THE ELECTRICITY STORAGE

Consultation on the potential requirement for new balancing services by National Grid Electricity Transmission plc (NGET) to support an uncertain mid-decade electricity security of supply outlook

The Electricity Storage Network

The Electricity Storage Network is the UK's industry association for the promotion of electrical energy storage. Current members include electricity storage manufacturers and suppliers, developers of electricity storage projects, users, electricity network operators, consultants, academic institutions and research organisations.

The Electricity Storage Network works on behalf of its members to respond to and address issues affecting the development and utilisation of grid-scale electricity storage within the UK power system. This includes special interest meetings, liaising with the media, responding to consultations, providing a unified point of contact for those interested in electricity storage and promoting the value of storage within the UK power system.

We strongly support UK energy storage solutions for the UK electricity system and by promoting local innovation in electricity storage we support wider UK industry.

Introduction

Ofgem has made an assessment of capacity going forward and indicates that that is a significant risk of having insufficient capacity ahead of the period covered by the Capacity Market, in winter 2014-2015 and winter 2015-2016. This risk is likely to diminish as 2020 approaches.

National Grid has been in discussion with Ofgem and DECC to mitigate these risks and National Grid has proposed two new balancing services which would be called in winter to cover evening peak demand on non-holiday weekdays.

We agree that there is likely to critical periods for margins in the winters of 2014-2015 and 2015-2016 (and possibly beyond) and that steps are needed to ensure that there is indeed sufficient capacity to meet demand. However we do not feel that the two proposed services, Demand Side Balancing Reserve and Supplemental Balancing Reserve are the appropriate way to address the forecast capacity issues.

General comments

National Grid has not made a strong or robust case for either of the two new services.

Both services would represent a distortion of the current markets and add further complexities to an already complicated range of services, balancing or otherwise.

Demand Side Balancing Reserve (DSBR) has many of the characteristics of the current STOR service and it would seem more appropriate to procure capacity (which has the same system impact as balancing) through the already well-established STOR tender process, securing the required capacity / balancing / margin in the appropriate season.

National Grid, by contracting directly with smaller demand customers (presumably below the 3 MW requirement for STOR), will impact negatively on the current space in which Aggregators operate and will curtail the future business opportunities for Aggregators to secure and bring together demand size response to meet the requirements for STOR.

National Grid's view that DSBR is a quick and cost effective method to procure demand side services completely misunderstands the complexities and processes needed to develop such services. Aggregators are already well placed to deliver demand side services and have an excellent understanding of the issues that need to be addressed when dealing with potential new providers.

Further, the role of Aggregators in the provision of services to National Grid provides a reliable response, with well developed methods of calling providers on and off. National Grid's proposal to rely on texts and web-based communication methods for DSBR suggests that this will not be a secure and reliable means of meeting tight margins and presents a very real risk that DSBR will fail to address the capacity issue at the very time it is needed, resulting in a system failure.

It is not clear what the cost to National Grid and ultimately the end customer will be for either of these new services, while STOR costs are better understood.

The new services proposed by National Grid conflict with the Capacity Market, hence the recent announcement to delay the start of the Transitional auctions within that market. This offers no certainty to those looking for business opportunities on the demand side and for electricity storage.

We can see no reason for the introduction of the new National Grid services.

Alternatives to Providing Capacity in Winter

Electricity storage offers the potential to offer a similar service to those proposed, but with the added benefit of being available to provide wider system services as required.

We would be very interested in exploring with National Grid, how the role of electricity storage could be adapted to meet these requirements. As electricity storage is not generation – the ownership or operation of storage by National Grid is not in contravention of its licence as a TSO, we would propose that some of the SBR is allocated to a large bespoke energy storage system, contracted for by National Grid. In order to accelerate the procurement of such a device, the initial ownership might be by National Grid, but after initial operation, some allocation of its operation might be sold, transferred or contracted to a third party.

We would advise that such a storage plant, or plants could be made ready in approximately 12 - 18 months, subject to satisfactory siting opportunities and our members would be very pleased to work with National Grid to deliver such project.