Can we integrate Market Data to help forecast Distribution Network Loading?

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: Flexibility and Forecasting

Network Areas: Electricity Distribution

What is the problem?

When it comes to forecasting, there are a range of input variables that are used in order to produce a result. The more detailed the inputs, the likelihood of a more accurate output will be higher. When carrying out forecasting, previous load data and weather data are currently used in order to produce forecasts that will then be used to make strategic decisions relating to network investment.

One thing that isn't considered in the input variables is current market data and customer behaviour. For example, would it be possible to take pricing data from the wider market in order to understand what assets will (not) likely run.

What are we looking for?

Furthering on from the above, DNOs would be interested in finding out what additional market data would be useful to a DNO and in what capacity is it useful? This would then be used to carry out more robust forecasting and network planning.

Therefore, we would like to see some desktop work and thought process into finding and trialling the differing range of datasets that could be used into our planning and forecasting process.

What are the constraints?

The solution must adhere to our current forecasting and planning arrangements

The solution must be able to quantify the benefit of included differing data sets

Who are the key players?

- Flexibility Service Providers
- Energy Suppliers
- Economic Consultants
- DNOs
- ESO
- Asset Owners

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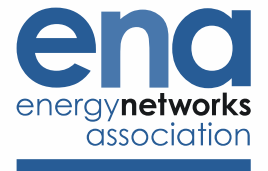
N/A

What else do you need to know?

N/A

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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.