



Bringing Energy
Together

CHPA response to Demand Side Balancing Reserve consultation July 2013

Introduction

The Combined Heat and Power Association (CHPA) welcomes the opportunity to respond to National Grid's proposals for stimulating demand side activity as a means of alleviating grid stress. The CHPA is a leading advocate of energy services, combined heat and power and district heating. Some of our members are already working to provide demand-side response (DSR) services, and many more are interested and have scope to provide DSR services.

DSR has been demonstrated to be a cost effective mechanism for alleviating system stress, especially at times of peak demand. If designed from the perspective of users, a demand side balancing system could offer tangible benefits and meet the aims of national grid, Ofgem and the Department of Energy and Climate Change.

The key requirements of an effective demand side response mechanism are:

1. **Credibility** – for all participants including the system operator that DSR can and will deliver when called upon.
2. **Bankability** – a mechanism that is sufficiently simple and enduring so that potential users, who are not active participants in the electricity market, can be persuaded to offer their services into the system.

The consultation proposals are welcome, especially the aim of simplicity and the recognition that DSR can only provide services for a limited duration. There are some areas where the proposals as they stand will not ensure a credible and bankable system. Consideration of these points would help to ensure that an effective demand side market can be established in the UK:

1. A 'setup' or 'availability' payment, associated with appropriate checks, to reward the future ability to deliver. Proposals for a scheme where payment is only made on delivery are highly likely to undermine the entire DSR market, as any user can make an implausible offer as there is no financial risk if they fail to deliver. Such a proposal will inevitably lead to DSR being viewed as unreliable by stakeholders, including industry, National Grid, Ofgem and Government.
2. **Scheme endurance.** DSR is a largely untapped UK market. A time horizon of at least three years is necessary if those who are not used to participating in the UK energy market are to grow in confidence and offer DSR services. These

services are clearly distinct from proposals in DECC's capacity mechanism and, therefore could run concurrently with the DSR transitional arrangements.

3. The scheme needs to express confidence in the sector. Proposals to derate delivery to 25% of offered capacity expresses a deep scepticism about the ability of DSR to deliver and does not appear to be based on robust analysis from other DSR schemes.
4. The scheme should interact well with other load control and balancing mechanisms such as Triad avoidance . Proposals for demand 'baselining' using the 10 system peak days will effectively exclude sites running for Triad periods. It may be that this demand side balancing service is needed outside a Triad period, so sites that operate for Triad Avoidance should also be able to operate for the DSR service outside of triad periods.

If these key issues are addressed, we are confident these proposals can establish the cost effective participation of demand side response, help the stability of the electricity system, and complement other services such as STOR.

Consultation questions

DSBR1 Do you agree with our proposed participation criteria?

We support the proposals for both demand reduction and increase in 'behind the meter' generation. On a site with both demand reduction and generation, full response may lead to substantial local power export in the most cost-effective manner and we would recommend that both measures be included within the scope of the DSR.

DSBR2 Do you agree with our proposed product definition?

The proposals for event duration limits and for simple monitoring are vital operational criteria for the inclusion of DSR and are very welcome.

We are very concerned about the proposals for Option 2, the voluntary DSR programme. Establishing DSR in an organisation which is not an active market participant, even when that participation is to occur through an aggregator, is a medium-term process. As with National Grid, it is vital that the customer can build confidence in the scheme.

The user needs to be able to receive value for participation, which is best done through an availability payment as payment only for dispatch, is, by its nature, unpredictable. The risk with Option 2 is that given that there is no risk for offering services, some may offer a service they cannot deliver. This would do major harm to the market and is highly to undermine Ofgem and National Grid's confidence in DSR ability to deliver. Other markets have demonstrated that availability payments are a necessary requirement for a successful DSR framework. We would also recommend that power export be considered within these arrangements. The complexity and cost of electricity market participation has led many sites to deliberately undersize plant to avoid export. However, some sites still have a capacity for power export as well as demand reduction. These sites do not consider generation and demand separately, but instead consider how to meet their integrated energy requirements in the most cost-effective way. The ability to offer demand side and generation services to the system is useful both to the site (as a

way of managing risk and maximising the services it can offer), but also to consumers in securing cost-effective balancing services.

In addition, restricting behind the meter generation from participating may reduce the ability of short-term increases in output from onsite power.

We believe that there is merit in considering year-round participation rather than winter only if this can stimulate greater cost effective DSR participation.

The ability to pro-rate participation for limited duration is welcome. It would also be valuable to enable participation for subsets of the four-hour window. For example, a commercial site may be able to only offer services from 4 to 6pm, due to their hours of commercial operation. Inclusion of these options may enable National Grid to ensure its proposals contract the best value DSR.

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

As per Question 2, we have major concerns about the voluntary DSR (Product 2) programme proposed. For Product 1, we understand that a set up payment needs to be higher for it to be effective. We would recommend that National Grid investigate the case with the industry for a higher set-up payment to ensure that the DSR market can grow and develop. It is vital that all stakeholders have confidence in the DSBR system and therefore, we recommend that a claw-back mechanism is considered so that if contracted DSR fails to deliver at the times it was called to dispatch, the full set up/availability payment should be required to be returned.

DSBR4 Do you agree with our measurement and baseline proposals?

The baseline proposals effectively exclude sites participating in Triad Avoidance. Given that these sites are likely be operating DSR for these occasions, it would seem highly likely that such sites will not be able to offer any DSR services to this market. We recommend that a baseline method that examines site peak demand days (rather than system) be considered. Such a methodology may provide for a more appropriate baselining methodology as it will examine sites based on real peak load rather than at times when peak load is deliberately reduced. Clearly it is important that there is not a double payment for DBSR and Triad avoidance. Sites could be required to notify National Grid if they were planning to run for Triad on a given day and would be ineligible for DSBR utilisation payments.

As baselining considers net demand, the vast majority of sites with dispatchable onsite generation will be assumed to be operating during a stress event with an option to increase output. Should for any reason the onsite generator be out of operation at a stress event, site demand will appear to increase even with other DSR activated. It may be that a mechanism for notification of a lack of available DSR should be provided to reduce the risks posed by unexpected outages.

DSBR5 Do you agree with the proposed arrangements for dispatch?

Yes, we would encourage a simple, reliable approach such as that currently used for STOR.

DSBR6 Do you agree with our proposals on procurement?

Yes.

DSBR7 Do you agree with our proposals on verification?

The CHPA encourages a stronger verification process to build stakeholder-wide confidence in DSR. A test event, preferably twice a year, would ensure that the reliability of DSR resources could be measured. This becomes critical in the event of DSR not dispatching in a given year to ensure that DSR offerings are genuine and deliverable.

We also advocate a set-up payment clawback to ensure that there is an incentive to deliver the product offered. Such a clawback penalty is vital to ensuring effective DSR and a central argument against Product 2 that has not set up payment or penalties.

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?

Yes.

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. The intention of this product is for it to be in addition to the Triad mechanisms, creating a demand reduction incentive.

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

Broadly, yes. Committed STOR providers should not be able to also provide DSR simultaneously. It may be that a site can offer other assets for DSR outside of their committed STOR assets, which could be valuable for the DSR. Enabling these additional assets to be available for DSR should be considered during the design of the policy.

DSBR13 Do you have any comments on our procurement options?

In all possible options the balance between simplicity and robustness needs to be struck. In principle, we would encourage a system that is sufficiently simple for individual site participation, with the optional use of aggregators where needed. Sites with 2 to 3 MW may well be able to participate without the need for aggregation, while others may choose the aggregator route. Discussions with individual users as well as aggregators will be key to getting this balance right.

TAC1 Do you agree with the way in which we propose to assess Demand Side Balancing Reserve?

The proposal to derate all DSR to 25% is a major concern. It portrays a view that DSR is a highly unreliable resource despite effective deployment elsewhere. In the absence of data behind this assumption, it is difficult to comment on the appropriate number, but we would strongly encourage Grid to engage in a dialogue with industry to determine an appropriate derating figure that is evidence based (See proposal for test events to test reliability in Question 7).

The proposals for a voluntary DBSR (Product 2) may have played a role in choosing such a low number. As noted earlier, such a product could be inaccurate and result in damaging the credibility of DSR.

TAC2 Do you have any particular comments on the way we propose to use Disappearance Ratios (DRs) for Demand Side Balancing Reserve in the assessment process?

N/A

TAC3 Do you agree that we should enter into a contract with all Demand Side Balancing Reserve with a utilisation price of less than the Value of Lost Load (VoLL) that has no set-up fee?

As already stated, DSR with no set-up fee represents a major risk to the DSR industry and its credibility among all stakeholders. We would strongly encourage these proposals to be rejected.

TAC4 Do you have any comments on our proposed assessment of Supplemental Balancing Reserve?

N/A

TAC5 Do you agree with our proposed call-off arrangements?

No comments to add.

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