

Steven Becker
Energy Market Outlook
Ofgem
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14 January 2014

Dear Steven,

**ELECTRICITY CAPACITY ASSESSMENT 2014: CONSULTATION ON
METHODOLOGY**

Thank you for the opportunity to respond to the above consultation. Our answers to the Consultation questions are set out in the attached Annex.

Whilst the Capacity Assessment aims to set out the risks to electricity security of supply in GB and is not designed to calculate how much capacity to procure, it will, in our view, influence decisions related to the Capacity Mechanism auctions. A thorough process and clear methodology is therefore very important, especially in light of the security of supply challenges identified by Ofgem in last year's assessment. Moreover, we would note that these anticipated challenges around maintaining security of supply are likely to have increased with the improving forecasts for economic growth from the Office for Budget Responsibility and other commentators.

In this context, we would reiterate our view that there are enough projects at a suitable stage of development to provide an acceptable level of competition to allow for a delivery year under the capacity auction earlier than 2018. Likewise, we consider that the existing delivery year timetable remains realistic even if the auction were to be delayed by a year or even longer. Accordingly, the majority of the supply side analysis within last year's capacity assessment report should remain robust against the possibility of moderate delays in the capacity mechanism.

We have the following key observations on the methodology:

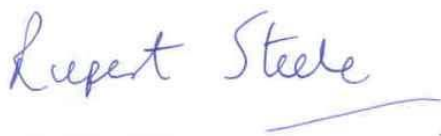
- We agree that the general methodology used for the 2013 report remains fit for purpose and valid for the period of analysis that the 2014 report will cover. In particular, we continue to support the use of a time-collapsed probabilistic model that analyses capacity adequacy over the winter period. We agree that a fully chronological model is not required given the current characteristics of the GB electricity system and its expected evolution over the next five winters. The discrete analysis of time-linked variables should, however, remain a separate and important ongoing project.

- Analysis suggests that there is little merit in carrying out price-based quantitative modelling of the interconnector flows at the current time. A qualitative approach would therefore seem to be sensible. However, at present, it is unclear how a qualitative approach to assess the role of interconnection would influence the level of capacity procured in capacity mechanism auctions.
- As we observed in response to last year's consultation, building an explicit model to predict future levels of DSR during periods of high demand is challenging. To this end we expressed the view that greater market participation should have been observed before increasing the underlying DSR assumptions in the last assessment. As outlined above, given that the 2014 analysis is likely to have a strong influence on the Capacity Mechanism auction, we particularly consider that a prudent approach should be taken to assumptions around both DSR and energy efficiency.
- Our reservations that the link between wind output and demand is not adequately represented have to date been mitigated by the wind-demand sensitivity. However, we consider that the analysis which provided modest evidence that wind output decreases as daily peak demand increases should be given further consideration. There continues to be a widespread view that this negative correlation is strong, at least some of the time. We maintain, therefore, that it is important that both current and future methodologies consider the frequency and duration of protracted periods of high demand in cold, still weather. These conditions remain the most likely to create a shortfall, especially bearing in mind that extremely cold conditions can also affect the supply side.

Finally, we would highlight our continuing doubt about whether the modelling horizon is sufficient for this type of analysis. Given lead times within the industry, a security of supply assessment over a longer time frame is important to help optimise investment decision-making for both new and existing plant. Furthermore, for many forms of capacity mechanism (and in particular those designed around auctions, as DECC plans for its model) a view of capacity adequacy beyond four years ahead is crucial.

If you wish to discuss any of these points further, please do not hesitate to contact me.

Yours sincerely,



Rupert Steele
Director of Regulation

**ELECTRICITY CAPACITY ASSESSMENT 2014: CONSULTATION ON METHODOLOGY –
SCOTTISHPOWER RESPONSE**

Question 1: Do you agree that the general methodology used for the 2013 report is still valid to analyse GB's generation adequacy in the next five winters from 2014/15 to 2018/19? If not, please explain why and make some specific suggestions for the methodology and their comparative advantages.

We broadly agree that the general methodology used for the 2013 report remains fit for purpose and valid for the period of analysis that the 2014 report will cover. In particular, we support the use of a time-collapsed probabilistic model that analyses capacity adequacy over the winter period.

We do, however, have concerns around the assumed relationship between wind output and demand. This is explored further under question 3.

Question 2: Do you agree with using a qualitative approach to assess the impact of interconnector flows on LOLE and EEU in our Reference Scenario and sensitivities? If you disagree, please provide justification and suggestions for alternative approaches.

Analysis to date has suggested there is little merit in carrying out price-based modelling of the interconnector flows. We therefore agree that the qualitative approach seems sensible. However, it is unclear how a qualitative approach, and any other subsequent approach, will influence the level of capacity procured in the capacity mechanism auction.

Question 3: Do you agree with our proposed approach to capture the uncertainties of a potential relationship between wind availability and high-demand on the level of risk? Please justify and provide suggestions for alternative options and their comparative advantages.

Despite the lack of data demonstrating statistical significance, we consider that the analysis which provided modest evidence to suggest that the available wind appears to decrease as daily peak demand increases should be given further consideration. While we have not seen the analysis, it seems possible to us that the modest overall correlation may arise from a mixture of days which are high demand with low wind and others which involve high demand with higher than average wind speeds. But the fact that there are some high demand/high wind days does not prevent the high demand/low wind days from constituting a problem.

We maintain that it is important that both current and future methodologies consider the frequency and duration of protracted periods of high demand in cold, still weather. These conditions remain the most likely to create shortfall conditions, especially bearing in mind that extremely cold conditions can also affect the supply side.

Question 4: Do you agree with the use of sensitivities to represent the main uncertainties facing the electricity security of supply outlook at the moment? If not, please provide specific reasons and alternatives.

Yes, we agree with the use of sensitivities. However, given our concerns highlighted above it is important that these scenarios and the associated likelihood of occurrence are communicated effectively.

Question 5: Do you agree that our proposed sensitivities around interconnector flows, generation capacity, and peak demand capture the uncertainties that have the most significant impact on the level of risk? If not, what other sensitivities should we consider and why?

We broadly agree that the proposed sensitivities capture the uncertainties that have the most significant impact on the level of risk, but would suggest an additional scenario focussing on the interaction between gas security of supply and electricity security of supply.

Given recent announcements about possible plant closures, the Carbon Price Floor trajectory, and very low spark spreads, we believe that there is merit in exploring in more detail assumptions around closures and mothballing. Whilst we note the possible use of the new ancillary services, we consider that a more aggressive sensitivity around generation capacity closure should be investigated.

Question 6: Do you agree that the Reference Scenario and associated sensitivities provide a sufficient range of possibilities for the electricity security of supply outlook? Please provide suggestions for alternative options and their comparative advantages.

Whilst the range is useful, forming a clearer view on the likely future outlook, and therefore what capacity is needed, requires an in-depth understanding of the range and the associated risks.

Question 7: Do you agree that the different demand projections presented in the report provide a sufficient range of possible demand outcomes? If not, please suggest alternatives and their comparative advantage.

As previously commented in our last response, we consider that greater market participation should have been observed before increasing the underlying DSR assumptions and we remain concerned with the level of uptake assumed for both energy efficiency and DSR in the scenarios. We believe that the 2014 analysis will have a strong influence on the Capacity Mechanism auction, and therefore consider that a prudent approach should be taken to both DSR and energy efficiency assumptions.

Question 8: What sensitivities do you think would be most appropriate to include in our main summary graphs (e.g. Executive Summary), and why?

As reflected in our responses above, it is important for users of the output of this work to fully understand all the scenarios. Questions around the presentation of the report need to be considered in this context.

ScottishPower, 14 January 2014