

Power Responsive Steering Group

Note of Seventh Meeting

26 April 2017, 13:00-17:00hrs, held at Elexon Offices, 4th Floor, 350 Euston Road, London, NW1 3AW.

This Note of Meeting is prepared by Sustainability First on behalf of the Steering Group.

1. Welcome & Introduction

Lee Priestley chaired the meeting, as Cathy McClay sent apologies. Guests were welcomed and provided with an overview of Power Responsive. The aim is to support growth of non-traditional flexibility providers in GB markets – including demand side response (DSR), distributed generation and storage. This is a collaborative programme involving market players and providers, led by National Grid with support from Sustainability First.

The steering group meets quarterly to guide the work programme and hold timely, strategic discussions on major topics for demand side flexibility stakeholders. Steering group members represent the views of their sector. As we approach the end of Year 2, membership will be revisited on a sector-by-sector basis for Year 3 (from July). The aim is to achieve an optimal size of group and ensure senior level representation.

Power Responsive in Year 2 moved beyond initial awareness raising, to incorporate tangible deliverables in improving markets and addressing barriers, with a focus on:

- **Wider awareness raising** – sector specific sessions (e.g. NHS and Scotland workshops); widened outreach to storage community; new ‘open forum’ working groups for DSR and storage attracted 300 attendees; and total programme registered individuals of >1500.
- **Building confidence** – Power Responsive Annual Report and DSR “short guide” published to provide clearer information; supporting development of ADE code of conduct for aggregators; and National Grid System Needs & Product Strategy due in May 2017 to provide certainty on SO actions and product strategy.
- **Future evolution of flexibility markets** – National Grid Future Role of SO (FRSO) Programme (includes a flexibility workstream); National Grid questionnaire of flexibility providers on market information and balancing services (over 100 responses); simplification of Balancing Services; new routes to market in Balancing (e.g. Demand Turn-up and Enhanced Frequency Reserve); inform BEIS & Ofgem smart plan; and greater coordination between SO and DNOs.

Awareness, confidence and future market evolution will continue to be major themes for Power Responsive in Year 3.

1. Demand side flexibility horizon scan

National Grid

Paul Lowbridge gave the System Operator update, covering:

- **Balancing: Reserve** – Demand Turn Up (DTU) fixed tender process completed in February, 138MW procured of 262MW tendered. DTU flexible procurement now live and on-going through summer with bi-weekly opportunity to submit availability and participate.
- **Balancing: Frequency Response** – entry point for FFR market now lowered to 1MW resulting in slight increase in number of tenders (March=52, April=60), volume increase small at this stage.
- **Capacity Mechanism** – the Transitional Arrangement Auction, designed specifically for DSR, completed on 22 March for delivery this winter (2017/18), with a clearing price of £45/kW/year, 312.72 MW of DSR successful in the auction, including 275 MW new / unproven DSR.
- **System Needs & Product Strategy** – SO clarity on how system changes translate into SO actions, and expectations for trends over next 5 years. Plans to simplify balancing services. Due May 2017, followed by stakeholder consultation.

BEIS & Ofgem

Due to general election purdah, the Smart Systems Plan will no longer be published in May. David Capper and Andy Burgess gave an informal, high-level view of topics likely to be covered in the Smart

Systems Plan. Responses to the Industrial Strategy were also welcomed.

Subject to the views of Ministers, the **Smart System Plan** may cover:

- **Roles & responsibilities of market participants** – between SO and DNO/DSO; intersects and boundaries; regulatory and incentive frameworks; and ensuring scope for incentive alignment and transfer between transmission and distribution networks where appropriate.
- **Aggregators** – whether there are undue barriers for aggregators entering the market; potential access to the Balancing Mechanism; adequacy of frameworks for consumer protection; and ADE code of conduct.
- **Electricity storage** – address double charging for storage; renewable levy charges; question of ownership of storage by network companies; DNO clearer view on storage connections; definition of storage – either through primary legislation or licencing regime; co-location of storage and renewables; and land-use planning regime for storage.
- **Network charges** – Ofgem targeted charging review; fixed/variable elements – variable elements need to adapt over time.
- **Balancing Procurement** – action best taken by industry, welcome NG work to simplify services important to describe clearly the problem for providers to solve without being overly prescriptive on solutions.
- **I&C providers** – work to address barriers. Consider whether flexibility providers can compete and stack value, and, in particular, if there are ‘missing markets’.
- **Households** – smart home (smart meters, half hourly settlement, automation); addressing cyber risk; consumer protections and standards.

It was suggested that during this period of transition and change, that the longer-term narrative and principles for the sector also need to continue to be clearly articulated and more widely.

2. Business customer & provider views on participating in demand side flexibility

A year on from the first customer snapshot, participants reviewed three key themes impacting participation in flexibility:

- **Awareness** – how do business customers & providers view the opportunities available today?
- **Confidence** – have views on available opportunities changed over the past year?
- **Simplicity** – to what extent have product and market complexities been addressed?

Neil Durno (Younicos / REA Storage Group) and Eddie Proffitt (Major Energy User’s Council - MEUC) kindly offered opening remarks.

Key points:

- **Awareness** – communications are clearer. People are engaged and interested in demand side flexibility. Including as a result of joint Power Responsive and MEUC initiatives e.g. detailed training, roadshows and events.
- **Confidence** – is impacted by transitional uncertainty. There are so many changes taking place at the moment. A lot of issues remain to be addressed. Uncertainty is holding some potential providers back from investing, as well as impacting existing DSR programmes. It is not yet clear to some if the commercial case is there for DSR, and how it competes with other forms of flexibility such as storage. It was noted that delivery figures for DSR and storage in Capacity Market auctions suggest a more positive picture for customer engagement, via aggregators and suppliers.
- **Simplicity** – the landscape is becoming more complex. There are more balancing schemes than last year. New local network schemes are also emerging. The rules for schemes such as the capacity market are complicated. This means customers tend to have to work with aggregators to handle the complexity and stack value across markets. National Grid is taking steps to simplify Balancing Services. Some providers warned of the risks of ‘rationalisation’ of services leading to the loss of precision products.

The discussion is summarised in a ‘*Business customer and provider snapshot*’ available at www.powerresponsive.com. The three themes will be considered further at the Power Responsive Annual conference.

3. Value stacking demand side flexibility from different GB markets

Assuming value stacking from multiple sources and market actors – to what extent can demand side flexibility markets move to a simpler ‘customer led’ landscape of products and services? The discussion covered the expectation of flexibility providers for value stacking and the steps to unlock value stacking for existing and future demand side providers.

Asheya Patten (National Grid) opened with what is meant by value stacking and current routes to market for customer demand side flexibility. Sotiris Georgiopoulos (UK Power Networks) and Roger Hey (Western Power Distribution) discussed how market actors are working collaboratively to optimise value stacking across markets.

Key points:

- By value stacking, we mean the pooling together of multiple revenue streams to build a business case for investing in flexibility.
- Currently there are different revenue streams offered by market actors and plural routes to market for flexibility providers, including:
 - **Capacity market** – Government / Electricity Market Reform delivery body
 - **Wholesale market (& Balancing Mechanism)** – suppliers
 - **Network charging signals** – direct signal or via suppliers
 - **Energy balancing** – system operator
 - **Network services “missing markets”** – System operator, distribution network operators (DNO)/ distribution system operators (DSO)
- Providers can offer multiple services to different market actors – directly or via aggregators, suppliers or other third parties.
- The result is a complex landscape with many different options available to providers. It is challenging for providers to decide which products and routes to market are best for them and their assets.
- Customers would like to be able to set out the flexibility they can offer, and allow market actors to decide how to use this to best serve the system.
- There was discussion on how to reconcile customer calls for simplicity and confidence, with current market complexity and uncertainty.
- It was suggested that ‘optimisation’ in terms of value stacking can take place at three levels: procurers; partners / aggregators; and/or in-house by business customers and providers.

The discussion is summarised in a ‘*Snapshot on value stacking of demand side flexibility from different GB markets*’ available on the Power Responsive website. There will be a facilitated break-out session on value stacking at the Power Responsive Annual conference.

4. Power Responsive work update

a. Next steps on Annual Report & demand side flexibility metrics

Clare Dudeney (Sustainability First) gave an overview of next steps for the Annual Report and metrics. The Annual Report was published in Dec 2016 covering: power responsive deliverables in Year 1; plans for Year 2; narrative on the state of demand side markets; and some initial baseline metrics for demand side flexibility.

Power Responsive held a Trade Association roundtable on the 2016 Annual Report and metrics on Wed 8 March – with energy and customer representative bodies – to help disseminate the findings of the annual report and to inform the next report.

The next Annual Report is planned for Nov 2017. This will consider changes from Year 1 to Year 2, and plans for Year 3. In developing metrics, it was necessary to narrow an initial wish-list to those delivered in the first report. Gaps in metrics were identified, which we would like to re-visit for the next report.

We plan to reconvene a sub-group on metrics for Annual Report 2017 – to identify priority additional metrics to include in the report; inform the state of the market narrative (incl. changes seen in metrics over the past year); and support the gathering of data & information. Kick-off meeting is to take place in May, with two subsequent meetings. We are seeking a small group of volunteers ~8-10 expert representatives - e.g. BEIS, Ofgem, supplier, aggregator, DNO, SO, MEUC, storage operator, Cornwall Energy & ADE.

b. Upcoming events

Paul Lowbridge gave an overview of upcoming Power Responsive events for 2017, including:

- **Demand side flexibility investor session** – 10 May
- **High-level dinner** – 16 May
- **Annual Conference** – Tues 27 June
- **Steering Group meeting** – 4 July
- **Steering Group meeting** – 11 Oct

The Power Responsive Conference 2017: '*Demand side flexibility – delivering the future together*' will be held at the Emirates Stadium, London with 300-350 participants expected. National Grid will seek a balanced attendance of DSR, storage providers and market actors. The conference will maintain momentum for demand side flexibility, reflecting on the past 12 months, and setting out priorities for the next 12 months. It will focus on the themes of awareness, confidence & simplicity, with morning panel sessions and audience interaction, an exhibition opportunity for aggregators & suppliers and afternoon interactive workshops.

Proposed agenda for next Steering Group meeting on 4 July:

- Putting shape to future of demand side flexibility markets
- Smart Energy System Plan
- Value proposition of demand side flexibility to customers and all consumers
- Power Responsive Annual Report 2017 – initial outline
- Power Responsive Year 3 – work plan

c. Working Group updates

Paul Lowbridge gave headline feedback from the storage working group (13 March – 150 attendees) and DSR Provider Group (21 March – 60 attendees). The agenda topics for both were:

- Future Role of SO;
- Charging developments;
- Capacity Market updates; and
- BEIS/Ofgem Smart Energy Plan process.

With workshop sessions on:

- NG – System Needs & Product Strategy; Product Simplification process;
- DNOs/NG – Whole System Development to enable the Connection and Use of DER

A summary document and presentations are available on the Power Responsive website.

d. Focus for Year 3 Power Responsive programme

Initial plans for Year 3 include:

- **Awareness and Engagement** – Continue raising awareness of opportunities and next steps for demand side flexibility. Storage & DSR working groups: continue to run and evolve as desired; identify specific groups/sectors that would benefit from engagement; and deliver collaborative engagement activities and events with Power Responsive stakeholders.
- **Building Confidence** – Power Responsive Annual Report 2017 (Q4 2017) including collaborative working group on metrics and improvements to be made (Q3/4 2017); supporting implementation of ADE Code of Conduct; NG Market Information improvements, including website update implementation (Q3 2017) and historical balancing information improvements (Q3 2017 onwards).
- **Evolving Flexibility Markets** – BEIS/Ofgem Smart System Plan; NG Balancing Services Product Simplification process, including consultation on process (Q2 2017) and proposals for market changes (Q3 2017); DNO Regional Development Programmes – continued progress; Value stacking commercial paper for industry (Q3 2017).

Steering group members were asked for feedback to Cathy McClay and Paul Lowbridge on priorities for the steering group and Power Responsive in Year 3.

5. AOB & Next Steps

Suggestion to change exclusivity clauses in Balancing Services contracts to reference interactions between different procuring parties (such as the collaborative work between the SO and DNOs).

Attendees		
Lee Priestley	National Grid	Chair
David Capper Gemma Huett	BEIS	Policy & Regulation
Andy Burgess & Louise van Rensburg	Ofgem	Policy & Regulation
Asheya Patten	National Grid	System Operator
Jim Cardwell	Northern Powergrid	Distribution Network Operator
Roger Hey	Western Power Distribution	Distribution Network Operator
Sotiris Georgiopoulos	UK Power Networks	Distribution Network Operator
Luke Banner-Martin	Dong	Renewable Generator/Supplier
Mark Futyan	Centrica	Large Supplier
Tom Palmer	Cornwall Energy	Small Supplier
Kevin Spencer	Elexon	Electricity Market
Jon Ferris	UtilityWise	Third Party Intermediary
David Penfold	Sainsbury's	I&C (retail)
Eddie Proffitt	MEUC	I&C (industry)
Neil Gillespie	United Utilities	I&C (water/utilities)
Alastair Martin	Flexitricity	Aggregator
Yoav Zinger	KiWi Power	Aggregator
Neil Durno	Yunicos	Electricity Storage
Imran Abbasi	AES	Electricity Storage
Pedro Aspiazu	ABB / BEAMA	Technology
Paul Lowbridge	National Grid	Secretariat
Judith Ward	Sustainability First	Secretariat
Clare Dudeney	Sustainability First	Secretariat
Adrian Sellar	National Grid	Secretariat
Apologies		
Cathy McClay	National Grid	Chair
Sara Vaughan	E.ON	Large Supplier
Oliver McMillen	SSE	Large Supplier
Dipali Raniga	EEF	I&C (manufacturing)
Joe Ernst-Herman	Crown Commercial Service	I&C (public sector)
Jonathan Graham	ADE	Distributed Energy