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RWE response to the Ofgem consultation on "Electricity Capacity Assessment: Measuring and modelling the risk of supply shortfalls"

Dear Mr Mokkas,

Please find enclosed the RWE response to the Ofgem Consultation on Electricity Capacity Assessment: Measuring and modelling the risk of supply shortfalls" published by Ofgem on 12th October 2011. This response is provided on behalf of the RWE group of companies, including RWE Npower plc, RWE Supply and Trading GmbH and RWE Npower Renewables Limited, a fully owned subsidiary of RWE Innogy GmbH.

We welcome the opportunity to comment on this consultation. The monitoring and assessment of capacity margins is an important activity as set out in the 2010 Energy Act.

With regard to the answers to question 1 and 2 in the consultation document we believe that the de-rated capacity margin is a good indicator of future capacity adequacy and the "Loss of Load Expectation" and Expected Energy Unserved" are important parameters that provide an indication of potential tightness in

electricity margins. However, we believe that in an efficient and effective electricity market, the signals provided by such variables will be reflected in the forward price of electricity. Pricing signals will ensure that the sufficient capacity will be delivered such that the likelihood of actual capacity shortfalls will be limited to extreme events that are by definition extremely unpredictable or emergency circumstances that cannot be foreseen by the market. Therefore we would caution that any analysis that provides an indication of capacity shortfall should be regarded as a definite forecast the energy will unserved.

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With regard to questions 3 to 13 we believe that is difficult to comment in detail without a full understanding of the economic modelling that is being contemplated. In this context we believe that the following principles should be applied:

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• **Demand Forecasting**: A robust demand forecast is required and this could be obtained from an external econometric forecasting company or from National Grid. Demand forecast data should take into account the effects of embedded generation of demand within each distribution zones of the transmission such that the demand requirements for each GSP group can be derived. Data on embedded generation could be



derived from information provided by the DNOs as part of their existing obligations with regard to the preparation of the National Grid Severn Year Statement:

- Energy Prices: A fundamental analysis of energy prices is required based on forecasts of commodity prices including oil, coal and gas prices;
- Marginal Dispatch: The modelling process should be based on a dispatch model for electricity generation that identifies the marginal costs of key technologies or groups of technologies operating on the GB electricity network; and
- Entry and Exit: A standard approach to market entry and exit should be adopted for the modelling. As a starting point data should be derived from the National Grid TEC register. Alternative scenarios may deviate from the TEC register.
- Marginal dispatch Costs: We believe that estimating the capacity margin at peak will require an estimate of the marginal despatch costs of generators in a "merit order". These dispatch costs should be based on a fundamental analysis of the costs of generation for technology types and groups of power stations with similar or representative costs.
- Wind Forecasts: Explicit stochastic modelling of wind output is an appropriate approach for this technology.

It is difficult to comment in detail on questions 2 to 13 without a full understanding of the economic modelling that this being contemplated. Ofgem should publish a detailed design specification of the modelling process that includes an outline of the sources of key input data, the modelling methodology and the outputs. The specification should include the key assumptions that underpin different scenarios and the basis of any sensitivities that are applied to each scenario. Publication of the specification should enable market participants to ensure that the outputs are robust and internally consistent.

We do not believe that additional requirements on market participants are required with regard to the provision of data that informs the modelling process. However, Ofgem should publish information of the key assumptions that underpin any scenarios used as the basis of modelling.

Yours sincerely,

Alan McAdam

Wholesale Economic Regulation Manager