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Dear sir

# ZONAL TRANSMISSION LOSSES – ASESMENT OF PROPOSALS TO MODIFY THE BALANCING AND SETTLEMENT CODE

Teesside Power Limited welcomes the opportunity to respond to the consultation document on the four modification proposals, P198, P200, P203 and P204, and the associated Alternatives, to the Balancing and Settlement Code to alter the rules for the allocation of transmission losses.

Whilst you will no doubt be aware that Teesside Power Limited proposed Modification Proposal P200, we felt it appropriate nevertheless to make this clear at the outset.

We have set out our response to each of the questions in the impact assessment and consultation below. There are, however, a number of comments on the document of a more general nature which we would wish to highlight first.

In paragraph 1.1 of the Background section of the document, you state that "the purpose of a transmission system is to facilitate that bulk transfer of electricity from producers of electricity to centres of demand." Whilst it is indisputable that this is a purpose of a transmission system, it is not the only purpose. Indeed, it is commonly understood that originally, the purpose of the GB transmission system was to minimise the requirement for reserve. It is important to recognise that bulk transfer of electricity is only one purpose of the transmission system.

In paragraph 1.2 of the Background section, based on an estimate by NGET of the level of transmission losses, you deduce that in 2006/07, transmission losses resulted in emissions of 2.5 MtCO2. You provide no justification for this figure. It is clear that the quantity of CO2 emitted will depend upon the generation which is identified as having given rise to the losses. Unless this has been properly accounted for in the calculation, the figure quoted is without justification and may be misleading.

In paragraph 1.22 of the Background section, you correctly state that "Under each proposal the TLMs would vary by location, i.e. the contribution of a user to the total cost of losses would depend on where on the network they were located." We would wish to highlight, however, that this does not mean that the contribution of the user to the total cost of losses is in any way

Registered office: Christine House, Stockton-on-Tees, TS17 6DA Registered number: 2464040 directly related to the losses which that user causes on the transmission system. This fact is admirably demonstrated by the position of Teesside Power Station, 'TPS'. TPS is located in the north generation charging zone, as used for determining Transmission Network Use of System charges. According to the NGC Seven Year Statement, this zone is relatively balanced: i.e. the amount is generation in the zone is matched by the level of consumer demand in that zone. It follows that the direct contribution of either demand or generation located in the zone to transmission losses is therefore small. Nevertheless, because of the calculation methodology, under each of the proposals and their alternatives, generators in the zone would be penalised and consumers in the zone will be rewarded. Each of the proposals and their alternative provide no disincentive to consumers to either increase their demand in the zone or in the extreme, to relocate to the north zone with the consequence that the net imbalance will increase. We conclude that any loss allocation methodology based on Transmission Loss Factors for the system as a whole, will lead to inefficient investment of the longer term.

Finally, as regards the report by Skyplex, we note that the document is seriously prejudicial to the matter under consideration as it fails to highlight the decision made by the secretary of state in the run up to the liberalisation of the trading arrangements in England and Wales in 1990, that there should be a single market price for electricity in the area covered by the England and Wales electricity pool. Prior to "go-live" on 31<sup>st</sup> March 1990, NGC did take into account transmission losses in the despatch of generation. The then Secretary of State for Energy, however, determined that this feature should be removed, on the basis that there should be a single wholesale market price for electricity in E&W. We consider that to have ignored this signal to the market at this critical time is a fundamental deficiency in the Skyplex report.

## Chapter 2: Direct Impacts

Question 1: Do respondents consider that we have appropriately summarised the direct impacts of the proposed and alternative modifications?

In the section on "Impact on the total volume of losses", table 2.3b sets out the value of the reduction in the total volume of losses: the figures are reproduced from the report by OXERA. These values were derived by OXERA assuming a forward market price for electricity of £45/MWh. In the footnote to paragraph 1.2, you say that you have used this figure for "consistency". However, since OXERA carried out its work in 2006, there has been a substantial fall in forward electricity prices. Ofgem should update the estimates for this long run change in circumstances. A representative market price would now be around £36/MWH which would imply a reduction in the estimated benefit of reducing losses of about 20%.

Furthermore, the OXERA analysis, which is reproduced here, focused only on the value of the reduction in transmission losses, rather than the reduction in the costs of generation, as a complete analysis would require. Any re-despatch of generation will inevitably result in more expensive generation being run and hence there will be a further cost which will serve to reduce the benefit claimed based on the reduction in the volume of losses. It is impossible to estimate the effect of this without further runs of the OXERA models. We consider that Ofgem should have included the costs of re-despatch of generation, and to the extent appropriate, demand, in its assessment of the likely benefit from reduction in the quantity of losses, as summarised in tables 2.3 a to c.

In the section on "Impact on the distribution of costs", you make no reference to P200. Given that P200 introduces the same short term locational signals as P198, without the detrimental effect of a substantial redistribution of costs, we do not understand why you have chosen to omit any consideration of P200 in this important section of the report. We can see no justification for this omission.

We consider that the discussion on hedging which is set out in paragraphs 2.39 to 2.41 is factually incorrect and misleading. In particular, paragraph 2.40 states that P200 will "be expected to produce weaker signals that the unmitigated models". Since P200 was deigned to explicitly provide hedging whilst maintaining the same incentives provided by P198, and implicitly, P203, we can see no justification for Ofgem making this judgment on P200.

Question 2: Do respondents consider there are additional direct impacts that have not been fully addressed?

Question 3: Do respondents wish to present any additional analysis that they consider would be relevant to assessing the proposals?

#### **Chapter 3: Indirect Impacts**

Question 1: Do respondents consider that we have appropriately summarised the indirect impacts of the proposed and alternative modifications?

We note that one of, if not the longest section in the document is that dealing with "Accuracy of allocation of loses". We would wish to make a number of comments regarding this section.

- (i) Firstly, we can find no evidence that accuracy is a criterion which needs to be considered when assessing modification proposals. Hence, you should state clearly why you consider that this is a relevant measure.
- (ii) Secondly, paragraph 3.6 claims that "Load flow models seem to be a generally accepted way of estimating marginal losses." That only means, however, that these models provide an estimate of losses. If there was an objective measure of accuracy, this would have to refer to the real figures, which for any individual market participant are indeterminate.
- (iii) Thirdly, there is clearly no value in setting TLFs close to their actual or estimated value other than for the impact on costs and efficiency, which are direct impacts which aspects have already been discussed in chapter 2. The inclusion of vague references to the impact of updating TLFs regularly to maintain their "accuracy" therefore amounts to double counting a benefit.
- (iv) Fourthly, Ofgem has suggested a link between the concept of accuracy and some form of cross-subsidy: we do not recognise the link and Ofgem should define cross-subsidy before introducing such a prejudicial statement in the impact assessment and consultation document. Furthermore, there is no fixed definition of "technically accurate allocation": the use of short-term marginal loss factors, which we assume is what Ofgem intend here, is simply one of the many possible interpretations of what constitutes a technically accurate allocation.

This lack of clarity over what is meant by "cross-subsidy" is particularly significant for P200. In paragraph 3.10, you state that "...hedging in the form proposed through P200 and its Alternative can only reduce the accuracy with which losses are allocated to users." However, hedging as proposed for P200 and its Alternative is no different from the hedging provided by fixed price contracts for fixed quantities of electricity. The statement in paragraph 3.10 would suggest that Ofgem consider that such contracts are inaccurate or impose a "cross-subsidy" because they adjust the allocation of costs relative to a "technical analysis": i.e. short term marginal costs.

In the section on "Impact on long-term decisions", we note that again here, you have omitted any reference to P200, even though the longer-term impact of P200 would be no different from those of P198 and P203. The omission is misleading as the clear implication for the reader is that P200 does not have any impact.

We also consider that the conclusions from the OXERA report have been selectively chosen to present a picture where there are longer-term benefits from each of the schemes. This is clearly inconsistent with section 3.5 of the OXERA report which shows that as a result of new generation build in the South, the annual loss savings fall to zero by 2014/15.

We consider that a fundamental omission is that the document fails the address the impact of the proposals on the development of regional markets and of market to market convergence, which should be an important consideration for Ofgem.

Question 2: Do respondents consider there are any indirect impacts of the proposed and alternative modifications that have not been fully assessed?

Whilst we recognise that NGC has a different role in reducing the cost of losses from the proposals under consideration in this document, nevertheless, we are surprised that Ofgem have failed to cover the impact of the proposals on the incentive scheme in place with NGC.

Question 3: Do respondents wish to present any additional analysis that they consider would be relevant to assessing the proposals?

In June 2006, Teesside Power Limited sent to Elexon a paper produced by NERA on regulatory risk and option theory. The paper demonstrated how regulatory risk can lead to an increase in the rate of return required by investors, which hedging would mitigate. The document fails to acknowledge this analysis. Even if a decision is taken to revise the allocation of losses reflecting a "soundly based" change in policy since vesting, the hedging feature of P200 signals to investors that they can make decisions based on current arrangements without concern that future changes in policy may dramatically alter the value of committed investments. Thus, P200 embodies all the same incentive properties and procedural protection as the other modifications, with the addition al benefit of financial stability for existing investments. Only P200 offers this final feature.

The failure here to acknowledge the benefits of P200 over those of P198 or P203 appears to be a further example of where the assessment document is prejudicial to P200 and its Alternative compared with the other modifications discussed.

# **Chapter 4: Environmental Impacts**

Question 1: Do respondents consider that we have appropriately outlined the key environmental impacts of the different proposals?

We do not understand why Ofgem fails to mention the environmental benefits of P200 and its Alternative, with the clear implication that there are none, even though they are equivalent to those for P198 and P203.

We consider that the analysis presented in this section is misleading as it implies that the environmental benefits are additional to the benefits calculated by OXERA and presented in the earlier section of the document. In fact, in financial terms, the benefits claimed in table 4.1 are already included in the value of the reduction in transmission losses presented in Chapter 2. The

electricity price used to calculate the value in the reduction in losses includes the value of EU ETS CO2 allowances and hence the value of the reduction in CO2 emissions. Including the benefits again in table 4.1 amounts to double counting benefits already claimed in chapter 2.

Question 2: Do respondents consider that there are other environmental impacts that should be assessed?

Question 3: Do respondents have any additional analysis in relation to environmental impacts that they wish to present?

### Chapter 5: Process and the way forward

Question 1: Do respondents have any views on both the process and timetable that are proposed for taking forward this assessment of the proposed and alternative modifications?

As we have noted above, throughout substantial sections of the document the impact of our original Modification Proposal P200, which along with P200Alternative makes up a third of the six modifications being considered, has been totally ignored. These omissions will have implied that there is no impact of either P200 or its Alternative, which is misleading and wrong.

We expect this clear deficiency in process to be fully addressed by Ofgem in the next stage of its evaluation, the 'minded to' stage. In order that interested parties can have a full and fair opportunity to consider the relative impact of P200 and its Alternative and to comment accordingly, we expect the "minded to" decisions to be the subject of further consultation. Only then can all stakeholders be assured that the Authority can come to a final decision based on a complete and accurate assessment and understanding of all the issues relating to all six modifications.

Finally, in the light of the complexity of the matter under consideration, TPL reserves the right to include, arguments which are made in responses to the consultation document from third parties in any future correspondence on the matter of allocation of transmission losses.

Yours sincerely

RM. Ville\_

Keith Miller

Director

