Energy Innovation Basecamp 2024
Problem Statement EIP129

Maintaining Reliability Under Increased Electrification

The following problem statement has been developed by the innovation teams within the UK's Gas and Electricity Networks for the 2024 Energy Innovation Basecamp.

Theme: Net Zero Transition Impacts

Network Areas: Electricity Distribution, Electricity Transmission

What is the problem?

If we reduce the number of energy vectors from three to one (i.e., from gas, diesel and electricity to electricity alone), the reliability of the energy supply to the customer reduces. Customers will not buy into a lower reliability energy lifestyle, and this will hinder decarbonisation unless the reliability issue is addressed.

What are we looking for?

A *scalable* solution for increasing the inherent resilience of the whole energy system, as applicable to the customer (e.g., thinking about storms, national energy shortages, rota load disconnection, etc.). Rollout timescales will depend on the solution type and the rollout logistics that imposes.

What are the constraints?

Network-centric thinking around the issue, and the Ofgem ISS Regime.

Who are the key players?

Energy users and broader society (c. 65M people)

Does this problem statement build on existing or anticipated infrastructure, policy decisions, or previous innovation projects?

Enablers include existing work on resilient storage projects, heat networks, self-generation and self-energy production. Information on all registered network innovation projects is available on the ENA Smarter Networks Portal.

What else do you need to know?

Note that this problem statement has been carried over from the 2023 Basecamp.

Innovator submissions to this problem statement will be open here during March and April, but we encourage you to submit your response as early as possible, as networks will be able to review submissions as soon as they come in.

You can also use the virtual Q&A on the Smarter Networks Portal to ask for more information about this problem statement. Questions may be answered online or at the ENA Problem Statement Launch in March 2024. More information on last year's Basecamp programme can be found here.