



Ben Smithers
Energy Markets Monitoring and Analysis
Ofgem
9 Millbank
London
SW1P 3GE

28 October 2013

Dear Ben,

Please find below our response to the Ofgem DSR consultation- thank you for considering it.

We are happy for the response to be shared publicly.

We would welcome the opportunity to discuss in more detail any of the points raised.

Yours sincerely,

Felix Wight
Policy and Innovation Manager
Telephone number: 0141 275 4889
E-mail: felix.wight@communityenergyscotland.org.uk
Please respond to our Glasgow office.



Registered Office: 2b Fodderty Way, Dingwall Business Park IV15 9XB
Tel: 01349 860120 Fax: 01349 860138
E mail: info@communityenergyscotland.org.uk
www.communityenergyscotland.org.uk
Registered Company No. SC333698 Scottish Charity No. SC039673
VAT No. 927 4349 04

2b Fodderty Way
Dingwall Business Park
Dingwall
IV15 9XB

Huntly Business
Centre Gordon Street
Huntly,
Aberdeenshire
AB54 8FG

Watson Peat Building
Auchincruive
Ayr
KA6 5HW

36 Newhaven Road
Edinburgh
EH6 5PY

St Mary's House
Gordon Square
Fort William
PH33 6DY

Level 3
St George's Buildings
5 St Vincent Place
Glasgow
G1 2DH

Taigh Cheann a'Locha
Lionacleit
Isle of Benbecula
HS7 5PJ

The Bridge
1 Veitchs Close
Jedburgh
TD8 6AY

c/o Mzuzu University
Private Bag 201
Luwanga, Mzuzu 2
Malawi

Unit 5
Lochavulin Industrial
Estate
Crannog Lane, Oban
PA34 4HB

Anchor Buildings
6 Bridge Street
Kirkwall, Orkney
KW15 1HR

Algo Business Centre
Glenearn Road
Perth
PH2 0NJ

Office 1, Unit 5.3
Toll Clock Shopping
Centre, 26 North Road
Lerwick, Shetland
ZE1 0PE

James Square
9 James Street
Stornoway
HS1 2QN

Question 1: Are there any additional key challenges associated with revealing the value of demand-side response across the system? If so, please identify and explain these challenges.

One key challenge not mentioned is the role of generators. It is striking that generators were not included in the list of actors in table 5.

Based on our own experience of community energy projects on constrained distribution networks, it is clear that there is an appetite from generators to procure demand response services that will allow them to increase their access to the network.

In the case of wind, hydro and solar generators with fixed PPA's in particular, there is a clearly defined opportunity cost when their output is constrained (**without compensation**) due to a lack of network capacity: with low operational costs and zero fuel costs it is effectively the value of their PPA.

Therefore they are in a position to define the exact value of DSR services that would create network capacity for them, and there is the potential for this value to be significant (on the basis that from a renewable generator's point of view, some generation is always better than none).

However it is clear that at the moment neither DNO's nor suppliers are motivated to facilitate DSR arrangements, even though there are clear benefits in terms of maximising use of network assets and passing on added value to customers as cost savings.

On the other hand, generators looking to contract directly with flexible loads for DSR services face a number of institutional, regulatory and commercial barriers as there is no ready market or brokering platform at a distribution level.

Furthermore where non-firm network access arrangements are in place, the structure of the non-firm arrangements can impede the development of a market for DSR, where it is difficult for generators to be confident that a specific DSR event will benefit their specific generator.

While there are advantages and disadvantages to the various principles of non-firm network access, it is clear that 'First In Last Off' systems are difficult to integrate with DSR as they require all generators to participate in a separate post-facto benefit redistribution process.

As such while there may be a strong desire on the part of the generator to secure additional network capacity, there is not currently a bankable investment mechanism in DSR services. This is holding back the development of DSR in one of the key potential growth areas- constrained distribution networks.

As large areas of the Scottish networks are constrained until 2020 and beyond, there is a clear and enduring need for consented and pipeline generating capacity to find alternative forms of network access and ways of maximising available capacity. In our view this represents a perfect opportunity for incubating the DSR market, but by leaving generators off the list of market actors, and focusing on load shedding rather than generation following, the framing of DSR in this consultation risks

overlooking it.

Question 2: Can current regulatory and commercial arrangements provide the means to secure demand-side response being delivered? If not, what will regulatory and commercial arrangements need to deliver in future?

We consider the following to be fundamental to the future of DSR:

- **More suppliers in the market**

Innovation in the supply market is likely to be related to the diversity and number of suppliers in the market. As noted in the consultation, successful delivery of DSR and its integration into customer friendly products requires both technical innovation and a sophisticated understanding of customer needs.

Our view is that at a domestic level, non-traditional actors in the supply market such as housing associations, local authorities, community groups, and care services are often best placed to engage with customers on energy issues.

Furthermore the aggregated nature of the wholesale market impedes direct interaction between customers and the generation portfolios that their supply is based on. We are aware of a number of parties looking at ways of providing customers with more direct feedback on the availability of generators 'linked' to their supply- for example by using electric heating to absorb peak generation from a particular wind cluster.

However the supply market continues to have significant barriers to entry for new supply businesses, both in terms of the regulatory requirements and in terms of the lack of liquidity for non-vertically integrated suppliers.

We are aware that Ofgem is currently considering how to reduce barriers to entry and we support this work- however it is important that discussions around the future of DSR are not separated from the fundamental issue of competition led innovation.

In the short term, the availability of the 'license lite' model is an important development and we urge Ofgem to ensure that the first round of applications are completed as soon as possible. As the model rests upon the cooperation of fully licensed suppliers, we hope that their response will be closely examined by Ofgem, and further action taken by Ofgem if necessary.

We are concerned that the direction of RMR will actually reduce the number of domestic tariffs that could incorporate more innovative DSR elements, and potentially make it more difficult for new entrants to enter the domestic supply market. While the consultation mentions RMR this tension is not flagged up and it would be useful to have more detail from Ofgem on how this will be addressed.

- **Profiles and DSR verification**

Developing a DSR market depends upon transactions being verifiable. Discussions around changes to the settlement process for customers currently on NHH meters need to take this into account- we

need a transparent and high resolution settlement process for all customers in order to realise the full value of DSR. Likewise the continued use of profiles despite the availability of smart meters risks undermining the market for domestic DSR as the lack of certainty around aggregated, indirectly verified DSR will lead to discounting on margins that are already likely to be low.

- **DSR enabled smart meters**

While the roll out of smart meters does represent an opportunity for DSR, it is not clear that this will be fully realised. The SMETS do not require any load control functionality at this time, which is disappointing and could be a missed opportunity. Questions remain as to how visible customer demand data will be to suppliers or third parties wishing to offer DSR services.

As such in our view the issue is less about the roll out of smart meters, and more about the intentions and business models of the suppliers using them. Unless more suppliers are motivated to take up the full functionality of smart meters, it is unlikely that a market will develop around non-teleswitched domestic DSR in the near future.

Question 3: Is current work on improving clarity around interactions between industry parties sufficient? If not, what further work is needed to provide this clarity?

In our experience DNO's are understandably very wary of any activity that may be perceived to conflict with the terms of their license. We have been told that providing realtime data on network conditions to suppliers or other third parties may conflict with the 'general competition' clause in their license, particularly if the supplier in question is part of the same vertically integrated company.

Therefore it would be useful for both DNO's and organisations seeking to develop DSR services if Ofgem could clarify how they expect DNO's to respond to requests for aggregated (non customer specific) network data and the integration of third party DSR systems with their networks.

While bilateral arrangements between suppliers and customers, or generators and customers, are theoretically possible, in our view they are sub-optimal because there is a risk that contracted positions will not reflect the needs of the local distribution network as a whole, and could lead to faults on individual parts of the DN, or conflict with system level priorities. DNO's are best placed to have visibility of the boundary flows between their network and the transmission system, and the nodal flows around their network, and therefore should be at the heart of DSR.

We would welcome a more active role for DNO's in managing both generation and demand on their networks. While RIIO-ED1 may help incentivise this, the overwhelming priority for a DNO is to avoid penalties for breaches of license conditions. Therefore it is vital that the institutional arrangements and license conditions are sufficiently clear as to not inhibit innovative activity.

Precondition 2

Question 4: Are there any additional key challenges associated with effectively signalling the value

of demand-side response to consumers? If so, please identify and explain these challenges.

N/A

Question 5: Do you agree that signals to customers need to improve in order for customers to realise the full value of demand-side response? Does improving these signals require incremental adaptation of current arrangements, or a new set of arrangements?

N/A

Question 6: To what extent can current or new arrangements better accommodate cross-party impacts resulting from the use of demand-side response?

N/A

Precondition 3

Question 7: Are there any additional key challenges associated with customer awareness and access to opportunities around demand-side response? If so please identify and explain these challenges.

N/A

Question 8: Is any additional work needed to explore the role of third parties in helping customers to access and assess demand-side response offerings?

N/A

Conclusion

Question 9: Are there additional preconditions for delivering the right environment for demand-side response? If so, please explain what these are and why they are important, as well as attaching a priority relative to those challenges we have already identified.

Capacity mechanism

While the Capacity Mechanism has the potential to incentivise DSR, from what is known of the current proposals they appear to focus on parties able to provide large scale capacity with high year round availability. Given the immature market for DSR aggregators, it is unlikely that DSR will be able to meet these requirements.

We would therefore like to see more detail on the CM design, and a greater range of capacity products that could be more suitable for DSR. Otherwise there is a high risk that the CM will be dominated by gas plant which will impede the development of more efficient, lower carbon alternatives such as DSR.

Currently the Capacity Mechanism, like STOR, appears to be focused on the SO's needs at a transmission level. However if distribution networks were better balanced then this would make system balancing easier. Therefore to maximise the potential of DSR, particularly in niche 'early'

markets, consideration needs to be given as to how to integrate the capacity mechanism with distribution level DSR services.

We appreciate that the design of the capacity mechanism is outwith Ofgem's control but raise these points for completeness.

Question 10: Do you agree with the priority and timing we have attached to addressing each of the key challenges identified above?

While we broadly agree with the priorities, we would welcome more detail on the actions that will be taken to achieve them. In prioritising actions we would reinforce the need to consider the immediate opportunities on constrained distribution networks, and facilitate the integration of distribution level and system level DSR solutions.