Demand-Side Management: the System Operator View

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Electricity System Operator

ESMAP Knowledge Sharing Forum
National Grid’s role as System Operator

Multiple TOs

- SHET
- SPTL
- OFTOs
- NGET

One SO

National Grid Electricity Transmission System Operator
National Grid’s role as System Operator

Efficient, economic & coordinated development of the Electricity Transmission System

Residual energy balancing post-gate closure

Maintaining quality and security of supply
What is flexibility and why do we need it?

- What do we mean by “flexibility”?

- Why do we need more flexible plant?

- How are we going to create the environment where flexibility is rewarded?
Introduction to Power Responsive

Purpose

• Launched in 2015 to support growth in participation of demand side flexibility into GB electricity markets
• Stakeholder-led programme of work, facilitated by National Grid SO

Engagement channels

• Steering Group – almost 30 members representing all stakeholder groups established
• Flexibility Forum – to deliver fresh messages and clarity to demand side flexibility stakeholders, create engaging debate, and work towards action/solutions
• Sponsors’ events – Major Energy Users Council, The Energyst
• External events – RWM, Solar and Storage Live, Energy Live, Flexible Networks
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<th>1. Continued Customer Engagement</th>
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<tr>
<td>• Broaden engagement activity to include stakeholders in other sectors</td>
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<td>• Continued deeper engagement with DSR stakeholders</td>
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<th>2. Increase Confidence in Flexibility</th>
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<td>• Providing information that supports confidence to invest</td>
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<td>• Support activity to build confidence in working with partners</td>
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<th>3. Evolution of Flexibility Markets</th>
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<td>• Simplifying Balancing Services to encourage participation</td>
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<td>• Trial sharing of services with distribution networks</td>
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Future of Balancing Services

2016
Perception that market is focused on existing technologies

2021
An energy system that delivers value to the end consumer

INVESTABLE MARKET FOR ALL

Existing technology

New technology

Big Players

Small Players
System Needs & Product Strategy consultation

128 responses

10+ industries consulted

98% Agree with approach
Future of Balancing Services – What’s next?

- Simplification and standardisation of existing markets for frequency response and reserve energy
- Trial new procurement approaches for frequency response: closer to real time, cleared price auction
- Investigate faster-acting frequency response procurement as part of business-as-usual
- Transition to ‘business as usual’ for demand side flexibility
Future of Balancing Services:
www.nationalgrid.com/uk/electricity/balancing-services/future-balancing-services

Power Responsive Programme:
www.powerresponsive.com

LinkedIn:
Power Responsive

For National Grid service opportunities:
commercial.operation@nationalgrid.com