Electricity Distribution

EIP113 - Market Data for Forecasting Distribution Network Loading Diversity

Ryan Huxtable – Innovation Engineer
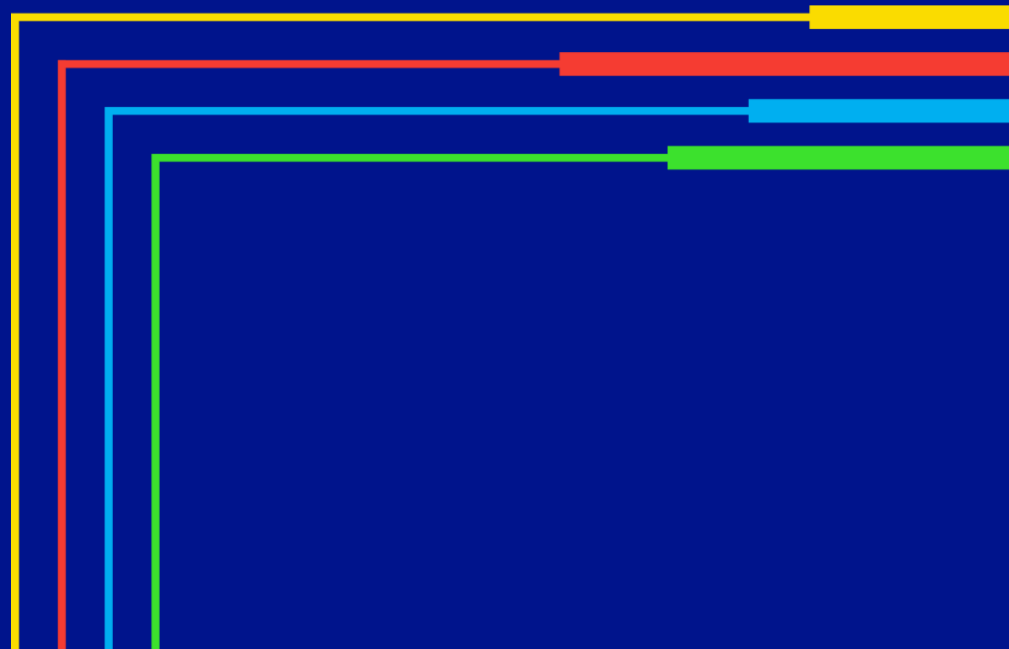**Felix Peterken – DSO Engineer**
Tuesday 5th March 2024

nationalgrid

Contents page

01

The Problem

EIP113: Problem

Through our Distribution Network Options Assessment (DNOA) and Network Development Plan (NDP) processes, we are able to forecast roughly how much flexibility NGED need to procure in different locations.

At a week ahead, we look at predictions to determine whether to use the flexibility available.

At present, we only look at the previous week's demand to predict the following week, and we have also carried work to incorporate weather data into forecasting.

But we don't have any idea of the wider flex markets that connected assets may also be participating in.

EIP113: Problem

- Knowing asset's committed position would improve network security – e.g. in Constraint Management Zones (CMZs) with primarily generation/storage we have less diversity than in areas with a greater number of customer connections.

- Knowing when to procure flexibility to optimise positioning of differing flexibility markets closing at different times would be helpful.

EIP113: What are we looking for?

NGED would be interested in finding out what additional market data would be useful to a DSO and in what capacity is it useful? This would then be used to carry out more robust short-term forecasting and network planning.
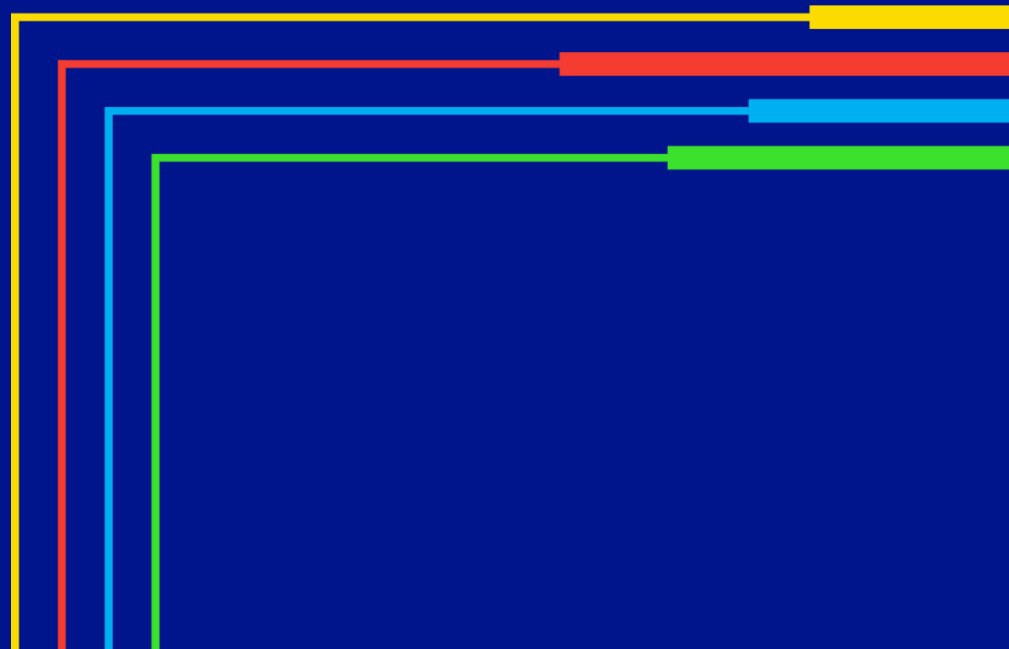
Therefore, we want proposals for finding and trialling the range of potential market (and other) datasets that could improve our planning and forecasting processes.

Who are the key players

- Flexibility Service Providers & Aggregators

- Energy Suppliers

- Economic Consultants

- Energy Consultants

- DNOs

- ESO/NESO

- Asset Owners

02

# Solution
Constraints

nationalgrid

EIP113: Solution Constraints

The solution must;

- Adhere to our current forecasting and planning arrangements.

- Be able to quantify the benefit of including differing datasets e.g. improved accuracy of forecast requirements and reduction in flexibility dispatch costs vs. data acquisition and processing costs.

- Identify how benefits change with different time horizons. E.g. day ahead, week ahead, longer term planning etc.

- Assess any competitive market or regulatory compliance issues.

- Assess the likely risks associated with the additional data acquisition and processing.

03

Contacts
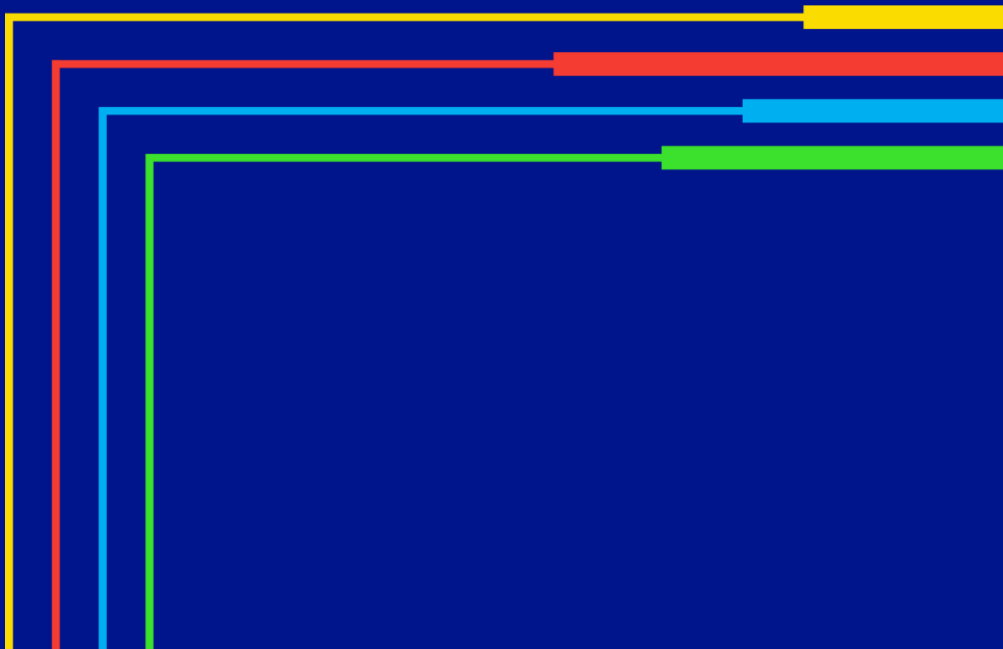
national**grid**

Contacts

Innovation Team	Ryan Huxtable rhuxtable@nationalgrid.co.uk
DSO Team	Felix Peterken fpeterken@nationalgrid.co.uk