SCOTTISHPOWER

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Director of Regulation

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Dear Catherine,

PROJECT TRANSMIT: FURTHER CONSULTATION ON PROPOSALS TO CHANGE THE ELECTRICITY TRANSMISSION CHARGING METHODOLOGY

Thank you for the opportunity to respond to the further consultation on the changes to the transmission charging methodology contained within CMP213.

ScottishPower is pleased to note that Ofgem is still minded to approve the WACM2 option of CMP213 in accordance with the majority vote of the CUSC Panel.

The further modelling carried out by Baringa on behalf of Ofgem ("the Baringa modelling") demonstrates that WACM2 is clearly more cost-reflective than the existing charging methodology as the introduction of a dual background methodology reflects the way in which transmission investment is evaluated under SQSS GSR009. Further, WACM2 incorporates a methodology for incorporating HVDC bootstraps and island connections which is not present in the current methodology, thereby reflecting changes in the TOs' transmission businesses.

It is clear from the Baringa modelling that it is extremely difficult to model the impact of any single factor, such as transmission charges, upon power sector and consumer costs at time of such significant change in the electricity industry. However, the Baringa modelling clearly demonstrates that the significant consumer dis-benefit claimed by NERA/Imperial College in their August submission was unsubstantiated. The very small static consumer dis-benefit shown by the Baringa scenarios is within the margin of error for modelling of this nature.

Modelling cannot capture all the factors that will influence the costs in reality and we agree with Ofgem that there are dynamic effects which are not captured by the further modelling carried out. We agree with Ofgem that such dynamic effects are likely to outweigh any modelled dis-benefits and have the potential to deliver long term benefits to consumers which would be in line with Ofgem's wider statutory objectives.

Following the conclusion of this further consultation process we would urge Ofgem to make a prompt decision on implementation. Generator parties will be required to enter the Contract for Difference allocation rounds and Capacity Mechanism auction process in October and December 2014 respectively (having completed the relevant pre-

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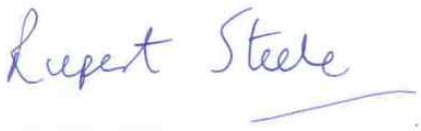
qualification process earlier in the year) and require certainty about the future direction of transmission charges in order to make efficient economic decisions on whether or how to participate in these processes. Ongoing uncertainty could lead to the inclusion of the corresponding risk premia and a less efficient outcome for consumers.

The level of change in TNUoS costs that would be faced by generators between the current methodology and WACM2 in 2015/16 is well within the normal levels of volatility in TNUoS charges experienced by generators between the forecast and final TNUoS tariffs produced by National Grid throughout the charging year. Accordingly, the lack of a full year's notice does not make it necessary (or even desirable) to delay the implementation of CMP213 to April 2016.

The late submission of further representations by some parties towards the end of the August 2013 consultation process permitted them to achieve their objective of delaying implementation of this important change to their own economic benefit and to the detriment of delivering the wider benefits identified. A prompt implementation decision and early implementation date following this consultation would ensure that this situation is not replicated.

I attach an Annex giving answers to the questions posed in the consultation. Please contact me if you have any questions on any of the matters raised in our response.

Yours sincerely,



Rupert Steele
Director of Regulation

Annex 1

Detailed responses to the questions raised in the further consultation

Question 1: *Do you agree with our interpretation of benefits to consumers of implementing WACM2, including revised impact assessment modelling?*

It is clear from the further modelling carried out by Baringa on behalf of Ofgem ("the Baringa modelling") that it is extremely difficult to model the impact of a single factor, such as transmission charges, upon power sector and consumer costs at time of such significant change in the electricity industry. However, the Baringa modelling clearly demonstrates that the significant consumer dis-benefit claimed by NERA/Imperial in their August submission was unsubstantiated. The very small static consumer dis-benefit shown by the Baringa scenarios is within the margin of error for modelling of this nature.

We agree with Ofgem that the results should not be considered as definitive but as part of a wider range of evidence to be considered collectively.

The revised modelling shows a reduction in power sector costs which we believe demonstrates the benefits of improved cost reflectivity from WACM2. The complex interaction with the Capacity Mechanism in the modelling which leads to marginally higher consumer costs seems counter-intuitive and we agree with Ofgem that there are dynamic effects, not captured by the modelling which are likely to increase the benefits of WACM2. Some of these dynamic effects are explored by Oxera:[1]

- The effect of WACM2 on the cost of the Capacity Mechanism
- Clearer direction of policy could lead to delivery of renewables targets at lower cost
- The benefits of a diverse portfolio of renewable generation

The effect of WACM2 on the cost of the Capacity Mechanism

The Baringa modelling shows increased generator profit under WACM2 which is likely to encourage either new entry of generators or older plant deciding to remain connected for longer periods. This could lead to more competition and lower payments through the Capacity Mechanism. Increased competition and entry of more efficient plant should also lead to lower wholesale prices.

We agree with Ofgem that the model is very sensitive to the assumption that the marginal plant in the capacity mechanism will be a conventional plant in the south. Alternative assumptions could lead to much lower Capacity Mechanism costs and increased consumer benefit

The factor that is likely to play a crucial role in the effect of WACM2 on the costs of the Capacity Mechanism is the location of the plant that is marginal in the capacity auction. Only changes in the costs of marginal generators could be expected to feed through into capacity mechanism prices. For generators that are not marginal, cost changes could be expected to feed into changes in their infra-marginal rent.

NERA/Imperial's modelling for its 2013 report still does not take account of other generation siting drivers, such as the impact of the planning process nor the effect which plant location can have on its ability to secure revenue from the provision of ancillary services. These are both important considerations in investment decision-making.

New investment could take place in a number of locations with differing transmission charges and it is difficult to determine with reasonable certainty in which transmission zone the marginal generator in the Capacity Mechanism will be located. Therefore, the scale of the impact of WACM2 charges on the long-run marginal costs of new entrants, and consequently power prices, could be smaller than envisaged in the NERA/Imperial modelling.

[1] Review of selected issues relating to Ofgem's Project TransmiT. Note prepared for ScottishPower, 23 May 2014

Similarly, for existing generation plant, low spark spreads have led to the mothballing of a number of CCGT plant both in the north and south of GB and it is likely that these plant will be marginal in the Capacity Mechanism auctions for existing plant. All other factors being equal, higher TNUoS charges for plant in northern TNUoS zones would make plant in that region more likely to be marginal in the capacity auction. This would imply that the impact of WACM2 charges on consumer welfare could be significantly lower than that envisaged in the NERA/Imperial modelling.

Clearer direction of policy could lead to delivery of renewables targets at lower cost

The Baringa modelling demonstrates that WACM2 is more likely to lead to achievement of the Government's renewable targets for a given budget of low carbon support. This conclusion is consistent with Oxera's November 2010 report[2] which indicated that a charging methodology which encouraged the full exploitation of relatively more cost effective onshore wind resource before offshore deployment would result in savings to consumers.

Project TransmiT was launched in September 2010 and CMP213 was raised in June 2012. Ofgem's "minded-to" position has been known since August 2013. The proposed changes to the charging methodology have been extensively consulted on and well signalled to the market.

The proposed changes are part of a broader set of policy measures to support the delivery of renewable targets and a change in Ofgem's current "minded-to" position could increase perceptions of policy risk increase uncertainty over the broader policy stance towards renewables.

As outlined by Oxera,[3] "This is because policy risk would be expected to affect investors' risk perceptions associated with investing in renewables, and therefore also the hurdle rates investors require in order to commit capital to these investments."

The benefits of a diverse portfolio of renewable generation

A more diverse mix of intermittent renewable technologies would bring security of supply benefits through the 'portfolio' effect of imperfectly correlated output from different technologies summing to s more stable overall output level. A more stable overall output level would be expected to reduce the cost of system balancing through a lower cost of procuring reserve and frequency response and lower balancing mechanism costs. Since balancing costs in the GB market are effectively socialised across all generators and consumers, this would result in higher overall social welfare.

More diverse renewable technologies could result in a more stable aggregate output level, especially on the main transmission boundaries, which, in turn, could be matched more closely with transmission requirements when averaged over time. This should result in a reduction in the cost of the transmission system.

A further benefit of a more stable aggregate output would be a reduction in the probability that actions by the system operator are insufficient to prevent a supply shortage at a local or system level, thus improving overall security of supply to consumers.

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[2] 'Principles and Priorities for Transmission Chraging reform', Oxera, November 2010. https://www.ofgem.gov.uk/ofgem-publications/54363/principlesandprioritiesfortxchargingreformoxera.pdf
'If the UK is able to meet its renewable targets, an additional 4TWh of onshore wind could displace 4TWh of relatively more expensive offshore wind. This implies that the associated annual saving through a reduction in the obligation size to meet the UK's renewable target could be around £164m (in 2009 prices) in each year subsequent to the target being met.'

[3] Review of selected issues relating to Ofgem's Project TransmiT. Note prepared for ScottishPower, 23 May 2014

Overall, therefore, we agree with Ofgem's conclusion that WACM2 is likely to deliver long-term benefits to consumers in line with the Authority's principal objective of protecting the interests of existing and future consumers.

Question 2: *Do you agree that the revised impact assessment modelling captures concerns raised during the August 2013 consultation about the NGET modelling?*

ScottishPower believes that the concerns with the impact assessment modelling raised during the August 2013 consultation have been fully addressed in the Baringa modelling and the interpretation of its results.

The principal concerns raised with the original modelling contained in the August 2013 consultation were:

- The simplified assumptions used when modelling the Capacity Mechanism, including generator closure decisions process when anticipating Capacity Mechanism payments and delivering the stable capacity margins envisaged by DECC through the Capacity Mechanism.
- The requirement for further sensitivity analysis to explore a range of generation mix.
- The levels and mix of renewable and low-carbon generation delivered under various options.

ScottishPower believes that the updated Baringa modelling more accurately reflects the operation of the Capacity Mechanism as outlined by DECC than the analysis presented in August 2013. The August 2013 assumption that CfD strike prices would be set to meet government policy targets has been replaced with assumption that strike prices will be set to stay within levy control framework budget and that projects will compete (either immediately or when budget constraints require) to secure funding within that budget. The Baringa review of the NERA/Imperial modelling concluded that "This is a theoretical approach which does not reflect the detail of DECC's proposed Capacity Market design".

In addition the Baringa model now uses a 5 year forward view of expected revenues and costs in evaluating the Capacity Mechanism clearing price which is more reflective of generators' decision processes when entering the capacity auction. The auction outcomes are then reflected in the generation build and retirement decisions from 2019 onwards.

The Baringa modelling and analysis of the NERA/Imperial modelling clearly demonstrates that the significant consumer dis-benefit claimed by NERA/Imperial in their August submission was unsubstantiated and based on a number of counter-intuitive assumptions. These are indicated by results which indicate that the lower cost/higher efficiency onshore wind sites in Scotland would not be developed before offshore wind sites.

The Baringa modelling now has fixed volumes of nuclear and CCS build which eliminates the large distortive effects seen in the August 2013 analysis from changes in their build volumes and timing. We agree with Baringa's assertion that such projects are likely to be developed on a discrete funding basis irrespective of transmission charging policy and therefore these effects should be eliminated from the analysis.

The further sensitivity analysis prepared by Baringa in their Alternative Case represents a credible alternative scenario of generation build post 2020 and demonstrates a reasonable range of outcomes.

Question 3: *Do you agree with our minded-to position in light of new evidence discussed below and the responses to the consultation set out in Appendix 2?*

ScottishPower agrees with Ofgem's minded to position in light of the further evidence presented in the Baringa analysis. Further, the issues raised by some parties in their responses to the August 2013 have been thoroughly addressed.

In terms of the Applicable CUSC Objectives, CMP213 WACM2 introduces dual charging backgrounds and has been demonstrated to be more cost-reflective of the way that transmission investment is evaluated and planned under the SQSS.

By introducing more cost reflective charging than the existing methodology, WACM2 will improve the cost signals sent to generation owners and developers resulting in better overall economic decisions and improvements in competition in the generation market.

In introducing a methodology to incorporate HVDC bootstraps and island links into the charging methodology, WACM2 better reflects developments in the Transmission Owners' businesses.

Therefore, overall WACM 2 better meets the Applicable CUSC Objectives and should be approved by the Authority.

The Baringa modelling indicates that the impact of WACM2 upon overall consumer costs is extremely marginal and that the earlier NERA/Imperial modelling can be set aside as inconsistent. However there are dynamic effects, which are not captured by the Baringa modelling, which have a potentially significant upside and therefore approval of WACM2 would be aligned with the Authority's principal objective of protecting the interests of existing and future consumers.

ScottishPower agrees with Ofgem's conclusion that WACM2 is more cost reflective than the existing charging methodology. The conclusion by NERA/Imperial in 2013 that WACM2 charges are less cost-reflective than the status quo was based upon modelling which Ofgem has demonstrated is counter-intuitive in important respects.

In addition, a review of the NERA/Imperial modelling by Oxera[4] states that "we believe that omitting generation capacity and some additional benefits of network reinforcement from the optimisation model may lead to some anomalies and influence some of the key results reported by NERA/ICL. Importantly we found a number of points where we believe that the NERA/ICL model may not reflect the real costs of network reinforcement" and concludes "Overall we do not believe that the logical conclusion from the modelling results derived by NERA/ICL is that WACM2 charges are less "cost-reflective" than charges under the status quo."

Question 4: *Do you agree with our minded-to position to implement in April 2016?*

Following the conclusion of this further consultation process we would urge Ofgem to make a prompt recommendation on implementation. Generator parties will be required to enter the Contract for Difference allocation rounds and Capacity Mechanism auction process and in October and December 2014 respectively (having completed the relevant pre-qualification processes earlier in the year) and require certainty about the future direction of transmission charges in order to make efficient economic decisions on whether or how to participate in these processes. Ongoing uncertainty could lead to the inclusion of significant risk premia and a less efficient outcome for consumers.

The late submission of further representations by some parties towards the end of the August consultation process permitted them to achieve their objective of delaying implementation of this important change to their own economic benefit and to the detriment of delivering the wider benefits identified. A prompt implementation decision following this consultation would ensure that this situation is not replicated.

[4] Review of the NERA/Imperial College London report on assessing the cost reflectivity of alternative TNUoS methodologies, Note prepared for SSE, 23 May 2014

We do not believe that earlier implementation of CMP213 (than 1 April 2016) would materially increase costs to consumers in the long term for the following reasons.

TNUoS is a fixed charge faced by generators, therefore an earlier than anticipated change in such a fixed cost is unlikely to have a material impact on the running regime of generation plant. In any case, one potential remedy would be to allow a shorter notice period for generators to adjust their TEC during without penalty on a "one-off" basis.

The level of change in TNUoS costs faced by generators between the current methodology and WACM2 is well within the normal levels of volatility in TNUoS charges experienced by generators between the forecast and final TNUoS tariffs produced by National Grid throughout the charging year.

CMP213 was raised in June 2013 in response to Ofgem's direction following the conclusion of project TransmiT which was launched in September 2010. Ofgem's "minded-to" position has been known to market participants since August 2013. As Oxera state[5] "we consider it unlikely that changes in generator TNUoS charges that are passed through into wholesale prices will be material relative to the expected overall volatility of wholesale prices when viewed from the perspective of suppliers offering fixed tariffs."

We see no reason why a mid-year change in methodology should not be implemented in the 2015/16 charging year as all Parties have had sufficient prior notice of the changes delivered by WACM2 including regular re-forecasts of tariffs utilising the WACM2 methodology. However, should it be decide not to implement a mid-year change, implementation should not be any later than 1 April 2016.

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[5] Review of the NERA/Imperial College London report on assessing the cost reflectivity of alternative TNUoS methodologies. Note prepared for SSE by Oxera, 23 May 2014