



Department
of Energy &
Climate Change

The Rt Hon Amber Rudd MP
Secretary of State

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6 July 2016

Dear Mr. Pettigrew,

CONFIRMATION OF CAPACITY AUCTION PARAMETERS

Thank you for your Electricity Capacity Report 2016 (ECR) delivered on 31st May and for the thorough and helpful analysis that your team has undertaken, which has served to underpin my final decisions. I have also benefitted from advice from my own Panel of Technical Experts (PTE) and, in respect of interconnection, from Ofgem; and in accordance with regulation 12(5) of the Electricity Capacity Regulations 2014, I have also had regard to the reliability standard and the matters set out in section 5(2) of the Energy Act 2013. In light of all this, I am writing to confirm the parameters for the next T-4 auction planned for December 2016, the supplementary auction planned for January 2017 and the second Transitional Arrangements (TA) auction, planned for March 2017.

T4 auction

In Table 1 below, I set out the parameters for the T-4 auction for delivery in 2020/21, incorporating a total target volume of 52,600MW of which I am setting aside 600MW leaving 52,000MW to be auctioned in the T-4. This approach is consistent with the ECR analysis but makes two adjustments to the final recommendation:

- Firstly, I understand that around 5GW which were awarded multi-year agreements in 2014 (Trafford, West Burton and Cottam) have missed the milestones required to retain agreements in 2020/21¹. The ECR assumes that projects which had already missed formal milestones should be discounted for the purposes of the 2020/21 target capacity. However your recommendation was based on only 3.4 GW of this not delivering. I am therefore adding to the target capacity to reflect these latest developments;
- Secondly, I am grateful for the progress made in identifying the volume of resources outside the CM which will be present in the market in the 2020/21 delivery year. This is an important issue and I welcome the strides that have been made in this year's ECR.

¹ In the light of representations, the Secretary of State has since agreed to extend Trafford's termination notice period to 19 December 2016.

However, there remain several uncertainties in two of the areas (for autogeneration assumed not to bid into the CM; and for growth in renewables that do not already have support) which do not yet provide a reliable basis on which to calculate the capacity to secure. I am therefore adding 1.1GW to the target capacity to reflect this. I welcome the commitment of your team to undertake further analysis next year to investigate distribution-connected generation in more detail. The PTE have also recognised the need for more robust evidence in this area.

Supplementary capacity auction

Table 2 sets out the auction parameters for the supplementary auction for delivery in 2017/18. As there is no set-aside for this auction, I am setting the target capacity at 53.8GW as recommended in the ECR.

Transitional Arrangements (TA)

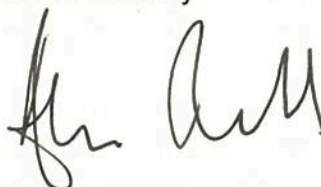
Table 3 sets out the parameters for the second TA auction. The Electricity Capacity (Amendment) Regulations 2016 will tighten the eligibility criteria so that the auction will focus on "turn down" DSR only – the sector which is most in need of targeted support. The ECR does not make recommendations on targets for this auction, but I have had regard to the best evidence available to me of the current size and future potential of the sector. I am keen to provide full opportunities for the *growth* of this important resource, and am therefore setting a target of 300MW. This represents a stretching target when considered against the current evidence, and I will reconsider the figure if necessary ahead of the auction depending how much capacity prequalifies to ensure the auction is liquid. The target is also expected to be reduced in line with the amount of TA prequalified capacity that succeeds in the supplementary auction.

Interconnection

Table 4 sets out the de-rating factors for interconnectors which I have determined for both the supplementary auction and the T-4 auction. The ECR makes no formal recommendations in this area, but provides some technical analysis which I have reviewed alongside specific advice from PTE and from Ofgem. My decisions are in line with this advice, and the annex to this letter provides a more detailed explanation of the methodology which has informed my decisions.

I note that, for all three auctions confirmed above, the parameters may be refined and amended following the prequalification and related appeals processes.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Amber Rudd', written over a light blue horizontal line.

AMBER RUDD

Table 1: T-4 auction parameters

Parameter	Value
Target Capacity	52,000MW
Demand curve: Maximum capacity at price cap	50,500MW (-1,500MW)
Demand curve: Capacity purchased at £0/kw	53,500MW (+1,500MW)
Reliability Standard	3 hours/year
Net Cone	£49/kW/yr
Price Cap	£75/kW/yr
Price Taker Threshold	£25/kW/yr
15-year agreement threshold	£255/kW
3-year agreement threshold	£130/kW
Indexation	2015/16 ²

Table 2: Supplementary auction parameters

Parameter	Value
Target Capacity	53,800MW
Demand curve: Maximum capacity at price cap	52.8GW (-1,000MW)
Demand curve: Capacity purchased at £0/kw	54.8GW (+1,000MW)
Reliability Standard	3 hours/year
Net Cone	£49/kW/yr
Price Cap	£75/kW/yr
Price Taker Threshold	£25/kW/yr

Table 3: TA auction parameters

Parameter	Value
Target Capacity	300MW
Demand curve: Maximum capacity at price cap	200MW
Demand curve: Capacity purchased at £0/kw	400MW
Net Cone	£49/kW/yr
Price Cap	£75/kW/yr
Price Taker Threshold	£25/kW/yr
Percentage of auction clearing price payable to time banded capacity obligations	70%

Table 4: Interconnector de-rating factors

Interconnector	Final De-rating factor	
	Delivery Year 2017/18	Delivery Year 2020/21
IFA (France)	59%	60%
BritNed (Netherlands)	74%	74%
Moyle and EWIC (Ireland)	30%	26%
Eleclink (France)	-	65%
NEMO (Belgium)	-	77%
IFA2 (France)	-	62%
NSL (Norway)	-	78%

Annex – Summary of approach to de-rating interconnectors

Introduction

1. There are two elements to de-rating interconnectors – the expected contribution from each connected market and the technical reliability of the wires.
2. In February 2015, 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 must 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 modelling exercise on interconnector flows. On the basis of this work, a range was put forward to the Secretary of State from which to choose the forecast de-rating factor. Details can be found in the 2016 Electricity Capacity Report.
4. The Panel of Technical Experts (PTE) supported this range and recommended that DECC choose the midpoint of the range on the basis that it is transparent and that the main downside with this approach – risk neutrality – had already been considered by NG in devising the range.
5. This approach was used for all markets except Ireland for 2020/21. PTE agreed that in this case it was appropriate to refer to the lower end of the recommended range, due to potential delays to the works to relieve transmission constraints within the market and the as yet undecided intra-day trading arrangements.
6. The forecasted country flow de-rating factors for this year’s capacity auctions are all at the same level or above the historical figures. 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 NG’s Future Energy Scenarios, 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 report² which was commissioned by Ofgem.

² “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->

2016 De-rating Factors

8. The final de-rating factors for the supplementary auction are set out below:

	NG Recommended Range	Country flow	Final De-rating (including technical adjustment)
IFA (France)	45-86%	66%	59%
BritNED (Netherlands)	70-82%	76%	74%
Moyle and EWIC (Ireland)	2-58%	30%	30%

9. The final de-rating factors for the T-4 auction are set out in the following table:

	NG Recommended Range	Country flow	Final De-rating (including technical adjustment)
IFA (France)	45-88%	67%	60%
BritNED (Netherlands)	70-82%	76%	74%
Moyle and EWIC (Ireland)	25-50%	26%	26%
Eleclink (France)	45-88%	67%	65%
NEMO (Belgium)	65-92%	79%	77%
IFA2 (France)	45-88%	67%	62%
NSL (Norway)	76-96%	86%	78%