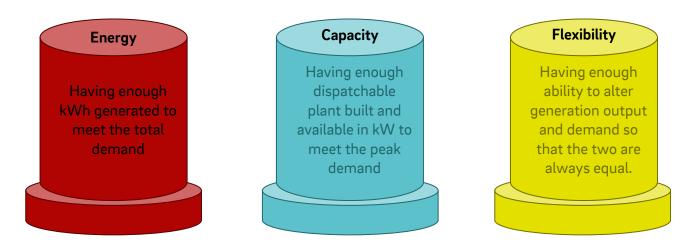
All Change for Flexibility Markets



Greg Payne
8th Smart Grids Cleanpower Conference
Cambridge, UK www.cir-strategy.com/
events

Three requirements of the energy system

Previously, large conventional plant provided energy, capacity and flexibility. The majority of the value lied with energy.



Now, a larger number of technologies will provider energy, capacity and flexibility with a more even share of the value between them.

The basis of change for Flexibility Markets

Carbon targets drive increase in renewable generation.



Legacy plant is closing down, or running at low load factors. Meaning it isn't available for flexibility services.



This increases cost of procuring flex from traditional sources



The Solution:

re-design market to encourage new participants and keep the cost down.



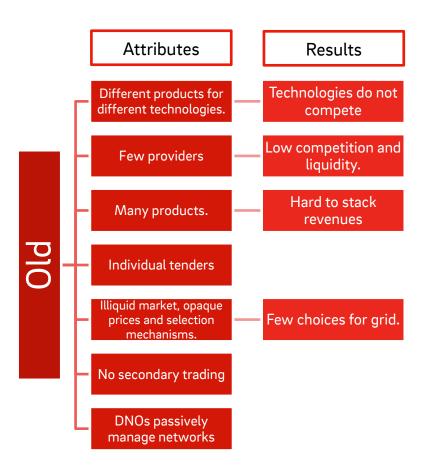
The Problem:

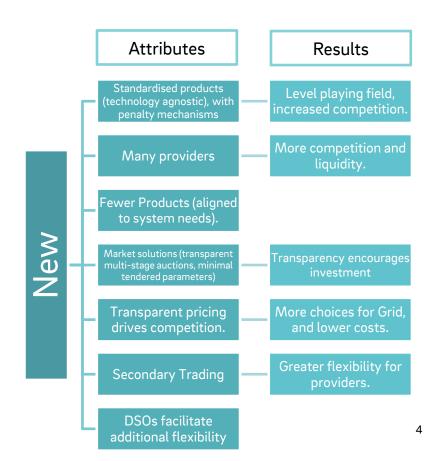
flexibility products are designed around legacy plant and do not provide certainty for prospective entrants



To meet system requirements and keep costs down, NG needs to diversify where they procure flexibility from and markets need to attract new participants

Old Market System vs. Possible New Market System





National Grid's "System Needs and Product Strategy" ¹ Published 13 June 2017.

In their recent document NG highlighted the issues with the Existing Market:

- Too many products
- Unclear requirements and interactions
- Unclear assessment criteria
- Overlapping markets

And set out a plan of improvements:

- Rationalisation
- Standardisation
- Improvement: single product versus standardised products.

Important Market Principles

We agree with National Grid on:

- The need to simplify and rationalise markets.
- Providing clear and consistent signals to support investment decisions.
- Lower barriers for entry.
- Deliver the most economic outcome for consumers.
- Enabling optimisation of assets by offering multiple services from them.
- Creating investible markets.

We also believe that these principles will deliver the best outcome:

- Standardised products, which will...
 - Create clear market prices by keeping tendered parameters to a minimum.
 - Use penalty regimes to enable participants to enter technology that can provide at "sub-standard" levels.
 - Increase liquidity, and offer potential for secondary trading.

We believe that clear market prices and liquidity would lead to an investible market help provide the most economic outcome for consumers.