



Making a positive difference
for energy consumers

Company Secretary
National Grid Electricity Transmission plc
1-3 Strand
London
WC2N 5EH

Direct Dial: 0207 901 1873
Email: Phillipa.Pickford@ofgem.gov.uk

Date: 26 April 2018

Dear Company Secretary

Direction to include the correction to the Model Inaccuracy in the embedded generation output in the SO Models, pursuant to Special Condition 4C.42 of the Electricity Transmission Licence

Under Special Condition (SpC) 4C.38 of the Electricity Transmission Licence, National Grid Electricity Transmission plc (NGET) is required to notify the Authority¹ and seek to correct a Model Inaccuracy that prevents the SO Models from producing a target that reflects the efficient baseline costs baseline to be incurred by NGET (as defined under Part M of Special Condition 4C).

On 9 February 2018, NGET wrote to notify us of a Model Inaccuracy. Embedded generation output in the SO Models is modelled using wind speed data provided by a third party (MERRA-2). This data has been found by NGET to overestimate wind output in the SO Models. This constitutes a Model Inaccuracy, leading to an inappropriately high cost target.

NGET's analysis revealed that the modelled output looked relatively high compared to historical modelled data. They submitted further support for this conclusion in the form of a paper, produced by Imperial College London² that identifies an 11% bias in MERRA-2 data compared to MERRA data. SO Models in historical incentive schemes used MERRA data which was validated as part of the Capacity Market analysis. NGET propose to apply a reduction factor to reduce the MERRA-2 wind speeds by 11% to align with the MERRA data used in the historical models.

On the basis of the information provided in accordance with SpC 4C.42, we agree with the change to the Embedded generation output in the SO models. We believe the correction to the models ameliorates the inaccuracy of the target and broadly draws it closer to the costs incurred by an efficient SO. We therefore attach to this letter a formal direction that directs NGET to include the correction to the Model Inaccuracy in the Embedded generation output in the SO Models.

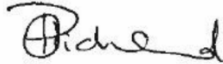
¹ References to the "Authority", "Ofgem", "we" and "our" are used interchangeably in this document to refer to GEMA, the Gas and Electricity Markets Authority. The Office of Gas and Electricity Markets (Ofgem) supports GEMA in its day to day work. This decision is made by or on behalf of GEMA.

² <https://spiral.imperial.ac.uk/bitstream/10044/1/39214/2/Staffell%2C%202016%20-%20Modelling%20Wind%20Power.pdf>

Direction and Notice

Attached as an Annex to this letter is a formal Direction for NGET to include the correction to the Model Inaccuracy in the Embedded generation output in the SO Models.
This letter constitutes a notice of the reasons for our decision pursuant to section 49A of the Electricity Act 1989.

Yours sincerely,



Philippa Pickford – Associate Partner
For and on behalf of the Gas and Electricity Markets Authority

For and on behalf of the Gas and Electricity Markets Authority

Annex

DIRECTION ISSUED PURSUANT TO PARAGRAPHS 4C.42 OF SPECIAL CONDITION 4C (BALANCING SERVICES ACTIVITY REVENUE RESTRICTION ON EXTERNAL COSTS) OF NATIONAL GRID ELECTRICITY TRANSMISSION PLC'S ELECTRICITY TRANSMISSION LICENCE IN RELATION TO THE INCLUSION OF THE CORRECTION TO THE MODEL INACCURACY IN THE EMBEDDED GENERATION OUTPUT OF THE SO MODELS

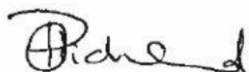
Whereas:

1. National Grid Electricity Transmission plc ("NGET") is the holder of an electricity transmission licence (the "Licence") granted or treated as granted under section 6(1)(b) of the Electricity Act 1989 (the "Act").
2. Special condition 4C (Balancing Services Activity Revenue Restriction on External Costs) ("SpC 4C"), Part L (Scheme Governance), sets out the establishment and publication of the SO Methodologies as approved by the Authority for determining Modelled Target Costs. In accordance with Special Condition 4C.38, NGET must notify the Authority and seek to correct a Model Inaccuracy that has arisen that prevents the SO Models from appropriately reflecting the cost baseline expected from the economic and efficient incentivised balancing services costs to be incurred by NGET.
3. The Authority has considered the model correction to the Embedded generation output in the SO Models and on the basis of the information provided has decided to include the correction to the Model Inaccuracy.

Therefore:

The Authority hereby directs that NGET include the correction to the Model Inaccuracy in the Embedded generation output in the SO Models in accordance with SpC4C.42.

This document constitutes a notice of the reasons for the decision to issue the direction pursuant SpC 4C.42, as required by section 49A of the Act.



.....
Philippa Pickford – Associate Partner

For and on behalf of the Gas and Electricity Markets Authority

Date: 26 April 2018