

Response to the Joint OFGEM and BERR Consultation on Distributed Energy – Initial Proposals for More Flexible Market and Licensing Arrangements – Published 18th December 2007

National Grid welcomes the opportunity to respond to the OFGEM and BERR joint consultation on Distributed Energy and the consideration of a range of proposals for more flexible market and licence arrangements in this area.

1. Distributed Energy (DE) has an important part to play in the future evolution of the GB electricity industry. The challenging national and European targets for reductions in greenhouse gas emissions will require the development of a wide range of generation, and demand reduction, options. The expansion in DE capacity is one of a number of options that will contribute to the achievement of these targets and, as such, it is important to ensure that market and licensing arrangements are aligned to help and not hinder the development of DE.
2. Distributed Energy covers a number of technologies with differing dynamic characteristics and deliverability. It is recognised that these differing attributes afford providers a number of different routes to market and it is important that these different routes are facilitated efficiently so that providers can determine their market of choice and accurately assess the costs and benefits of each of these opportunities.
3. Ultimately the development of routes to markets for these providers should add to the overall efficiency of the industry, and by the establishment of appropriate market incentives, inform the market of the most efficient way to meet the nation's emission reduction targets.
4. In order to accomplish this it is important that the benefits derived from DE are captured in any market arrangements. The relative reduction in losses that occur due to DE's proximity to demand would need to be identified and the financial benefits to the market measured through some loss allocation model. By the same token it is important that the costs of infrastructure and benefits of its avoidance are appropriately allocated to DE in the proportion to which they cause or help avoid that infrastructure. By financially quantifying the costs and benefits of DE the value that is added to the efficiency of the market can be accurately calculated.
5. Although predominantly aimed at attracting new entrants into the main energy markets, this consultation process should also highlight the opportunity that exists for DE to offer more specialist services, for example the option to offer balancing services to the System Operator (SO), services to Distribution Network Operators or flexibility to balancing responsible parties.

6. National Grid, as GBSO, has successfully promoted new sources of balancing services from the demand side and distributed generation parties. Although not appropriate for all, we welcome services of sufficient individual or aggregated capacity that, when instructed, can contribute to our management of the transmission system. The increased diversity and competition this brings to our procurement allows us to procure our requirements more efficiently and consequently means these efficiencies are passed on to the market in reduced SO costs. We are keen to work with aggregators and providers to explore the service possibilities whenever new generation sources enter the industry.

7. It may be appropriate to explore whether the increase in Distributed Energy offers opportunities for the establishment of alternative services which, at present, are considered too impracticable. Reactive power provides a prime example of where distributed generation could, with a review of the current obligations for its provision, establish itself as a valid competitive service provider. If the parties responsible for the use of reactive power could be identified it is possible that they could be made responsible for their provision. This could be accomplished either through their direct procurement from appropriate sources, or through a charge for the reactive power that it causes to be centrally procured.