Power Responsive Steering Group
Note of Eighth Meeting

4 July 2017, 13:00-17:00hrs, held at Thistle Hotel Euston, London, Cardington Street, London NW1 2LP. This Note of Meeting is prepared by Sustainability First on behalf of the Steering Group.

1. Welcome and introductions

Cathy McClay welcomed guests to the first Steering Group meeting of Year 3. The Steering Group brings together representatives of all stakeholder groups for demand side flexibility, setting the strategic direction, objectives and priorities of the Power Responsive programme. This session offered a forward look at the themes and objectives for Year 3, with a discussion on future market evolution.

Cathy noted that there have been some recent staff changes at National Grid. Cordi O'Hara will head up National Grid's business in Massachusetts from August. Phil Shepherd will step up into her role for the interim. Duncan Burt will take Phil's place as interim Head of Operations for the System Operator. Lee Priestley is also leaving to take on a new role. Rob Smith will head up Lee's team in the interim. Paul Lowbridge is moving to become Head of Settlements. Rhiannon Marsh is taking over as lead for Power Responsive.

The third Power Responsive Conference took place on 27th June 2017 at the Emirates Stadium. There were 350 delegates, including industrial & commercial (I&C) customers, storage developers, small-scale generators, suppliers & aggregators, finance providers, energy experts and policy makers. Steering Group members were invited to give reflections.

The conference worked well, with a diverse audience, good engagement and a progression from the previous event. It was inclusive and helped to build a sense of trust. Participants were 'thirsty for answers', but where it was not possible to provide firm solutions it was useful to have a schedule and timeline (e.g. System Needs and Product Strategy). The exhibition area and stands enabled networking between market actors and customers. There could have been more interaction with the audience in terms of Q&A, not just Slido. It was noted that the figure of £2 billion quoted by the Association for Decentralised Energy (ADE) for the size of the market was incorrect.

2. Demand side flexibility horizon-scan

There were updates from Rhiannon Marsh and Asheya Patten (National Grid) on procurement, Russell Jenkins (BEIS) on policy and Andy Burgess (Ofgem) on regulation.

National Grid

- **Firm Frequency Reserve (FFR)** – since lowering the megawatt (MW) size threshold for participation, there has been a steady increase in the number of individuals tendering (March: 52, April: 60, May: 67, June: 114). There was a question about the types of participants and volumes. National Grid are to follow up.
- **Demand Turn Up (DTU)** – the 2017 service went live on 27th March and runs for the duration of British Summer Time. Usage figures were given for the first half of the summer (April: 3000MWh, May: 900MWh, June: 1950MWh). National Grid is undertaking a mid-point review of contract and service arrangements, seeking feedback from participants. There was a question on whether there have been more or less participants in DTU. There are now two procurement routes: a fixed tender in Feb, with a lower number of participants; and a new flexible option, which is open throughout BST. National Grid's Market Information Report will start to bring together information on whether flexible bidders have been accepted or used. The focus for DTU is on times of low demand (e.g. mainly overnight, sometimes weekends) and/or high renewable output (e.g. wind and solar). It was also used for a planned Transmission outage – to enable access to high frequency response. The National Grid Operational Forum slides – show trends for demand and inertia over time.
- **System Needs and Product Strategy** – considers future system needs and proposals to simplify and standardise Balancing Services. It is open for consultation until 18th July. There have been

1200 downloads of the document so far. A webinar was held on 3rd July for 300 participants, with another planned for 7th July. National Grid expects between 200-300 responses to the consultation.

BEIS

The BEIS & Ofgem Smart Systems Plan remains a top priority. Publication was delayed due to the general election. It will hopefully be out soon. Until then there is a limit to what BEIS can say about the plan, but it will likely focus on:

- **Removing barriers for smart technologies** – such as the definition of storage, changes to the planning regime and recalibrating policy/network charges.
- **Smart homes and businesses** – smart meter rollout, half hourly settlement, appliances provide for automation, cyber security and customer protections.
- **Markets that work for flexibility** – including improved access to the capacity market, balancing mechanism, and ancillary services; enabling value stacking; and creating new local markets for flexibility.

The plan will give a clearer direction of travel, once published, BEIS will engage widely. There is helpful consistency in the messaging on transparency and clarity through Power Responsive and in this work.

Ofgem

Ofgem reiterated BEIS messages on the Smart Systems Plan, suggesting that its contents should not come as a surprise to the group. Ofgem is undertaking wider work on future energy systems, with plans to publish in July.

They will also publish a letter on the future shape of RIIO-2, building on the experience of RIIO-1. There was discussion on the extent to which innovation from trials will translate to business as usual. There are signs of Distribution Network Operators (DNOs) rolling out innovation and the Smart System Plan will encourage them to explore alternatives to reinforcement. The Energy Networks Association (ENA) will produce a report by the end of the year on this.

A question was asked on the link between forward investment and future strategy work. Ofgem has met with the Institution of Engineering and Technology (IET) & Energy Systems Catapult, and is building in their thinking, but it is not one overall coordinated plan. A more independent System Operator (SO) will be part of that thinking. The SO will continue to have a role as residual balancer, even if energy balancing is resolved and there is an open Balancing Market, actions will need to be taken for operability.

3. Shaping future markets for demand side flexibility

Asheya Patten (National Grid) introduced the main discussion, which considered markets beyond Balancing Services. The main points included:

- **Market interplays** – it is important to understand interplays between different markets, and the future outlook and needs. National Grid is considering this for Balancing Services through the System Needs and Product Strategy, and is also looking at interactions with adjacent markets.
- **Regional markets** – there is an opportunity for new regional markets and price signals, with different potential options to achieve this.
- **Balancing Mechanism (BM)** – there is potential to open up the Balancing Mechanism to smaller players, through BM Lite, and with consideration of non-locational BM units.
- **Wholesale market** – should there be further obligations on parties to balance their positions, what potential is there for nodal pricing?
- **Capacity market –** concern was expressed about the design (including contract length, metering arrangements). This currently offers a long-term signal. With changes from the EU, will we move toward shorter-term markets?
- **Code modifications –** there are a number of relevant code modifications. It would be helpful to explain these and their interactions clearly to customers.
- **Regional and local markets –** are starting to open as DNOs become Distribution System Operators (DSOs). This brings new opportunities but could increase complexity. DNOs

sometimes offer alternative connections, which mean a quicker and/or cheaper connection, by agreeing to reduce capacity under certain conditions.
- **Route to market for customers –** the landscape is becoming more complex. It was suggested that perhaps schemes could be designed starting from the customer perspective, where customers say what assets they have and what flexibility they can offer, through a platform. There is a risk of unrealistic expectations for the size of the market.
- **Industry-led code of conduct for aggregators –** will give assurance that ethical business standards are adhered to; lets customers see which providers are meeting standards; and ensures bids/proposals include common elements so different products can be compared.

A snapshot on future markets for demand side flexibility is available at: [Discussion on the shape of future markets will continue through Power Responsive in Year 3.]

4. Strategic themes and next steps

Paul Lowbridge (National Grid) outlined the strategic themes and proposed milestones for Power Responsive in Year 3, building on the Executive Dinner, Flexibility Investor Workshop and Power Responsive Conference. See **Annex A** for the proposed work programme for Year 3.

Awareness & Engagement

- Continued awareness raising, open forum working groups and collaborative engagement (including with energy industry and customer trade associations) e.g. National Grid is working with MEUC to update the Demand Side Response (DSR) training manual and undertake a series of further workshops.
- The Electricity Storage Working Group is large (~200 people), and there was discussion about whether this could be broken down into smaller groups, so it can be more 2-way discussion rather than information giving. Some concern was expressed about having separate groups for DSR and storage – as this could lead to silos. Ideally the working groups should cater for all Distributed Energy Resources (DER) – including renewable developers and electric vehicles. Perhaps meetings could be location based – such as a series of regional events – considering different issues and constraints across the UK. Another option would be to split out commercial, operations and finance functions. It was noted that some issues are DSR specific such as baselining.
- Power Responsive has created huge interest; we now need to convert that into participation.
- Continued briefing of journalists on positive flexibility stories is also important.
- There is likely to be an engagement event when the Product Strategy comes out this autumn.

Building Confidence

- Power Responsive Annual Report 2017 – including collaborative subgroup meetings to determine scope and metrics development.
- Supporting Code of Conduct for Aggregators – helping raise the profile. For example, National Grid lists aggregators on its website and could say whether they are signatories of the code or not. This will require a process to ensure the list remains up to date. National Grid must remain neutral and cannot, for example, approve or reject aggregators based on their participation in the code.
- Forward looking procurement strategy delivered through the Future of Balancing Services webpage, and improved National Grid website.

Evolving Flexibility Markets

- Outputs of:
  - the BEIS/Ofgem Smart Systems Plan,
  - National Grid Balancing Services Simplification: proposal launched with next steps,
  - and Regional Development Programmes: SO & DNOs – learning by doing.
- NG will also produce a commercial principles paper for industry on value stacking and creation of new markets this autumn, as part of the ENA open networks – joint National Grid and ENA work. This paper will consider any learnings from the shared services framework.
- It was noted that a strong message from the conference was the need for clear prices. Important

to consider the process for price discovery for flexibility services. It is currently difficult to see how much money is available and how to access it. With the retirement of coal, the system is changing. There is value for flexibility over summer (rather than the traditional winter peak).

The following discussion topics were proposed for steering group meetings in Year 3:

1. Future shape of markets for demand side flexibility (4 July 2017)
2. Whole system benefit and value to consumers of demand side flexibility (11 October 2017)
3. Sources of demand side flexibility – assets and providers (24 January 2018)
4. Regional / distributed view of demand side opportunities (11 April 2018)

5. Power Responsive work update

a. Annual Report 2017 & demand side flexibility metrics

A sub-group of volunteers has been established to inform the development of the next annual report and metrics. It met on 16th June, covering: the scope and timeline of the annual report; and a detailed list of metrics and where the gaps are. There is still space to join the sub-group if steering group members are interested. For the first report the metrics were a patchwork – pulling together what was readily available. We would like to include additional insights this year. But if the report is to be improved, support will be required.

A concern was noted that with the STOR figures, there is no way of distinguishing between different types of distributed generation. It was agreed that there are some gaps and specific areas that can be improved with data for contracted markets. For example it would be helpful to see utilisation and availability numbers. Where it is not possible to access certain data currently, the report will set out a plan for future data requirements in balancing contracts, to improve data going forward.

The challenge will be data for self-dispatched markets. This will only be possible through self-reporting, so there is a bigger question about roles and responsibilities for gathering such data. The ADE might be well placed to gather such information. Suppliers may be able to give an indication of implicit activity. The Energyst survey will be expanded to include storage this year. This will give a market sentiment viewpoint.

b. Steering group meeting agenda – October

Main discussion: whole system benefit and value to consumers of demand side flexibility (11 October 2017)

- Holistic treatment of energy efficiency and demand side flexibility
- Smart Energy Systems Plan – published
- Ofgem targeted charging review
- ADE code of conduct for demand side providers
- Annual Report 2017 – draft for review

It was noted that this is a full agenda and we will need to consider how to ensure it is manageable in the time.

c. Updated Terms of Reference & membership

This has been circulated to steering group members for feedback.

6. AOB

Cathy thanked Paul Lowbridge for his work in driving forward the Power Responsive programme and welcomed Rhiannon Marsh to her new role.

Future meeting dates:

- 11 October 2017
- 24 January 2018
- 11 April 2018
- 4 July 2018

Attendees

Name	Company	Sector Representation
Cathy McClay	National Grid	Chair
Russell Jenkins	BEIS	Policy & Regulation
Andy Burgess	Ofgem	Policy & Regulation
Louise van Rensburg	Ofgem	Policy & Regulation
Asheya Patten	National Grid	System Operator
Roger Hey	Western Power Distribution	Distribution Network Operator
Chris Morrison	Centrica	Large Supplier
Jeff Whittingham	Dong	Renewable generator / Supplier
Jo Butlin	EnergyBridge	Market Commentator
Justin Andrews	Elexon	Electricity Market
Jon Ferris	UtilityWise	Third Party Intermediary
Eddie Proffitt	MEUC	I&C (industry)
Joe Ernst-Herman	Crown Commercial Service	I&C (public sector)
Matthew Webb	TFL	Transport
Alastair Martin	Flexitricity	Aggregator
Yoav Zinger	KiWi Power	Aggregator
Matthew Rowe	DNV GL	Electricity Storage
Judith Ward	Sustainability First	Secretariat
Clare Dudeney	Sustainability First	Secretariat
Paul Lowbridge	National Grid	Secretariat
Rhiannon Marsh	National Grid	Secretariat
Adrian Sellar	National Grid	Secretariat

Apologies
David Capper (BEIS)
Lee Priestley (National Grid)
Jim Cardwell (Northern Powergrid)
Sara Vaughan (E.ON UK)
Mark Futyan (Centrica)
Neil Gillespie (United Utilities)
David Penfold (Sainsbury’s)
Imran Abbasi (AES Electricity Storage)
John Parsons (BEAMA)

Annex A: Proposed Work Programme for Year 3

Objective	Milestone	Lead	Date
AWARENESS & ENGAGEMENT	Continue the “soak” approach to raising awareness of opportunities & next steps using Power Responsive as the platform.	National Grid	Ongoing
	Continue Storage & DSR working groups and evolve as desired, to allow open forum access for interested parties.	National Grid	Quarterly
	Collaborations on engagement activities and events with Power Responsive stakeholders.	National Grid & Stakeholders	Ongoing
	Raising awareness of milestones for policy & regulatory actions – driven by Smart Systems Plan	BEIS & Ofgem	TBC
BUILDING CONFIDENCE	Power Responsive Annual Report 2017 – including collaborative subgroup meetings to determine scope and metrics development.	National Grid & Stakeholders	November 2017
	Supporting publication of consultation and final implemented Code of Conduct for Aggregators.	ADE	Autumn 2017(tbc)
	Forward looking procurement strategy delivered through Future of Balancing Services webpage (ongoing following launch of SN&PS document).	National Grid	Ongoing
	National Grid website improvements implemented based, including improvements to historical balancing information.	National Grid	Autumn 2017
EVOLVING FLEXIBILITY MARKETS	Next steps from output of BEIS/Ofgem Smart Systems Plan	BEIS & Ofgem	TBC
	NG Balancing Services Simplification: proposal launched with next steps	National Grid	Autumn 2017
	Regional Development Programmes: SO & DNOs – learning by doing	National Grid & DNOs	Ongoing
	Commercial Paper for industry on value stacking and creation of new markets.	National Grid & Stakeholders	Autumn 2017