

# DECC/Ofgem Smart Grid Forum Meeting October 2015

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The meeting discussed Ofgem's Flexibility project DECC's Smart Energy Systems project, WS6 Final report, update on WS7 and the findings of ENW's CLASS project	From Date and time of Meeting Location	DECC/Ofgem 20 <sup>th</sup> October 2015 13.30-16.00 BIS Conference Centre	October 2015
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## 1. Present

See Appendix 1 for the list of attendees and apologies.

- 1.1. David Capper (DECC) opened the meeting and welcomed members. There were no comments on the minutes and it was confirmed that actions from the previous meeting had been completed.

## 2. Ofgem's Flexibility Project and DECC's Smart Energy Project

- 2.1. Judith Ross (JR) gave an overview of Ofgem's position paper *'Making the electricity system more flexible and delivering the benefits to consumers'*, which was published on 30<sup>th</sup> September. JR noted that work to date had focused on identifying who the users and providers of flexibility were, their routes to market and what barriers to flexibility exist. JR noted that key aspects of ensuring a transition included: encouraging the evolution from DNO to DSO; exploring how to support industrial and commercial participation; clarifying the role of aggregators; clarifying the legal and commercial status of storage; and examining the evolution of distribution tariffs.
- 2.2. Sam Balch (SB) outlined DECC's Smart Energy Project, which began in January 2015, and was intending to consider in more detail the overall benefits of moving to a smart energy system. Work would initially focus on the electricity system, but the links to other energy vectors would be considered. SB noted that that DECC was planning to publish a paper in November outlining initial findings and plans for further work. DECC and Ofgem will now work together to consider "least regrets" options, including: levelling the playing field by removing regulatory barriers to smart solutions, delivering clearer price signals to allow more flexibility from consumers; and catalysing further innovation.
- 2.3. David Capper (DC) noted that both projects would build on the valuable work that had already been carried out by the Smart Grid Forum and that many of the recommendations for DECC/Ofgem within the WS6 report would be followed up within this work.
- 2.4. During discussion, members noted that the projects should: consider the impact of the supply-chain; cover wider energy vectors beyond electricity; ensure demand reduction featured in the analysis (in addition to demand response); consider what size price differentials would be needed to make time of use tariffs (ToU) work; and consider the distributional impact of ToU tariffs.
- 2.5. DC confirmed that the SGF would be kept fully up to date and engaged on the work; DECC had also issued a tender to help build the evidence base on "least regrets" and optimal level of flexibility in the UK's energy system, which should be completed by Spring.

## 3. WS6 Final Report

- 3.1. JR presented the final report of WS6. JR noted that over 45 organisations had been involved in developing this final report, with six sub-groups covering: community energy, consumer protection, distribution of value, smart metering, storage and distributed generation and visibility. These sub-groups had made 17 recommendations

and outlined 61 actions that would facilitate the deployment of a smart grid. JR noted that the next step would be to prioritise the actions that will ensure those that will make the biggest change are taken forward.

- 3.2. DC asked how participants of WS6 felt having concluded the report and whether there were any tensions within the group on the recommendations. There was broad agreement amongst members that the WS6 was a very useful contribution with high quality analysis and thinking and there was general appreciation of the considerable amount of work that had been put in.
- 3.3. Judith Ward noted the important role Dora Guzeleva (who had now left Ofgem) had played in driving the work forward. DC, with support from the Forum, noted that he would personally pass his thanks on to Dora.
- 3.4. DC and JR noted that some of the recommendations would be taken forward by the work on smart/flexibility being led by DECC/Ofgem, but that it would also be important for the other actors to see where they could make a difference. We then carried out an ad-hoc prioritisation exercise on the recommendations (results at Annex A)
- 3.5. JR noted that SGF members would be given a further two weeks to comment on the report (6<sup>th</sup> November) and then it would be published – members agreed. DC confirmed that DECC/ Ofgem would consider further the interaction between the recommendations set out in WS6 report and the Ofgem and DECC's respective smart/flexibility projects. In doing so, SGF members would be consulted.

#### **4. Update on WS7**

- 4.1. Steve Johnson (SJ) provided an update on the work of workstream 7. SJ reminded members that WS7 was undertaking a detailed technical analysis on how the distribution network will cope with different low carbon technology scenarios. This work would help identify, for example, what control co-ordination may be required to ensure reliable and robust whole-system operation and highlight any new roles and responsibilities for DNOs.
- 4.2. The studies had modelled typical rural and urban networks and two networks with special characteristics. They had looked at the impacts on thermal, voltage and fault level network performance. They had also examined whole system issues including frequency control, protection, harmonics, and dynamics. The studies to date had confirmed that power system issues will require intervention, particularly in "hot spots" where clustering occurs. The studies also demonstrated how smart solutions can postpone conventional reinforcement. The studies point to many areas of work where further benefits can be anticipated; for example R&D to address storage optimisation and co-ordinated voltage control. The findings were broadly consistent with expectations based upon the outputs of Transform and RIIO-ED1 Business Plans.
- 4.3. SJ stated that WS7 expected to complete their studies in November and publish stage 4/5 results by the end of November. It then planned to publish the overall final report by mid-December. The workstream would report back at the next SGF meeting after the final report had been published.

#### **5. Customer Load Active Systems Services (CLASS) Project**

- 5.1. Steve Johnson, Paul Bircham and Steve Cox (SC) from ENW provided an overview of the findings from its CLASS project. This project sought to demonstrate that electricity demand can be managed by controlling voltage. SC noted that by altering voltage in a coordinated way, peak demand could be reduced helping to avoid network reinforcement and reduce the need for investment in additional peaking capacity. In

turn this could help facilitate the faster connection of low carbon technologies and reduce network costs.

- 5.2. SC noted that, if replicated across all distribution networks, it could lead to up to 3GW of demand reduction or boost. During the trial, which included 485,000 customers, SC noted they had received no complaints on power quality and that those surveyed, had not noticed any differences to their power supply.
- 5.3. Members felt this was an important project and helps to put into action some of the recommendations from the WS6 report. This was an excellent use of existing assets and it was important that regulatory issues did not place a barrier on the use of these types of solutions.

## **6. Closing Doors – Standing Item**

- 6.1. Duncan Botting raised the issue of EU funding that had been given for a project in the Moray Firth and asked for an update of this project. Stewart Reid explained that this project was no longer going ahead and had been replaced by a different project. He offered to speak to Duncan after the meeting.

## **7. AOB**

- 7.1. The next Smart Grid Forum will be held on 12th January at Ofgem and future dates will be, 12th April, 12th July, 11th October.

**Appendix 1**

## Attendees:

David Capper (Chair)	Department of Energy and Climate Change
Paul Bircham	Electricity North West
Duncan Botting	Global Smart Transformation
Jill Cainey	Energy Storage Network
Steve Cox	Electricity North West
Mark Drye	Northern Powergrid
Audrey Gallacher	Citizens Advice Bureau
Vandad Hamidi	National Grid
Chris Harris	RWE npower
Steve Ives	OLEV
Steve Johnson	Electricity North West
Gavin Jones	Electralink
Dave Openshaw	UK Power Networks
Ash Pocock	EDF
Stewart Reid	SSEPD
John Scott	Chiltern Power
Jim Sutherland	Scottish Power
Phil Swift	Western Power Distribution
Vincent Thornley	BEAMA
Judith Ward	Sustainability First

**DECC:** Rob Kinnaird, John Christie, Beth Chaudhary, Sam Balch

**Ofgem:** Judith Ross, Deirdre Bell, Amy Freund, Gareth Evans

**Apologies**

Chris Welby	Good Energy
Tabish Khan	British Gas
Steve Unger	Ofcom

