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10th October 2013

Dear Anthony,

Project TransmiT: Impact Assessment of industry's proposals (CMP213) to change the electricity transmission charging methodology

National Grid, through our subsidiary National Grid Electricity Transmission plc (NGET), owns and operates the electricity transmission system in England & Wales, and is the National Electricity Transmission System Operator (NETSO) for the entire transmission system across Great Britain. In our role as NETSO we are responsible for setting Transmission Use of System (TNUoS) tariffs, calculating TNUoS charges to generators and suppliers, and recovering the associated revenue on behalf of Transmission Owners (TOs) whose assets comprise the National Electricity Transmission System (NETS).

We welcome the opportunity to provide a response to the impact assessment consultation for CMP213: Project TransmiT TNUoS Developments. Whilst the current charging methodology has historically been successful in driving efficient electricity transmission investment, we believe that there is now a need for this to evolve to recognise the changing nature of GB generation mix.

The Original CMP213 and each of the formal Working Group Alternative CUSC Modifications present an improvement upon the baseline formed by the current charging methodology. The proposals developed through the CMP213 process better reflect the future development of the transmission system as defined by the National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS), and account for the introduction of new transmission technologies into the NETS. This letter sets out our views on points of note within the impact assessment consultation. Our response to each of the consultation questions can be found in Annex 1.

National Grid has undertaken extensive quantitative modelling of the impact of a number of options proposed under CMP213 to support both the CUSC process and Ofgem's Impact Assessment. The model used for this work is an updated version of that utilised by Redpoint Energy as part of their modelling of the impact of options considered as part of the Project TransmiT Significant Code Review (SCR). As part of the CMP213 Workgroup process, we discussed the data assumptions used in the model with the Workgroup to ensure that there

were no concerns over the data sources used (which were sourced from publically available information). National Grid endeavoured to ensure that the latest data available from each source was used in the updated model, although we do acknowledge that some of this was superseded by updated publications during the period in which the modelling was undertaken. Whilst we agree that this is worthwhile noting, as it may explain the differences between the CMP213 modelling results and those relating to other work published with more recent data assumptions, in our opinion, none of these updates are significant enough to bring the robustness of the modelling undertaken in support of CMP213 into question and for that reason we consider that the results presented remain relevant.

Overall, noting the data assumptions used and simplifications to certain functionality made in the model (such as the workings of the Capacity Mechanism) National Grid believe that the model provides an adequate illustration of the likely future trends under each option, and that the model results, as presented, have been interpreted appropriately in the CMP213 Impact Assessment Consultation. We do note, however, that where two different scenarios give rise to very similar results, it may be difficult to conclude which of the two options provides the better solution, given the level of uncertainty over particular data inputs. Our view is that, whilst the modelling results can assist in quantifying broad industry trends, it is of greater importance that the underlying principles of each option are also assessed as part of reaching a conclusion.

We expect that the measures resulting from the forthcoming Electricity Market Reform will help facilitate security of supply and the achievement of the government's sustainability targets. Our modelling shows that this will be the case irrespective of the outcome of CMP213. However, the generation mix and the costs associated with achieving these goals can differ under each model. In this respect, we concur with Ofgem's conclusion that it is clear that the diversity option 1 included within WACM2 presents the most cost effective option in this respect over the modelling period. In relation to the treatment of converter costs for parallel HVDC circuits, the modelling results are much closer. We believe that there is a case for the socialisation of some of the costs of HVDC converter stations including consistent treatment with other onshore transmission technologies in the TNUoS methodology. However, we do note that the option to include all converter costs within the locational element of TNUoS charges under WACM2 appears to be slightly favourable over the time period considered.

Finally, we note the proposed implementation date of April 2014 and the comments made within the consultation on potential impacts on different parties. TNUoS is designed to provide a long term investment signal, and as such the results of the modelling that we have undertaken indicates that the implementation of WACM2 will provide long term benefits to the end consumer once customers have responded to the change in the signal provided. However, it is not clear that the proposed April 2014 implementation strategy delivers any benefit to end consumers over and above that provided through effective signalling of a future change that would allow the energy market sufficient time to react. Such an early effective date may introduce an element of regulatory uncertainty, which could reduce investor confidence and result in an associated risk premium being added to enduring energy prices. For this reason, we believe that an April 2015 implementation would provide a more appropriate solution.

To help remove some of the more short-term uncertainty associated with the suggested implementation, and to assist customers' understanding, we have recently published indicative 2014/15 tariffs for the original modification and all diversity options, and a TNUoS charge

calculator based upon the Ofgem's minded to position. These indicative tariffs have been developed using the latest available input data, as used for our July quarterly tariff update, and generic generation load factors. We note that the use of generic load factors could introduce a level of uncertainty to the residual element of generation tariffs, but we do not believe that this uncertainty is of any more significance than that which already exists in the determination of the Maximum Allowed Revenue (MAR) for 2014/15. To assist stakeholders in understanding this uncertainty, we have published a likely range for the residual element in our indicative tariff calculator. In addition, we intend to provide updated indicative tariffs based upon more generator specific load factors for Ofgem's minded to position alongside status quo figures in our next quarterly update due in November. Whilst there are a number of changes required to the National Grid charging systems to implement the minded to position, these are all deliverable within the timescale required to enable implementation in April 2014, and we remain confident that we can publish draft load factors for customer consideration later in the Autumn. However, we would highlight that it is necessary for a decision on CMP213 to be made by early December in order to allow us to meet our usual informal deadline of publishing draft tariffs ahead of Christmas.

If you would like to discuss any of these points further, please do not hesitate to contact me or Wayne Mullins (email: wayne.mullins@nationalgrid.com, tel: 01926 653 999).

Yours sincerely,

Patrick Hynes

Electricity Charging & Access Development Manager

Annex 1: Responses to consultation questions

Question 1: Do you think we have identified the relevant impacts from NGET's modelling and interpreted them appropriately?

Overall, considering the data assumptions used and simplifications to certain functionality made in the model (such as the workings of the Capacity Mechanism) we believe that the model provides an adequate illustration of the likely future trends under each option, and that the model results, as presented, have been interpreted appropriately by Ofgem in the CMP213 Impact Assessment Consultation. We do note, however, that where two different modelled scenarios give rise to very similar results, it can be difficult to reach a certain conclusion on which of the two models provides the better solution, given the level of uncertainty over particular data inputs. Whilst the modelling results can assist in quantifying broad industry trends, it is of greater importance that the underlying principles of each option are also assessed as part of reaching a conclusion. We believe that Ofgem have achieved this as part of their impact assessment.

Question 2: Do you have any further evidence of the impacts of the charging options not covered by NGET's analysis?

There are a number of comments which highlight that the Gone Green 2012 demand background used within the CMP213 modelling has now been superseded by the Gone Green 2013 scenario, and how capacity margins would evolve under this scenario. As a result, we have re-run our analysis for Status Quo and Diversity 1 using demand data based on the 2013 Gone Green Scenario. As this scenario forecasts lower demand than the 2012 scenario previously used, there is a resulting decrease in wholesale costs over the period concerned (as less energy is traded in the wholesale market). Most notably, there is a resulting increase in capacity margins. The following charts depict this.

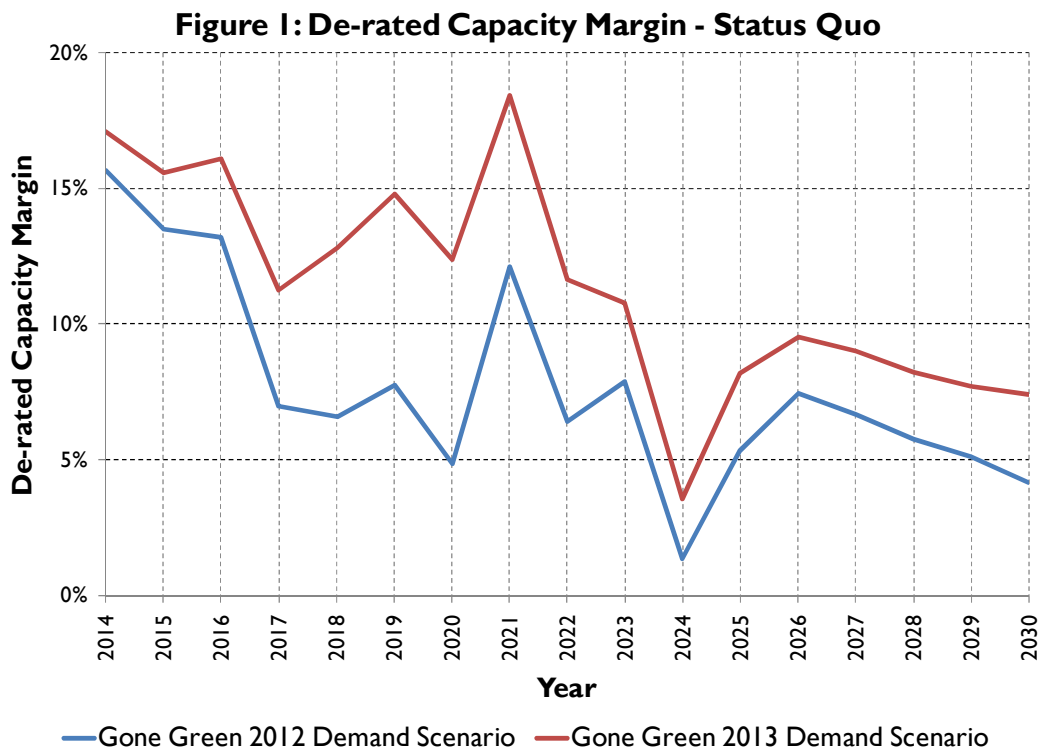
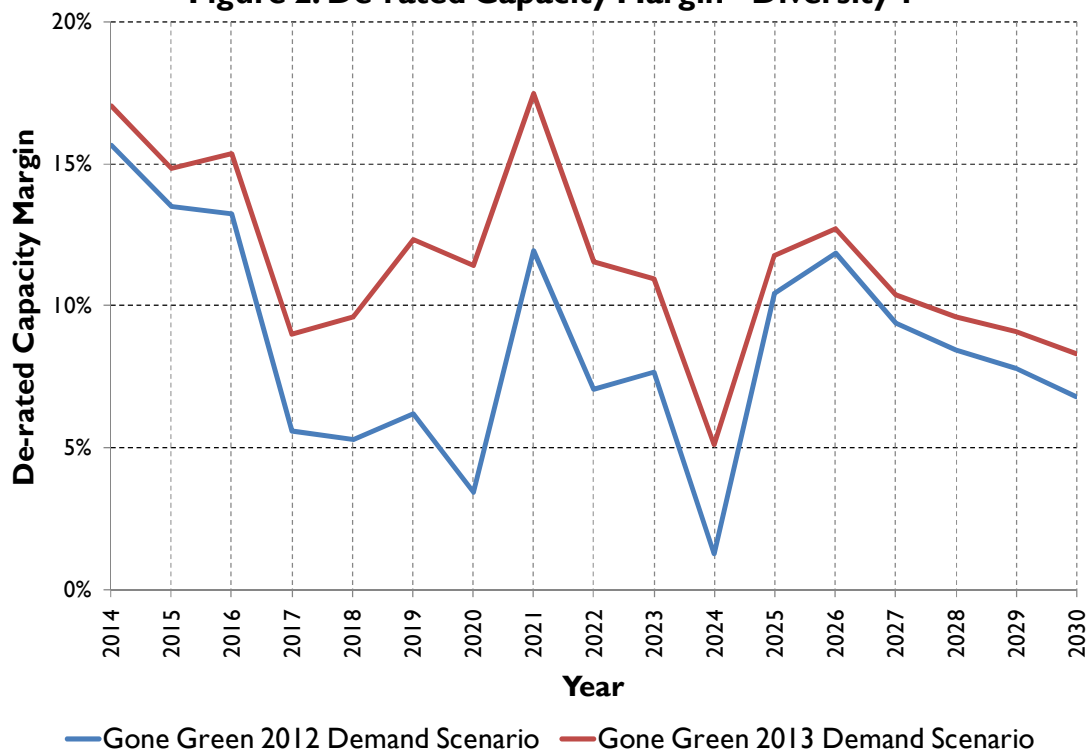


Figure 2: De-rated Capacity Margin - Diversity I



The only other noticeable effects of the demand reduction are a decrease in the level of CCGT build under the Diversity 1 model, and a decrease in CCGT CCS generation build under both models. The level of renewable build remains identical to that previously modelled.

Question 3: Do you agree with our assessment of the options in terms of the strategic and sustainability impacts? In particular, are there any impacts that we have not identified?

We expect that the measures resulting from the forthcoming Electricity Market Reform will help facilitate security of supply and the achievement of the government’s sustainability targets. Our modelling shows that this will be the case irrespective of the outcome of CMP213. Although the modelling only extends to 2030 we are not aware of anything that would suggest a risk to the achievement of UK 2050 carbon targets.

Question 4: Do you think that socialising some of the cost of HVDC converter stations could lead to other wider benefits, such as technology learning? If so, please provide further evidence in this area.

We believe that there are strong arguments for the socialisation of some of the costs of HVDC converter stations as developed by the CMP213 Workgroup and detailed in the Final Modification Report. This would ensure consistent treatment with other onshore transmission technologies in the TNUoS methodology. It should also facilitate the future appropriate development of HVDC circuits as economic and efficient investment decisions which would benefit the end consumer whilst mitigating the visual impact of transmission reinforcement.

With regards to technology learning, we believe that HVDC is a proven technology with a mature global market, and therefore there is unlikely to be any additional financial benefit to be released through technology development in this area. Additionally, the modelling results suggest that socialisation of some of the cost of HVDC converter stations does not significantly alter the number of such projects being installed on the GB transmission system. In combination, we believe that there is very little obvious benefit from technology learning in this area.

Question 5: Do you agree with our assessment of the options against the Relevant CUSC objectives? Please provide evidence to support any differing views.

We agree with the assessment that diversity option 1 offers the best sharing alternative in relation to the Relevant Objectives. In relation to the treatment of HVDC converter costs, we believe that the options that enable the removal of elements of converter station costs from the locational charge better facilitates relevant CUSC objective a (competition). In the case of parallel HVDC, we believe that there is justification for the removal of 60% of the costs on the basis of the equivalence with AC substation and quadrature booster costs. In the case of Islands connections, we believe that there are reasonable arguments in support of the removal of 50% of the costs on the basis of the equivalence with AC substation costs.

Question 6: Do you agree with our assessment of the options against our statutory duties? Please provide evidence to support any differing views.

We agree with Ofgem's overall assessment of the options against their statutory duties.

Question 7: Do you agree with our assessment that it is appropriate to implement WACM2 in April 2014? Please provide evidence to support any alternative implementation date.

It is not clear that the proposed April 2014 implementation strategy delivers any benefit to end consumers over and above that provided through effective signalling of a future change that would allow the energy market sufficient time to react. Such an early effective date may introduce an element of regulatory uncertainty, which could reduce investor confidence and result in an associated risk premium being added to enduring energy prices. For this reason, we believe that an April 2015 implementation would provide a more appropriate solution.