Annex 1 – Non Confidential Response

We include here three relevant responses that we have provided to Elexon and the Authority.

There are two (P229) responses provided to Elexon (dated 2nd March 2010 and 11th January 2010) on the P229 (Workgroup) Assessment Phase consultation and the (Panel) Report Phase consultation respectively together with one (P198 et al) response provided to the Authority (dated 31st July 2007) on the Zonal Transmission Losses - Authority 'minded to' decision which provides additional detail to that outlined in our covering letter to the 23rd May 2011 P229 Impact Assessment consultation.

2nd March 2010 – Reponse to the (Panel) Report Phase consultation on P229

Question 1:	**Response:**
Do you agree with the Panel's initial view that the Proposed Modification should be rejected?	Yes

Please explain the reason(s) for your view: **Page Ref:** 29

Consideration of the Draft Modification Report

We note the Panel discussions, as set out on pages 26-32 of the Draft Modification Report, and agree with the Panel's initial view that the P229 Original Modification should be rejected as, in our view, it does not better achieve the Applicable BSC Objectives when compared with the baseline.

In respect of the Panel's consideration of the Modification Group's Assessment Report we agree with the Panel member who noted the limitation of the modelling (of not considering the actions of market participants) when its based on an environment of a 'perfectly competitive' market and concur that, as a result, the CBA overestimated the benefits of P229, as the benefits are primarily due to improved despatch by participants.

We too were intrigued that the effect of all the CBA sensitivity analysis scenarios was to lower the overall benefits of implementing P229. Like the Panel member we would expect that some alternative CBA modelling scenarios around the central case to increase the benefits and others to decrease them.

With respect to offshore wind generation and the comments, in the Draft Modification Report, about "the lower level of information available at the time the CBA modelling was done and the continuing elements of uncertainty in this area" we note that, in our view, there was a reasonable (rather than low) level of information available at the time the CBA was undertaken on, in particular, Round 3 projects.

Specifically, the December 2008 joint study undertaken by National Grid and Econnect for Crown Estates had a list of the 25GW of Round 3 projects with:-

a) associated MW;
b) connection points; and
c) connecting technology (AC or DC).

We understand that this was flagged up to the Modification Group as early as January 2009 (circa four months prior to the CBA modelling being undertaken). At around the same time we understand a fair, equitable and transparent methodology was put forward to the Modification Group to determine when these new generators could be connected.

As to the load profiles that might be assigned to the Round 3 offshore wind generation we mealy

note that the CBA modelling already includes generation load profiles for the Rounds 1 and 2 projects. We can see no credible reason as to why the Rounds 1 & 2 generation load profile information could not be used for modelling Round 3 in the CBA.

We understand that a Panel member noted "that the CBA included analysis of a scenario with more offshore wind generation to assess the sensitivity of the CBA results to this factor, which indicated the results were not disproportionately sensitive to the level of offshore wind generation."

We beg to disagree. The CBA modelled a 1.2GW increase in offshore wind generation (from 6GW to 7.2GW). This equated, according to the CBA, to a decline in the P229 CBA benefit of £9M (from £277M to £268M).

As we pointed out in our Assessment Consultation response the quantity of additional offshore generation (from Rounds 1, 2 and 3) is of the order of 27GW (on top of the 6GW modelled in the CBA).

Thus each 1.2GW of additional offshore wind generation causes the total P229 benefits, according to the CBA, to fall by £9m (or 3.2%) which, when tabulated, corresponds to:-

GW	£M	%
1.2	9	3.2
2.4	18	6.4
3.6	27	9.6
4.8	36	12.8
6.0	45	16.0
7.2	54	19.2
8.4	63	22.4
9.6	72	25.6
10.8	81	28.8
12.0	90	32.0
13.2	99	35.2
14.4	108	38.4
15.6	117	41.6
16.8	126	44.8
18.0	135	48.0
19.2	144	51.2
20.4	153	54.4
21.6	162	57.6
22.8	171	60.8
24.0	180	64.0
25.2	189	67.2
26.4	198	70.4
27.6	207	73.6

Thus the addition of the 27GW of offshore wind (from Rounds 1, 2 and 3, that was not included in the CBA model) would reduce the CBA modelled benefit of P229 by over £200M or by over 70%.

We therefore agree with the view of most of the Modification Group that the amount of offshore wind generation in the CBA was significantly too low.

Given these view, with respect to offshore wind generation, together with our previous comments (such as those with respect to WACC) outlined in our Assessment Consultation response we have come to the conclusion that the P229 CBA was not fit for the purpose of assisting us with our assessment of P229.

Question 1: **Response:**

We agree with the Panel members comments that P229 would impact TNUoS charges by affecting energy volumes through the impact on despatch identified by the CBA and support the further consideration of this aspect of P229, in particular, by the Authority in due course.

Finally, with respect to the Panel member's comments regarding the nodal aspects of the modelling, such as the location etc., of a 'slack node' we are mindful that (as with the modelling for P75/82 and P198/200/203/204) that there was a reluctance to model the location of the 'slack node' in other locations (such as southern England or northern Scotland) rather than Coventry to gauge the effect this could have on the modelling results.

Applicable Objectives

With respect to the Panel's comments regarding the Applicable Objectives we find ourselves in wholehearted agreement with many of these comments as they echo those we (and other BSC Parties) made at the Assessment Consultation phase in arguing P229 Original (and Alternative) does not better facilitate the Applicable BSC Objectives.

We set out in detail in our Assessment Consultation response the components of our argument as to why P229 Original would not better achieve the Applicable BSC Objectives when compared with the baseline.

For the sake of brevity we do not repeat these detailed arguments here, rather the reader should refer to them as they form part of the P229 documentation. Therefore, in brief, our arguments with respect to the Applicable Objectives are as follows:-

(a) The efficient discharge by the licensee [i.e. the Transmission Company] of the obligations imposed upon it by this licence [i.e. the Transmission Licence].

We believe that P229 Original would not better facilitate the achievement of Objective (a) when compared with the baseline.

The reason for this is that P229 Original gives rise to windfall gains and losses between BSC Parties. As such it demonstrably discriminates (without justification) and thus fails to achieve the efficient discharge by the licensee of the obligations imposed upon it by this licence.

(b) The efficient, economic and co-ordinated operation of the national transmission system.

We believe that P229 Original would not better facilitate the achievement of Objective (b) when compared with the baseline.

The reasons for this include:-

1. The combination of TNUoS and zonal losses is not cost-reflective (as set out in Q1 (i) in our Assessment Consultation response).

2. Inherent inaccuracies in the TLF calculation mean it would not deliver costs reflecting BM Unit impact on losses in every Settlement Period; therefore would not result in more accurate and appropriate allocation;

3. Would discourage investment in wind generation in the North and encourage investment in the South, with a negative overall effect on investment, and therefore a negative environmental impact.

(c) Promoting effective competition in the generation and supply of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity.

We believe that P229 Original would not better facilitate the achievement of Objective (c) when compared with the baseline.

The reasons for this include:-

1. The combination of TNUoS and seasonal zonal losses is not cost-reflective (as set out in Q1 (i) in our Assessment Consultation response).

2. The inability of existing plant to relocate in response to seasonal zonal signals (as set out in Q1 (ii) in our Assessment Consultation response).

3. The economic impact of P229 Original is significant (as set out in Q1 (iii) in our Assessment Consultation response).

4. The Regulatory risk it gives rise to (as set out in Q1 (iv) in our Assessment Consultation response).

5. The signal is flawed (as set out in Q1 (v) in our Assessment Consultation response).

6. The DTI Decision on BETTA (as set out in Q1 (vi) in our Assessment Consultation response).

7. The environmental impact (as set out in Q1 (vii) in our Assessment Consultation response).

8. The inconsistency of locational signals (as set out in Q1 (viii) in our Assessment Consultation response).

9. It causes distributional transfers between market participants based on type and location which are windfall gains and windfall losses, to the detriment of competition.

10. The transfers are disproportionate to any benefit of P229 Original.

11. It is not cost reflective of the contribution to variable losses because it allocates negative variable losses, whereas all participants on the system cause some volume of variable transmission losses to occur.

12. It introduces a new cross-subsidy because some participants benefit from being credited with energy, while others would be penalised by being debited energy.

13. It has a disproportionate impact on classes of participants who cannot respond to signals: demand, renewables, combined heat and power (CHP) plant and nuclear generators.

14. There are inherent inaccuracies which mean it does not guarantee more accurate and appropriate allocation, so rather than removing the purported cross subsidy, it would create a new, less transparent, cross subsidy.

15. The socialisation of losses within zones would give inappropriate market entry/exit signals.

16. The negative impact on investment in renewables due to increased cost of investment in unfavourable zones.

17. It discriminates between new and existing generators.

(d) Promoting efficiency in the implementation and administration of the balancing and settlement arrangements.

We believe that P229 Original would not better facilitate the achievement of Objective (d) when compared with the baseline.

The reasons for this include:-

1. There is no defect in the Code (as we set out under Q1 ‘Defect’ in our Assessment Consultation

Question 1:	**Response:**

response).

2. The high cost of implementation, coupled with the increased cost of administering the balancing and settlement arrangements, compared with the baseline.

3. Adds additional complexity.

Therefore, in conclusion, we agree with both the Modification Group and the BSC Panel that P229 Original should be rejected.

Question 2:	**Response:**
Do you agree with the Panel's initial view that the Alternative Modification should be rejected?	Yes

Please explain the reason(s) for your view:	**Page Ref:** 30

Consideration of the Draft Modification Report

We note the Panel discussions, as set out on pages 26-32 of the Draft Modification Report, and agree with the Panel's initial view that the P229 Alternative Modification should be rejected as, in our view, it does not better achieve the Applicable BSC Objectives when compared with the baseline. We explain our thoughts in more detail under Q1 above.

Applicable Objectives

With respect to the Panel's comments regarding the Applicable Objectives we find ourselves in wholehearted agreement with many of these comments as they echo those we (and other BSC Parties) made at the Assessment Consultation phase in arguing P229 Alternative (and Original) does not better facilitate the Applicable BSC Objectives.

We set out in detail in our Assessment Consultation response the components of our argument as to why the P229 Alternative would not better achieve the Applicable BSC Objectives when compared with the baseline.

For the sake of brevity we do not repeat these detailed arguments here, rather the reader should refer to them as they form part of the P229 documentation. Therefore, in brief, our arguments with respect to the Applicable Objectives are as follows:-

Applicable Objectives

(a) The efficient discharge by the licensee [i.e. the Transmission Company] of the obligations imposed upon it by this licence [i.e. the Transmission Licence].

We believe that P229 Alternative is neutral in terms of better facilitating the achievement of Objective (a) when compared with the baseline.

(b) The efficient, economic and co-ordinated operation of the national transmission system.

We believe that P229 Alternative would not better facilitate the achievement of Objective (b) when compared with the baseline.

The reasons for this include:-

1. The combination of TNUoS and seasonal zonal losses is not cost-reflective (as set out in Q1 (i) in

our Assessment Consultation response).

2. Inherent inaccuracies in the TLF calculation mean it would not deliver costs reflecting BM Unit impact on losses in every Settlement Period; therefore would not result in more accurate and appropriate allocation;

3. Would discourage investment in wind generation in the North and encourage investment in the South, with a negative overall effect on investment, and therefore a negative environmental impact.

(c) Promoting effective competition in the generation and supply of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity.

We believe that P229 Alternative would not better facilitate the achievement of Objective (c) when compared with the baseline.

The reasons for this include:-

1. The combination of TNUoS and seasonal zonal losses is not cost-reflective (as set out in Q1 (i) in our Assessment Consultation response).

2. The inability of existing plant to relocate in response to seasonal zonal signals (as set out in Q1 (ii) in our Assessment Consultation response).

3. The economic impact of P229 Alternative is significant (as set out in Q1 (iii) in our Assessment Consultation response).

4. The regulatory risk it gives rise to (as set out in Q1 (iv) in our Assessment Consultation response).

5. The signal is flawed (as set out in Q1 (v) in our Assessment Consultation response).

6. The DTI Decision on BETTA (as set out in Q1 (vi) in our Assessment Consultation response).

7. The environmental impact (as set out in Q1 (vii) in our Assessment Consultation response).

8. The inconsistency of locational signals (as set out in Q1 (viii) in our Assessment Consultation response).

9. It has a disproportionate impact on classes of participants who cannot respond to signals: demand, renewables, combined heat and power (CHP) plant and nuclear generators.

10. The socialisation of losses within zones would give inappropriate market entry/exit signals.

11. The negative impact on investment in renewables due to increased cost of investment in unfavourable zones.

12. It discriminates between new and existing generators.

(d) Promoting efficiency in the implementation and administration of the balancing and settlement arrangements.

We believe that P229 Alternative would not better facilitate the achievement of Objective (d) when compared with the baseline.

The reasons for this include:-

Question 2: **Response:**

1. There is no defect in the Code (as we set out under Q1 'Defect' in our Assessment Consultation response).

2. The high cost of implementation, coupled with the increased cost of administering the balancing and settlement arrangements, compared with the baseline.

3. Adds additional complexity.

Therefore, in conclusion, we agree with both the Modification Group and the BSC Panel that P229 Alternative should be rejected.

Question 3: **Response:**

Do you agree with the Panel's initial view that, while both are inferior to the baseline, P229 Alternative is superior to P229 Proposed? Yes

Please explain the reason(s) for your view: **Page Ref:** 30

We agree with the Panel's initial view that, while both the Original and Alternative are inferior to the baseline, P229 Alternative is superior to P229 Original.

Whilst we do not support, in principle, a seasonal zonal losses scheme (in either the form proposed with P229 Original or the Alternative) we can see, when compared with the Original, that the Alternative would better achieve the Applicable Objectives.

As we have noted in our answer to Q1 in our Assessment Consultation response (under 'Defect') P229 Original would see, for example, generators in the south of Britain receiving a windfall gain (in the form of their settlement account being credited with additional electricity as if they had generated that electricity when, in fact, they had not) for doing nothing.

However, P229 Alternative removes this windfall gain to southern generation (and the associated loss to northern generation). Previous work in this area has shown that without the scaling (that P229 Alternative introduces) there is a danger that the total amount of funds reallocated (via the P229 Original) will bear little relationship to the actual outturn costs of variable transmission losses that occur from the despatching of generation by National Grid.

This would introduce a competitive disadvantage into the market place and run counter to the achievement of the Applicable Objective (c) as well as, by virtue of introducing discrimination, running counter to Applicable Objective (a).

It is also clear that any scheme that transfers funds from northern generation to southern generation in excess of the cost of variable transmission losses is, in itself, a cross subsidy.

Furthermore, a major anomaly arises with P229 Original in that it creates negative seasonal zonal loss factors. As it is physically impossible to create energy from nothing it is inappropriate to consider a proposal (P229 Original) which has negative seasonal zonal loss factors.

With the P229 Alternative this anomaly recedes.

Removing this anomaly and the associated windfall gain to southern generation (as the P229 Alternative does) better achieves, in particular, Applicable Objective (c); when compared to the Original; by promoting effective competition in the generation and supply of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity.

Question 3:	**Response:**

Therefore, in conclusion, we agree with both the Modification Group and the BSC Panel that P229 Alternative is better that P229 Original, but not better than the baseline.

Question 4:	**Response:**
Do you agree with the Panel's suggested Implementation Dates for P229 Proposed and P229 Alternative?	No

Please explain the reason(s) for your view:	**Page Ref:** 31

As we noted in our Assessment Consultation response we do not support a within year change in the settlement arrangements, with the associated negative impact on consumers, that would arise if either P229 Original or Alternative were to be implemented in October.

Therefore we do not support the first proposed implementation date of 1st October 2011 (if an Authority decision is received by 30th September 2010).

For the sake of brevity we do not repeat the detailed arguments in our Assessment Consultation response here, rather the reader should refer to them as they form part of the P229 documentation.

Question 5:	**Responses:**
Do you agree that the legal text for P229 Proposed and P229 Alternative delivers the intent of the Proposed and Alternative?	Yes

Please explain the reason(s) for your view:	**Page Ref:** 31

It appears to.

Question 6:	**Responses:**
Do you have any further comments on P229?	Yes

Please give your rationale:	**Page Ref:** n/a

We set out in response to Q6 in the Assessment Consultation comments that we had on the analysis undertaken on behalf of the Modification Group with respect, in particular, to:-

i) Round 3 Offshore wind;
ii) Disproportionate impact with treatment of 132kV; and
iii) Security of supply.

For the sake of brevity we do not repeat theses Assessment Consultation response comments here, rather the reader should refer to them as they form part of the P229 documentation.

However, we would ask that the Panel give consideration to examining how the CBA process was undertaken for P229 and in particular any learning points that could be gleaned to improve the efficiency of the process going forward.

For example, we found it somewhat strange that there appeared to be a reluctance to undertake sensitivity analysis, such as over a substantial increase in the level of WACC, that the Modification Group desired.

Question 6:	Responses:

11th January 2010 – Reponse to the (Workgroup) Assessment Phase consultation on P229

Question 1:	Response:
Would the Proposed Modification P229 help to achieve the Applicable BSC Objectives?	No

Please explain the reason(s) for your view and state which Applicable BSC Objective(s) your views are based on:	Page Ref: 8

Insert rationale here

Introduction

We do not believe that Proposed Modification P229 better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline.

Whilst P229 must be assessed on its own merits we note that our view, with respect to the introduction of zonal losses, has been consistent for some time (e.g. P75/82 and P198/200/203/204).

In coming to this view afresh with respect to P229 we have been mindful, amongst other things, of the initial view of the Modification Group that P229 be rejected.

Defect

We are not clear that a defect actually exists.

For example, the 'Description of Issue or Defect that Modification Proposal [P229] Seeks to Address' indicates that the current (baseline) arrangements:-

> "….means that customers in the north of GB and generators in the south of England have to pay some of the costs of transmitting electricity to locations miles away from the source of generation. The proposed seasonal zonal scheme will enable the variable costs of transmission losses to be allocated on a cost-reflective basis and reflected on parties that cause them."

However, what is proposed with P229 Original is that generators in the south of Britain, for example, would:-

1. Pay none of the "costs of transmitting electricity to locations miles away from the source of generation" that they give rise to even though, demonstrably, the electricity they themselves produce cannot be used in their immediate locality, so must be transmitted across the transmission system (and thus give rise to variable losses – with associated costs - on that system) "to locations miles away from the source of generation".

This is illustrated by reference to the proposer's own 3GW power station at Didcot where, presumably, the power is transmitted "to locations miles away from the source of generation" to meet the demand in, say, London and central southern England etc., rather than being used entirely in its immediate locality.

Notwithstanding this, if (as some might suggest) generators in the south of England do not require to use the transmission system to transfer their electrical output "miles away from the source of generation" to where the demand is (and thus would not, if this were the case, give rise to increased volumes of variable transmission losses) then why do those same generators require capacity on the transmission system in the form of TEC?

2. Receive a windfall gain (in the form of their settlement account being credited with additional electricity as if they had generated that electricity when, in fact, they had not) for doing nothing.

Overall, what this means is that generation in northern Britain not only (i) pay the cost of those variable losses that they give rise to they also (ii) pay for the cost of the variable losses that are caused by generators in southern Britain and (iii) pay the cost of the energy credited to the southern Britain generators.

Therefore P229 Original does NOT "enable the variable costs of transmission losses to be allocated on a cost-reflective basis and reflected on parties that cause them" (the defect suggested by the proposer of P229) as those generators in southern Britain not only pay none of costs, for the variable transmission losses that they give rise to, they are actually 'paid' (via the settlement crediting). This is not cost reflective and is also anti-competitive.

The 'Description of Issue or Defect that Modification Proposal [P229] Seeks to Address' goes on to state that:-

> "The current allocation of transmission losses fails to provide potential connectees to the transmission system with appropriate signals regarding the implications of siting in different parts of the country. This may give rise to inefficient decisions regarding the development of new power stations or connection of new industrial loads."

Notwithstanding our comments below (regarding the existence of locational signals, such as TNUoS) we can see there may well be some merit in providing "potential connectees to the transmission system with appropriate signals regarding the implications of siting in different parts of the country".

However, P229 Original applies to both new and existing connectees. Whilst new connectees can take account of this signal (and thus they can respond to it) this is not the case with existing connectees as they will not move location. This is demonstrably unfair and discriminatory.

Detailed Arguments

(i) The combination of TNUoS and zonal losses is not cost-reflective

We believe that the introduction of a seasonal zonal losses signal would conflict with existing pricing signals in the transmission pricing methodology of National Grid, which is already approved by the Authority.

In our view, exposure to both P229 seasonal zonal losses and TNUoS would result in an inefficient mechanism, which would overstate the cost of plant locational decisions. This 'double' locational signal would, if P229 was approved, require revisiting of the existing TNUoS charging methodology.

Based on current levels of transmission charging, a 1,500 MW power station in northern Scotland pays around £30 M per annum TNUoS. P229 would impose an additional payment of around £14 M per annum (based upon the CBA modelling). This would take its total locational **payment** to nearly £44 M per annum.

In contrast, a similarly sized power station in southern England would receive a TNUoS payment of £9 M and be credited a further £7 M through P229 (again based upon CBA modelling). This southerly-located station would, therefore, **receive** a locational payment of £16 M per annum. We do not consider that these locational signals would be either cost-reflective or be conducive to promoting effective competition in generation.

(ii) Inability of existing plant to react to seasonal zonal signals

All large power stations require explicit planning approval before they can be built. This approval, up to now, has been given by the Department of Energy & Climate Change (DECC) (in England and Wales) or the Scottish Government (in Scotland) via a Section 36 consent (which is, in effect, planning permission). In addition, DECC issues all thermal plants with a Section 14 approval. The location and operation of all large power stations in GB has, therefore, been explicitly agreed/approved by central Government.

P229, irrespective of any previous approval from Government, would impose a penalty on some power stations located away from areas of demand whilst rewarding other power stations who are, equally, located away from areas of demand.

Furthermore, Peterhead power station in northern Scotland could not physically be moved to Petersfield in southern England. Equally, a large industrial user of electricity could not relocate from southern England to northern Scotland. Importantly, even if possible, this behaviour would not deliver an efficient and effective electrical system. System stability is dependent upon generation being located throughout the network.

As a consequence, the application of seasonal zonal loses will not result in re-organisation of plant location to produce an 'optimum' network. Instead, the proposals will merely redistribute value between existing generators, producing windfall gains and losses.

(iii) Economic impact of P229 is significant

Taken together, points (i) and (ii) have a significant economic impact on generation plant. For an individual generator in the north, this equates to an incremental annual cost of many millions of pounds.

There is, therefore, a risk that such large swings in value could force exiting plant located in the north to close or mothball capacity earlier than is efficient. This would have a negative impact on plant margins and system security at a time when the industry is facing significant challenges in terms of building substantial new capacity.

(iv) Regulatory risk

Approval of P229 would significantly increase the regulatory risk associated with new generation build in GB. This would impose a premium on the cost of capital for both new and existing generators.

This arises because, as described above, the implementation of seasonal zonal losses will produce significant winners and losers. The operators of such plant could not realistically have expected value shifts of this magnitude and, as a consequence, perceptions of regulatory risk for the sector will, all other things being equal, increase.

As has already been stated by DECC, Ofgem and others; indeed National Grid's SO Incentive scheme assumes this; there is a significant quantity (measured in 10's of GW) of new generation capacity due to be built over the period covered by the CBA analysis.

It is, therefore, clear that even a modest increase in the cost of capital of a few basis points could offset the potential benefit suggested in the CBA.

In this respect, we wish to record that the weighted average cost of capital (WACC) used in the CBA of 6.14% (real post tax) is both grossly unfair and inappropriate. It distorts the effect of P229 by increasing the purported benefits of the proposed introduction of a seasonal zonal losses scheme.

The WACC figure is based on the Ofgem Transmission Price Control Review (TCRP) figure of 6.25%. Such a rate may well be appropriate for a regulated transmission business.

We note, for example, that Ofgem has included (within the SO Incentive Scheme) an element to, specifically, cover steps that National Grid can take to reduce transmission losses. In that situation a WACC based on the Ofgem TCPR figure is appropriate.

However, P229 relates entirely to the way that generators operate rather than how the transmission system is operated by National Grid.

This is witnessed by reference to the P229 'Description of Issue or Defect that Modification Proposal Seeks to Address':-

> "The proposed seasonal zonal scheme will enable the variable costs of transmission losses to be allocated on a cost-reflective basis and reflected on parties that cause them."

It must be recognised that the risk/reward profile of a fully regulated TO operation (where revenue, once agreed by Ofgem, is fully secured) is totally different to that of a generator operating in the competitive GB electricity market. As such the WACC is materially different. The use of the TPCR WACC within the CBA completely misrepresents that.

We understand that at the time the CBA work was being undertaken (last summer) that this issue was clearly identified by members of the Modification Group.

In particular, a table of the WACC as report on Bloomberg[1] (which is generally accepted as a reputable public source of data) for a selection of nine[2] GB generator companies was provided.

[1] As at 30th June 2009

[2] i) SSE; ii) Drax; iii) RWE; iv) Centrica; v) International Power; vi) Iberdrola; vii) EdF; viii) E.On; and xi) GdF Suez

This table indicated that the nearest GB generator company WACC was 24% higher than the 6.14% WACC figure used (in the CBA) whilst the highest company WACC was 118% higher than the CBA figure.

In our view the use of such a low WACC in the CBA means that this work is, in respect of the purported benefits arising from P229 Original (and Alternative) fatally flawed and cannot be relied upon.

(v) Signal is flawed

If P229 was implemented and plants responded to the economic signals and relocated (putting aside the obvious practical difficulties) the following year that economic signal would change and the incentive that instigated the change would reduce or disappear or, as the PTI Siemens modelling suggests, even reverse.

It is, therefore, a very uncertain and unreliable signal. A party looking to build, for example, a power station in the south, would be unable to 'bank' on the perceived benefit of its locational decision, as that benefit would disappear as soon as the station was commissioned (and the relevant seasonal zonal loss factors were recalculated).

Again, it is important to note that generation needs; for system operational purposes; to be located and operated throughout the GB transmission system.

(vi) DTI Decision on BETTA

In designating the GB BSC for the introduction of BETTA, the Secretary of State excluded provisions relating to zonal losses. The introduction of P229 would, therefore, demonstrably be inconsistent with the intent of the legislation to introduce BETTA.

(vii) Environmental impact

We believe that P229 will impair the achievement of Government's stated renewable generation objectives. It is recognised that most renewable developments will be sited in Scotland, and in particular, in northern Scotland. Approval of P229 would, therefore, by definition, increase the cost of renewable generation and this could undermine new wind/wave technologies and offshore wind, for which the economics are already challenging. We, therefore, question whether approval of P229 would be consistent with the Authority's duty to have regard to sustainable development.

Given the potential substantial impact of P229 on new and existing renewable generators, many of which are located in peripheral parts of the network that would attract a high seasonal zonal loss factor under the proposals, we believe that implementation of P229 could be inconsistent with the Renewables Directive.

Given the location of GB plant - 1.3 GW of hydro in northern Scotland, large quantities of environmentally efficient plant such as gas-fired CCGTs and FGD-equipped plant in the north and less environmentally efficient OCGTs and oil-fuelled plant in southern GB, we are not certain that there will be any overall environmental benefit from this proposed change. Indeed there is the potential that generation output from the most benign environmental plant would be reduced, whilst the most environmentally damaging plant would increase their output. We believe this could be in excess of the reduction in emissions from any potential reduction in transmission losses claimed for the original P229.

Indeed, noting that new emissions limits will cap operation of more carbon-intensive plant, even if certain plant (opted-out limited hours coal plant) could increase their running, this

would simply advance the date of their closure with its consequential effect on security of electricity supply.

(viii) Inconsistency of locational signal

Looking specifically at northern Scotland, slides 37 and 38 of the PTI report[3] clearly shows that the intended 'signal' from the introduction of P229 not only varies between seasons, but also within seasons and, indeed in some cases, within month. This finding is repeated throughout the PTI report and reflected in the CBA report.

At certain times of the year, the signal is to locate a power station in northern Scotland. At other times the signal is directly opposite. It is, therefore, difficult to see how either a generator or customer can make a locational decision based upon such an inconsistent signal. It cannot, on any reasonable interpretation, be said to be 'long term'.

(ix) Analysis critique

In addition to the flaws in the CBA noted under (iv) above (with respect to the exceeding low WACC level used) we believe that the non inclusion of the Round 3 Offshore wind farm developments within the CBA is a fatal flaw in this work.

We details this below under Q6.

Applicable Objectives

> (a) The efficient discharge by the licensee [i.e. the Transmission Company] of the obligations imposed upon it by this licence [i.e. the Transmission Licence].

We believe that P229 Original would not better facilitate the achievement of Objective (a) when compared with the baseline.

The reason for this is that P229 Original gives rise to windfall gains and losses between BSC Parties. As such it demonstrably discriminates (without justification) and thus fails to achieve the efficient discharge by the licensee of the obligations imposed upon it by this licence.

> (b) The efficient, economic and co-ordinated operation of the national transmission system.

We believe that P229 Original would not better facilitate the achievement of Objective (b) when compared with the baseline.

The reasons for this include:-

1. The combination of TNUoS and zonal losses is not cost-reflective (as set out in (i) above).

2. Inherent inaccuracies in the TLF calculation mean it would not deliver costs reflecting BM Unit impact on losses in every Settlement Period; therefore would not result in more accurate and appropriate allocation;

3. Would discourage investment in wind generation in the North and encourage investment in the South, with a negative overall effect on investment, and therefore a negative environmental impact.

[3] 18th June 2009

(c) Promoting effective competition in the generation and supply of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity.

We believe that P229 Original would not better facilitate the achievement of Objective (c) when compared with the baseline.

The reasons for this include:-

1. The combination of TNUoS and seasonal zonal losses is not cost-reflective (as set out in (i) above).

2. The inability of existing plant to relocate in response to seasonal zonal signals (as set out in (ii) above).

3. The economic impact of P229 Original is significant (as set out in (iii) above).

4. The Regulatory risk it gives rise to (as set out in (iv) above).

5. The signal is flawed (as set out in (v) above).

6. The DTI Decision on BETTA (as set out in (vi) above).

7. The environmental impact (as set out in (vii) above).

8. The inconsistency of locational signal (as set out in (viii) above).

9. It causes distributional transfers between market participants based on type and location which are windfall gains and windfall losses, to the detriment of competition.

10. The transfers are disproportionate to any benefit of P229 Original.

11. It is not cost reflective of the contribution to variable losses because it allocates negative variable losses, whereas all participants on the system cause some volume of variable transmission losses to occur.

12. It introduces a new cross-subsidy because some participants benefit from being credited with energy, while others would be penalised by being debited energy.

13. It has a disproportionate impact on classes of participants who can not respond to signals: demand, renewables, combined heat and power (CHP) plant and nuclear generators.

14. There are inherent inaccuracies which mean it does not guarantee more accurate and appropriate allocation, so rather than removing the purported cross subsidy, it would create a new, less transparent, cross subsidy.

15. The socialisation of losses within zones would give inappropriate market entry/exit signals.

16. The negative impact on investment in renewables due to increased cost of investment in unfavourable zones.

17. It discriminates between new and existing generators.

(d) Promoting efficiency in the implementation and administration of the balancing and settlement arrangements.

We believe that P229 Original would not better facilitate the achievement of Objective (d) when compared with the baseline.

The reasons for this include:-

1. There is no defect in the Code (as we set out under 'Defect' above).

2. The high cost of implementation, coupled with the increased cost of administering the balancing and settlement arrangements, compared with the baseline.

3. Adds additional complexity.

Therefore, in conclusion, we agree with the Modification Group that P229 Original should be rejected.

Question 2:	**Response:**
Would the Alternative Modification P229 help to achieve the Applicable BSC Objectives compared to the current baseline?	No

Please explain the reason(s) for your view and state which Applicable BSC Objective(s) your views are based on:	**Page Ref:** 10
Insert rationale here	

Whilst, when compared with the P229 Original, P229 Alternative has some merits (see Q3 below) we believe, as a stand alone Modification Proposal, that P229 Alternative does not better achieve any of the Applicable Objectives when compared with the current baseline.

The reasons for this are similar / identical to those we have listed in Q1 above and, for the sake of brevity, we avoid repeating them in full here – please refer, therefore to Q1 above for further details.

Applicable Objectives

(a) The efficient discharge by the licensee [i.e. the Transmission Company] of the obligations imposed upon it by this licence [i.e. the Transmission Licence].

We believe that P229 Alternative is neutral in terms of better facilitating the achievement of Objective (a) when compared with the baseline.

(b) The efficient, economic and co-ordinated operation of the national transmission system.

We believe that P229 Alternative would not better facilitate the achievement of Objective (b) when compared with the baseline.

The reasons for this include:-

1. The combination of TNUoS and seasonal zonal losses is not cost-reflective (as set out in Q1 (i) above).

2. Inherent inaccuracies in the TLF calculation mean it would not deliver costs reflecting BM Unit impact on losses in every Settlement Period; therefore would not result in more accurate and appropriate allocation;

3. Would discourage investment in wind generation in the North and encourage investment in the South, with a negative overall effect on investment, and therefore a negative environmental impact.

> (c) Promoting effective competition in the generation and supply of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity.

We believe that P229 Alternative would not better facilitate the achievement of Objective (c) when compared with the baseline.

The reasons for this include:-

1. The combination of TNUoS and seasonal zonal losses is not cost-reflective (as set out in Q1 (i) above).

2. The inability of existing plant to relocate in response to seasonal zonal signals (as set out in Q1 (ii) above).

3. The economic impact of P229 Alternative is significant (as set out in Q1 (iii) above).

4. The regulatory risk it gives rise to (as set out in Q1 (iv) above).

5. The signal is flawed (as set out in Q1 (v) above).

6. The DTI Decision on BETTA (as set out in Q1 (vi) above).

7. The environmental impact (as set out in Q1 (vii) above).

8. The inconsistency of locational signal (as set out in Q1 (viii) above).

9. It has a disproportionate impact on classes of participants who can not respond to signals: demand, renewables, combined heat and power (CHP) plant and nuclear generators.

10. The socialisation of losses within zones would give inappropriate market entry/exit signals.

11. The negative impact on investment in renewables due to increased cost of investment in unfavourable zones.

12. It discriminates between new and existing generators.

> (d) Promoting efficiency in the implementation and administration of the balancing and settlement arrangements.

We believe that P229 Alternative would not better facilitate the achievement of Objective (d) when compared with the baseline.

The reasons for this include:-

1. There is no defect in the Code (as we set out under Q1 'Defect' above).

2. The high cost of implementation, coupled with the increased cost of administering the balancing and settlement arrangements, compared with the baseline.

3. Adds additional complexity.

Therefore, in conclusion, we believe that the P229 Alternative should be rejected.

Question 3:	**Response:**
Would the Alternative Modification P229 help to achieve of the Applicable BSC Objectives when compared to the Proposed Modification?	Yes
Please explain the reason(s) for your view and state which Applicable BSC Objective(s) your views are based on:	**Page Ref:** 10
Insert rationale here	

Whilst we do not support, in principle, a seasonal zonal losses scheme (in either the form proposed with P229 Original or the Alternative) we can see, when compared with the Original, that the Alternative would better achieve the Applicable Objectives.

As we have noted in our answer to Q1 above (under 'Defect') P229 Original would see, for example, generators in the south of Britain receiving a windfall gain (in the form of their settlement account being credited with additional electricity as if they had generated that electricity when, in fact, they had not) for doing nothing.

However, P229 Alternative removes this windfall gain to southern generation (and the associated loss to northern generation). Previous work in this area has shown that without the scaling (that P229 Alternative introduces) there is a danger that the total amount of funds reallocated (via the P229 Original) will bear little relationship to the actual outturn costs of variable transmission losses that occur from the despatching of generation by National Grid.

This would introduce a competitive disadvantage into the market place and run counter to the achievement of the Applicable Objective (c) as well as, by virtue of introducing discrimination, running counter to Applicable Objective (a).

It is also clear that any scheme that transfers funds from northern generation to southern generation in excess of the cost of variable transmission losses is, in itself, a cross subsidy.

Furthermore, a major anomaly arises with P229 Original in that it creates negative seasonal zonal loss factors. As it is physically impossible to create energy from nothing it is inappropriate to consider a proposal (P229 Original) which has negative seasonal zonal loss factors.

With the P229 Alternative this anomaly recedes.

Removing this anomaly and the associated windfall gain to southern generation (as the P229 Alternative does) better achieves in particular, Applicable Objective (c); when compared to the Original; by promoting effective competition in the generation and supply

of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity.

Therefore, in conclusion, we believe that P229 Alternative is better that P229 Original, but not better than baseline.

Question 4:	**Response:**
Are there alternative solutions that the Modification Group has not identified which they should consider?	No

Please explain the reason(s) for your view:	**Page Ref:** 10
Insert rationale here	

We do not believe that there are alternative solutions; which better meet the Applicable Objectives when compared with the baseline; that the Modification Group has not identified which they should consider.

Question 5:	**Response:**
Do you support the implementation approach described in the consultation document?	No

Please explain the reason(s) for your view:	**Page Ref:** 5
Insert rationale here	

We do not support a within year change in the settlement arrangements, with the associated negative impact on consumers, that would arise if either P229 Original or Alternative were to be implemented in October.

Therefore we do not support the first proposed implementation date of 1st October 2011 (if an Authority decision is received by 30th September 2010). As has previously been set out (with both the P75/82 and P198/200/203/204 changes) the TLMs need to be provided in time for the April customer contracting round. Therefore we can only support the second proposed implementation date of 1st April 2012 (if an Authority decision is received by 30th March 2011).

The reason for this is that it will allow BSC Parties and customers to take into account the effect of TLFs in their contracts. We note that many industrial and commercial (and increasingly domestic) customers sign one year contracts. Introducing a seasonal zonal transmission losses prior to April 2012 would distort the market place as these customers would find their expected costs being altered. We believe that a more equitable solution would be to set an appropriate implementation date of April 2012. This would allow sufficient lead time for market participants and customers to be aware of them in their pricing decisions.

We agree that Seasonal TLFs must be made available to BSC Parties at least 3 months before being used in Settlement. As has been noted, most BSC Parties (including ourselves) require 6-9 months to implement P229. Therefore an implementation lead time of 12 months in total is appropriate to allow participants to complete their own implementation activities prior to receiving the first TLFs.

Furthermore, this twelve month implementation timescale for P229 would allow sufficient time for the associated, and wholly necessary, Elexon related activities to be undertaken, such as:-

i) TLFA procurement and Load Flow Model Reviewer appointment;
ii) establishment and adoption of the Load Flow Model by the TLFA;
iii) development of TLFA systems, processes and documentation;
iv) calculation of Adjusted Seasonal Zonal TLFs; and
v) the publication of Adjusted Seasonal Zonal TLFs to Parties 3 months before they are used in Settlement.

Question 6:	**Response:**
Do you have any views on the analysis undertaken on behalf of the Group or the Group's assessment of P229? For instance with respect to environmental impact, security of supply, offshore wind development (e.g. offshore Round 3) and investment in generation or the Transmission Systems. Have these views had any impact on your consideration of P229?	Yes
Please explain the reason(s) for your view:	**Page Ref:** 14
Insert rationale here	

We have some views on the analysis undertaken on behalf of the Group.

(i) Round 3 Offshore wind

In addition to the flaws in the CBA noted under Q1 (iv) above (with respect to the exceedingly low WACC level used within the CBA) we believe that the non inclusion of the Round 3 Offshore wind farm developments within the CBA is a fatal flaw in this work.

We understand that the inclusion of the 25GW of Round 3 Offshore wind farm developments within the CBA analysis was identified as early as January 2009. This flaw (in not including this sizable quantity of generation - circa one third of the GB installed generation capacity - within the CBA) was, we understand, highlighted on a number of subsequent occasions as work on the CBA progressed.

Looking at the CBA Report tables 6-4 (pg 103) and 6-5 (pg 104) along with the comments in 7.4.1. (pgs 199-201) indicate that not only has all the 25GW of Round 3 Offshore wind farm developments not been modelled within the CBA analysis, neither has 2GW of the (8GW) Round 1 and 2 offshore wind capacity.

Instead the CBA modelling has only used a total of circa 6GW, by 2020, of offshore wind generation; whilst the Government, Ofgem, the Crown Estate and National Grid are talking in terms of a total of 33GW of offshore wind being connected to the transmission system by that date (8GW via Rounds 1 & 2 plus 25GW via Round 3).

If the difference was relatively minor then it might be understandable as to why it had not been included in the CBA analysis. However, the CBA Report has only modelled circa 20% of what the Government, Ofgem, the Crown Estate, National Grid et al are suggesting will be the quantity of offshore wind farm developments by 2020.

See, for example, the DECC press release from January 2009[4] and in particular the quote from the Energy Minister (Similar comments were made by the CEO of Ofgem and the Director of the Marine Estate at the Crown Estate in the same press release) in that statement:- .

> "An extra 25GW of offshore wind energy could be accommodated around the UK's shores, in addition to the 8GW already built or planned, Energy Minister Lord Hunt announced today." .

This means not only will the location of this 'additional' 27GW[5] of offshore wind generation not have been modelled (with the associated impacts - 'good' and 'bad' - on the volume of variable transmission losses) but also neither will the associated (MWh) output.

Furthermore, the output of this 'additional' 27GW of offshore wind generation has instead had to be 'replaced' (in the CBA modelling) by other generation (coal? gas? oil? nuclear? etc.,) in other locations across GB (rather than where the Crown Estates / NG said, in their December 2008 report, the offshore wind generation capacity could be) resulting in significantly different volumes of variable transmission losses (to be allocated, via seasonal zonal losses, under P229) and environmental benefits etc., being reported in the CBA.

Thus a 'double whammy' occurs.

It ***excludes*** from the CBA analysis:-

> a) what is believed (by the Crown Estates – who allocate the sea bed locations for offshore windfarms – and National Grid – who set out the grid connection sites) to be the location and the associated volume of variable transmission losses (to be allocated, via seasonal zonal losses, under P229) of this 27GW of offshore wind generation; and
>
> b) the environmental (CO2, SOx, NOx etc.,) benefits from that output 27GW of offshore wind generation.

It ***includes*** in the CBA analysis:-

> a) non wind generation at various locations across GB, which impacts on the volume of variable transmission losses (to be allocated, via seasonal zonal losses, under P229) whose output is equivalent to that produced by the 27GW of offshore wind generation; and
>
> b) the environmental (CO2, SOx, NOx etc.,) disbenefits from that output (which arises from it being non renewable plant, such as coal, gas, oil, nuclear etc., rather than wind generation).

This is a major deficiency in the CBA analysis. As a consequence it has detrimentally hindered our ability to consider the effects of P229.

Finally, to put matters into context, the CBA modelling is based on circa 6GW of offshore wind by 2020. The announcement[6] by the Crown Estates on 8th January 2010, with respect to

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[4] http://www.decc.gov.uk/en/content/cms/news/pn065/pn065.aspx

[5] 6GW modelled in the CBA out of 33GW in total leaving a 27GW shortfall.

[6] http://www.thecrownestate.co.uk/newscontent/92-r3-developers.htm

Round 3 Offshore wind farm developments, coupled with their previous announcements means that the Scottish and Southern Energy's share of offshore capacity, in its own right, exceeds this 6GW figure used in the CBA.

This was outlined in our announcement to the Stock Market on the 8th January 2010 where we stated that:-

> "SSE's capacity share of the two proposed [Round 3] wind farm developments totals around 4GW."
>
> "During 2009, SSE was awarded exclusive rights from The Crown Estate to develop offshore wind farms at locations in Scottish territorial waters (including two where it is in partnership with other specialist developers) with a total capacity of over 2GW."

To this capacity must be added the other offshore wind farm capacity we have (for example, from Rounds 1 & 2) such as our share of the 500MW Greater Gabbard project.

(ii) Disproportionate impact with treatment of 132kV

We have been mindful of the report commissioned by the DTI in June 2003 into "The Impact of Average Zonal Transmission Losses Applied throughout Great Britain" (written for the DTI by Oxera) which states (pg iv) that:-

> "The high degree of scaling for generation output in the two Scottish regions is reflective of the inclusion of 132 kV lines as part of the transmission network in Scotland* as well as the geographical distribution of generation and demand in Great Britain."

*"132 kV lines are classified as distribution in England and Wales but as transmission lines in Scotland. Losses in these [132 kV] lines tend to be higher than in higher voltage lines, and will affect TLFs in Scotland but not in England and Wales."

We believe that 132 kV should be excluded from the application of seasonal zonal losses if P229 (Original or Alternative) is implemented. This will result in a consistent approach to losses from 132 kV.

If this does not happen then we believe that P229 would have a disproportionate impact on certain classes of BSC Parties.

(iii) Security of supply

An efficient and effective electrical transmission system requires that generation is located throughout the network for reasons of (electrical) system stability. If P229 were to be approved then the economics of generation plant located in northern Britain would be adversely affected.

This, in turn, could lead to such plants being made uneconomic which would advance the date of their closure with a consequential effect on security of electricity supply.

Furthermore, if this were to happen with respect, in particular, to northern Scotland, then National Grid may have to be more reliant on imports which in certain circumstances (such as adverse weather conditions) might seriously jeopardised the security of electricity supplies.

Question 7:	**Response:**
Do you have any views on the Group's assessment of the impact of P229 on the environment and the analysis of environmental impact in the P229 CBA? For instance any other environmental impacts the Group should consider or the analysis of emissions contained in the P229 CBA (i.e. the approach to CO_2, NOx/SOx). Have these views had any impact on your consideration of P229?	Yes
Please explain the reason(s) for your view:	**Page Ref:** 14
Insert rationale here	

For the reasons we have outlined above, we believe that, in particular, there are fatal flaws in the CBA analysis with respect to the environmental impact associated with P229.

Question 8:	**Response:**
Do you have any further comments on P229?	Yes
Please give your rationale:	**Page Ref:** n/a
Insert rationale here	

We understand that in the Modification Group deliberations that there was some suggestion that the potential introduction of a zonal transmission losses arrangement was identified at the time of privatisation.

However, we note that there was no reference in the Scottish Hydro Electric or Scottish Power prospectuses to zonal transmission losses. Accordingly, the argument that the intention to introduce zonal transmission losses has been known for some considerable time would not apply to Scotland.

Question 9 (supplementary question):	**Response:**
Is there anything further you believe the P229 Group should consider regarding the potential interaction of HVDC with the Load Flow Model in the future?	Yes
Please give your rationale:	**Page Ref:** n/a
Insert rationale here	

- Recommendation 1 – HVDC circuits should be excluded from the Load Flow Model (because the nature of the power flows on DC systems makes it impractical for the TLFA to calculate them).

We do not agree with this recommendation. It is clear from the work that the ENSG (which has the widespread support of industry, Government and Ofgem)

and from the front page lead story in the Times[7] that the effect of HVDC will be significant, if not substantial, in terms of the impact on the use of the transmission system which must, therefore impact of the volumes of variable losses to be allocated. Excluding the HVDC circuits from the Load Flow Model is therefore wrong.

We note the comments:-

> "….the flow on a DC circuit is determined by an operational decision. For example, somebody sets the flow to be 975MW. This could be due to system operation reasons or due to trading requirements or due to combination of these. This level of flow can be reset very frequently and even the resetting automated, but still, in principle, the flow is fixed and maintained fixed (until reset)."

We further note that the France-England interconnector is also a DC circuit, yet is included in the Load Flow Model. Discriminating between DC circuits in the way that is proposed, with this recommendation, is not justified.

Furthermore, going forward, given the increasing use of HVDC circuits (within the GB transmission system) to enter into a new regime (as a result of P229) knowing this on the basis that now (and in the future) such "HVDC circuits should be excluded from the Load Flow Model" is wholly inappropriate.

- Recommendation 2 – For the purposes of the Load Flow Model, any flow between the AC system and an HVDC circuit should be treated as an additional power flow (a 'DC Nodal power flow') at the Node on the AC system that represents the connection point.

For this recommendation to be taken forward, then a similar approach should be applied to the flows on the France-England interconnector DC circuits to avoid discriminating between flows on DC circuits.

- Recommendation 3 – Losses on HVDC circuits will be socialised through the TLMO mechanism (except where the HVDC circuit is serving specific, clearly identifiable users – see Recommendation 4).

For this recommendation to be taken forward, then a similar approach should be applied to the flows on the France-England interconnector DC circuits to avoid discriminating between flows on DC circuits.

- Recommendation 4 – If an HVDC circuit is specific to one or more users (e.g. a circuit connecting one or more offshore wind farms to shore), then the losses on that HVDC circuit will be incorporated into the Nodal TLF values for that user or users, and hence into the appropriate Zonal TLF. Note that this adjustment of Nodal TLF values will have to be done outside the Load Flow Model proper, using data on the actual measured HVDC losses in each Sample Settlement Period.

For this recommendation to be taken forward, then a similar approach should be applied to the flows on the France-England interconnector DC circuits to avoid discriminating between flows on DC circuits.

- Recommendation 5 – When averaging Nodal TLF values to derive a Zonal TLF, DC Nodal power flows will be taken into account if they represent genuine demand or generation connected to the HVDC system, but not if they are internal to the Transmission System.

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[7] Times 8th January 2010 "National Grid threat to Scottish renewables".

For this recommendation to be taken forward, then a similar approach should be applied to the flows on the France-England interconnector DC circuits to avoid discriminating between flows on DC circuits.

• Recommendation 6 – In order to implement Recommendations 2 and 4, settlement metering should be installed at each point of connection between the AC Transmission System and the HVDC Transmission System.

We agree with the suggestion to install settlement metering at each point of connection between the AC Transmission System and the HVDC Transmission System.

• Recommendation 7 – The P229 solution does not need to include drafting for an 'HVDC sandwich' i.e. two separate parts of the AC Transmission Systems joined only by HVDC circuits.

We believe that had the Round 3 Offshore wind farm developments been included within the analysis (see our comments under Q6 above) that the effects of the 'HVDC sandwich' could have been taken into effect.

31st July 2007 – Response to the Authority on the Zonal Transmission Losses 'minded to' decision

Zonal Transmission Losses – The Authority's 'minded-to' decisions

Thank you for the opportunity to respond to the Authority's 'minded-to' decisions.

We have provided our answers to the questions posed in the consultation in the attached Annex. However in addition to these, we would like to highlight the following.

We continue to believe that not one of the Modifications P198 Original, P198 Alternative, P200 Original, P200 Alternative, P203 or P204 should be implemented. We firmly believe that none of the Modifications are better than the existing uniform allocation of losses and we strongly advocate that Ofgem ratify the Modification Panel's recommendations and reject all of the proposed Modifications and alternatives.

The 'minded-to' decision to approve P203 is based on Ofgem's belief that P203 will:

- promote efficiency by reducing losses;
- benefit the environment by reducing carbon emissions; and,
- have no material adverse impact on the development of renewable generation.

We do not believe that the case for approval has been conclusively made, particularly in view of the significant transfers of funds that will accompany the implementation of the Modification nor that approval is a proportionate response to remedy the alleged failing. Ofgem's conclusions are based on unsound modelling and evidence. It is also clear that the industry does not support these Modifications. Ultimately, we do not believe that approval will better meet the BSC objectives nor Ofgem's primary and secondary objectives towards consumers and the environment. We expand on these points below.

Lack of Industry Support

In addition to the Modification Group's rejection and the BSC Panel's rejection of the Modifications, it is clear from the responses to the RIA consultation that there is no

significant support from industry for a change to the existing uniform loss arrangements. According to Ofgem's assessment, of the 25 responses the best supported was P203, with 2 votes, one of these being the proposer RWE. Energywatch do not believe that change will benefit consumers and have not supported change. Neither have other bodies such as Highlands and Islands Enterprise and Unison. In addition, there is no support from the renewable energy associations BWEA and SRF. With such a body of support for uniform losses, it is clearly incumbent on Ofgem to provide overwhelming evidence that that there is a significant benefit from making a change. We do not believe that Ofgem have i) provided such overwhelming evidence; nor ii) presented robust modelling supporting the conclusions; nor iii) shown that the benefits significantly outweigh the large transfer of funds that will occur with the consequent effect this will have on participants.

Ofgem's Modelling and Portrayal of Evidence

Ofgem put forward that there will be a reduction in losses associated with short-term dispatch and longer-term re-location. The level of reduction is calculated based on Oxera's modelling.

Short-term

The short-term year-on-year benefits are recognised by both Ofgem and Oxera as being volatile, *a "function of the snapshot estimation used in the analysis"*, that is, the analysis is based on only three snapshots of data out of a whole year. The savings due to reduced losses for the Central scenario are estimated to change from £1.6m for the year 2008/09 to £12m in 2009/10 back to £1.9m in 2010/11. This variation is exhibited across the Modifications, and is justified by Ofgem as being a result of feedback from participants behaviour. However, if participants were to react to the zonal loss signals, it would be expected that there would be a rational reaction that would show as a linear reduction in losses. We believe the volatility shown is simply a function of the lack of robustness of the model. We do not believe that such significant Modification decisions should rely on such weak modelling.

As importantly, this level of benefit needs to be put into the context of the overall energy on the system, the level of losses, and the transfer of funds that will take place. For this Central scenario, the estimated savings (e.g. £1.6m in 2008/09) need to be set alongside the value of the energy market, some £13.1bn, the cost of losses of £233m and the swing in funds from Northern generators to Southern generators, and Southern customers to Northern customers in total of some £353m. Even if the level of saving was to be believed, in the context of the market and the level of losses, the approval of the Modifications (P198 and P203 in particular) and their effect on the transfer of funds of some £353m to create such a saving, is wholly disproportionate.

Medium-term

In the medium-term it is recognised by both Ofgem and Oxera that new plant locations are effectively already fixed: Oxera - *"in the medium term (i.e. until the end of the study period), it [zonal transmission losses] is unlikely to have a significant impact on any new developments"*. There is also the likelihood in both the medium and longer-term that existing sites will be re-used because of the infrastructure already in place. Indeed, the proposer of both P198 and P203, RWE, announced in May 2007, their intention to build a new 2,400 MW coal fired power station at their existing Blyth site in Northern England. This is in a zone where zonal losses would be a dis-benefit. According to their press release, the site is in an *"ideal location"*. It is clear that RWE's actions do not reflect their arguments in their RIA submission that the implementation of zonal losses will *"lead to more efficient and economic short-term plant generation decisions and long-term plant investment decisions"*.

Long-term

Ofgem make several references to the long-term benefits of the introduction of zonal losses. Reference is made to an annual benefit of between £1m and £20m. This value comes from the Oxera report. However the context of the Oxera report is not properly represented. Oxera note that the analysis and estimation of the savings is speculative – *"As discussed, the impact of zonal loss charging on the long-run location of generation is subject to a large degree of uncertainty. Consequently, this section presents speculative scenarios that are intended to provide rough indications of the potential size of any long-run benefit under specific assumptions."* The consultation on the other hand puts forward these savings as though they will occur. Given the timescale, i.e. beyond 2015/16, the scenarios put forward are just that, scenarios, of 1 GW, 2 GW, 3 GW and 4 GW relocating from the North to the South. They are purely speculative, and cannot be relied upon to justify the implementation of zonal losses.

In justifying little impact on renewables, Ofgem put forward the argument that there are other factors that will influence the siting of renewables other than zonal losses – *"the actual impact on renewable generation would be determined by a wider range of factors than just charges for losses."* However, Ofgem do not attribute such reasoning to other types of plant, even when this has been recognised by Oxera. For example Oxera recognise that existing sites would be used because of their existing infrastructure, fuel source etc and that TNUoS will have a greater impact on locational decisions than losses. Indeed, RWE recognise such factors make Blyth their *"ideal location"* for their proposed new 2,400 MW power station. This reasoning is valid regardless of the technology; there are other factors greater than zonal losses that will affect all plant decisions. Ofgem cannot argue it both ways to suit their preferred outcome. If other factors will influence participants' actions greater than the effect of zonal losses, then implementation will not result in a change in behaviour, rather it will simply result in a funds transfer or tax on participants.

Renewables

Ofgem have provided analysis that renewable generation in the North will remain competitive against conventional thermal generation in the South following the implementation of zonal losses - *"And as a result, it would not be expected that locational loss charging arrangements would result in more environmentally efficient renewable generation being replaced by less environmentally efficient conventional generation".* A table is produced on page 18 of the consultation. However, there are two significant flaws/omissions in this analysis:

1. The cost data is based on a paper published in March 2003 (relying on data prior to that year);
2. No recognition is given to the potential impact on large-scale hydro generation in the North that does not receive support through the Renewables Obligation.

We have reproduced the consultation table below using data provided as part of the DTI's consultation on Reform of the Renewables Obligation, May 2007 (E&Y report: Impact of banding the Renewables Obligation – Costs of electricity production). Both the market and the costs of generation have changed significantly since circa 2003. This new table shows categories of onshore wind (as described in the E&Y report), large- and small-scale wind generation in low and high wind speed conditions. These updated costs show that onshore wind <u>will</u> be affected by the introduction of zonal losses, as the 'South CCGT' cost will appear somewhere along the cost continuum between large-scale high wind speeds and small-scale low wind speeds. On Ofgem's analysis with updated costs, there will definitely be an impact on Northern onshore wind generation.

There is currently some 640 MW of large-scale hydro capacity installed in the North of Scotland owned by SSE Generation Ltd. The annual average output of this generation is some 1,500 GWhs per year. Whilst this generation counts towards the Government's renewables targets this generation does not receive support under the Renewables Obligation. The introduction of zonal losses could have an impact on the future of this generation, yet it would appear that Ofgem have not considered this impact. Ofgem's estimate of the environmental benefit of zonal losses is based around an annual peak level of some 559 GWhs of losses savings under P203. This level can be compared with the 1,500 GWhs of Northern large-scale hydro generation output that could be put at risk because of the implementation of zonal losses, to be replaced by a 'South CCGT'. This needs to be factored into Ofgem's analysis of the environmental benefits (if any) of losses savings before coming to a conclusion that renewable generation will not be replaced by less environmentally efficient conventional generation.

In summary, the evidence on short-term benefits is based on modelling that outturns volatile year-on-year loss savings due to only 3 snapshots being taken from a whole year. The level of estimated savings is insignificant given the level of funds transfer that will occur and the effect this will have on participants being unable to undertake the course of their licensed business. The effect is disproportionate. There can be no medium-term or long-term benefits ascribed to zonal losses. By Ofgem's analysis and updated costs, there <u>will</u> be an impact on Northern renewables. In addition, the potential impact on existing non-ROCable large-scale hydro generation plant has not been given consideration in Ofgem's analysis.

Disproportionate Response

As noted above, we do not believe that Modifications that will transfer some £353m between participants to make an estimated annual saving as potentially as low as £1.6m can be a proportionate response. In addition, there is likely to be a significant impact on North of Scotland generation, including hydro generation, belonging to SSE Generation Ltd. Ofgem's discussion on proportionality puts forward a definition that *"the proposed action taken should not exceed that which is necessary to achieve a stated objective".* However, Ofgem's consideration of this only extends to the costs of the implementation of the Modification without considering the impact the Modification would have on participants. In the case of SSE Generation Ltd, the annual cost is likely to be of the order of £5m.

In their conclusions on the Modifications, Ofgem make the comment that *"under the existing arrangements the fact that Scottish consumers are in close proximity to generation stations is not reflected in the charges they pay for losses."* This statement recognises that a benefit can be properly attributed to demand and generation that are in close proximity, e.g. North of Scotland demand and generation. This would suggest that a solution to the perceived problem of uniform losses would be to net-off demand and generation and apply loss factors to only the residual element in a zone. This could be a viable alternative that has not been assessed, and could be one that better meets the stated objective and so could lead to a more proportionate response than the existing Modifications. Making a decision on zonal losses without assessing such an option would fail Ofgem's own definition of proportionality.

Significantly, we believe that Ofgem has failed to comply with its obligations under the IME Directive and the general principles of Community law to ensure that terms, conditions, rules, mechanisms and methodologies are proportionate and applied in a non-discriminatory manner.

We believe that implementation of any of the zonal loss Modifications would be a disproportionate response to the perceived problem of uniform losses, particularly given the impact on participants through the transfer of funds and doubt on whether all relevant alternatives have been taken into account. This would be a breach of the IME Directive and the general principles of Community law.

	Total generation Cost in 2006/07	ROC	Generation Cost with ROC	Maximum TNUoS differential See Note 2	Convert to energy cost	Maximum average TLF differential	Convert to energy cost	Total generation cost with ROC and network charges	Pre zonal loss economics
	£/MWh	£/MWh	£/MWh	£/kW	£/MWh		£/MWh	£/MWh	£/MWh
South CCGT	42.00	0.00	42.00	-8.57	-1.22	-2%	-0.84	39.94	40.78
North offshore wind	86.00	-35.00	51.00	0.00	0.00	3%	1.26	52.26	51.00
North onshore Large wind Hi wind/spd	62.00	-35.00	27.00	0.00	0.00	3%	1.26	28.26	27.00
North onshore Large wind Low wind/spd	72.00	-35.00	37.00	0.00	0.00	3%	1.26	38.26	37.00
North onshore Small wind Hi wind/spd	74.00	-35.00	39.00	0.00	0.00	3%	1.26	40.26	39.00
North onshore Small wind Low wind/spd	86.00	-35.00	51.00	0.00	0.00	3%	1.26	52.26	51.00
Notes:									
1. Revised using current energy and renewables figures - ref E&Y report to DTI, 2007; CCGT cost from Redpoint study, 2007.									
2. Average TNUoS costs are already included in E&Y costs and have been excluded in their entirety from these calculations.									

Response to RIA – Outstanding Issues

In addition to the above, we believe that the following points raised by us in the previous RIA consultation have not been fully addressed.

1. As noted above, we believe that the implementation of zonal losses will not provide a signal that generation can credibly be expected to react to, particularly taken alongside the often contradictory signals given by TNUoS and gas network charges. There is significant inconsistency of zonal signals between TNUoS and zonal losses. In particular, there are contradictions between TNUoS and zonal losses in the North of Scotland and across TNUoS generation zones 14 and 15. In these zones, participants are faced with TNUoS signals and losses signals in opposite directions. We continue to believe that the effect of TNUoS signals on top of losses signals is punitive and unnecessary, despite Ofgem's response on the additive effect of the two signals. The level of the zonal TNUoS signal dominates that provided by zonal losses. The disconnected effect of the two signals can be seen to stem from the separate governance of the two arrangements, the BSC and the CUSC. Zonal losses under the BSC should not be implemented without reviewing TNUoS charging including consideration of the relevant governance arrangements of both. Despite Ofgem's response on the additive effect of the two signals, we believe that Ofgem have completely failed to address the separate point on contradictory signals between TNUoS and losses and need to reconsider the overall effect of the two including their governance arrangements.

2. If implemented, the loss factors that will be applied will be based on ex-ante data that will be more than a year out of date; the aggregation of nodes into zones and the aggregation of half-hourly data to seasonal or annual. The combination of these effects means that the resulting loss factors cannot be cost-reflective. We do not believe that Ofgem have fully addressed this in their analysis.

3. Some 67% of NGET's short-term actions in the Balancing Mechanism are related to system/network actions over which generators have no control. These actions will introduce a penal cross subsidy through zonal losses of more significance than any alleged cross subsidy that exists with the present uniform arrangements. We believe that this is inappropriate and that Ofgem have yet to address this point.

4. Furthermore, there is a large set of plant that will be immune to any zonal losses signal in dispatch timescales, be that because of: their technology; their fuel source; to recoup investment in new plant or equipment; or because they are committed through contracts. In the long-term, the pattern of generation is already set. Overall, we believe that there will be little change in the pattern of generation as a result of the introduction of zonal loss factors. However, zonal losses will inevitably have an impact on the economics of marginal projects where there is not the possibility of substitution. As noted above, some of these projects will be renewables in the North. This could result in projects not going ahead or could encourage plant to close earlier than is efficient. This risk is a reality and as such the introduction of zonal losses increases regulatory risk and could undermine investment. Again, we do not believe that Ofgem have fully addressed these points.

5. We have commented previously and have added through the comments above, that the environmental benefits have been misrepresented.

On generation:

- We do not believe that there will be a switch from coal to gas as the price differential between the fuels is much larger than the effect of zonal losses;
- Instead, zonal losses will penalise northern renewables in favour of more carbon-intensive Southern generation;
- In addition, the Government is striving to meet its renewable targets and is subsidising wind generation in the North through the Renewables Obligation. Zonal losses will remove some of that subsidy and provide it to (mainly thermal) generators in the South.

On demand:

- The inclusion of negative loss factors for demand encourages increased energy use in the North.
-

We do not believe Ofgem can meet their environmental obligations nor that Ofgem have fully addressed these points.

6. We continue to believe that zonal losses introduces a totally unnecessary regulatory risk, one which existing power stations (or consumers) are unable practically to respond to. It introduces a volatile year-on-year charge that will disappear if a generator tries to react to it. The calculation of loss factors is not transparent or replicable by participants. This instability and lack of transparency in the zonal losses signal can only increase risk and deter investment. In addition, we continue to believe that the statement by the Secretary of State, along with the actions of both Ofgem and Government, have provided clear strong signals of intent that uniform losses would remain post BETTA.

7. Ofgem continue to reference benefits from the demand side despite recognising in the RIA consultation that *"in the short term, changes to the volume of losses are likely to be relatively small as a consequence of any of the proposals being implemented"*. We continue to believe that there will be no material benefit from the demand side. Indeed, as noted above,

negative demand side losses will only encourage greater energy use in the North, harming environmental objectives. This, in particular, has not been addressed by Ofgem.

8. Whilst acknowledging the point, Ofgem have not addressed our previous comments on zonal losses taking GB further away from EU policy, cutting across efforts to encourage greater cross-border trading. In particular, we believe that Ofgem have failed to take account of the obligations contained in Article 4 of the Cross-Border Exchanges in Energy Regulation, that any such charges should not be *"distance related"*. The impact on cross border trading needs to be taken account of in the overall assessment of the benefits of zonal losses. More generally, Ofgem have failed to clarify whether it is mandated under EU obligations to implement zonal loss charging or whether the existing system of uniform losses is prohibited. We believe that this failure to provide analysis on whether Ofgem has met its obligations under EU regulations relating to cross-border trading, the IME Directive and the Renewables Directive means that Ofgem cannot reach a conclusion on the implementation of zonal loss charging arrangements.

9. The network needs generation spread across it from both an electrical and a security & diversity of supply point of view. In particular there is a need for generation in Scotland. The potential dependency on imports from England & Wales was highlighted in January/February 2007 when the coal conveyer belt system at Longannet power station failed. Such geographical diversification is also highlighted by the recent flooding in England affecting Grid substations. We highlighted that the Scottish 132kV transmission network is treated differently from 132kV networks in England and Wales. The inclusion of these 132 circuits increases the losses that are allocated on a locational basis and hence to participants in Scotland. This results in discriminatory treatment of Scottish generation with regards to zonal losses. This discrimination is further exacerbated when it is considered that the 132kV network in Scotland connects generation closely to demand (this is particularly the case in relation to Northern Scotland hydro and wind generation). As noted above, this close proximity of demand and generation would appear to be a desired outcome from the implementation of zonal losses for Ofgem, yet clearly the application of the Modifications would disproportionately load costs onto Northern Scotland 132kV generation that is close to demand. Ofgem have failed to address these points.

Our response to the questions posed by Ofgem follows. Please do not hesitate to give me a call if you wish to further discuss any aspect of this letter and Annex.

Annex 1 – Response to Questions

CHAPTER: Two

Question 1: *Do respondents consider that we have appropriately summarised the key themes of the responses to Ofgem's impact assessment on zonal losses?*

No. As noted above, we believe that a number of aspects of our response to the RIA consultation have not been fully addressed. Some could be listed as themes that have not been addressed, others as aspects of themes that have not been addressed. Regardless of their title, we believe that there are a number of points that have still not been fully addressed by Ofgem in formulating the 'minded-to' decision. These points are listed above as points 1 to 9.

Question 2: *Are there any other themes which respondents considered should have been highlighted?*

Yes. As noted above we believe that a number of points remain outstanding, points 1 to 9 above.

CHAPTER: Three

Question 1: *Do respondents consider that the additional analysis we have provided addresses the concerns expressed by respondents to the impact assessment regarding analytical gaps in the impact assessment?*

No. We do not believe that Ofgem have provided analysis to counter many of the points made in points 1 to 9 above. For example, the contradiction between TNUoS and losses; the aggregation to zones and to seasons/years; the influence of NGET's actions to resolve network issues; the increase in consumption in the North by allowing negative demand-side zonal loss factors and its impact on the environment; the impact on cross-border trading, the IME and Renewables Directives; the impact on Scottish security of supply. Where additional analysis has been provided, e.g. on the impact on renewables in page 18, this has relied on out-of-date data and as a consequence the conclusions cannot be relied upon. This additional analysis has also failed to give consideration to the impact on large-scale non-ROCable generation. Fundamentally however, we do not believe that the Oxera work based on snapshot analysis can be relied upon; the output is recognised by Ofgem as being volatile year-on-year and the alleged benefits can be seen to be minimal in comparison with the size of the market, the level of losses, the transfer of funds and the impact this will have on participants.

Question 2: *Do respondents consider that there are any remaining aspects on the modification proposals that require to be addressed analytically?*

Yes. We believe that Ofgem need to address the points we have made in our response above.

Question 3: *Do respondents have any additional analysis in relation to the impact of the modification proposals that they wish to bring to the attention of the Authority?*

Yes. We believe that Ofgem have relied on out-of-date data in relation to the impact on renewables. We have provided more up-to-date data that results in an alternative conclusion.

CHAPTER: Four

Question 1: *Do respondents consider that the modification proposals have been appropriately assessed against the applicable BSC objectives?*

No. We do not believe that a case has been made that the implementation of P203 will promote efficiency by reducing losses. We do not believe that Oxera's analysis can be relied upon. Even if it was to be believed, the benefits are estimated to be volatile and minimal. In addition, there is a large set of plant that will be immune to any zonal losses signal in dispatch timescales be that because of their technology, fuel source contracts or to make a contribution towards their investment. The medium-term re-location decisions are already made so there can be no benefit attributed to this. The long-term benefits have been misrepresented as being factual whereas they are

labelled as speculative by Oxera. Furthermore, it is recognised that medium- and long-term locational decisions are influenced significantly more by TNUoS than losses and by many other factors such as infrastructure, fuel sources, etc as evidenced by RWE's proposals for their Blyth site. Ofgem recognise this in relation to renewables, but not in relation to other plant technologies. This position is untenable. Overall, the effect is that there will be little if any benefit from the introduction of zonal losses.

Significantly however, the proportionality of the implementation has not been appropriately assessed and will breach the IME Directive requirements. The benefits (if any) will be minimal in comparison with the size of the market, the level of losses, the transfer of funds and the impact this will have on participants.

Ofgem have concluded that objectives have been met "on balance". This suggests that in their view, the evidence was finely balanced. However, given the significant impact on participants and the overall minimal benefit (if any) that would accrue, it would be expected that the evidence would be overwhelming before a decision was taken to change. It should be incumbent on Ofgem to seek and then make available such evidence. It is clear from the response to the RIA consultation that the market is not convinced that Ofgem have provided that evidence nor that the change should be made.

Question 2: *Do respondents consider that there are any aspects of the modification proposals that have not been adequately assessed in relation to the applicable BSC objectives?*

We do not believe that the proportionality of the effect of zonal losses has been fully factored into Ofgem's assessment against the applicable objectives. Ofgem have concluded that objectives have been met "on balance". This suggests that in their view, the evidence was finely balanced. However, given the significant impact on participants and the overall minimal benefit (if any) that would accrue, it would be expected that the evidence would be overwhelming before a decision was taken to change. It should be incumbent on Ofgem to seek and then make available such evidence. It is clear from the response to the RIA consultation that the market is not convinced of the merit of the change.

As noted above we believe that there are still a number of issues from our previous RIA response that have not been fully addressed. Points 1 to 9 above need assessed both individually and collectively.

CHAPTER: Five

Question 1: *Do respondents consider that the Authority has appropriately assessed the modification proposals against the applicable BSC objectives when considered collectively?*

No. We do not believe that the Modification proposals have been appropriately assessed either individually or collectively. In that regard, just as above, we do not believe that a case has been made that the implementation of P203 will promote efficiency by reducing losses. We do not believe that Oxera's analysis can be relied upon. Even if it was to be believed, the benefits are estimated to be volatile and minimal. In addition, there is a large set of plant that will be immune to any zonal losses signal in dispatch timescales be that because of their technology, fuel source

contracts or to make a contribution towards their investment. The medium-term re-location decisions are already made so there can be no benefit attributed to this. The long-term benefits have been misrepresented as being factual whereas they are labelled as speculative by Oxera. Furthermore, it is recognised that medium- and long-term locational decisions are influenced significantly more by TNUoS than losses and by many other factors such as infrastructure fuel sources etc as evidenced by RWE's proposals for their Blyth site. Ofgem recognise this in relation to renewables, but not in relation to other plant technologies. This position is untenable. Overall, the effect is that there will be little if any benefit from the introduction of zonal losses.

Significantly however, the proportionality of the implementation has not been appropriately assessed and will breach the IME Directive requirements. The benefits (if any) will be minimal in comparison with the size of the market, the level of losses, the transfer of funds and the impact this will have on participants.

Ofgem have concluded that objectives have been met "on balance". This suggests that in their view, the evidence was finely balanced. However, given the significant impact on participants and the overall minimal benefit (if any) that would accrue, it would be expected that the evidence would be overwhelming before a decision was taken to change. It should be incumbent on Ofgem to seek such evidence. It is clear from the response to the RIA consultation that the market is not convinced that Ofgem have provided that evidence nor that the change should be made.

Question 2: *Do respondents consider that there are any aspects on the modification proposals that have not been adequately assessed in relation to the applicable BSC objectives when considered collectively*?

We do not believe that the proportionality of the effect of zonal losses has been fully factored into Ofgem's assessment against the applicable objectives. Ofgem have concluded that objectives have been met "on balance". This suggests that in their view, the evidence was finely balanced. However, given the significant impact on participants and the overall minimal benefit (if any) that would accrue, it would be expected that the evidence would be overwhelming before a decision was taken to change. It should be incumbent on Ofgem to seek such evidence. It is clear from the response to the RIA consultation that the market is not convinced of the merit of the change.

As noted above we believe that there are still a number of issues from our previous RIA response that have not been fully addressed. Points 1 to 9 above need assessed both individually and collectively.

CHAPTER: Six

Question 1: *Do respondents consider that the Authority has appropriately assessed the modification proposals against its duties?*

No. We do not believe that the Modifications have been appropriately assessed in relation to the environment, security & diversity of supply, proportionality and EU obligations.

Question 2: *Do respondents consider that there are any aspects on the modification proposals that have not been adequately assessed in relation to the Authority's duties?*

In relation to the environment, the conclusions on the impact on renewables is based on out-of-date data. The impact on large-scale non-ROCable hydro and the impact on the environment of increased energy consumption in the North as a result of negative demand loss factors have not been considered. In relation to security & diversity of supply, the potential impact on Scotland's security has not been fully analysed. In relation to proportionality, whilst the system costs of implementation have been considered the significant impact on participants has not been factored in. In relation to EU obligations, we do not believe that Ofgem have fully considered their obligations in relation to cross-border trading, the IME and Renewables Directives.

CHAPTER: Seven

Question 1: *Do respondents have any comments on any of the issues set out in this chapter?*

We do not believe that consumers' interests will be improved as a result of zonal losses. Energywatch agree with this view. We also do not believe that the case has been made that there will be a benefit to the environment. Aspects such as the impact on renewables, the impact on large-scale non-ROCable hydro and the impact of increased Northern energy consumption have not been addressed. In addition, given the recognition of the benefits of demand and generation in proximity in this chapter, this would suggest a potential alternative has not been assessed. It should be incumbent on the Authority to ensure that only a proportionate solution is implemented.

CHAPTER: Eight

Question 1: *Do respondents wish to raise any specific issues regarding the Authority's minded to position?*

Given the outstanding issues from the RIA and those additional issues raised by the 'minded-to' consultation, we do not believe the 'minded to' decision is valid.

Question 2: *Do respondents have any views on both the process and timetable that are proposed for the Authority making its final decisions on the modification proposals and for publishing those decisions?*

Given the outstanding unresolved issues and our view that the current 'minded to' decision is untenable, we believe rejection of all the Modifications is the Authority's only viable course of action.

Appendix 6 - Feedback Questionnaire

Does the report adequately reflect your views? If not, why not?

No. As noted above, we believe that many of the issues we raised in the RIA have not yet been addressed.

Does the report offer a clear explanation as to why not all the views offered had been taken forward?

No.

Did the report offer a clear explanation and justification for the decision? If not, how could this information have been better presented?

No. There is a lack of transparency with regard to Ofgem's analysis. Increased transparency would assist a better understanding of Ofgem's reasoning.

Do you have any comments about the overall tone and content of the report?

If additional analysis is provided, the background to the data needs to be made transparent.

Was the report easy to read and understand, could it have been better written?

Other than the lack of transparency regarding the numerical analysis, the report was readable and understandable.

[end]