Peter Bingham
Electricity Market Reform Project
National Grid
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

26th July 2013

Dear Peter,

National Grid Consultation: Demand Side Balancing Reserve and Supplemental Balancing Reserve

Please find attached the Micropower Council's response to National Grid's consultation on the Demand Side Balancing Reserve and Supplemental Balancing Reserve.

The Micropower Council is a cross-industry body whose membership comprises of electricity and gas companies, manufacturers, installers, trade associations, professional bodies, non-governmental organisations and charities in the microgeneration sector. We provide the microgeneration industry's main focal point for Government, regulators, Parliament and the general public on regulation and public policy issues.

Accounting for nearly a third of all UK CO2 emissions, the domestic sector is a key target area of Governments renewable and low carbon agenda. The microgeneration sector is gearing up for this challenge, with ASHP and GSHP for example projected to provide nearly two thirds of domestic heat demand[1] by 2050.

Domestic consumers will therefore have an increasing impact on demand from the electricity system when also combined with the growth in electric vehicles. But at the same time, the growth in solar PV and that of mCHP will also provide additional generation capacity. Domestic consumers will therefore have a role in security of supply and be able to provide capacity in the balancing markets, both locally and nationally.

The key elements of our response encompass the changes we believe are necessary to both fully support the roll-out of microgeneration technologies, storage and their participation in National Grid's DSBR and SBR proposals.

[1] Source: The future of Heating, Meeting the Challenge (Evidence Annex)

In summary, these encompass:

- The DSBR participation criteria must include export from small scale and micro generation and storage from 'beyond the meter'. Many such units are capable of export and could be aggregated together to provide additional capacity, supporting network voltage and frequency regulation, reduction in transmission and distribution losses as well as stimulating downward pressure on utility bills.
- The DSBR product should be year-round rather than just the winter months.
- To increase confidence and reduce system risk, testing of DSBR capacity at least once a year would be helpful.
- In case of non-delivery of DSBR capacity, we suggest a repayment of the initial set-up fee on a scaled basis could be a suitable compromise.
- The most sensible option for national grid is to procure the DSBR service from aggregators, suppliers, DNOs and larger users.
- In summary, simplicity, financial benefits and service standards must be at the centre of successfully engaging consumers in DSBR

Our full response is in the annex to this letter: if you would like to discuss any of our submission or to see our analysis in more detail, I would be very happy to meet with you to discuss in person.

Yours sincerely,

Emma Piercy

Head of Policy, Micropower Council

Annex: Micropower Council response to National Grid consultation on 'Demand Side Balancing Reserve and Supplemental Balancing Reserve'

Annex: Consultation Question Responses:

Demand Side Balancing Reserve

DSBR1 – Do you agree with our proposed participation criteria?

No. The proposed participation currently excludes any potential export from small scale and micro generation and storage. Whilst 'behind the meter' generation could match a loss in grid off take from the host, many units would be capable of export and therefore provide additional grid benefits.

For example a Stirling engine mCHP unit typically operates for 2,000 to 2,500 hours per year, and therefore don't operate for most of the year. It is of course when they are not running that they are available to provide short term balancing services.

Likewise with some electricity led fuel cell mCHP applications, these are designed to load follow. This means they are likely, when operating, to be doing so at less than full output, leaving spare capacity available to provide short term balancing services. In particular at winter peak, they are highly likely to be synchronised (because there will be a call for heat) but may not be operating at full electrical output. This means they could provide short term operating reserve, fast reserve or frequency response at times of maximum system stress.

Storage units will also be able to provide additional capacity into the system.

The inclusion of these technologies is supported by the rationale of introducing DSBR, stated as being 'as a means of participating in the provision of balancing services for service providers that are called relatively infrequently and for whom existing institutional arrangements and costs of full participation in the balancing mechanism are a barrier to entry' (page 39 of consultation).

DSBR2 – Do you agree with our proposed product definition?

No – instead of just being a winter product, this should in fact be a year-round product. The summer this year in 2013 has already seen times with system capacity very tight due to plants on outage in combination with other factors.

DSBR3 – Do you agree with our proposed payment arrangements? Do you have any views on the proposed level of set-up payment?

The conceptual arrangements look sensible, but we are concerned that the level of set-up payment is too low and that there is no penalty for non-delivery of capacity if

called upon. This could lead to speculative bidding and high risk of non delivery. A potential compromise could be around a repayment of the initial set up fee in case of non-delivery.

For sufficient and reliable volumes of DSR to come forward, this will require a programme that can last for at least 2 to 3 full calendar years and offer sufficient compensation levels.

DSBR4 – Do you agree with our measurement and baseline proposals?

In principle yes, but National Grid needs to make sure it doesn't put up any unintended barriers for newer plant / those that will be commissioned shortly (and therefore no baseline data), for participation in DSBR.

DSBR5 – Do you agree with the proposed arrangements for despatch?

Yes

DSBR6 – Do you agree with our proposals on procurement?

Yes

DSBR7 – Do you agree with our proposals on verification?

In part yes – but there are two crucial elements missing are those of testing and penalties. To ensure DSBR is enabled and to reduce system risk, testing at least once a year would be helpful. Likewise, as proposed under question 3, we are concerned that there is no penalty for non-delivery of capacity if called upon. This could lead to speculative bidding and high risk of non delivery. A potential compromise could be around a repayment of the initial set up fee in case of non-delivery.

DSBR8 – Do you agree with that there should be a de-minimis dispute threshold?

Yes

DSBR9 – Do you agree with our proposed approach to contracting?

We are concerned that there is no penalty for non-delivery of capacity if called upon. This could lead to speculative bidding and high risk of non delivery. A potential compromise could be around a repayment of the initial set up fee in case of non-delivery.

DSBR10 – Do you agree with our proposals on imbalance pricing?

Yes

DSBR11 – Do you agree with our proposals on how the service should interact with triad demand reducers?

No comment

DSBR12 – Do you agree with our proposals in respect of Committed and Flexible STOR providers?

Yes

DSBR13 – Do you have any comments on our procurement options?

The Micropower Council believes the most sensible procurement option is that which is identified in option (b): procure a service from aggregators, suppliers, DNOs and larger users. National Grid is not in the business of contracting directly with small amounts of load / generation capacity, and so this option would allow it to use many of the existing systems and processes for contracting, without incurring substantial new administrative costs through required education, marketing, account management, etc.

Supplemental Balancing Reserve

SBR1 – Do you agree with our basic product proposals?

No: in relation to both the DSBR and SBR proposals, any potential export from small scale and microgeneration and storage (indeed anything in the SBR less than 50MW) is excluded from participation.

For small scale and microgeneration and storage, we advocate including these within the DSBR.

The inclusion of these technologies is supported by the rationale of introducing DSBR, stated as being 'as a means of participating in the provision of balancing services for service providers that are called relatively infrequently and for whom existing institutional arrangements and costs of full participation in the balancing mechanism are a barrier to entry' (page 39 of consultation).

For larger scale embedded generation, the Deminimis threshold of the SBR should be lowered.

Tender Assessment and Call-Off

No Comments