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Date : 6th February 2014

Dear Anthony,

Project TransmiT: update on progress and next steps

We are writing to you in respect of the Authority's letter of 16th December 2013 concerning the progress and next steps on Project Transmit.

We set out below a number of process concerns that we have. We note that this 'new' information has been provided to the Authority in the responses to the August 2013 consultation and we set out below our comments on this 'new' information. We also set out below our comments on cost reflectivity as well as outlining an alternative modelling of cost reflectivity. In addition to this we also provide a comparison of WACM2 and SQSS outcomes. Finally we provide you with our conclusions.

We hope you find these comments helpful and we would strongly urge the Authority to proceed with its 'minded to' decision on (CMP213) WACM2 as quickly as practical such that CUSC parties are aware of it before mid March this year so that implementation (of CMP213, WACM2) can be achieved for 1st April 2015. A delay in making the decision by mid March this year will have a profound effect on the implementation of this beneficial change to the GB transmission charging regime which could then slip to 1st April 2016, four years after Ofgem itself stated it expected these changes would occur, namely 1st April 2012.

1. Process Concerns

Firstly, we were disappointed that the Authority determined that the implementation date for CMP213 should be put back from their previously 'minded to' position of 1st April 2014 to 1st April 2015. This will result, as we have explained in detail in our response[1] to the Authority's August consultation, in a delay in the benefits of CMP213 being realised. It is also disappointing in terms of the whole Significant Code Review (SCR) process itself, of which CMP213 is the first in the electricity sphere.

Secondly, we share your disappointment and indeed frustration at the introduction, at the last moment, of apparently 'new' information. However, we do not believe the information raised is in practice 'new', but rather a reworking of some previously raised issues. Given this it could, and should, have been raised much earlier in the process by the parties concerned.

As we set out[2] in our response to the August Regulatory Impact Assessment consultation there has been, to October 2013, over 296 working days (or in excess of 59 weeks) of consultations on Project Transmit. This has given those parties more than sufficient time to raise these matters.

In addition the two organisations who we understand, in particular, have provided this 'new' information both had representatives on (i) the Ofgem Project Transmit Technical Working Group (which met over the summer and autumn of 2011) and (ii) the CMP213 Working Group (which met from summer 2012 to the spring of 2013). They have therefore had ample opportunity to provide this 'new' information into the Project Transmit / CMP213 assessment process. Their decision not to do so might almost be considered as deliberate 'filibustering' in order to put off the implementation date of this very important change, not just for GB consumers, but also for the delivery of the UK Government's renewable and wider targets.

We note that it is still the Authority's intention to continue with their minded-to position for WACM2. We welcome this. For the reasons we set out in our response to the August consultation[3], there are strong grounds for supporting WACM2 and we would urge the Authority, yet again, to make a decision in support of this option in March this year so that the industry can finally move on, with certainty, on the all important matter of the future charging regime for using the GB transmission network.

[1] 10th October 2013.
[2] see Appendix 3, Annex 3 (pg 29) of our 10th October 2013 letter.
[3] Which, for the sake of brevity, we do not repeat here – please refer to our consultation response for further details.

Finally, in light of your publication of all the responses to your August consultation we set out below some observations that we have on a number of those consultation responses (as we believe a number of the points they make are seriously flawed). We appreciate that you might not necessarily wish to see more information on this matter but, equally, I'm sure you appreciate that we cannot leave their representations to you unaddressed. The following therefore presents our comments on the main issues raised by the "new" information.

2. "New" Information

a) Modelling

The new modelling presented by RWE [4]and Centrica[5] is flawed. The conclusions are largely driven by the input assumptions, in particular the impact of transmission charging on the siting of new generation and the impact of transmission charging changes on wholesale electricity prices as a consequence of changes in the resulting cost of new entry.

- The impact on low carbon subsidies appears to arise from an increase in offshore wind deployment in England and Wales which displaces (i) onshore wind deployment in England and Wales, but more significantly (ii) nuclear and CCS in central England and Wales. This is not explained in the report and appears inconsistent with real world experience and decision making. This aspect of the suggested consumer cost increase in the modelling should therefore be ignored.
- The impact on power prices seems to stem directly from the modelled change in TNUoS tariffs for new entry CCGTs in a number of locations in England and Wales. This appears to rely on these generators being the marginal generators in both the Status Quo and the WACM2 cases and the estimated increase in TNUoS for these generators feeding directly into increased wholesale power price. This is a significant gross oversimplification of the mechanics of price formation and cannot be considered to be a robust conclusion. This aspect of the suggested consumer cost increase in the modelling should therefore be ignored.
- The impact on demand TNUoS appears to stem almost entirely from the assumed increase in MAR[6] which results from WACM2. However, a major portion of this appears to arise from additional

[4] NERA, Project TransmiT: Modelling the Impact of the WACM 2 Charging Model, and Project TransmiT: Review of Ofgem Impact Assessment of Industry Proposals CMP213, Prepared for RWE npower, October 2013

[5] REVIEW OF OFGEM'S IMPACT. ASSESSMENT ON CMP213, A report to Centrica Energy, October 2013

[6] Maximum Allowed Revenue.

expenditure that feeds through to TNUoS in 2014 (about £50m per year equivalent – this jump in MAR in 2014 can most readily be seen by reference to the graph[7]) and some further additional expenditure through the period up to 2030 (a further £25m to £50m). This clearly cannot be the case as the bulk of this expenditure on the transmission system necessitated by the assumed increase in MAR cannot be impacted by the implementation of WACM 2 as the expenditure must have already been (a) programmed (b) consented and (c) be under construction prior to the introduction of any change. If the 2014 differential is removed the difference between TNUoS costs reduces significantly. This aspect of the suggested consumer cost increase in the modelling should therefore be ignored.

b) Criticism of previous NERA modelling

In critiquing NERA's previous modelling, Oxera[8] highlighted that NERA's conclusions were based on a single case and that this might give a misleading picture regarding the welfare impacts of implementing the Project TransmiT change.

"This review of the 2012 NERA/Imperial report suggests that, although improvements to its 2011 analysis have been made by NERA/Imperial, some major concerns already set out by Oxera in 2011 remain. In particular, the conclusions of the NERA/Imperial analysis are driven in large part by the particular assumptions used, rather than being representative of the effects of all potential models of transmission charging under Improved ICRP."

"Given that the NERA/Imperial analysis finds that the introduction of Improved ICRP may lead to only slightly higher costs to the power sector in the period 2014 – 2030 (estimated to be in the range of £0.1bn and therefore only marginally reduces welfare), it seems to be even more important that the sensitivity of this finding is robust to reasonable changes of the assumptions made in the analysis. Such sensitivity analysis is not presented in the 2012 NERA/Imperial report. The modelling presents a single case and given the sensitivity to a number of assumptions the headline results might not be representative of the potential range of estimates of the impact of Improved ICRP."

[7] Figure 3.18, pg 28, Project TransmiT: Review of Ofgem Impact Assessment of Industry Proposals CMP213, Prepared for RWE npower, October 2013
[8] Oxera review of the NERA/Imperial College London, report on the impact of 'Improved incremental cost-related pricing' Prepared for SSE, July 16th 2013

In the latest 2013 analysis NERA[9] outline that this remains the case.

> *"To reach more definitive conclusions regarding the impact of WACM2, it would be necessary to run a number of sensitivities to identify whether the result is sensitive to any of these underlying drivers".*

These sensitivities were not presented, and thus it must be recognised that the conclusions reached can be assumed to be far from definitive.

Previously, Oxera also identified that there was significant instability in the NERA modelling.

> *"Moreover, the 2012 NERA/Imperial report still shows the instability of the model regarding the locational decision of thermal generation. As the 2012 NERA/Imperial report identifies, the process of completing several iterations that provide the feedback between generation investment decisions, network investment decisions, and the transmission charging model does not lead to a single, stable equilibrium, but one in which location decisions 'flip' between regions in alternate iterations."*

NERA identify in their 2013 report that these issues remain, "*charges between 2015 and 2018 showed instability from run to run, which drove some instability in investment patterns"*. This is dealt with in the analysis by averaging the unstable results. However, given the scale of the difference in cost, averaging may not be an appropriate way of dealing with the instability. It is highly unlikely that such flipping will happen as a consequence of WACM2 being implemented. Thus it can be concluded that the reported impact on wholesale power purchase costs in the period up to 2020 can be considered irrelevant, resulting as it does from unstable modelling as well as a questionable axiom. It is certainly not a clear fact that an increase in the costs incurred by new entrant thermal generators in England and Wales results in a direct increase in the GB wholesale power price. This is especially true in the short to medium term, up to 2020 say. Thus it is not robust to assert, as NERA's report[10] does that "*because WACM2 increases the costs incurred by new entrant thermal generators in England and Wales, which determines the level to which wholesale power (energy + capacity) prices will need to rise to remunerate new investments will be higher under WACM2*." [sic]

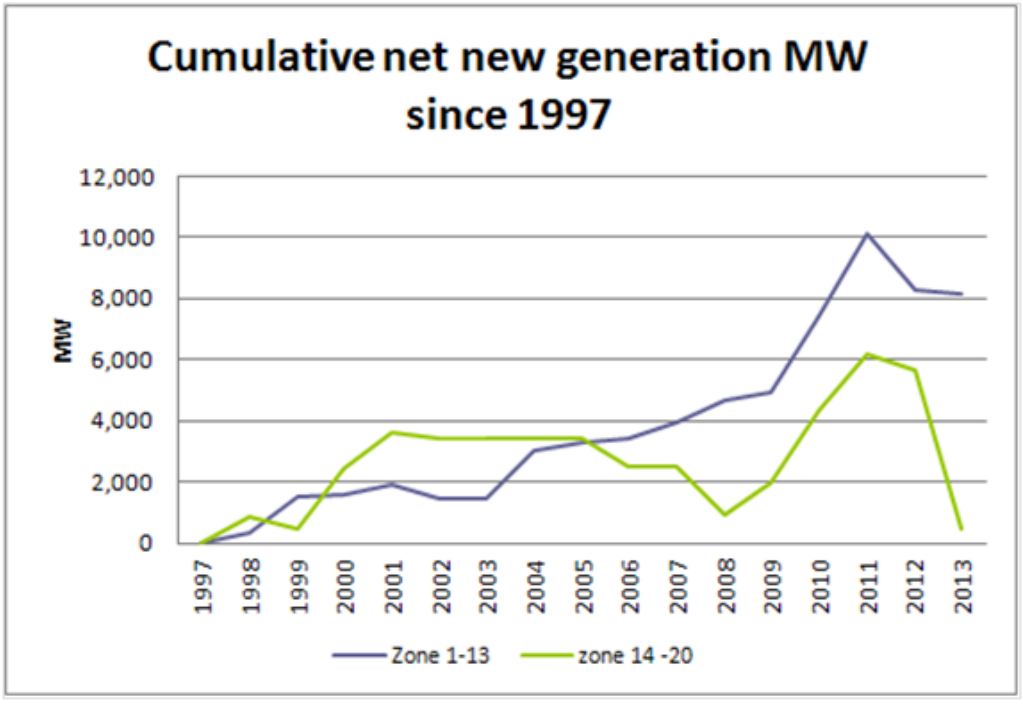
NERA themselves recognise that "*although this welfare loss is significant, it is subject to a range of uncertainty*." They further state that "*although the increase in power sector costs is large, it is small as a proportion of total costs, and will be*

[9] NERA, Project TransmiT: Modelling the Impact of the WACM 2 Charging Model, Prepared for RWE npower, October 2013
[10] NERA, Project TransmiT: Modelling the Impact of the WACM 2 Charging Model, Prepared for RWE npower, October 2013, p39

subject to a degree of noise". This suggests that they are not convinced of the robustness of their claims. NERA appear to be putting down a sensible marker here given the problems with modelling as outlined above.

Oxera outlined that *"determining the impact of the introduction of Improved ICRP on wholesale electricity prices is not straightforward and the 2012 NERA/Imperial analysis does not appear to capture the locational incentives of the existing arrangements and their implications for wholesale prices."*

Given that the bulk of the suggested impacts on consumers and the power sector costs in the NERA analysis are driven by the impact of charging on locational decisions it remains the case that the conclusions of the NERA analysis should not be relied upon and given this it should not be considered representative of the consequences of implementing the 'minded to' position. As we have previously outlined[11], the locational decisions of the bulk of generation plant in the GB market over the past 14 years have been at 'odds' with the Status Quo ICRP signal. This is illustrated in the following graph.



Looking ahead it cannot be the case that any 'locational' signal, via transmission charging, as to where to site new build generation will have any significant effect given the continued impact of other factors; such as land and water availability for thermal generation and renewable resources for intermittent generation; and the potentially far greater effect on new build (and existing generation plant operation) of

[11] SSE Response to Project Transmit: Impact Assessment of industry's proposals (CMP213), October 2013.

the UK Government's Electricity Market Reform proposals and in particular the proposed Capacity Mechanism.

c) Criticism of SQSS scaling factors

The Annual Load Factor (ALF) is the most cost reflective factor to use to allocate year round charges. The ALF is appropriate for conventional generation, especially given the large spread of load factor performance between different stations even of the same technology and it is appropriate to treat wind in exactly the same way. It is not appropriate to use the SQSS scaling factors for charging purposes for allocating charges to individual stations for reasons including:

- The SQSS is only designed for general GB wide system background checks as a rough rule of thumb and it is not used to approve specific network investment. By contrast, investment decisions are driven by a full detailed cost benefit appraisal which does take into account individual station characteristics. It would be discriminatory and perverse for a charging methodology to disregard specific station operating characteristics when these are readily available.

- The purpose of the SQSS scaling factors is to calibrate the transport model to make the boundary flows add up appropriately. As the GB plant mix changes, then because the scaling factor for conventional plant is variable to make the totals add up, the scaling factor for conventional plant could be adjusted to become either greater than 100%, or less than zero. These results would clearly show that the SQSS scaling factors would not make any sense as the basis of allocating charges to individual stations either dispatchable or wind.

d) Criticism of NERA approach to Peak Security element

In their report, NERA used a three node model with all of the demand in the central node, while all of the generation is distributed between the other two nodes. This model design is misleading because by definition, it makes it impossible to demonstrate a negative Peak Security price signal because by definition, no configuration of generation capacities could result in a flow into a node containing generation. Instead, this model configuration will always show the direction of any flow as being from the generation zones and into the single central demand zone irrespective of whether the Year Round, or Peak Security backgrounds are applied. Their approach therefore misleadingly hides an important benefit of WACM2 as compared with Status Quo, which is that WACM2 is capable of providing a separate Peak Security price signal to dispatchable plant, which is more cost reflective and consistent with the approach of the SQSS, but which is completely absent from the Status Quo.

e) Criticism of NERA approach to using SQSS scaling factor as a benchmark

Furthermore NERA's analysis is misleading because they configure their model to demonstrate the resulting WACM2 TNUoS charge for a wind farm in a zone which is fully shared and compare this to the implied charge using the SQSS 70% wind scaling factor which is designed to deal with a mixture of shared and non shared circuits. As described above, we do not agree that using the SQSS scaling factors provide an appropriate benchmark and it is our view that the SQSS scaling factors should not be used to judge the appropriateness of the resulting TNUoS charge for a wind farm under WACM2. However, since this is the benchmark which NERA chose, it can be shown from their own arguments, that WACM2 can be more cost reflective of the SQSS than the Status Quo.

NERA concluded that under WACM2, the charge for a wind farm in a fully shared zone would be lower than the charge implied from the SQSS scaling factor for a mixed shared zone, which should not be particularly surprising. However, if the NERA model had considered the charge for a wind farm in a zone with limited sharing to more closely match the application of WACM2 to reality and to more closely match the assumptions behind the SQSS, then they would find that the tariff derived from WACM2 would very closely align with the SQSS. In contrast, the charge derived from the Status Quo would be substantially higher and clearly not cost reflective.

In practice, as we have demonstrated in the graphs below[12], the combination of both the Year Round Shared and Year Round Not-Shared elements of the WACM2 charging methodology delivers a TNUoS tariff for wind (intermittent), nuclear, conventional and peaking generation which is very similar to that implied by the SQSS. It is therefore clear that there is no case at all for the criticism of WACM2 based on its cost reflectivity to the SQSS as compared against the Status Quo because in practice, WACM2 is far more cost reflective of the SQSS than the Status Quo.

3. Cost Reflectivity

Evidence provided by both RWE and Centrica purports to challenge the cost reflectivity of WACM2 and claim that it is not reflective of the SQSS and transmission investment planning. However, they fail to identify that the Status Quo is clearly less cost reflective of the SQSS in that the Status Quo does not recognise that wind and other forms of intermittent generation, capacity for capacity, do not lead to the same requirement for transmission capacity to be built by TOs as conventional generation. The evidence that Centrica have provided, sourced from Poyry, clearly

[12] See Section 5 below.

indicates that the main features of the WACM2 changes to transmission charging are better and more cost reflective than Status Quo, namely:

a) Introduction of a Peak Security background.

Poyry indicate that a dual background approach provides a clearer signal for locating peak generation, "*the OCGT wouldn't run in practice unless the wind output was low – consequently it is very unfair that it should have to pay high year round charges*". Under Status Quo there is no possible recognition of this issue, whereas under WACM2 in zones with some sharing the OCGT would pay less than a higher load factor plant. This would suggest that Poyry should support the conclusion that WACM2 is better than Status Quo in this regard. This is further supported by the following comment "*Indeed, in this example zone A would be a very good location for an OCGT (as the negative peak charge would signify a strong need for generation capacity)*" (Poyry 3.2.1.4.). Under Status Quo there is no signal for locating peak generation in a zone with a high level of wind.

It is not clear if Poyry misunderstand that introducing the Peak Security background is an essential change from the Status Quo since Poyry also suggest "*Ofgem considers the current charging methodology to be discriminatory on the basis that it only recognises peak security as a driver of transmission investment...*" (Poyry 5.2.1.1). Poyry ignore and disregard the fact that the background used by Status Quo is very different from that used in the WACM2 Peak Security background and it is highly misleading to refer to Status Quo as charging based on Peak Security. Since Status Quo applies a scaling factor to all generation equally, it fails to provide an appropriate negative Peak Security charge, an aspect of WACM2 which Poyry should welcome given their statements regarding OCGT charging outlined above. Instead Status Quo provides a perverse price signal to close low load factor peaking plant in a zone with a relatively high level of wind generation.

b) Use of two backgrounds to be consistent with SQSS.

Poyry relies on the Bath report as an assessment of the appropriateness of using a Year Round background with sharing, as proposed with WACM2. However, the paper submitted in October 2013 by SSE "University of Bath report "Year-round System Congestion Costs – Key Drivers and Key Driving Conditions" (Phil Baker 2013) demonstrates that Bath's claims are not supported by their own evidence or analysis - more detail is available in the Phil Baker paper[13].

It is also very important to note that Bath only considered the Original proposal, so Bath's claims are not valid criticisms of WACM2, since the inclusion of Diversity 1 deals with the Year Round background in a very different way and addresses many of

[13] This paper was included in our October 2013 response to the August 2013 consultation.

the criticisms which Bath aimed at the Original proposal. Poyry's reliance on the Bath analysis to critique WACM2 is therefore fatally flawed by Bath's analysis of Diversity 1 not being reflective of the WACM2 situation (vis the treatment of sharing).

Furthermore, Bath claimed that it would be more cost reflective to use five backgrounds, which suggests more backgrounds (such as the two with WACM2) is better than fewer (such as the single one with Status Quo). This is at odds with their claim that Status Quo (one background) is better than Original or WACM2 (two backgrounds).

c) Use of an average load factor to weight the demand for transmission capacity created by disptachable plant.

Poyry use an example three zone system to provide an argument in favour of recognising sharing. Poyry also consider the Diversity 3 alternative which provides a very similar price signal to the Status Quo, and make a criticism which can be equally made about the Status Quo "*...under Diversity 3 all capacity pays the same, which is clearly unfair*". Poyry consider the benefits of sharing under WACM2, which contrasts with Status Quo, which does not recognise any sharing:

> "*However, with almost no sharing an OCGT would pay nearly as much for the year round as the wind (or indeed a nuclear plant if there was one). However, the OCGT wouldn't run in practice unless the wind output was low – consequently it is very unfair that it should have to pay high year-round charges*." [14]

Poyry's objective with these remarks was to make the case that WACM2 could be further improved by assuming full sharing for dispatchable plant, but it also demonstrates clear support for the principle of sharing and demonstrates that the (non sharing) approach used in the Status Quo is not cost reflective and implies the approach taken by WACM2 to make some allowance for sharing is better.

As National Grid has demonstrated, and Poyry and Bath have accepted, there is a relationship between load factor and constraint cost. Even if that relationship is not perfectly linear, taking the relationship into account should deliver a more cost reflective outcome than the Status Quo, which disregards load factor completely. For the University of Bath to demonstrate that the use of annual load factor is inappropriate, they would need to demonstrate that the Original proposal delivers a less cost-reflective outcome than the Status Quo. This they fail to do.

[14] Poyry 3.2.1.4.

d) The use of a scaling factor of less than 100% for wind capacity.

The evidence provided by both RWE and Centrica use simplified models to illustrate the flaws in cost reflectivity of WACM2. However, these critiques of the principle of sharing are built using very specific input assumptions which appear designed to obtain the result desired. Despite this, Poyry appear to support the principle that wind should pay a lower charge than 100% of TEC and Poyry suggest numbers in the order of 58%, or 47% (Poyry 3.2.1.5.). Hence, Poyry appear to agree that the Status Quo charging methodology is discriminatory and that using a lower factor would be better. The next question would be to determine what factor would be most appropriate to apply to wind for the Year Round Shared element of the WACM2 charging methodology and we would agree with National Grid that using the ALF as proposed does provide the best factor to use.

Evidence that SSE provided [15]as part of the October 2013 consultation demonstrated that the National Grid's CMP213 Original proposal "*could impose charges that are likely to be more representative of the actual costs incurred by the TOs than the existing [status quo] TNUoS methodology*".

4. Alternative modelling of cost reflectivity

A more appropriate modelling approach to consider cost reflectivity is outlined below. It uses a two node model (e.g. A to represent the North and B to represent the South) with both generation and demand at each node and a single circuit joining them. It can then be demonstrated that WACM2 would provide more cost reflective charges than the Status Quo and in some cases Status Quo would provide perverse incentives.

Scenario 1 (Peak Security in a shared zone)

The model shows the dominant flow is in the Peak Security background from South to North. WACM2 would provide consistent price signals as implied by the SQSS such that dispatchable plant in Northern zone A would receive a negative charge which would be needed in Northern zone A to reduce the likelihood of loss of load events in the North (as recognised by Poyry in their paper). By contrast, Status Quo would provide a perverse and dangerous price signal which would continue to charge high tariffs for low load factor dispatchable plant in Northern zone A, which would signal them to close, or fail to be built, hence increasing the likely frequency, severity and cost of loss of load events.

[15] University of Bath report "Year-round System Congestion Costs – Key Drivers and Key Driving Conditions": an alternate view, Phil Baker

Scenario 2 (balanced sharing)

The model would show a balanced level of sharing in Northern zone A. This would demonstrate that in a balanced sharing zone, for a northern wind farm, the combination of applying ALF to the Year Round Shared element and 100% to the Year Round Not-Shared element would result in a tariff which was identical to that implied by the SQSS 70% scaling factor for wind. By contrast, the Status Quo methodology would provide charges which were greater than the SQSS, which would be discriminatory against Northern wind. This demonstrates how the SQSS approach assumes a balanced level of sharing in all cases and makes no specific allowance that in some zones sharing may be higher, while in other zones sharing may be lower. Therefore it would be reasonable to expect that for zones with more or less sharing than the level assumed by the SQSS, the appropriate price signal would be lower, or higher respectively than that provided by the SQSS. This is described in scenarios 3 and 4 below.

Scenario 3 (Low sharing)

The model would show a low level of sharing in Northern Zone A. In this example, the Year Round Not-Shared component would dominate charges and a wind farm would pay roughly the same as a dispatchable station, or nuclear station. WACM2 would result in roughly the same charge as would have been provided by the Status Quo and both would be greater than the charge implied by the SQSS. While it may be argued that wind farms in a low sharing zone should be charged more than those in a high sharing zone, the proposed definition of sharing used in WACM2 understates the sharing which would occur in a zone consisting largely of wind and hydro generation. Hence, WACM2 will still tend to overcharge wind farms in a zone which the WACM2 methodology defines as “not shared”. However, this is a second order issue with the WACM2 methodology which can be further improved at a later date.

Scenario 4 (High sharing)

The model would show a high level of sharing in Northern Zone A. In this example, the Year Round Shared component would dominate and the ALF would be the relevant factor to apply. WACM2 would therefore provide a lower TNUoS cost for low load factor plant and a higher charge for higher load factor plant, which is an appropriate outcome. WACM2 would result in a lower charge for Northern wind than implied by the SQSS, which is the correct signal because in this scenario, sharing in Northern zone A is greater than the level which the SQSS assumes. By contrast, the Status Quo would apply an even higher charge to all generators than the SQSS, which would clearly be discriminatory and not cost reflective. This is the type of scenario that tends to be used by critics of WACM2 to claim that WACM2 would undercharge wind farms compared with the SQSS, but as has been demonstrated above, this conclusion from critics is invalid and misleading.

5. WACM2 and SQSS

Notwithstanding that the analysis presented by RWE and Centrica is flawed (for the reasons we have detailed above) their central argument is that WACM2 does not reflect the reality of transmission build, which is based on SQSS, and is thus not cost reflective.

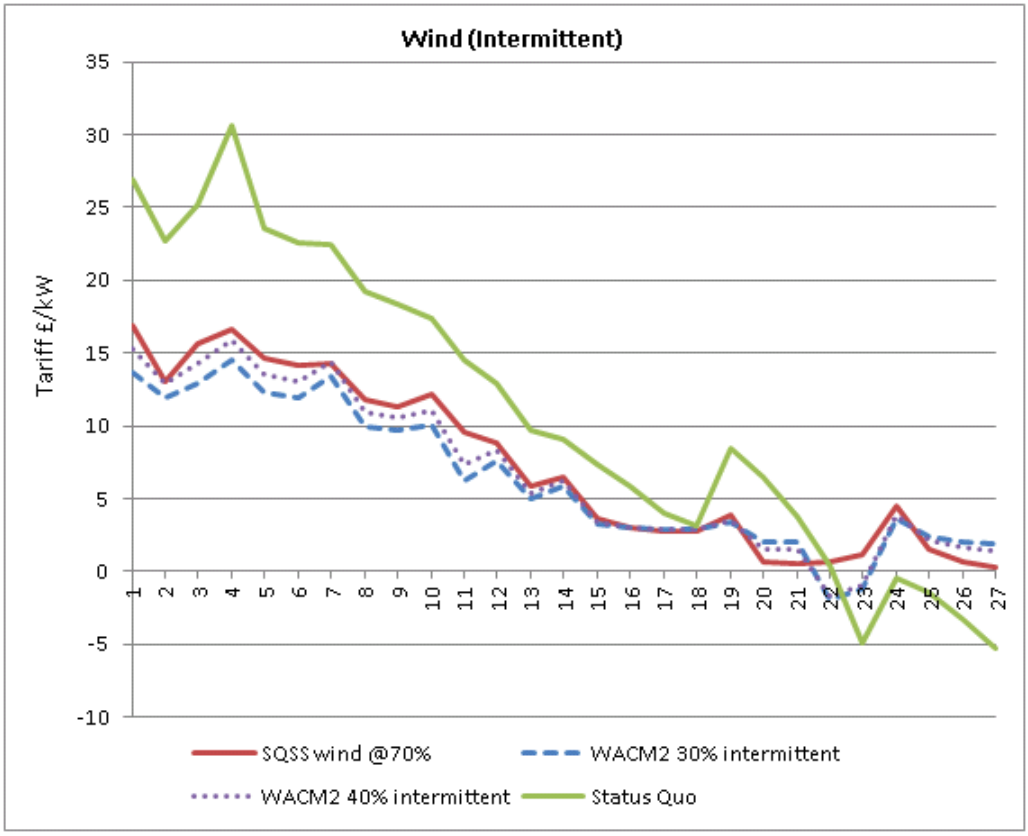
Just to be clear we do not endorse the use of the SQSS approach for the transmission charging arrangements; however, in order to consider this claim from RWE and Centrica we have constructed a charging base model that uses the SQSS load factor coupled with peak shared and year round elements and applies these using the intermittent load factor (70%) used in the SQSS. This allows us to present the tariff for 2015/16 for intermittent generation across the GB zones based on (i) Status Quo (ii) WACM2 and (iii) SQSS.

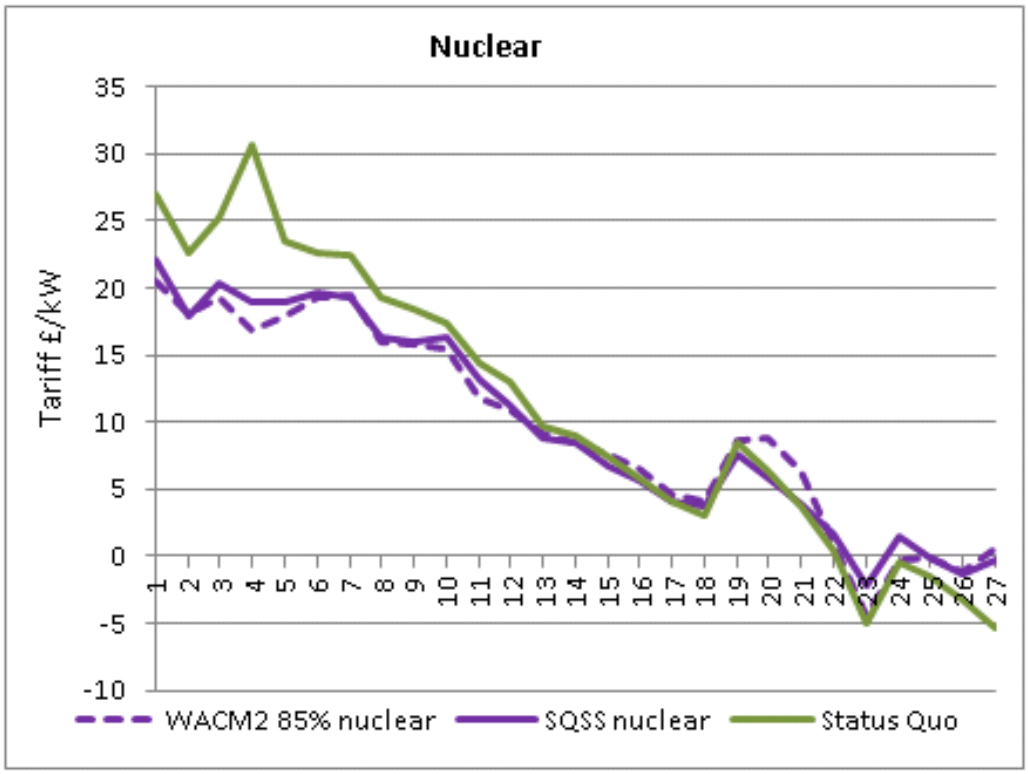
The criticism of the non cost reflective nature of WACM2 as tabled by RWE and Centrica is developed from an extreme case where in each zone there is full sharing. In practice there is a range of sharing levels across zones. This range of sharing results in a distribution of WACM2 charges around the SQSS proxy; e.g. in zones where there is full sharing then WACM2 charges are higher than the SQSS proxy whilst in zones where there is less sharing WACM2 charges are lower than the SQSS proxy.

This analysis clearly demonstrates, as shown in the graphs below, that WACM2 is unequivocally much more closely aligned with the SQSS than Status Quo and, therefore, WACM2 is more cost reflective than the Status Quo. This is a clear indication that pursing the 'minded to' position is the correct way of resolving the decision before the Authority.

The graphs below carry out a similar analysis to compare the TNUoS tariffs for different types of generator in each zone under tariffs derived from WACM2, SQSS and Status Quo, based on the initial tariffs for 2015/15 published by National Grid[16]. This also shows that in all cases, the tariffs derived from WACM2 provide generator transmission charges which are more cost reflective of the SQSS and which provide a more appropriate pricing signal than the Status Quo.

[16] February 2014


Wind (Intermittent)
Tariff £/kW
35
30
25
20
15
10
5
0
-5
-10
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
SQSS wind @70%
WACM2 30% intermittent
WACM2 40% intermittent
Status Quo


Nuclear
Tariff £/kW
35
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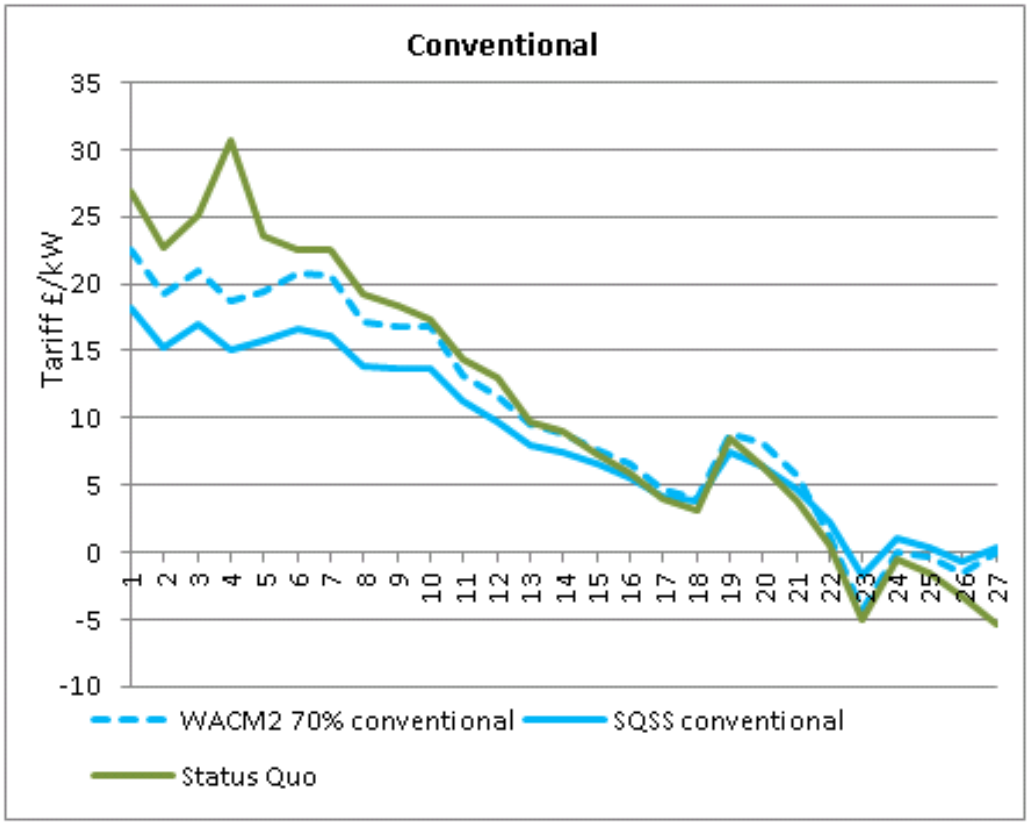
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
WACM2 85% nuclear
SQSS nuclear
Status Quo


Conventional
Tariff £/kW
35
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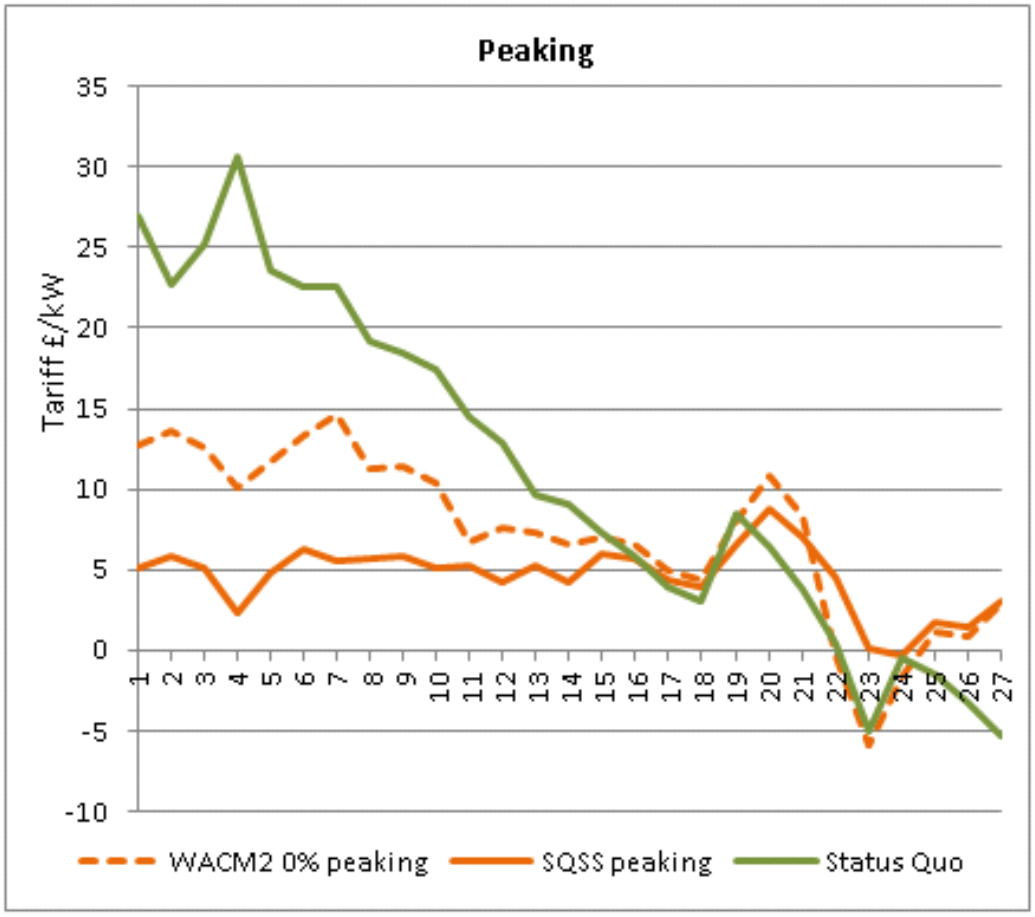
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
WACM2 70% conventional
SQSS conventional
Status Quo


Peaking
Tariff £/kW
35
30
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
WACM2 0% peaking
SQSS peaking
Status Quo

This analysis used the scaling factors and generic load factor assumptions from the National Grid published draft sharing transport model as per below:

Scaling Table					
Plant Type	**TEC**	**Generation A - Peak**	**Generation B - Year**	**Peak Security Generation**	**Generic Load Factor**
Other (Conventional)	61,386	73%	66%	**100%**	**75%**
Intermittent	5,378	**0%**	**70%**	**0%**	**25%**
Peaking	5,455	73%	**0%**	**100%**	**1%**
Pumped Storage	2,744	73%	**50%**	**100%**	**30%**
Nuclear & CCS	10,841	73%	**85%**	**100%**	**60%**
Interconnectors	3,268	**0%**	**100%**	**0%**	**0%**

Notwithstanding that our assessment above shows that, in any event, the generator transmission charges arising from WACM2 are consistent with those transmission charges that would occur if the SQSS factors were used instead; it is important that the Authority is not distracted from the decision before it which, in this respect, is namely '*is WACM2 more cost reflective than the baseline*' and not '*is WACM2 more cost reflective than SQSS*', as suggested by RWE and Centrica, as the Authority is unable to consider; because that option is not before it.

It is important to recognise that the suggestion, from RWE and Centrica, that the CMP213 TNUoS charges should be the same as would come from SQSS is irrelevant because it was never meant to be the same. In the Authority's direction of May 2012 it was never intended that the CMP213 solution should be the same as SQSS; rather the direction talks in terms of better reflecting the differing incremental impacts of individual generators on the Transmission Owners costs in a manner which is consistent with the SQSS. In our view (CMP213) WACM2 does do what the Authority's direction seeks.

6. Conclusions

In summary we were very concerned to learn that the Authority was still considering 'new' information at this late stage of the process. We share your disappointment that this information was not provided earlier, given that there have been multiple opportunities for these parties to do so.

We do not consider that the "new" information provides any clear reason to either delay the Authority's decision beyond mid March 2014 or go against the "minded to" position to implement WACM2 on the 1st of April 2015.

The modelling work provided by RWE and Centrica presents biased and questionable views of the consequences of WACM2 on GB consumer costs and net welfare. Significantly, in our view, this modelling represents an extreme and very unlikely outcome. It is subject to significant doubt because of its clear dependence on several

flawed modelling assumptions and relationships which clearly impact in a predetermined way on the conclusions that the modelling reaches. Given this, the "new" information is not credible and should not form part of any subsequent determination of CMP213.

The Ofgem modelling, which has been subject to far greater scrutiny than the modelling carried out for RWE and Centrica, shows overall consumer benefits. It would be at odds with affordability concerns to jeopardise these consumer benefits on the back of the highly the questionable modelling results that RWE and Centrica have provided to the Authority.

Furthermore, whilst the 'new' information claims that WACM2 is not cost reflective of the drivers of transmission investment, it is clear that WACM2 remains more cost reflective than the current 'Status Quo' charging methodology and we hope that the analysis that we have provided here helps the Authority to come to the same conclusion. This, in our view, is a key consideration for the Authority and it is on this basis that the Authority should approve WACM2.

At the end of the Project TransmiT SCR process the Authority recognised that the current 'Status Quo' transmission charging arrangements did not reflect the costs imposed by different types of generators on the transmission network and directed National Grid to raise a CUSC Modification (CMP213) to rectify this deficiency. The Authority now has before it a modification (WACM2), recommended by the CUSC Panel, that will do what the Authority asked for.

We understand that if WACM2 is not approved by mid March 2014 that the April 2015 may even be in jeopardy. We therefore urge the Authority to approve WACM2 before mid March 2014, to ensure that the 1st April 2015 implementation date can be met.

Yours sincerely

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