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Dear Mr Pettigrew,

CONFIRMATION OF CAPACITY AUCTION PARAMETERS

Thank you for your Electricity Capacity Report 2015 (ECR) delivered on 29 May. In the light of that report I am writing to confirm the parameters for the next T-4 auction planned for December 2015, as well as for the first Transitional Arrangements (TA) auction planned for January 2016.

In Table 1 a. below I set out the parameters for the T4 auction, including a target volume of 45.4GW to be auctioned in the T-4 itself. This is consistent with the ECR recommendation of 47.9GW capacity in 2019/20, given that I am setting 2.5GW aside for a T-1 auction.

The inclusion of interconnectors is an important new feature for this year's auction, and I am required to determine their de-rating factors. I set out at Table 1 b. the relevant figures, and in the annex to this letter provide a more detailed explanation of the evidence and methodology which has informed my decisions.

Table 2 sets out the parameters for the TA auction.

I note that, for both auctions, the parameters may be refined and amended subject in particular to the prequalification and appeals process.

Yours sincerely,

Amber Rudd

Table 1a. T-4 auction parameters

Parameter	Value
Target Capacity for 2015 T-4 auction	45,400MW
Demand curve: Maximum capacity at price cap	43,900MW (Target – 1500MW)
Demand curve: Minimum capacity at £0/kW	46,900MW (Target + 1500MW)
Reliability Standard	3 hours/year
Net Cone	£49/kW/yr
Price Cap	£75/kW/yr
Price Taker Threshold	£25/kW/yr
15-year minimum £/kW threshold	£255/kW
3-year minimum £/kW threshold	£130/kW
Variable or Non-Variable Price auction	Non variable¹
Base period for Indexation	2014/15²

Table 1 b. Interconnector de-rating factors

Interconnector	Final De-rating Factor
IFA (France)	52%
Eleclink (France)	56%
BritNED (Netherlands)	69%
NEMO (Belgium)	54%
Moyle and EWIC (Ireland)	6%

Table 2 - TA Auction Parameters

Parameter	Value
Target capacity	1500MW
Demand Curve: Maximum capacity purchased at Price Cap	1000MW (Target – 500MW)
Demand Curve: Minimum capacity purchased at £0/kW	2000MW (Target + 500MW)
Net Cone Proxy	£25/kW
Price Cap	£40/kW
Price-taker threshold	£15/kW

¹ In other words, no use will be made of any price duration equivalence methodology

² Average index October 2014 to April 2015 inclusive; CPI All Items

Annex – Summary of approach to de-rating Interconnectors

Introduction

1. There are two elements to de-rating interconnectors – the direction of flow between GB and each interconnected market, based on price signals (referred to as 'country flow') and the technical reliability of the wires.
2. In February, DECC announced that we would implement a "hybrid" de-rating approach which utilises both historical and forecasting methodologies. This gives interconnectors the maximum of the historical or forecasted country flow (expected average contribution to GB security of supply at times of system stress) subject to there not being any publically reported concerns about the security of supply outlook in the connected market for the relevant Delivery Year. This figure then needed to be adjusted to account for the technical availability of the interconnector. We expected the forecasted figure to be the greater of the two, as the methodology to determine the historical flow was intentionally conservative in line with its design as a "floor".

Forecast Methodology

Country Flow

3. National Grid (NG) has undertaken a comprehensive investigation of the evidence base and modelling available on interconnector flows. On the basis of this research, a range was put forward to the Secretary of State from which to choose the forecast de-rating factor. Details of this research can be found in the 2015 Electricity Capacity Report.
4. The Panel of Technical Experts (PTE) supported this range and recommended that DECC ideally use a Least Worst Regrets framework to choose the final figure. However, this approach was found to be too sensitive to uncertain assumptions and consequently the PTE recommended a simple average (i.e. the midpoint) on the basis that it is transparent and that they thought the ranges from Grid were reasonable.
5. This approach was used for all markets except Belgium. . Reflecting recently reported issues surrounding Belgian security of supply as cited by the PTE in their report and feedback from Ofgem, it is appropriate to refer to the lower end of the recommended range for this auction. Belgium is considering measures to resolve their capacity issues and more detail can be found in the PTE report.
6. The forecasted country flow de-rating factors for the 2015 capacity auction are all at the same level or above the historical figures that were published in February. Therefore, all interconnectors will receive the forecasted number for this auction, which is then adjusted for expected technical reliability.

Technical Reliability

7. The assumptions for existing interconnectors are consistent with Baringa's modelling used as an input to NG's recommended de-rating factor range and discussed at a DECC, Grid and Ofgem steering group which entails basing the availability of existing Interconnectors on

historic outage rates (excluding outlier years from the data set). For new interconnectors, data is used from the SKM report³ which was commissioned by Ofgem.

2015 De-rating Factors

8. The final 2015 de-rating factors are set out below:

	NG Recommended Range	Country flow	Final De-rating (including technical adjustment)
IFA (France)	50-70%	60%	52%
Eleclink (France)	50-70%	60%	56%
BritNED (Netherlands)	62-80%	71%	69%
NEMO (Belgium)	58-70%	58%	54%
Moyle and EWIC (Ireland)	2-10%	6%	6%

Forward Look

9. NG is working through a process of incremental improvements to their interconnector modelling capability, with a view to ultimately using a validated pan-European model. Progress can be seen in the significant improvement in the evidence base, enabling them to move from the net zero import (“float”) assumption for interconnector flows in the 2014 Electricity Capacity Report. We expect further improvements to be in place for next year.
10. Improvements to modelling capability will be supported by increased availability of useful data (for example, the effectiveness of market coupling). We expect that future de-rating factors will reflect this growing evidence base.
11. The next step for NG is to begin the process of reviewing commercially available network models and to engage with GB industry and interconnector stakeholders to get their views on the markets to which GB is connecting. This industry engagement will begin with stakeholder meetings in July 2015 and continue through the Future Energy Scenarios consultation process through the autumn and winter.

³ “Calculating Target Availability Figures for HVDC Interconnectors” (SKM, December 2012)
<https://www.ofgem.gov.uk/ofgem-publications/59247/skm-report-calculating-target-availability-figures-hvdc-interconnectors.pdf>