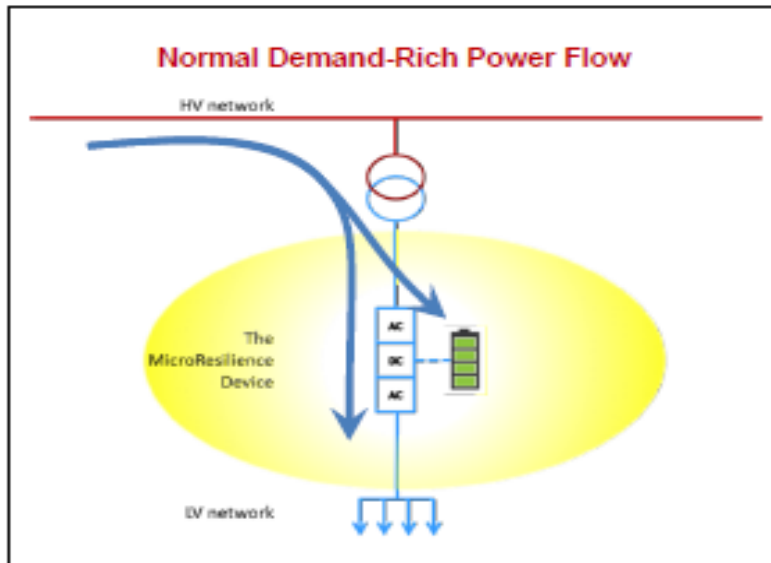


# Project Overview

- The project solution enables transition of the local LV network into an islanded grid, **maintaining supply to customers in the community either as restoration works are completed, or as NPg arranges mobile/temporary power supply for the duration of the grid outage**



# This project is a technology demonstrator that will...



# Site 1 - Byrness

Rural location in  
North  
Northumberland



Supplied from  
primary substation  
35 miles away in  
Hexham



Enhanced risk of  
outages





# Site 2 - Low Thornley

Location of the  
NGN Hydrogen  
Home



Opportunity to  
understand the  
impact of the  
Hydrogen mix on  
the power network



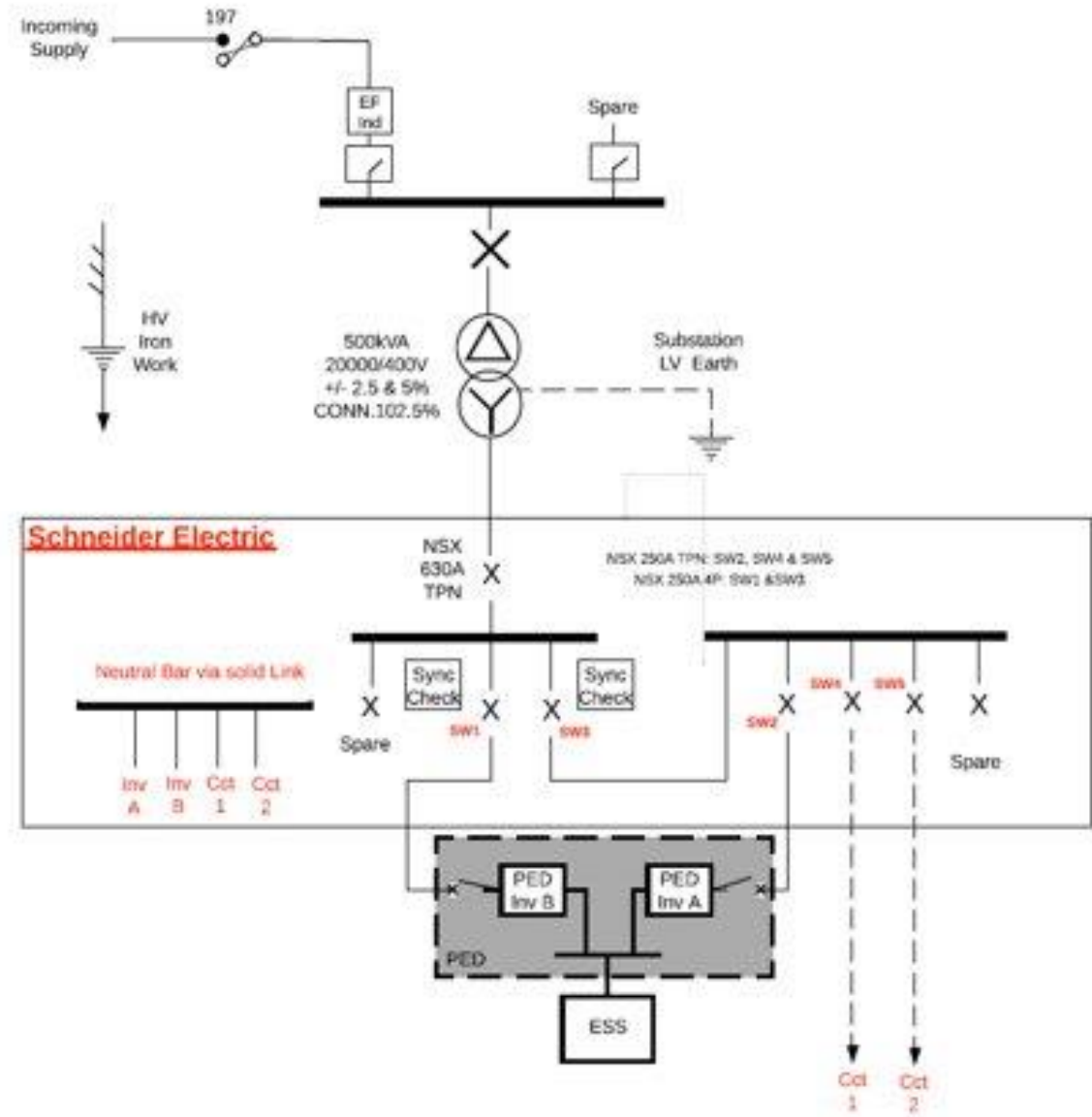
# How we plan to do it

Communications

Microgrid controller

Power Electronics Device

Battery Energy Storage



# Communications protocols under consideration





# Currently in design and testing phase

1

- Grid-to-island (unplanned)

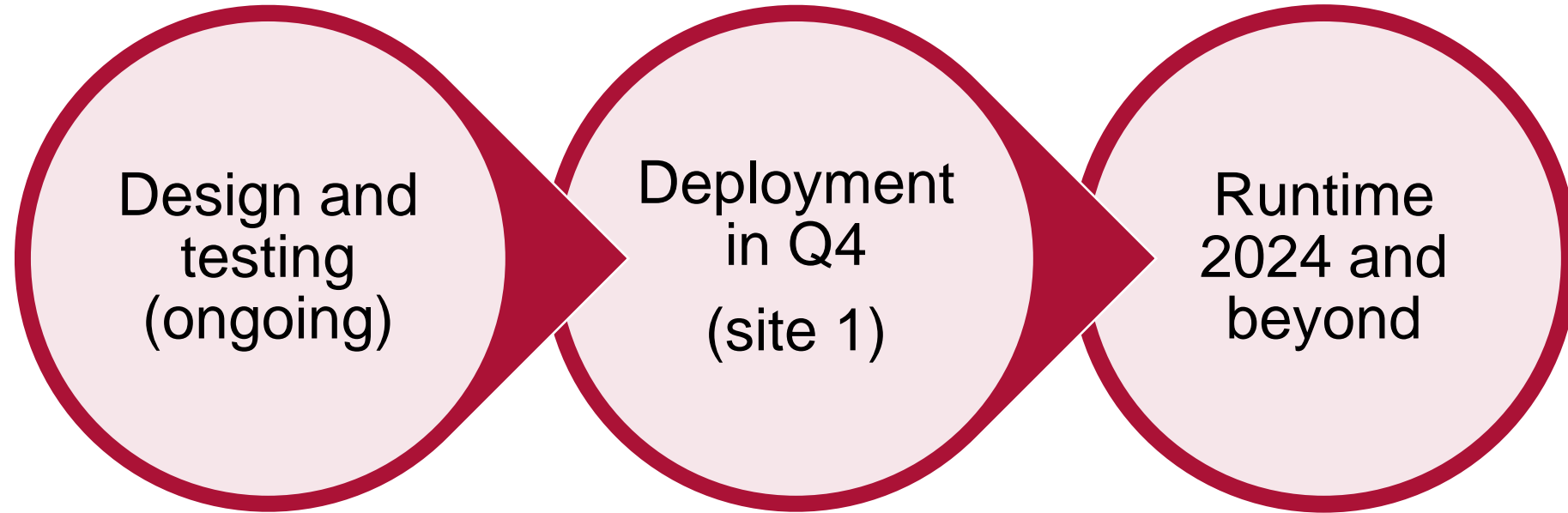
2

- Grid-to-island (planned)

3

- Island-to-grid

# Next steps



# Questions & Answers

For further information please contact me:

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