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Ofgem
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Dear Dena,

Impact Assessment on RWE proposal P229 – seasonal zonal transmission losses scheme

Thank you for the opportunity to provide views on behalf of ScottishPower and ScottishPower Renewables on your impact assessment and consultation on modification proposals P229 and P229 Alternative to the Balancing and Settlement Code (BSC) to alter the rules under which the costs of transmission losses are allocated to users of the electricity transmission system.

On the basis of the evidence presented within the impact assessment, and also that presented through the assessment procedure for the modifications, we do not consider that either proposal is better than the current uniform allocation of losses. We fully support the recommendations of the BSC Panel in rejecting both zonal losses proposals.

The implementation of zonal losses is likely to particularly impact onshore wind generation which is the most economic renewable technology available for achievement of the Government's 2020 renewable targets. There will be some projects, which are economic under the current arrangements, where the increased costs resulting from the application of zonal losses across the lifetime of the plant will make them uneconomic. Any methodology which discourages maximum deployment of onshore wind will not enable the Government's targets to be achieved in the most economic manner. Renewable generators are largely unable to respond to locational signals and to impose further locational operating signals on them is likely to adversely impact achievement of the Government's energy policy objectives in respect of renewable energy and climate change reduction.

The impact assessment does not clearly set out that the estimated level of benefits from implementation of each option is dependent on the accuracy of the modelling while the level of costs transferred between generators and between suppliers is determined by the option chosen. Thus some generators and suppliers will be faced with significantly increased costs while the overall benefits are uncertain.

We do not consider that the impact assessment and consultation properly assesses the likely impact of implementing zonal losses, identifies the impacts on the various parties affected by the proposals, takes account of relevant Government decisions nor does it bring out the degree of opposition from the industry to the proposals.

- The major benefits claimed arise from reductions in overall transmission losses incurred by generators which it is suggested will be passed on to consumers. However the assessment also recognsises that wholesale prices might be impacted by the proposals with some modelling showing larger increases than others and concludes it is appropriate to assume a small increase in wholesale prices as a result of the introduction of zonal losses. Thus under zonal losses suppliers will be paying more for their electricity and thus any benefits from reductions in overall transmission losses incurred by generators will not be passed on to customers and will merely result in cost transfers from southern to northern generators.

- The impact assessment does not set out the impacts of the various proposals on parties affected by them. In particular it fails to point out that nuclear generators will be significantly adversely impacted by P229 with no change in their behaviour and that this adverse impact would be largely mitigated in P229 Alternative. Nuclear generation by its nature is located distant from load and population centres and being self despatch and run as base load will not be affected by re-despatch. It is inconsistent to allocate losses on a marginal zonal basis to existing base load plant which has no credible option open to it to mitigate these increased charges other than closure.

- The impact assessment and consultation recognises that the P229 proposals interact with the Government's proposals under Electricity Market Reform (EMR) but Ofgem concluded on 23 May 2011 that it did not have sufficient detail at this stage to consider any interaction between the P229 proposals and EMR. On 23 March 2011 HM Treasury published its proposals for carbon price support under EMR setting the actual level of support for 2013/14 and providing estimates of the level for 2014/15 and 2015/16. These levels of support will significantly impact despatch decisions for fossil fuel generation and thus Ofgem's decision to ignore them invalidates the impact assessment. The introduction of capacity payments will also impact investment and retirement decisions for fossil fuel generation.

- The impact assessment and consultation fails to bring out the degree of opposition to each of the proposals from the BSC Panel, the body considering the modifications on behalf of the industry. Both P229 and P229 Alternative were rejected by the Panel by a significant majority.

The impact assessment and consultation recognises that the signals provided in the allocation of transmission losses and transmission charges interact with each other and need to be considered together to ensure that coherent and efficient overall cost signals are provided to users. Ofgem is currently proposing to launch a Significant Code Review (SCR) on electricity transmission charging and has consulted on the scope of such an SCR. We support the launch of such an SCR and recommend that its scope should be extended to include transmission losses arrangements. An SCR, which can consider significant cross-code issues, is a suitable vehicle for considering the interactions between transmission losses governed by the Balancing and Settlement Code and transmission charging governed by the Connection and Use of System Code. Considering both issues together under an SCR should lead to stable long term arrangements for both transmission losses and transmission charging.

Our responses to the detailed questions in the consultation are set out below.

I hope you find these comments useful. Should you wish to discuss any of these points further then please do not hesitate to contact me.

Yours sincerely,

Alex MacKinnon
Regulation and Trading Arrangements Manager

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Impact of Proposals

Question 1: Do respondents consider that we have appropriately identified and, where possible, quantified the impacts of P229 Proposed and P229 Alternative?

Impact on consumers

The major benefits claimed arise from reductions in overall transmission losses incurred by generators which it is suggested will be passed on to consumers. The impact assessment and consultation recognises that the extent to which such benefits would be passed on to consumers might vary depending on the market structure.

It is not anticipated that there will be significant reductions in the transmission losses incurred by suppliers as demand customers are not anticipated to relocate or vary their consumption based on the arrangements for allocating transmission losses to them. Thus since the implementation of zonal losses will not impact customer demand nor will it impact the transmission losses incurred by suppliers then the volume of wholesale energy purchased will not change under zonal losses. The volume of wholesale energy required is determined by the actual customer demand and the actual transmission and distribution losses incurred by suppliers and customers. National Grid as GB system operator is then required to ensure sufficient generation is despatched to meet this wholesale energy demand.

Thus the extent to which reductions in overall transmission losses incurred by generators will be passed on to consumers will be dependent on the extent to which wholesale prices change. If wholesale prices reduce then savings may be passed on to consumers but if they remain unchanged or rise then there will be no benefits for consumers.

Wholesale prices are determined by the marginal costs of generators. The impact of the zonal losses proposals on wholesale prices will depend on the location and costs faced by the generator that sets the marginal price. If the marginal station when losses are allocated on an average basis has its costs increased by the implementation of zonal losses but still remains the marginal station then wholesale price for that period will rise to reflect the increased zonal losses charge. However, if the marginal station when losses are allocated on an average basis has its costs reduced by the implementation of zonal losses then it is unlikely to remain the marginal station and is likely to be replaced on the margin by another station with higher non losses costs such as fuel. In this situation the saving from zonal losses will not be reflected in the wholesale price.

The impact assessment is contradictory in its estimate of the impact on consumers. It assumes that the full impact of reducing the transmission losses incurred by generators will be passed on to consumers when it is clear that this can only occur if wholesale prices reduce. It however concludes that it is appropriate to assume a small increase in wholesale prices as a result of the introduction of zonal losses. Thus under zonal losses suppliers will be paying more for their electricity and thus any benefits from reductions in overall transmission losses incurred by generators will not be passed on to customers and will merely result in cost transfers from southern to northern generators.

Impact on generators

The impact assessment recognises that as much of the existing renewable generation is in the north where the locational impact on losses is higher, the effect of the zonal losses proposals on renewable generators is likely to be greater. It however concludes that despite the likelihood that renewable generators in the north will face paying more for losses under the zonal losses proposals this is unlikely to have any real effect on despatch with such generators incentivised to generate even under the zonal losses proposals. It also concluded that increased costs under the zonal losses proposals would be unlikely to influence renewables locating in the north as the range of renewables technologies examined, with the exception of wave power, remained profitable under zonal losses.

This analysis does not however take into account the range of potential costs faced by renewable generation projects in the north. There will be some projects, which are economic under the current arrangements where the increased costs resulting from the application of zonal losses across the lifetime of the plant will make them uneconomic against a backdrop of fierce international competition for capital. This is likely to particularly impact onshore wind generation in Scotland which is the most economic renewable technology available for achievement of the Government's 2020 renewable targets. The impact assessment suggested that the impact on wind generation will be lessened as offshore wind capacity is developed off the south coast. However, offshore wind generation is significantly more expensive than onshore and thus any methodology which discourages maximum deployment of onshore wind will not enable the Government's targets to be achieved in the most economic manner.

We agree that zonal losses could impact plant retiral decisions, one example of this being coal power plant opted out under the Large Combustion Plant Directive which could be incentivised to close early with adverse impacts on security of supply. If this were to occur than any capacity payments would need to be increased to counter this effect.

Impact on competition

The impact assessment is contradictory in its assessment of the impact on competition. In section 4.41 it asserts that the introduction of locational losses would be expected to promote further competition by introducing more cost reflective charging arrangements that will facilitate lower prices. However in section 4.28 it concludes that it is appropriate to assume a small increase in wholesale prices as a result of the introduction of zonal losses and thus lower prices are not being facilitated.

Distributional impacts

The impact assessment estimates that around £31m per annum would be transferred between generators under P229 and around £13m per annum under P229 Alternative. Thus there are very significant differences between the level of costs transferred between generators for each option while the estimated level of benefits from each option is uncertain and dependent on the accuracy of the modelling.

Stability and predictability

The impact assessment appears to argue that any new risk perceived to arise from the introduction of zonal losses is mitigated by the potential for increased predictability and stability. It is however clear that the losses to be allocated to any generator under zonal losses would be less predictable and less stable than those allocated under the current uniform approach. The modelling has shown that zonal loss factors vary significantly across generators and for any individual generator will vary significantly over time. This variation over time is dependent on the action of other parties and is thus more difficult for a generator to forecast.

Question 2: Do respondents consider that there are additional impacts which we should take into account in the decision making process and, if so, what are these?

The impact assessment and consultation has not considered the adverse effect that the introduction of zonal losses would have on competition in the European electricity market. Retail competition will not be affected since all suppliers competing to serve a GB customer will be allocated losses based on the location of the customer and thus will face the same costs which can be reflected in the price quoted to the customer. Wholesale competition will however be distorted as a move to zonal losses in GB will change the cost base for GB generators when compared to generators in the major neighbouring Member States. France, Belgium, Netherlands, Germany and Spain all have losses allocated on an average basis and have no plans to introduce zonal losses. The introduction of zonal losses in GB will thus move the GB electricity market away from its most important neighbours at a time when Europe's aim is increased harmonisation of trading arrangements.

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Interactions

Question 1: Do respondents consider that we have appropriately identified the potential interactions of the P229 proposals with TransmiT and the EMR?

Project TransmiT

The impact assessment and consultation recognises that the signals provided in the allocation of transmission losses and transmission charges interact with each other and need to be considered together to ensure that coherent and efficient overall cost signals are provided to users. Ofgem is currently proposing to launch a Significant Code Review (SCR) on electricity transmission charging and has consulted on the scope of such an SCR. We support the launch of such an SCR and recommend that its scope should be extended to include transmission losses arrangements. An SCR, which can consider significant cross-code issues, is a suitable vehicle for considering the interactions between transmission losses governed by the Balancing and Settlement Code and transmission charging governed by the Connection and Use of System Code. Considering both issues together under an SCR should lead to stable long term arrangements for both transmission losses and transmission charging.

Electricity Market Reform

The impact assessment and consultation recognises that the zonal losses proposals interact with the Government's proposals under Electricity Market Reform (EMR) and that any of the four elements of EMR could affect the impact of the zonal losses proposals by affecting the marginal cost of plant and the generation mix:

> Carbon price support aimed at providing greater long-term certainty around the additional cost of running polluting plant will increase the cost of fossil fuel generation and make lower carbon power more attractive.
>
> Feed-in tariffs will provide more certainty on the revenue for future low carbon generation through long term contracts making such investment more attractive.
>
> Capacity payments will encourage security of supply through the construction of flexible reserve plant or demand reduction measures.
>
> An emissions performance standard will limit how much carbon the most carbon intensive power stations can emit.

Detailed proposals for feed-in tariffs, capacity payments and an emissions performance standard have still to be issued by Government. While it is important to recognise that capacity payments in particular have the potential to have a material impact on the modelled outcomes within 1-2 years of the introduction of zonal losses, we agree with Ofgem's conclusion that sufficient detail is not available at this stage to consider any interactions with the zonal losses proposals.

However on 23 March 2011 HM Treasury published its detailed proposals for a carbon price floor through levying 'carbon price support rates' – calculated as the difference between the carbon target/floor price and the futures market price in the EU ETS. A one year average of exchange index daily settlement prices has been used to calculate the actual support rate for 2013/14 and this has been set at £4.94/tCO2. Preliminary estimates have also been provided for 2014/15 of £7.28/tCO2 and for 2015/16 of £9.86/tCO2.

These levels of support will significantly impact despatch decisions for fossil fuel generation. The statement in the impact assessment that Ofgem does not have sufficient detail to consider any interaction between the Government's proposals for carbon price support and the zonal losses proposals is incorrect and Ofgem's decision to ignore this interaction in our view invalidates the impact assessment.

Question 2: Do respondents consider that we have appropriately identified the likely impacts of these interactions?

In relation to the short term impacts of the zonal losses proposals the Redpoint analysis, which Ofgem has suggested it is more appropriate to rely on in relation to the impact on wholesale prices, shows negative results in the first year for all scenarios but particularly for the reference case. Ofgem suggests this is largely due to modelling issues but it does cast further doubt over the results from the analysis.