Mr Steven Becker
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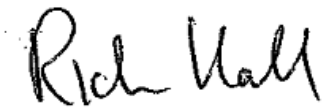
Dear Steven

Response to 'Electricity Capacity Assessment 2014: consultation on methodology'

Thank you for providing us with an opportunity to provide feedback on the methodology for your annual electricity capacity assessment. We provide answers to the questions posed in the consultation in the following pages. This submission is entirely non-confidential and may be published on your website.

If you would like to clarify or discuss any point, please do not hesitate to get in contact.

Yours,



Richard Hall
Director of Strategic Infrastructure

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?

Broadly, yes – we are more worried about the way the results are presented than the methodology used to calculate them.

We are concerned that the reports are open to misinterpretation by commentators, particularly in the media, and that this may mean that their publication causes unnecessary public concern and anxiety. For example, while the 2013 report shows, in relative terms, a deterioration in security of supply prospects, it also shows, in absolute terms, little realistic prospect of the lights going out. This message was entirely missed by the media. Several national newspapers responded to its publication with alarmist front pages suggesting that the lights would go out[1]. We recognise that Ofgem cannot control the media narrative; however the widespread misunderstanding of what the reports were showing does suggest that the data needs to be better contextualised.

We think that several things could assist with this.

Firstly, it would be useful if you could set out how tightening margins affect households in a meaningful way. By this, we mean try to contextualise:

- The likely depth of any interruptions that could be experienced (i.e. how far down the demand curve would disconnections go? Purely heavy industry? Down to small and medium sized businesses? Or down to households?)
- The likely breadth of any interruptions that could be experienced (i.e. localised or national disruption).
- The likely length of any interruptions that could be experienced (i.e. are we talking a few minutes, a few hours, or a few days?)

In the absence of such context, there is a heightened risk that results are interpreted as being a return to "1970s style three day weeks" of mass rolling blackouts in the way that several media outlets portrayed past reports.

Secondly, it may be useful if de-rated capacity margins over a longer historic time period can be shown in your reporting. For example, in the 2013 report you showed de-rated capacity margins for the five-year period from 2013/14 to 2018/19. These show a sharp drop from 2013/14 to 2015/16. This sharp drop was the principal cause of public alarm. However, it is presented in a way that is somewhat devoid of context, because margins in 2013/14 were actually quite high by historic standards; it may therefore have left readers with the understanding that margins are dropping to historic lows, which is not the case. There is always a risk that peaks look particularly high, and troughs look particularly shallow, when short time series are used. We would therefore encourage you to try and show historic de-rated capacity margins alongside your projection of future margins.

We think that including historic data as well as future projections may also help readers to contextualise the degree of risk better, eg if you can see that the risk of interruptions

[1] The front page headline of The Times on 28 June 2013, the day following the 2013 Electricity Capacity Assessment Report was "Britain faces blackout". On the same day, the Daily Mail headline was "Electricity to be rationed".

in future year (say) 2015/16 is similar to the risk in past year (say) 2007/08 that may help to keep things in proportion – because readers will have lived through that year and will have a sense of the extent of disruption that they experienced.

If the principal source of consumer harm from tightening margins is the risk of supply disruption, the secondary source is the effect that it may have on prices. Historic oversupply will have had a dampening effect on wholesale prices that will lift as margins tighten. We would also expect to see an increased scarcity premium in the value of balancing plant. It would therefore be extremely useful if you could include a sense of net cost to consumers of different scenarios – i.e. what the bill impact may be.

We would find it useful if Expected Energy Unserved (EEU) was more precisely defined. While in the case of Loss of Load Expectation (LOLE) you make clear that this figure is in the absence of intervention by the System Operator this caveat is not present for EEU. In future reports, it would be useful if you could clarify if the EEU figure that you are using is in the absence of intervention by the System Operator or following intervention by the System Operator.

Your 2013 modelling made clear that it was based on an expectation of how the market would develop under existing policies and did not include possible reforms that were still making their way through industry/regulatory/governmental development processes (eg the Capacity Mechanism, electricity cash-out reform or the introduction of any new balancing services). The Energy Act 2013, which contains the enabling provisions for the Capacity Mechanism, received Royal Assent on 18 December 2013. The Secretary of State has yet to issue a direction formally implementing the scheme, however has been clear that it is his intention to do so[2]. In the event that your publication timetable requires you to issue the 2014 Electricity Capacity Assessment before the secondary legislation implementing the Capacity Mechanism is in place we would nonetheless encourage you to treat it as part of the baseline as there now appears to be adequate certainty that it will be in place to allow for this.

Similarly, given that Ofgem has now made a decision to allow National Grid to introduce two new balancing services, Supplemental Balancing Reserve (SBR) and Demand Side Balancing Reserve (DSBR), it would be appropriate for these measures to be included in the baseline. In particular, noting that both SBR and DBSR are only initially in place for two years this may help both you and your stakeholders to understand the implications of any future decision to extend or scrap those tools.

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?

We are not comfortable with the approach that has been taken to the behaviour of interconnectors, though this is less a reflection of the adoption of a qualitative approach and more a concern with the assumptions that have been made within that approach.

[2] "Electricity Market Reform delivery plan published," DECC, 19 December 2013. https://www.gov.uk/government/news/new-energy-reforms-to-support-250000-jobs-keep-bills-down-and-produce-cleaner-energy

The reference scenario is based on the interconnectors with mainland Europe being at "float" (i.e. no imports or exports on average) while the Anglo-Irish interconnector is fully exporting to Ireland. You note that 'our analysis suggests that, at the moment, there are no evident complementarities between GB and its interconnected markets as we have very similar patterns of demand and supply availability'.

In effect, this presupposes that during times when the UK system is tight, the Irish system will always be tighter – and that price signals will be sending power to it from the UK to meet its needs.

We question how realistic that assumption is. It must be noted that the security of supply standard that the UK is introducing is actually higher than that in the Republic of Ireland. The Republic of Ireland's security of supply standard is for a LOLE of 8 hours per year – while the UK has committed itself to adopting a tighter LOLE standard of 3 hours. By implication, policymakers consider the Value of Lost Load (VoLL) in the UK to be higher than it is in the Republic of Ireland - that at a point where Irish consumers are unwilling to pay more to keep their lights on that British consumers would still be willing to keep paying. If policymakers on both sides of the Irish channel deliver policy frameworks that fully reflect these reliability standards in pricing signals on their market participants, it would appear that the Irish interconnector should always end up either flowing towards us (if the Irish TSO has not ceased exports to prevent a crisis within its borders) or not flowing at all (if it has) in a crisis where both countries simultaneously experience difficulties that would threaten disconnections.

We recognise that an argument can be made that there is 'missing money' in the GB cash-out price because it cannot currently rise to VoLL, however we also note that you are working to resolve that deficiency through your cash-out review.

We also note that the assumption of export to Ireland seems to be heavily influenced by historical behaviour, i.e. that Irish prices have tended to run at a premium to those in GB. There are reasons to believe that this may not persist. The rapid narrowing of GB margins is likely to create inflationary pressure on the value of power within its borders. It has also unilaterally introduced an escalating carbon floor price that means the cost of carbon within its borders is higher than elsewhere in the EU.

Based on the evidence presented in your reports, we do not see a compelling case to assume full export on the Irish interconnector in the reference scenario. We think it is entirely reasonable to make that assumption in some scenarios - but not in the central scenario.

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 the risk?

Yes, this is a reasonable approach.

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?

Yes, this is reasonable.

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?

We agree that these are the most significant risks.

As highlighted in our answer to question 2, different EU nations have different security of supply ("reliability") standards. We understand[3] ours and those of our neighbours to be:

Nation	LOLE
UK	3 hours (to be implemented through EMR)
Ireland	8 hours
France	3 hours
Netherlands	4 hours

There are also differences in the extent to which the different jurisdictions signal scarcity wholly through market prices, or whether separate capacity payments are in place – Ireland has an explicit capacity payment mechanism model and the UK and France are expected to introduce them.

It would be useful to see more commentary / modelling on any practical effects that the setting of different supply standards and any incentives that are not reflected in market prices (i.e. capacity mechanism penalties) may have on behaviours in the interconnected markets during a crisis.

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?

While we question some of the assumptions going into the model (for example, interconnector flows – see our answer to question 2), we think that the overall range of possibilities produced from that model represents a reasonable spread of scenarios.

Question 7: Do you agree that the different demand projections presented in the report provide a sufficient range of possible demand outcomes?

Since the publication of the consultation, the Government has taken the decision to heavily cut back the Energy Company Obligation (ECO) energy efficiency scheme – doubling the period that suppliers have in which to meet its targets. Separately, take-up of the Green Deal has been disappointing to date.

[3] "Annex C: Reliability standard methodology," DECC, July 2013.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/223653/emr_consultation_annex_c.pdf

We understand that your demand projections are taken from National Grid's Gone Green projections. It would be useful if you could make clear what assumptions it makes about the level of take-up of energy efficiency schemes – i.e. whether it uses Government forecasts, actual installs or some synthesis of the two. This would help stakeholders to reach views on whether demand reduction scenarios are likely to be optimistic, pessimistic or realistic.

Question 8: What sensitivities do you think would be most appropriate to include in our main summary graphs?

From a consumer perspective, the risk of actual interruption is the key measure that needs to be communicated. Consumers will wish to understand the likelihood of disruption and what form it might take – duration, frequency, what types of consumers may be affected etc. We would encourage you to concentrate on these measures. For further detail of our reasons for this, please see our answer to Question 1.