

## Responses from P200 Assessment Consultation

Consultation Issued 14 July 2006

Representations were received from the following parties

No	Company	File number	No BSC Parties Represented	No Non-Parties Represented
1.	Uskmouth Power Ltd	P200_AR_01	1	0
2.	RWE Trading GmbH	P200_AR_02	11	0
3.	Centrica	P200_AR_03	9	0
4.	Good Energy	P200_AR_04	1	0
5.	National Grid	P200_AR_05	1	0
6.	Scottish Executive	P200_AR_06	0	1
7.	Airtricity	P200_AR_07	1	0
8.	Bizzenergy	P200_AR_08	1	0
9.	E.ON UK	P200_AR_09	13	0
10.	International Power plc	P200_AR_10	4	0
11.	EDF Trading	P200_AR_11	2	0
12.	Alcan Smelting and Power UK	P200_AR_12	0	1
13.	Immingham CHP	P200_AR_13	2	0
14.	Scottish and Southern Energy	P200_AR_14	5	0
15.	EDF Energy	P200_AR_15	9	0
16.	Scottish Power	P200_AR_16	7	0
17.	Teesside Power Limited	P200_AR_17	2	0
18.	E.ON UK Energy Services Limited	P200_AR_18	0	1
19.	Gaz de France	P200_AR_19	1	0
20.	Fred. Olsen Renewables	P200_AR_20	0	1
21.	British Energy	P200_AR_21	5	0
22.	Scottish Renewables (*)	P200_AR_22	0	1

## P200 ASSESSMENT PROCEDURE CONSULTATION QUESTIONS

BSC Parties (“Parties”) and other interested parties are invited to respond to this consultation expressing their views or provide any further evidence on any of the matters contained within this document. In particular views are sought in respect of the following questions. Parties are invited to supply the rationale for their responses.

<b>Respondent:</b>	<i>Sam Murray</i>
<b>Company Name:</b>	<i>Uskmouth Power Ltd</i>
<b>No. of BSC Parties Represented</b>	<i>1</i>
<b>Parties Represented</b>	
<b>No. of Non BSC Parties Represented (e.g. Agents)</b>	
<b>Non Parties represented</b>	
<b>Role of Respondent</b>	Generator
<b>Does this response contain confidential information?</b>	<i>No</i>

<b>Q</b>	<b>Question</b>	<b>Response</b> Error! Bookmark not defined.	<b>Rationale</b>
1.	Do you believe Proposed Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	No	The BSC should find some mechanism by which to better allocate the costs associated with transmission losses to those parties who cause most losses. However, there seem to a be a lot off issues associated with P200 that we believe means it is not a solution that operates in line with the applicable objectives. We cannot support solutions that treat a new generator differently to an old one – what about a refurbished plant restarting? Or plants in CVA differently to those in SVA – both play a role in losses.
2.	Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the Proposed Modification? Please give rationale and state objective(s)	No	The introduction of seasonal figures does not seem to create any advantages over the original modification. We remain of the view that an annual number, while not totally cost reflective, sends a market signal without creating additional uncertainty.

Q	Question	Response Error! Bookmark not defined.	Rationale
3.	Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	No	The hedging scheme treats generators within the same zone differently which seems distortionary. The very long lead time before the full impact of locational losses is felt means that the economic impact is delayed to long to ensure a timely response. Changes in the patterns of energy use, combined with the use seasonal data, means that signals may not be clearer in the longer term when looking a major investments. Investors may be spooked by data that produces some significant changes between seasons that may be simply the result of extraordinary circumstances in the previous year.
4.	Do you support the implementation approach described in the consultation document/the implementation option preferred by the Modification Group? Please give rationale	Yes	
5.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	No	
6.	Do you agree with the 15 years duration for applicability of F-factors? If not please propose any other value with justification. Please give rationale	No	If this modification is agreed the F-factors should be for less time (say 5 years). While the "soft landing" is beneficial for those worst hit, it would be more economic to create a signal and let it stand.
7.	Which option do you support for the definition of the Baseline Period for calculation of F-factor values, either a) 1 April 2005 – 31 March 2006; or b) 1 April 2002 – 31 March 2006 (48 months). Data for England and Wales is available centrally for all of this period. c) Other period. Please give rationale	(a), (b) or (c)	None – this highlights exactly the same issue as arose over the CO2 allocations to generators. If you have an F-factor it would have to be a benchmark or you always get exceptions – eg the plant that was having FGD fitted, or the plant commissioning in the year etc. Any allocation process that simply chooses a year as if that is a representative year for everyone needs to have disputes process to address the concerns of all of those who do not believe it was representative.

Q	Question	Response Error! Bookmark not defined.	Rationale
8.	For option (b) data for BM Units in Scotland for the period 1 April 2002 - 31 March 2005 would have to be sourced directly from the registered Parties (as this was pre BETTA) with supporting confirmation? Please provide a view on the practicality of this requirement	View	Uskmouth assumes that if parties are required by the BSC to hand over such data they will comply. However, it would also be necessary to audit the data in some way – which would add to costs.
9.	Do you believe the cost of capital is affected by zonal TLMs with and without the addition of a hedging scheme? Please give rationale	No	The fact that locational losses have been discussed for so long means that investors should have considered such market change in looking at new investments. When looking to invest in regulated markets, investors are aware of the regulatory uncertainty that exists. The existence of the hedging scheme itself seems to create potential distortions in competition that would be more, not less likely to undermine investor confidence going forward. It is important that regulators signal changes in advance (as has been the case with losses) and that they treat all parties equitably.
10.	Does P200 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure? Please give rationale	Yes	It is not obvious that the group have considered the potential appeals issues surrounding the setting of the F-factors. Have they considered a benchmark by technology?
11.	Are there any further comments on P200 that you wish to make?	No	

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Please send your responses by **12 noon on Friday 14 July 2006** to [modification.consultations@elexon.co.uk](mailto:modification.consultations@elexon.co.uk) and please entitle your email 'P200 **Assessment Consultation**'. Please note that any responses received after the deadline may not receive due consideration by the Modification Group.

Any queries on the content of the consultation pro-forma should be addressed to Justin Andrews on 020 7380 4030, email address [justin.andrews@elexon.co.uk](mailto:justin.andrews@elexon.co.uk).

## P200 ASSESSMENT PROCEDURE CONSULTATION QUESTIONS

BSC Parties (“Parties”) and other interested parties are invited to respond to this consultation expressing their views or provide any further evidence on any of the matters contained within this document. In particular views are sought in respect of the following questions. Parties are invited to supply the rationale for their responses.

<b>Respondent:</b>	<i>Bill Reed</i>
<b>Company Name:</b>	RWE Trading GmbH
<b>No. of BSC Parties Represented</b>	11
<b>Parties Represented</b>	<i>Please list all BSC Party names of Parties responding on behalf of (including the respondent company if relevant). RWE Trading GmbH, RWE Npower plc, Great Yarmouth Power Ltd, Npower Cogen Trading Ltd, Npower Commercial Gas Ltd, Npower Direct Ltd, Npower Ltd, Npower Northern Ltd, Npower Northern Supply Ltd, Npower Yorkshire Ltd, Npower Yorkshire Supply Ltd</i>
<b>No. of Non BSC Parties Represented (e.g. Agents)</b>	None
<b>Non Parties represented</b>	<i>Please list all non Parties responding on behalf of (including the respondent company if relevant).</i>
<b>Role of Respondent</b>	<i>(Supplier/Generator/ Trader / Consolidator / Exemptable Generator / BSC Agent / Party Agent / Distributor / other – please state <sup>1</sup>) Supplier/Generator/ Trader / Consolidator / Exemptable Generator / Party Agent</i>
<b>Does this response contain confidential information?</b>	<i>No</i>

<b>Q</b>	<b>Question</b>	<b>Response</b>	<b>Rationale</b>
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<sup>1</sup> Delete as appropriate – please do not use knockout, this is to make it easier to analyse the responses

Q	Question	Response Error! Bookmark not defined.	Rationale
1.	<p>Do you believe Proposed Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline?</p> <p>Please give rationale and state objective(s)</p>	No	<p>We do not support the introduction of modification proposal P200. It introduces a significant delay to the delivery of a zonal losses scheme and a new cross subsidy associated with historic output of power stations. The modification has a number of consequences including reduced costs for power stations in the north and increased costs for generators in the south when generating less than f-volume when compared to a uniform losses scheme and to a zonal losses scheme. This will be detrimental to competition (thereby not better meeting Objective C). The 15-year duration of the scheme will protect certain generators from the effects of zonal factors while differentially impacting on other generators. A consequence of this is that the reduction in transmission losses associated with a zonal scheme (identified in the work by Oxera under P198) is undermined by the modification (thereby not better meeting Objective B). We also believe that the modification proposal is discriminatory since demand is excluded from the scheme (thereby not better meeting Objective A). Finally the scheme will be complex to establish and will have long term administrative consequences associated with monitoring f-factors and BMU/TU registration (thereby not better meeting Objective D).</p>
2.	<p>Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the Proposed Modification?</p> <p>Please give rationale and state objective(s)</p>	No	<p>While we support the seasonal basis for allocating losses we do not support the introduction of alternative modification proposal P200 when compared with the original modification. The alternative modification will reinforce the cross subsidy associated with historic output of power stations.</p>

Q	Question	Response Error! Bookmark not defined.	Rationale
3.	<p>Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)</p>	No	<p>While we support the seasonal basis for allocating losses we do not support the introduction of alternative modification proposal P200. The alternative has the same fundamental problems associated with original modification P200 since it introduces a significant delay to the delivery of a zonal losses scheme and a new cross subsidy associated with historic output of power stations. The modification has a number of consequences including reduced costs for power stations in the north and increased costs for generators in the south when generating less than F-volume when compared to a uniform losses scheme and to a zonal losses scheme. This will be detrimental to competition (Objective C). The 15-year duration of the scheme will protect certain generators from the effects of zonal factors while differentially impacting on other generators. A consequence of this is that the reduction in transmission losses associated with a zonal losses scheme (identified in the work by Oxera under P198) is undermined by the alternative modification (thereby not better meeting Objective B). We also believe that the modification proposal is discriminatory since demand is excluded from the scheme (thereby not better meeting Objective A). Finally the scheme will be complex to establish and will have long term administrative consequences associated with monitoring f-factors and BMU/TU registration (thereby not better meeting Objective D).</p>
4.	<p>Do you support the implementation approach described in the consultation document/the implementation option preferred by the Modification Group? Please give rationale</p>	Yes	<p>The implementation scheme reflects a pragmatic approach that will enable market participants to adjust to the introduction of cost reflective loss allocation.</p>
5.	<p>Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale</p>	No	



Q	Question	Response <small>Error! Bookmark not defined.</small>	Rationale
6.	<p>Do you agree with the 15 years duration for applicability of F-factors? If not please propose any other value with justification. Please give rationale</p>	No	<p>The 15-year duration appears to represent the investment horizons associated with new investments at the time of the introduction of the scheme. However, the consequences of the scheme would impact on many different generation projects including power stations where investment costs are sunk and have been fully amortised. In such cases the investment time horizon bears no relation to the 15-years of the scheme. We believe that the 15-year horizon is arbitrary and is designed to frustrate the introduction of a zonal losses scheme.</p>
7.	<p>Which option do you support for the definition of the Baseline Period for calculation of F-factor values, either a) 1 April 2005 – 31 March 2006; or b) 1 April 2002 – 31 March 2006 (48 months). Data for England and Wales is available centrally for all of this period. c) Other period. Please give rationale</p>	(a), (b) or (c)	
8.	<p>For option (b) data for BM Units in Scotland for the period 1 April 2002 - 31 March 2005 would have to be sourced directly from the registered Parties (as this was pre BETTA) with supporting confirmation? Please provide a view on the practicality of this requirement</p>	View	
9.	<p>Do you believe the cost of capital is affected by zonal TLMs with and without the addition of a hedging scheme? Please give rationale</p>	No	<p>This matter is outside the scope of the BSC Applicable Objectives. Regardless of this we believe that all parties in the electricity supply industry have been aware of the possibility of the introduction of a zonal transmission losses scheme in a GB context since 1990 and should have taken this into account.. Therefore the modification proposal will have no incremental impact on the cost of capital</p>

Q	Question	Response Error! Bookmark not defined.	Rationale
10.	Does P200 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure? Please give rationale	No	
11.	Are there any further comments on P200 that you wish to make?	Yes	We note that P200 introduces a new cross subsidy associated with the allocation of losses to generator output relative to the F-factor generation. We believe that this represents a fundamental change to the current losses allocation which only applies generation losses to power stations that are actually producing output.

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## P200 ASSESSMENT PROCEDURE CONSULTATION QUESTIONS

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<b>Respondent:</b>	Dave Wilkerson
<b>Company Name:</b>	Centrica
<b>No. of BSC Parties Represented</b>	9
<b>Parties Represented</b>	Accord Energy Ltd; British Gas Trading Ltd; Centrica Barry Ltd; Centrica Brigg Ltd; Centrica KL Ltd; Centrica KPS Ltd; Centrica PB Ltd; Centrica RPS Ltd; Centrica SHB Ltd
<b>No. of Non BSC Parties Represented (e.g. Agents)</b>	–
<b>Non Parties represented</b>	–
<b>Role of Respondent</b>	Supplier/Generator/Trader
<b>Does this response contain confidential information?</b>	No

**Q1 - Do you believe Proposed Modification P200 better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline?**

**Please give rationale and state objective(s)**

**No**

Centrica does not believe that P200 better facilitates the achievement of the Applicable BSC Objectives, although we have some sympathy with the general aim of this proposal in attempting to mitigate the effects of a zonal transmission losses scheme.

We do not believe that zonal transmission loss charging is necessary, and therefore see P200 as unsupportable due to its proposed introduction of a zonal losses scheme. However, it should be noted that even if one were to take the view that zonal transmission loss charging is a positive change, then P200 serves to dilute the perceived benefits of a market-wide scheme and ensures that a sizeable portion of the market is not as exposed to the zonal losses regime. It also proposes a more complex, expensive and discriminatory solution than P198. It can therefore be seen that under either viewpoint on the merits of zonal transmission loss charging, this Proposed Modification is unsatisfactory.

There are a number of further issues with P200 that lead to the conclusion that the proposal is unworkable. For example, the fact that it would not apply to new generation would create an unbalanced market for new entrants and a disincentive for new generation to be built. This can be seen to be in direct conflict with BSC Objective (c). There is also the issue that generators can have losses applied to them even if they are not generating – which could be due to an outage or even due to a northern-based generator choosing not to generate in order to reduce overall losses. This would create an imbalance for that generator that would be impossible to contract against.

Centrica does not believe that there are genuine efficiency benefits in terms of redespach of plant. It is also clear that investors in new plant are already taking account of existing signals through TNUoS, as shown by the number of new Section 36 consent granted in the south of England over the next ten years. Therefore we do not believe that P200 facilitates the achievement of BSC Objective (b).

P200 also fails to facilitate the achievement of BSC Objectives (d) and (a) due to its high level of complexity and high-cost solution. There is also an issue of discrimination, which has a negative impact on Objective (a), due to the different treatment of different types of BM Unit and, as noted above, new entrants compared to existing participants.

**Q2: Do you believe Alternative Modification P200 better facilitates the achievement of the Applicable BSC Objectives when compared with the Proposed Modification?**

**Please give rationale and state objective(s)**

**Yes**

Centrica does not believe that the Proposed or Alternative Modifications in any way better facilitate the achievement of the BSC Objectives. However, we believe that the Alternative Modification is better than the Proposed, while still acknowledging that neither approach would be an improvement to the current baseline.

The Seasonal (Alternative) approach appears to achieve a calculation result more in line with the intent of P200 than the Annual (Proposed) approach.

**Q3: Do you believe Alternative Modification P200 better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline?**

**Please give rationale and state objective(s)**

**No**

Centrica believes that the many arguments against the Proposed P200 Modification are equally valid when applied to the Alternative Modification, and therefore neither option can be said to better facilitate the Applicable BSC Objectives.

**Q4: Do you support the implementation approach described in the consultation document/the implementation option preferred by the Modification Group?**

**Please give rationale**

**No**

We do not support the Modification and therefore believe that the proposed implementation will only add to the unnecessary costs to the industry. If, however, P200 or its Alternative were to be approved, it should be ensured that as long an implementation period as possible is provided, so that Parties can robustly alter their systems and processes. This would also provide an opportunity for Parties who happen to be negatively affected by P200 to consider further their strategies to manage the changes in cashflow.

**Q5: Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered?**

**Please give rationale**

**No**

Centrica believes that the Modification Group has considered all the viable alternatives.

**Q6: Do you agree with the 15 years duration for applicability of F-factors? If not please propose any other value with justification. Please give rationale**

**No**

The 15 years proposed appears to be entirely arbitrary. It is therefore difficult to justify any different arbitrarily-chosen value, although any shorter timeframe would reduce the time for which discrimination was in place in the market.

**Q7: Which option do you support for the definition of the Baseline Period for calculation of F-factor values, either**

**a) 1 April 2005 – 31 March 2006; or**

**b) 1 April 2002 – 31 March 2006 (48 months). Data for England and Wales is available centrally for all of this period.**

**c) Other period.**

**Please give rationale**

**a)**

In order to achieve equitability between Scottish and England & Wales BM Units, it is appropriate to have the same Baseline Period for both. The implementation of BETTA showed that there are a number of problems with obtaining historic Scottish data, and with the absence of an appeals process the problem is exacerbated. We therefore do not support any proposal that relies on pre-BETTA data.

We do note that there may be issues around outages during the reference year, but believe that this only serves to further highlight the flaws of this proposal in general.

**Q8: For option (b) data for BM Units in Scotland for the period 1 April 2002 - 31 March 2005 would have to be sourced directly from the registered Parties (as this was pre BETTA) with supporting confirmation?**

**Please provide a view on the practicality of this requirement**

Centrica is not in a position whereby it would have to present any Scottish data. However, we note the previous issues faced by Elexon and the industry in obtaining robust and relevant data from Scotland for the implementation of BETTA and therefore do not see this solution as practical.

**Q9: Do you believe the cost of capital is affected by zonal TLMs with and without the addition of a hedging scheme?**

**Please give rationale**

**Neutral**

Any major Modification (or signalled intention of raising Modifications) will add to regulatory risk in the short term, although we do not believe it to be the case that P200 in particular impacts on general levels of regulatory risk. A small level of uncertainty is currently added to investment decision-making which may have an impact on cost of capital, however we believe that the signals proposed via zonal TLMs are sufficiently weak not to have any meaningful impact.

**Q10: Does P200 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure?**

**Please give rationale**

**No**

**Q11: Are there any further comments on P200 that you wish to make?**

**No**

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<b>Respondent:</b>	<i>Alice Waltham</i>
<b>Company Name:</b>	<i>Good Energy Ltd</i>
<b>No. of BSC Parties Represented</b>	<i>1</i>
<b>Parties Represented</b>	<i>Good Energy Ltd (PURE)</i>
<b>No. of Non BSC Parties Represented (e.g. Agents)</b>	<i>0</i>
<b>Non Parties represented</b>	
<b>Role of Respondent</b>	<i>Supplier</i>
<b>Does this response contain confidential information?</b>	<i>No</i>

Q	Question	Response	Rationale
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Q	Question	Response	Rationale
1.	<p>Do you believe Proposed Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)</p>	No	<p>We believe the Proposed Modification P198 would have a neutral effect on BSC Objective (a).</p> <p>We believe that the Proposed Modification would not better facilitate BSC Objective (b). As with P198, we feel that the economic modelling used in the cost-benefit analysis does not represent market conditions. Suppliers have a significant incentive to balance their supply to demand. We feel that this will reduce the ability of generators to change their dispatch, as suppliers will want generation to prevent them being short. Therefore we feel that the impact P200 would have on dispatch is ambiguous. The significant generation coming online in the south in circa 2012 indicates that other factors such as TNUOS are already providing a clear locational signal. It is not clear to us that P200 will have any significant impact on the location of generation, beyond that already given by TNUOS. Overall we feel the change will increase the costs to suppliers in amending and updating their systems whilst providing negligible benefit.</p> <p>We believe that the Proposed Modification would not better facilitate BSC Objective (c). Only CVA generators will be allowed hedging/ grandfathering rights and SVA generators have no opportunity to do this. We feel this is anti-competitive and particularly affects renewable generators, which are predominately SVA connected.</p> <p>We believe that the Proposed Modification would not better facilitate BSC Objective (d). We feel than the modification would add complexity and cost, therefore reducing efficiency.</p>

Q	Question	Response	Rationale
2.	<p>Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the Proposed Modification?</p> <p>Please give rationale and state objective(s)</p>	No	<p>We believe the Alternative Modification P200 would have a neutral effect on BSC Objective (a) compared to the Proposed Modification.</p> <p>We believe the Alternative Modification P200 would have a neutral effect on BSC Objective (b) compared to the Proposed Modification, as we are not convinced that suppliers and generators would vary their dispatch to the extent anticipated in the cost-benefit analysis.</p> <p>We believe the Alternative Modification P200 would not better facilitate BSC Objective (c) compared to the Proposed Modification, as it would have a disproportionate impact on renewable generators. By their nature wind and wave generation are unable to change their dispatch. Hydro, tidal and CHP power only has a limited degree of control. This would also have a disproportional impact on suppliers that purchase significantly from renewable generation.</p> <p>We believe the Alternative Modification P200 would not better facilitate BSC Objective (d) compared to the Proposed Modification. We feel than the modification would add further to the complexity and cost, therefore reducing efficiency.</p>

Q	Question	Response	Rationale
3.	<p>Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline?</p> <p>Please give rationale and state objective(s)</p>	No	<p>We believe the Alternative Modification P200 would have a neutral effect on BSC Objective (a).</p> <p>We believe that the Alternative Modification would not better facilitate BSC Objective (b). We feel that the economic modelling used in the cost-benefit analysis does not represent market conditions. It is not clear to us that P198 will have any significant impact on the location of generation, beyond that already given by TNUOS and we are not convinced that suppliers and generators would vary their dispatch to the extent anticipated in the cost-benefit analysis. Overall we feel the change will increase the costs to suppliers in amending and updating their systems whilst providing negligible benefit.</p> <p>We believe that the Alternative Modification would not better facilitate BSC Objective (c). We feel that renewable generation would be disproportionately impacted by the modification. We do not agree that the existing arrangements represent a cross-subsidy.</p> <p>We believe that the Alternative Modification would not better facilitate BSC Objective (d). We feel that the modification would add complexity and cost, therefore reducing efficiency.</p>
4.	<p>Do you support the implementation approach described in the consultation document/the implementation option preferred by the Modification Group?</p> <p>Please give rationale</p>	Yes	
5.	<p>Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered?</p> <p>Please give rationale</p>	Yes / No	

Q	Question	Response	Rationale
6.	Do you agree with the 15 years duration for applicability of F-factors? If not please propose any other value with justification. Please give rationale	Yes / No	
7.	Which option do you support for the definition of the Baseline Period for calculation of F-factor values, either a) 1 April 2005 – 31 March 2006; or b) 1 April 2002 – 31 March 2006 (48 months). Data for England and Wales is available centrally for all of this period. c) Other period. Please give rationale	(a), (b) or (c)	
8.	For option (b) data for BM Units in Scotland for the period 1 April 2002 - 31 March 2005 would have to be sourced directly from the registered Parties (as this was pre BETTA) with supporting confirmation? Please provide a view on the practicality of this requirement	View	
9.	Do you believe the cost of capital is affected by zonal TLMs with and without the addition of a hedging scheme? Please give rationale	Yes / No	
10.	Does P200 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure? Please give rationale	Yes / No	
11.	Are there any further comments on P200 that you wish to make?	Yes	We believe that P200 would not better facilitate the BSC objectives when compared to P198 because allow hedging rights only for certain classes of generator is anti-competitive.

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## P200 ASSESSMENT PROCEDURE CONSULTATION QUESTIONS

BSC Parties ("Parties") and other interested parties are invited to respond to this consultation expressing their views or provide any further evidence on any of the matters contained within this document. In particular views are sought in respect of the following questions. Parties are invited to supply the rationale for their responses.

<b>Respondent:</b>	<i>Andrew Truswell</i>
<b>Company Name:</b>	<i>National Grid</i>
<b>No. of BSC Parties Represented</b>	<i>1</i>
<b>Parties Represented</b>	<i>National Grid Electricity Transmission plc</i>
<b>No. of Non BSC Parties Represented (e.g. Agents)</b>	<i>None</i>
<b>Non Parties represented</b>	<i>N/A</i>
<b>Role of Respondent</b>	<i>Transmission Company</i>
<b>Does this response contain confidential information?</b>	<i>No</i>

<b>Q</b>	<b>Question</b>	<b>Response</b>	<b>Rationale</b>
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Q	Question	Response	Rationale
1.	<p>Do you believe Proposed Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline?</p> <p>Please give rationale and state objective(s)</p>	Neutral	<p>We are neutral as to whether Proposed Modification P200 would better facilitate the achievement of the Applicable BSC Objectives overall compared with the current Code baseline. In theory the introduction of a zonal transmission losses scheme will provide a market signal for generation and demand to locate closer to each other, thereby reducing the total amount of transmission losses and better facilitating the achievement of objective (b), the efficient, economic and co-ordinated operation of the GB transmission system. However, a zonal transmission losses scheme would be only one of many factors that would influence future investment decisions or short term dispatch, and it is therefore difficult to quantify the extent to which the operation of the transmission system would become more economic. Additionally, the hedging aspect of P200 would apply only to existing generators (and not to demand or to new generators) and therefore could potentially be unduly discriminatory, which would be contrary to both objectives (a), the efficient discharge by the licensee of the its licence obligations, and (c), the promotion of effective competition in the generation and supply of electricity. Finally, the introduction of the scheme, and particularly the F-factors, would significantly increase the costs and complexity of the BSC arrangements, thereby potentially failing to facilitate objective (d), the promotion of efficiency in the implementation and administration in the balancing and settlement arrangements.</p>
2.	<p>Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the Proposed Modification?</p> <p>Please give rationale and state objective(s)</p>	Yes	<p>We believe that Alternative Modification P200 would better facilitate the achievement of the Applicable BSC Objectives when compared with the Proposed Modification. The seasonal element of the Alternative Modification should in theory lead to more accurate short-term signals and therefore result in a greater reduction in losses, thereby better facilitating the achievement of objective (b), the efficient, economic and co-ordinated operation of the GB transmission system than the Proposed Modification. However, such an improvement would be very difficult to quantify, and may be very marginal.</p>

Q	Question	Response	Rationale
3.	<p>Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline?</p> <p>Please give rationale and state objective(s)</p>	Neutral	<p>Although we believe that Alternative Modification P200 would better facilitate the achievement of the Applicable BSC Objectives when compared with the Proposed Modification P200 (see Question 2, above), we believe that any such improvement may not be material when compared to the overall changes resulting from such a scheme. We are therefore again neutral overall as to whether Alternative Modification P200 would better facilitate the achievement of the Applicable BSC Objectives when compared to the current Code baseline, for the same reasons as for the Proposed Modification P200 (see Question 1, above).</p>
4.	<p>Do you support the implementation approach described in the consultation document/the implementation option preferred by the Modification Group?</p> <p>Please give rationale</p>	Yes	<p>We believe that the implementation approach described in the consultation document is broadly appropriate when our views as to the specific issues highlighted below are taken into account.</p>
5.	<p>Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered?</p> <p>Please give rationale</p>	No	<p>We have not identified any alternative solutions that we believe should be considered.</p>
6.	<p>Do you agree with the 15 years duration for applicability of F-factors? If not please propose any other value with justification.</p> <p>Please give rationale</p>	Neutral	<p>Whilst we have seen no convincing justification for the 15 years duration for applicability of F-factors, neither have we seen convincing justification for any other value.</p>
7.	<p>Which option do you support for the definition of the Baseline Period for calculation of F-factor values, either</p> <p>a) 1 April 2005 – 31 March 2006; or</p> <p>b) 1 April 2002 – 31 March 2006 (48 months). Data for England and Wales is available centrally for all of this period.</p> <p>c) Other period.</p> <p>Please give rationale</p>	(a)	<p>Although we believe that, all else being equal, a greater number of years' worth of data for the calculation of F-factor values would increase their accuracy, we believe that it is impracticable, and potentially discriminatory, to use incomparable data for BM Units in Scotland. We therefore support option (a) as the longest period of data available in the BETTA market prior to P200 being proposed.</p>



Q	Question	Response	Rationale
8.	For option (b) data for BM Units in Scotland for the period 1 April 2002 - 31 March 2005 would have to be sourced directly from the registered Parties (as this was pre BETTA) with supporting confirmation? Please provide a view on the practicality of this requirement	View	We do not believe that sourcing data for BM Units in Scotland for the period 1 April 2002 – 31 March 2005 is practical. In certain circumstances there may be incentives on Parties not to provide this data, and therefore incomplete data may be used and some Parties potentially discriminated against. Even if a complete data set were obtained, the data may not be directly comparable with post-BETTA BM Unit data.
9.	Do you believe the cost of capital is affected by zonal TLMs with and without the addition of a hedging scheme? Please give rationale	Neutral	Given that the debate surrounding the cost of capital primarily concerns investment decisions relating to generation, National Grid does not believe that is appropriate for us to comment on this issue.
10.	Does P200 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure? Please give rationale	No	We do not believe that P200 raises any issues that have not been identified so far.
11.	Are there any further comments on P200 that you wish to make?	No	

Parties are encouraged to provide financial information with regard to either the costs or benefits of the Modification Proposal to support the Assessment Procedure. Where requested this information can be treated as confidential, although all information will be provided to the Authority.

Please send your responses by **12 noon on Friday 14 July 2006** to [modification.consultations@elexon.co.uk](mailto:modification.consultations@elexon.co.uk) and please entitle your email 'P200 **Assessment Consultation**'. Please note that any responses received after the deadline may not receive due consideration by the Modification Group.

Any queries on the content of the consultation pro-forma should be addressed to Justin Andrews on 020 7380 4030, email address [justin.andrews@elexon.co.uk](mailto:justin.andrews@elexon.co.uk).



## SCOTTISH EXECUTIVE

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Fax: 0141-242 5807  
Christopher.bronsdon@scotland.gsi.gov.uk  
<http://www.scotland.gov.uk>

Your ref:  
Our ref:

July 2006

Dear Sir/Madam,

### **Assessment consultation for Modification Proposal P200 – ‘Introduction of a Zonal Transmission Losses Scheme with Transitional Scheme’**

The Scottish Executive is not a Balancing and Settlement Code party and is not therefore responding to the above consultation on the basis of the technical details that are outlined within the document. However, as an interested party in the development of renewable generation the implications of introducing Zonal Transmission Losses in Scotland (as well as more widely across the UK) raise two issues on which we would like to receive formal clarification.

As outlined within the P200 document, and elaborated to an extent within Oxera's Cost Benefit Analysis "What are the costs and benefits of zonal loss charging?" (June 2006), the application of Transmission Loss Multipliers (TLM's) across the UK will have adverse impacts on renewable generation resources in Scotland and the North of England. TLM's will be applied to metered generation in order to scale down the metered volumes to account for losses – effectively reducing at source the metered output of a generator in Northern England/Scotland (a TLM of 0.9 for example), and increasing the output of generator located closer to centres of demand in the south of the UK (a TLM of 1.1).

The market for Renewable Obligation Certificates (ROCs) are the underlying basis on which UK Government targets for renewable capacity are being delivered as they provide significant revenue streams to electricity suppliers and stimulate investment in new capacity. ROCs are awarded to qualifying renewable generation (by Ofgem) on the basis of metered output by a generator.

**Could Elexon please clarify that the application of TLM's to renewable generation will not affect the metered output values on which ROCs are awarded.**

If TLM's altered the metered output from renewable generation in Scotland, it could remove the incentive for investment in renewable projects in areas with a TLM of <1 as they would be awarded ROCs at a level that is less than parity with their metered generation, whilst stimulating investment in areas with a TLM of >1 which conversely would be awarded ROCs at a level greater than their metered generation.

The remit of the BSC panel (and hence the extent of the remit of this consultation) is to ensure that any modifications to the BSC ensure efficient operation of the transmission system as set out in the BSC Panel Objectives.

The cost benefit analysis that has been carried out is constrained to examining the overall system costs and losses under the existing charging system and under the proposed amendments, but explicitly excluded examination of the impact on the environment and consumers.

The purpose of Zonal Transmission Loss Charging is to provide a locational signal for the siting of generation (and demand) in order to reduce system losses and improve the efficiency of transmission operations. Renewables by their very nature are located in the region of optimal resource, and cannot respond (on aggregate) to the locational signals that this proposal seeks to introduce.

Oxera's Cost Benefit Analysis points out that there is likely to be an adverse effect on renewable generation in Scotland, and a potential benefit to renewable generation in Southern England – changing the locational decisions for renewable generators and being seen as a distributional effect within the UK. However, Oxera also state that *“it is plausible that applying zonal loss charging across Great Britain may reduce the overall growth of renewables generation”*.

Whilst their modelling analysis covers a range of renewable generation technologies, total resources and build costs are only examined for the different regions of England, Wales and Scotland for the position of onshore wind. Thus the distributional effects can only be demonstrated for wind projects, and the impacts on other emerging renewable technologies such as wave and tidal energy or biomass are unquantified.

Given that the DTI have sought to reduce the costs borne by renewable generation in the north of Scotland through the introduction of Transmission Network Use of System (TNUoS) charges through powers available under the Energy Act, **could Elexon clarify whether the remit of the consultation has considered the wider issue of whether renewable generation should be subject to Zonal Transmission Losses given that they less able to respond to locational signals due to resource constraints.**

Additionally, the Scottish Executive would be interested in receiving detailed information on the extent and scale of distributional effects for on/offshore wind projects, and other renewable technologies.

The Executive is also concerned that transmission charging acts as a significant disincentive for companies to invest in conventional generating plant in Scotland. Given Scotland's current reliance on a small number of large generating plants, and the relatively low capacity to import electricity through the interconnector to meet demand in Scotland, this raises real concerns about the long-term security of electricity supplies in Scotland.

Yours faithfully,



**Chris Bronsdon**

## P200 ASSESSMENT PROCEDURE CONSULTATION QUESTIONS

BSC Parties (“Parties”) and other interested parties are invited to respond to this consultation expressing their views or provide any further evidence on any of the matters contained within this document. In particular views are sought in respect of the following questions. Parties are invited to supply the rationale for their responses.

<b>Respondent:</b>	<i>Mr R C Longden</i>
<b>Company Name:</b>	<i>Airtricity</i>
<b>No. of BSC Parties Represented</b>	<i>1</i>
<b>Parties Represented</b>	<i>Airtricity</i>
<b>No. of Non BSC Parties Represented (e.g. Agents)</b>	
<b>Non Parties represented</b>	<i>Please list all non Parties responding on behalf of (including the respondent company if relevant).</i>
<b>Role of Respondent</b>	<i>Trading Party Interconnector User</i>
<b>Does this response contain confidential information?</b>	<i>No</i>

<b>Q</b>	<b>Question</b>	<b>Response</b>	<b>Rationale</b>
1.	Do you believe Proposed Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	No	The Proposed Modification would not better facilitate applicable objective (c), as it would act to reduce competition, through the discrimination introduced in its treatment of different parties. Certain parties would be shielded from the undesirable effects of proposed Modification P198, via the mechanisms in this proposal whilst some would not, with little rationale. It adds significant complexity and cross subsidy into a proposed process which is fundamentally flawed. The increased complexity and resultant costs of P200 would be counter to applicable objective (d)
2.	Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the Proposed Modification? Please give rationale and state objective(s)	No	Additional complexity and cost on top of the original proposal, resulting in increased variability and volatility for system users.

Q	Question	Response	Rationale
3.	Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	No	
4.	Do you support the implementation approach described in the consultation document/the implementation option preferred by the Modification Group? Please give rationale	No	
5.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	No	
6.	Do you agree with the 15 years duration for applicability of F-factors? If not please propose any other value with justification. Please give rationale	No	Disagree with entire Proposal
7.	Which option do you support for the definition of the Baseline Period for calculation of F-factor values, either a) 1 April 2005 – 31 March 2006; or b) 1 April 2002 – 31 March 2006 (48 months). Data for England and Wales is available centrally for all of this period. c) Other period. Please give rationale	(a), (b) or (c)	
8.	For option (b) data for BM Units in Scotland for the period 1 April 2002 - 31 March 2005 would have to be sourced directly from the registered Parties (as this was pre BETTA) with supporting confirmation? Please provide a view on the practicality of this requirement	View	Difficult to ensure that data is: *fully available *on a consistent basis with units already in NETA * Relevant to operation of the GB system as it is today, given the different operational regimes in E&W and Scotland pre BETTA And therefore of use to the process

Q	Question	Response	Rationale
9.	Do you believe the cost of capital is affected by zonal TLMs with and without the addition of a hedging scheme? Please give rationale	Yes	The variability and volatility associated with year on year or season on season changes to loss calculations would introduce further regulatory risk, which would be translated into financial risk (and increased cost) by providers of capital. This would represent a further increase in the barriers to entry and a lessening of competitive pressure. It would further have a disproportionate impact on renewables due to their location
10.	Does P200 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure? Please give rationale	No	
11.	Are there any further comments on P200 that you wish to make?	Yes	It should be rejected

Parties are encouraged to provide financial information with regard to either the costs or benefits of the Modification Proposal to support the Assessment Procedure. Where requested this information can be treated as confidential, although all information will be provided to the Authority.

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## P200 ASSESSMENT PROCEDURE CONSULTATION QUESTIONS

BSC Parties (“Parties”) and other interested parties are invited to respond to this consultation expressing their views or provide any further evidence on any of the matters contained within this document. In particular views are sought in respect of the following questions. Parties are invited to supply the rationale for their responses.

<b>Respondent:</b>	<i>Faye Hankin</i>
<b>Company Name:</b>	<i>BizzEnergy Limited</i>
<b>No. of BSC Parties Represented</b>	<i>1</i>
<b>Parties Represented</b>	<i>BizzEnergy Limited</i>
<b>No. of Non BSC Parties Represented (e.g. Agents)</b>	<i>0</i>
<b>Non Parties represented</b>	<i>0</i>
<b>Role of Respondent</b>	<i>Supplier</i>
<b>Does this response contain confidential information?</b>	<i>No</i>

<b>Q</b>	<b>Question</b>	<b>Response</b>	<b>Rationale</b>
1.	Do you believe Proposed Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	No	Please refer to responses to Proposed Modification P198
2.	Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the Proposed Modification? Please give rationale and state objective(s)	Yes	Please refer to responses to Proposed Modification P198
3.	Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	No	Please refer to responses to Proposed Modification P198

Q	Question	Response	Rationale
4.	Do you support the implementation approach described in the consultation document/the implementation option preferred by the Modification Group? Please give rationale	No	Please refer to responses to Proposed Modification P198
5.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	Yes	Whilst we are supportive of measures that seek to mitigate the destabilising and anti-competitive effect of zonal transmission loss charging for generators, we would suggest that measures to protect demand side BM Units are even more important. This is because of their relative inflexibility of response particularly in the short term.
6.	Do you agree with the 15 years duration for applicability of F-factors? If not please propose any other value with justification. Please give rationale	Yes	15 years is a suitable timeframe as it is reflective of the sort of timeframes that investment decisions of such magnitude as generation plant development are made within.
7.	Which option do you support for the definition of the Baseline Period for calculation of F-factor values, either a) 1 April 2005 – 31 March 2006; or b) 1 April 2002 – 31 March 2006 (48 months). Data for England and Wales is available centrally for all of this period. c) Other period. Please give rationale	N/A	BizzEnergy are neutral in respect of this issue.
8.	For option (b) data for BM Units in Scotland for the period 1 April 2002 - 31 March 2005 would have to be sourced directly from the registered Parties (as this was pre BETTA) with supporting confirmation? Please provide a view on the practicality of this requirement	View	BizzEnergy are neutral in respect of this issue.
9.	Do you believe the cost of capital is affected by zonal TLMs with and without the addition of a hedging scheme? Please give rationale	Yes	A hedging scheme will go some way to mitigating the detrimental impact of zonal transmission charging on the cost of capital for generation as described in our response to Proposed Modification P198.



Q	Question	Response	Rationale
10.	Does P200 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure? Please give rationale	No	
11.	Are there any further comments on P200 that you wish to make?	No	We are fully supportive of the rationale that existing generation plant output should be protected from the effects of zonal transmission loss charging as existing plant cannot respond to the pricing signals that are implied. However we firmly believe that any rationale that can be applied to generation BM Units could also be applied to consumption BM Units. Moreover, as demand is relatively inflexible in its response to cost signals, protection against distortionary "windfall" effects is even more important. We therefore find it inconsistent to make this Proposal without extending the same principle to the demand side.

Parties are encouraged to provide financial information with regard to either the costs or benefits of the Modification Proposal to support the Assessment Procedure. Where requested this information can be treated as confidential, although all information will be provided to the Authority.

Please send your responses by **12 noon on Friday 14 July 2006** to [modification.consultations@elexon.co.uk](mailto:modification.consultations@elexon.co.uk) and please entitle your email 'P200 **Assessment Consultation**'. Please note that any responses received after the deadline may not receive due consideration by the Modification Group.

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## P200 ASSESSMENT PROCEDURE CONSULTATION QUESTIONS

BSC Parties (“Parties”) and other interested parties are invited to respond to this consultation expressing their views or provide any further evidence on any of the matters contained within this document. In particular views are sought in respect of the following questions. Parties are invited to supply the rationale for their responses.

<b>Respondent:</b>	<i>Name</i> Ben Sheehy
<b>Company Name:</b>	E.ON UK
<b>No. of BSC Parties Represented</b>	13
<b>Parties Represented</b>	<i>Please list all BSC Party names of Parties responding on behalf of (including the respondent company if relevant).</i>
<b>No. of Non BSC Parties Represented (e.g. Agents)</b>	Citigen London Ltd., Cottam Development Centre Ltd., E.ON UK Ironbridge Ltd., E.ON UK plc, Economy Power plc, Enfield Energy Centre Ltd., Midlands Gas Ltd., Powergen Retail Ltd., TXU Europe (AH Online) Ltd., TXU Europe (AHG) Ltd., TXU Europe (AHGD) Ltd., TXU Europe (AHST) Ltd., Western Gas Ltd.
<b>Non Parties represented</b>	<i>Please list all non Parties responding on behalf of (including the respondent company if relevant).</i>
<b>Role of Respondent</b>	<i>(Supplier/Generator/ Trader / Consolidator / Exemptable Generator / <del>BSC Agent / Party Agent / Distributors / other</del> please state <sup>1</sup>)</i>
<b>Does this response contain confidential information?</b>	No.

Q	Question	Response	Rationale
1.	Do you believe Proposed Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	<del>Yes</del> / No	<p>P200 would be detrimental to the achievement of all of the Applicable BSC Objectives.</p> <p>Objective (a) would not be better facilitated as undue discrimination would be introduced, impacting the licensee’s transmission licence obligation. Newly registered generators and SVA registered BM Units would not qualify for an F-factor volume allocation.</p> <p>Furthermore, Standard Condition C3 requires the licensee to set the terms of the balancing and settlement arrangements, including the efficient settlement of financial obligations between Parties, and between Parties and the licensee. This settlement cannot be better facilitated if some Parties</p>

<sup>1</sup> Delete as appropriate – please do not use strikeout, this is to make it easier to analyse the responses

Q	Question	Response	Rationale
			<p>have preferential obligations compared with others.</p> <p>Objective (b) would not be better facilitated as the proposal both recognises the efficient incentive properties of zonal factors on generating units and introduces a fixed volume calculation to counter that efficiency.</p> <p>Futhermore, the transmission system operates under a market system, where Parties' risk is to balance supply and demand. P200 would transfer some of that risk to Parties' variance on their F-factor volumes, which are derived from arbitrary historic data.</p> <p>Objective (c) would not be better facilitated as, after recognising the benefits of zonal charging, the proposal advocates protecting uncompetitive cross subsidies for a further 15 years. Also, in terms of the costs of electricity generation, F-factor volume allocations would clearly result in an unfair disadvantage to new generators in negative TLF zones and an unfair disadvantage to existing generators in positive TLF zones.</p> <p>Objective (d) would not be better facilitated as, at present, all transmission losses are associated with actual metered volumes. P200 would require a proportion of transmission losses to be associated with historic data, with a complex energy crediting system being needed to apply F-factor volumes to qualifying BM Units.</p> <p>Furthermore, the proposal has necessitated tortuous legal drafting (which possibly requires the retrospective allocation of F-factor volumes) to prevent the re-registration of CVA BM Units. The proposal cannot better facilitate Objective (d) if the results need to be policed by the industry.</p>

Q	Question	Response	Rationale
2.	<p>Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the Proposed Modification?</p> <p>Please give rationale and state objective(s)</p>	Yes / <del>No</del>	<p>There may be merit in using seasonal TLFs if, in a workable way, they reflect overall costs more accurately than annual calculations. (It would not be practical or administratively efficient to calculate, for example, daily TLFs.) However, it should be stressed that this merit is limited solely to the more accurate calculation of losses. The decisions of generating businesses will be influenced by the overall signals provided by cost-reflective transmission losses charging, i.e. the effect on business costs over the financial year.</p> <p>Any improvement in cost-reflectivity would go some way to removing cross subsidies and better facilitate Objective (b).</p>
3.	<p>Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline?</p> <p>Please give rationale and state objective(s)</p>	<del>Yes</del> / No	<p>The allocation of F-factor volumes would be detrimental to the achievement of all of the Applicable BSC Objectives (as outlined against the Objectives in the answer to question 1. above).</p>
4.	<p>Do you support the implementation approach described in the consultation document/the implementation option preferred by the Modification Group?</p> <p>Please give rationale</p>	Yes / <del>No</del>	<p>It is an area the Modification Group has considered thoroughly.</p>
5.	<p>Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered?</p> <p>Please give rationale</p>	<del>Yes</del> / No	<p>At the time of writing, ELEXON has announced two further Proposed Modifications, both of which are similar to P198, in addition to P200. It is clear that alternative solutions have been considered very thoroughly by the Modification Group.</p>

Q	Question	Response	Rationale
6.	<p>Do you agree with the 15 years duration for applicability of F-factors? If not please propose any other value with justification. Please give rationale</p>	Yes / <del>No</del>	<p>15 years is an arbitrary time period and E.ON UK does not therefore have reason to recommend a different arbitrary time period.</p> <p>However, if 15 years is accepted as a typical investment horizon, it would not be logical to protect an investment sunk 5 or 10 years ago for the full term.</p> <p>It is also a concern that the detrimental impact of F-factor volumes on generating plant in positive TLF zones, and the inefficiencies encouraged by F-factors for plant in negative TLF zones, would be maintained for such a long period. (This point is expanded in the answer to question 11. below).</p>
7.	<p>Which option do you support for the definition of the Baseline Period for calculation of F-factor values, either</p> <p>a) 1 April 2005 – 31 March 2006; or</p> <p>b) 1 April 2002 – 31 March 2006 (48 months). Data for England and Wales is available centrally for all of this period.</p> <p>c) Other period. Please give rationale</p>	(a), <del>(b)</del> or <del>(c)</del>	<p>The only acceptable baseline period is one year from April 2005, as it would be based on directly comparable metered data, including those Scottish BM Units which only registered at BETTA go-live. A method that required those BM Units to volunteer pre-April 2005 data would not be transparent and could be discriminatory.</p> <p>A baseline beyond March 2006 would apply to BM Units registered after the raising of P200, which would render the already highly-suspect argument – that protection should be provided for sunk investment that could not have foreseen zonal charging – impossible.</p>
8.	<p>For option (b) data for BM Units in Scotland for the period 1 April 2002 - 31 March 2005 would have to be sourced directly from the registered Parties (as this was pre BETTA) with supporting confirmation? Please provide a view on the practicality of this requirement</p>	View	<p>This would not be acceptable as it is highly unlikely that the data set would be complete. Data would be unavoidably selective and therefore not directly comparable.</p>

Q	Question	Response	Rationale
9.	<p>Do you believe the cost of capital is affected by zonal TLMs with and without the addition of a hedging scheme?</p> <p>Please give rationale</p>	<del>Yes</del> / No	<p>Businesses involved in the production and supply of electricity in the UK operate in a well-regulated industry. There is therefore no reason why this proposal should represent a higher perception of regulatory risk than any other; particularly as the introduction of a more cost-reflective transmission losses scheme should have been expected for a long time.</p> <p>E.ON UK does not have evidence to question Oxera's findings: that any risk is both forward-looking and diversifiable, and will not have an impact on the cost of capital.</p>
10.	<p>Does P200 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure?</p> <p>Please give rationale</p>	<del>Yes</del> / No	

Q	Question	Response	Rationale
11.	Are there any further comments on P200 that you wish to make?	Yes / <del>No</del>	<p>There are two concerns covered in the Assessment Consultation that should be highlighted: the assumption that sunk investment needs to be protected and the perverse features of F-factor volumes.</p> <p>On the first point, the original privatisation prospectus refers to the Pooling and Settlement Agreement for details on the development of the settlement system. Schedule 12 of that Agreement (dated March 1990) introduces the principal of changing the allocation of transmission losses, suggesting a Works Programme for October 1994 and an implementation date of July 1996.</p> <p>Furthermore, F-factors would be tied to BM Units even after a change in ownership. Surely when a company sells an asset, it has cashed-in its investment and a new owner represents new investment.</p> <p>On the second point, it is likely that some generators' investment will be protected at the expense of others. Firstly, ELEXON presented TLM analysis to the Modification Group demonstrating that plant in comparatively "good" zones, such as Zone 11 (South West) and Zone 1 (East), will at times be allocated a substantially higher share of variable transmission losses than under the baseline. This seems to negate the recognised incentive features of zonal charging.</p> <p>But crucially, it cannot be efficient for BM Units in negative TLF zones to be credited with energy on the volume "not generated", where those Units generate volumes below their F-factor allocation. Essentially, it produces a scenario where, if two plants (one in the north and one in the south) both generate below their F-factor volumes, the southern generator would in effect have to "pay" the northern plant.</p>

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## P200 ASSESSMENT PROCEDURE CONSULTATION QUESTIONS

BSC Parties ("Parties") and other interested parties are invited to respond to this consultation expressing their views or provide any further evidence on any of the matters contained within this document. In particular views are sought in respect of the following questions. Parties are invited to supply the rationale for their responses.

<b>Respondent:</b>	<i>Libby Glazebrook</i>
<b>Company Name:</b>	<i>International Power plc</i>
<b>No. of BSC Parties Represented</b>	<i>4</i>
<b>Parties Represented</b>	<i>Deeside Power Development Co Ltd, First Hydro Company, Rugeley Power Generation Ltd, Saltend Cogeneration Ltd</i>
<b>No. of Non BSC Parties Represented (e.g. Agents)</b>	<i>None</i>
<b>Non Parties represented</b>	<i>None</i>
<b>Role of Respondent</b>	<i>Supplier/Generator</i>
<b>Does this response contain confidential information?</b>	<i>No</i>

<b>Q</b>	<b>Question</b>	<b>Response</b>	<b>Rationale</b>
1.	Do you believe Proposed Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	No	<p>P200 will allocate amounts for losses to generators when they are not generating, including when they are on outage. This may result in a cost to the generator or a payment depending on location. The mod does not therefore correctly allocate transmission losses to actual generation and does not facilitate the efficient and economic operation of the transmission system.</p> <p>Whilst the rules to identify Qualifying BM units are logical, P200 will exclude generator BM units where <math>QM &lt; 0</math> (i.e. pumped storage BM units). It seems discriminatory to exclude these BM units from the benefits of the transitional hedging scheme. The mod does not therefore promote competition in the generation and supply of electricity (objective c)</p>

Q	Question	Response	Rationale
2.	Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the Proposed Modification? Please give rationale and state objective(s)	Yes / No	No for the reasons stated in Q1
3.	Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	Yes/ No	No for the reasons stated in Q1
4.	Do you support the implementation approach described in the consultation document/the implementation option preferred by the Modification Group? Please give rationale	Yes	
5.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	Yes	P200 is overly complex and unworkable. Whilst we do not support a long term delay of the benefits of introducing zonal losses, losses could instead be applied to incumbent generators as now for a transitional period. Generators signing up to the BSC after a Qualifying date would be exposed to losses under P198
6.	Do you agree with the 15 years duration for applicability of F-factors? If not please propose any other value with justification. Please give rationale	Yes	This would seem to be in line with investment timescales.
7.	Which option do you support for the definition of the Baseline Period for calculation of F-factor values, either a) 1 April 2005 – 31 March 2006; or b) 1 April 2002 – 31 March 2006 (48 months). Data for England and Wales is available centrally for all of this period. c) Other period. Please give rationale	(a), (b) or (c)	(b) – The Baseline period needs to be as long as possible to smooth out any anomalies in metering data, Scottish generators will have to provide metering data pre BETTA to facilitate this.

Q	Question	Response	Rationale
8.	For option (b) data for BM Units in Scotland for the period 1 April 2002 - 31 March 2005 would have to be sourced directly from the registered Parties (as this was pre BETTA) with supporting confirmation? Please provide a view on the practicality of this requirement	View	Scottish generators provided DTI with metering information to enable CO2 allocations under Phase II if the EU ETS to be determined. Given this, it should be possible to provide metering data to ELEXON for P200.
9.	Do you believe the cost of capital is affected by zonal TLMs with and without the addition of a hedging scheme? Please give rationale	Yes	P200 should reduce the regulatory risk and the cost of capital at least until the end of the transitional period.
10.	Does P200 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure? Please give rationale	No	
11.	Are there any further comments on P200 that you wish to make?	No	

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## P200 ASSESSMENT PROCEDURE CONSULTATION QUESTIONS

BSC Parties (“Parties”) and other interested parties are invited to respond to this consultation expressing their views or provide any further evidence on any of the matters contained within this document. In particular views are sought in respect of the following questions. Parties are invited to supply the rationale for their responses.

<b>Respondent:</b>	<i>Name Steve Drummond</i>
<b>Company Name:</b>	<i>EDF Trading Ltd</i>
<b>No. of BSC Parties Represented</b>	<i>2</i>
<b>Parties Represented</b>	<i>EDF Trading Ltd and EDF (Generation)</i>
<b>No. of Non BSC Parties Represented (e.g. Agents)</b>	<i>None</i>
<b>Non Parties represented</b>	<i>N/A</i>
<b>Role of Respondent</b>	<i>Trader/Generator</i>
<b>Does this response contain confidential information?</b>	<i>No</i>

<b>Q</b>	<b>Question</b>	<b>Response</b>	<b>Rationale</b>
1.	Do you believe Proposed Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	No	We do not believe that P200 better any of the BSC Objectives. It introduces a scheme which is discriminatory to the demand side as they cannot hedge against the ‘P198 Losses Scheme’, as well as between existing and new generators; hence it fails Objective ‘a’. On Objective ‘b’ it reduces any operational efficiency benefit that P198 might have. On Objective ‘c’, the competitiveness of those that can’t hedge will be reduced compared with those that can and there are perverse incentives whereby generators that do not run will be paid monies. Finally, because of its complexity and the mix and ambiguity of the signals so produced, it fails Objective ‘d’ as well.
2.	Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the Proposed Modification? Please give rationale and state objective(s)	Yes	But only because it includes the seasonal calculation of the TLFs within the P198 element of the modification and as such the TLFs will be more accurate.

Q	Question	Response	Rationale
3.	Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	No	The seasonal element does not change the fundamental problems with P200 as mentioned above.
4.	Do you support the implementation approach described in the consultation document/the implementation option preferred by the Modification Group? Please give rationale	Yes	
5.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	No	
6.	Do you agree with the 15 years duration for applicability of F-factors? If not please propose any other value with justification. Please give rationale	No	It is difficult to agree that 15yrs is a suitable figure when we disagree with the proposal on fundamental grounds. The argument for it is one related to investment timescales, but we believe that a TL scheme has more benefit in operational timescales. A phasing in of P198 or such like would seem to be more appropriate, should one of them be approved.
7.	Which option do you support for the definition of the Baseline Period for calculation of F-factor values, either a) 1 April 2005 – 31 March 2006; or b) 1 April 2002 – 31 March 2006 (48 months). Data for England and Wales is available centrally for all of this period. c) Other period. Please give rationale	(a), (b) or (c)	Definitely a), since this would provide a full year's worth of data that included Scotland and it would avoid any gaming that might be done if the data after 31 <sup>st</sup> March 2006 was used.
8.	For option (b) data for BM Units in Scotland for the period 1 April 2002 - 31 March 2005 would have to be sourced directly from the registered Parties (as this was pre BETTA) with supporting confirmation? Please provide a view on the practicality of this requirement	View	Is the data there in the right format? It would need careful checking and would therefore suggest that it would be impracticable and to what end?

Q	Question	Response	Rationale
9.	Do you believe the cost of capital is affected by zonal TLMs with and without the addition of a hedging scheme? Please give rationale	No	
10.	Does P200 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure? Please give rationale	No	
11.	Are there any further comments on P200 that you wish to make?	Yes	If P198 or one of its variants is to be approved, then it is difficult to understand why P200 should be approved alongside it, when it undermines P198. If all the existing generators were to be hedged for 15 years as suggested then P198 might just as well be rejected in the first place. The arguments for or against a TL scheme revolve around P198 et al in our view.

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**P200 ASSESSMENT PROCEDURE CONSULTATION QUESTIONS**

BSC Parties (“Parties”) and other interested parties are invited to respond to this consultation expressing their views or provide any further evidence on any of the matters contained within this document. In particular views are sought in respect of the following questions. Parties are invited to supply the rationale for their responses.

<b>Respondent:</b>	<i>Bob Nicholson</i>
<b>Company Name:</b>	Alcan Smelting and Power UK
<b>No. of BSC Parties Represented</b>	<i>0</i>
<b>Parties Represented</b>	<i>N/A</i>
<b>No. of Non BSC Parties Represented (e.g. Agents)</b>	<i>1</i>
<b>Non Parties represented</b>	Alcan Smelting and Power UK
<b>Role of Respondent</b>	<i>Exemptable Generator</i>
<b>Does this response contain confidential information?</b>	<i>No</i>

<b>Q</b>	<b>Question</b>	<b>Response</b>	<b>Rationale</b>
1.	Do you believe Proposed Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	<b>No</b>	(See comments under 10 and 11.)
2.	Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the Proposed Modification? Please give rationale and state objective(s)	Yes / No	
3.	Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	Yes/ No	

Q	Question	Response	Rationale
4.	Do you support the implementation approach described in the consultation document/the implementation option preferred by the Modification Group? Please give rationale	Yes / No	
5.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	Yes / No	
6.	Do you agree with the 15 years duration for applicability of F-factors? If not please propose any other value with justification. Please give rationale	Yes / No	
7.	Which option do you support for the definition of the Baseline Period for calculation of F-factor values, either a) 1 April 2005 – 31 March 2006; or b) 1 April 2002 – 31 March 2006 (48 months). Data for England and Wales is available centrally for all of this period. c) Other period. Please give rationale	(a), (b) or (c)	
8.	For option (b) data for BM Units in Scotland for the period 1 April 2002 - 31 March 2005 would have to be sourced directly from the registered Parties (as this was pre BETTA) with supporting confirmation? Please provide a view on the practicality of this requirement	View	
9.	Do you believe the cost of capital is affected by zonal TLMs with and without the addition of a hedging scheme? Please give rationale	Yes / No	



Q	Question	Response	Rationale
10.	<p>Does P200 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure? Please give rationale</p>	<p><b>Yes</b></p>	<p><b>FAIR TREATMENT OF EXISTING PLANT</b></p> <p>As investment decisions have already been made there is no possible relocation signal within the UK for existing plant. Alcan operates its own power stations purely to provide the high level of security of supply that its smelters require (and which cannot be provided from the public system).</p> <p>The operation of Alcan's power stations will be unaffected by the introduction of zonal losses, as our priority will continue to be security of supply. Therefore this is not a signal Alcan can respond to, there will be no benefit from imposing this cost on Alcan. This option will also create great uncertainty and make expansion of our UK facilities difficult, in particular where further generation is required and less security is evident. Introducing locational losses provides no economic benefits to any of our sites. It follows that Grandfathering would be required to prevent sterilisation of Alcan's industrial assets.</p> <p>The treatment of existing plant in P200 would appear to represent a significant advantage over the P198 approach in this respect.</p>
11.	<p>Are there any further comments on P200 that you wish to make?</p>	<p><b>Yes</b></p>	<p><b>EQUAL TREATMENT OF DEMAND AND GENERATION</b></p> <p>Demand and Generation zones should be treated equally and zones for demand and generation must share the same geographic definition. For example Alcan as a major consumer could be transferring power between local sites, exporting and importing power within the same area, and therefore loss factors must be the same to avoid inappropriate distortions.</p> <p>All the zonal loss modifications proposed suffer from asymmetry in demand and generation loss factors.</p>

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## P200 ASSESSMENT PROCEDURE CONSULTATION QUESTIONS

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<b>Respondent:</b>	<i>Kirsten Elliott-Smith</i>
<b>Company Name:</b>	<i>Immingham CHP</i>
<b>No. of BSC Parties Represented</b>	<i>2</i>
<b>Parties Represented</b>	<i>Immingham CHP ConocoPhillips</i>
<b>No. of Non BSC Parties Represented (e.g. Agents)</b>	<i>-</i>
<b>Non Parties represented</b>	<i>Please list all non Parties responding on behalf of (including the respondent company if relevant).</i>
<b>Role of Respondent</b>	<i>Generator and trader</i>
<b>Does this response contain confidential information?</b>	<i>No</i>

Q	Question	Response	Rationale
1.	<p>Do you believe Proposed Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline?</p> <p>Please give rationale and state objective(s)</p>	No	<p>P200 shares all the defects of P198, although it introduces an important concept of mitigation for the first fifteen years.</p> <p>Our assessment is that over time it may realise benefits from redespach but these would be fewer under P200, while the costs of implementation would be greater. Overall, P200 can be expected to have a detrimental effect against applicable objective (b).</p> <p>The effect of the proposal measured against applicable objective (c) is also negative, penalising existing investment decisions and causing a negative impact on competition, but not to the same degree as evidenced under P198 because of the inclusion under P200 of the mitigation scheme.</p> <p>The increased complexity and costs would mean that P200 would not better facilitate the achievement of objective (d).</p>
2.	<p>Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the Proposed Modification?</p> <p>Please give rationale and state objective(s)</p>	No	<p>This is a marginally lesser evil in terms of objective (b), as the alternative is more representative. In particular it produces less distorting results in Scotland. However, the competitive detriments of P200 alternative on existing players (as under P198 alternative vs original) would be significantly greater.</p>
3.	<p>Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline?</p> <p>Please give rationale and state objective(s)</p>	No	<p>Again, the alternative shares the deficiencies of P200 original, and we consider these greater under the alternative to the original relative to the current baseline.</p>
4.	<p>Do you support the implementation approach described in the consultation document/the implementation option preferred by the Modification Group?</p> <p>Please give rationale</p>	Yes	<p>The proposal approach is practical.</p>

Q	Question	Response	Rationale
5.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	Yes	The mitigation element of the P200 solutions are very complex. Whilst we support the concept, we would have preferred exploration of simpler mitigation route, perhaps similar to P109.
6.	Do you agree with the 15 years duration for applicability of F-factors? If not please propose any other value with justification. Please give rationale	No	We would prefer an arrangement that covers the remaining operating life of commissioned assets.
7.	Which option do you support for the definition of the Baseline Period for calculation of F-factor values, either a) 1 April 2005 – 31 March 2006; or b) 1 April 2002 – 31 March 2006 (48 months). Data for England and Wales is available centrally for all of this period. c) Other period. Please give rationale	(c)	Assuming commencement from April 2008, we would prefer use of 2006/07 data once this is available, and do not agree with the comment of the group that this might be amenable to gaming. Alternatively (a), as proposed by the modification group, is to be preferred. It is important the baseline is recent. In our case ICHP was commissioning over the earlier part of the period in option (b), which would unfairly impact on the baseline quantity.
8.	For option (b) data for BM Units in Scotland for the period 1 April 2002 - 31 March 2005 would have to be sourced directly from the registered Parties (as this was pre BETTA) with supporting confirmation? Please provide a view on the practicality of this requirement	View	A consistent approach, using consistent data should be adopted. Asking some parties to self-source baseline data is not appropriate.
9.	Do you believe the cost of capital is affected by zonal TLMs with and without the addition of a hedging scheme? Please give rationale	Yes	Introduction of any zonal losses scheme would impact adversely on risk and competition in the marketplace. We estimate that these effects are such that they could impact on sectoral financing costs and could be regarded as creating a further barrier to entry. We do not accept Oxera's findings that any such new risk would be diversifiable, especially for stand-alone players like ourselves.

Q	Question	Response	Rationale
10.	Does P200 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure? Please give rationale	No	-
11.	Are there any further comments on P200 that you wish to make?	No	<p>Despite the complexity of P200, and given that we believe the distortions are greatest under the alternative formulation, ICHP believes that P200 original represents the least bad outcome. This preference is based exclusively on the effect of the mitigation scheme within P200, which would eliminate many of the competitive detriments that would arise from a zonal losses scheme at least for a finite period.</p> <p>If any zonal losses scheme were to be implemented, we believe that it should be accompanied by a mitigation scheme.</p>

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Our Reference:

Your Reference:

Date : 14<sup>th</sup> July 2006

Dear Kathryn,

**Consultation on Impact of P200 ‘Introduction of a Zonal Losses Scheme with Transitional Scheme’**

This response is sent on behalf of Scottish and Southern Energy, Southern Electric, Keadby Generation Ltd., Medway Power Ltd., and SSE Energy Supply Ltd.

In relation to the eleven questions contained within your note of 30th June 2006, and the associated Modification Report consultation for P200, we have the following comments to make.

**Q1 Do you believe Proposed Modification P200 better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)**

No. We believe that Proposed Modification P200 would not better facilitate the achievement of the Applicable BSC Objectives when compared with the current Code baseline.

However, we do believe that Proposed Modification P200 would better facilitate the achievement of the Applicable BSC Objectives when compared with P198 (original or alternative).

We believe that to introduce a zonal losses scheme (e.g. P198) without a transitional scheme would have a host of flaws (which we have outlined in our response to the ‘sister’ consultation to this one on P198).

Briefly, a zonal losses scheme would not be cost reflective and would not be something that existing power stations could, realistically, respond to (by re-locating to a lower changing area).

It would, therefore, penalise those existing parties and would create ‘winners’ and ‘losers’. It also suffers from the fatal defect that even if an existing party does respond (which we doubt they practically could) to the signal that a zonal transmission scheme seeks to establish (by, for example, moving the existing power station from northern Scotland to southern England) then that signal disappears. This is illustrated in the Task 10 aspects (pgs 44-45) of the PTI Report.

However, a transitional scheme applied to the introduction of the zonal losses scheme would take account of the fact that existing power station cannot, practically, up and move.

Such a scheme would also be following the principle, of a transitional arrangement for a significant alteration in market design that has recently been adopted, for example, by Ofgem when applying the new ICRP methodology for transmission charges.

**Q2 Do you believe Alternative Modification P200 better facilitates the achievement of the Applicable BSC Objectives when compared with the Proposed Modification? Please give rationale and state objective(s)**

Yes. We believe that P200 Alternative would better facilitate the achievement of the Applicable BSC Objectives when compared with P200 Original.

**Q3 Do you believe Alternative Modification P200 better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)**

No. We believe that P200 Alternative would not better facilitate the achievement of the Applicable BSC Objectives when compared with the current Code baseline.

However, we do believe that P200 Alternative would better facilitate the achievement of the Applicable BSC Objectives when compared with P198 (original or alternative).

**Q4 Do you support the implementation approach described in the consultation document/the implementation option preferred by the Modification Group? Please give rationale**

We support the implementation approach as described in the consultation document. It seems a pragmatic solution to implement P200 from 1<sup>st</sup> April 2008.

**Q5 Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale**

None at this time.

**Q6 Do you agree with the 15 years duration for applicability of F-factors? If not please propose any other value with justification. Please give rationale**

Yes. We agree with the 15 year duration for the applicability of the F-factors. Power stations are capital intensive projects that have a very long lives. For example, some of our existing BMU trading units have been operating for over 50 years (and we see little reason, with the appropriate O&M, why, technically, they cannot operate for many decades to come). Given this it seems entirely appropriate to apply the F-factor for what, in the context of power station life-time, is a fair and reasonable period, namely 15 years duration

**Q7 Which option do you support for the definition of the Baseline Period for calculation of F-factor values, either (a) 1 April 2005 – 31 March 2006; or (b) 1 April 2002 – 31 March 2006 (48 months). Data for England and Wales is available centrally for all of this period; or(c) Other period. Please give rationale**

We are mindful, as noted in our response to Question 6, that power stations have very long lives and picking a single year is, on reflection, not appropriate.



This is particularly the case with respect to 1<sup>st</sup> April 2005 – 31<sup>st</sup> March 2006 given the well documented shortage in the gas market etc., during this period which led to higher gas prices and a noticeable decrease in gas fired generation output in that year and a corresponding increase in other generation output, such as coal. This year was, therefore, atypical.

We therefore conclude that option (a) is not appropriate and we do not support it.

We appreciate that whilst, in the ‘perfect world’, looking as far back as possible would be the ‘ideal’ this has to take account of the practicality of gathering such data. The larger the number of months upon which the F-factor values are based the better. We therefore conclude that option (b) is, pragmatically, the most appropriate and we support it.

Given our comments above, and noting the technical data constraints that limit us going further back than 1<sup>st</sup> April 2002, we feel that there is no other period that is more appropriate than the 48 months in option (b). We therefore conclude that option (c) is not appropriate and we do not support it.

**Q8 For option (b) data for BM Units in Scotland for the period 1 April 2002 - 31 March 2005 would have to be sourced directly from the registered Parties (as this was pre BETTA) with supporting confirmation? Please provide a view on the practicality of this requirement**

We note that the arrangements with respect to metering power stations in Scotland prior to 1<sup>st</sup> April 2005 was subject to approval (and oversight) from Ofgem (and its predecessor).

We believe that metered volume data is available prior to 1<sup>st</sup> April 2005 for those Scottish BM units. It should be a straightforward task to link the pre BETTA metered volume data to the post BETTA BMU. To ignore such valid data from Scotland would be discriminatory.

**Q9 Do you believe the cost of capital is affected by zonal TLMs with and without the addition of a hedging scheme? Please give rationale**

Yes. Before answering this question it is first worth noting that, in February, the regulators for electricity, gas and water (Ofgem and Ofwat respectively) issued a joint working paper on “financing networks”<sup>1</sup> and that the Forward contained the following statements:-

“The 2004 Ofgem and Ofwat price control reviews can be regarded as successful for three reasons. First, because regulatory risk has diminished....The regulators showed in their actions that they were well informed about the issues of greatest concern to consumers and to the providers of finance. *The regulatory risk premium in the cost of capital should go down as a result* [emphasis added].”

It is therefore clear that both regulators recognised that regulatory risk can impose a premium on the cost of capital and should, for that reason, be avoided if possible. We agree with this sentiment.

That having been said, we believe that if a zonal losses scheme were to be introduced without an associated transitional scheme then there would be a significant increase in the regulatory risk associated with building new generation in GB and this would lead to a higher cost of capital for new and existing generation.

It should be noted that generation investments are made over a very long period of time. For example, our Glen Doe hydro generation investment could be expected (based on our existing hydro generation plant) to be operating for well over 40 years.

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<sup>1</sup> Ofgem/Ofwat (2006), *Financing Networks: A Discussion Paper*, Ofgem and Ofwat, February 2006

Such long term investments are entered into in response to the signals that prevail at the time the investment is made. As these assets cannot be moved, so the generator is unable to respond to the alleged 'signal' associated with zonal losses and it is, therefore, inappropriate to prejudice the output of those generators now.

Anything as profound as applying a zonal losses scheme, which, according to section 9.1.3 (pg 68) of the Oxera report will see a transfer of £85M from northern GB generation to southern GB generation will significantly increase the perception, amongst those wishing to invest in new generation, about the regulatory risk as well as having a negative impact on the cost of capital for existing and new generation and adversely affecting the competitive market.

A transitional scheme would mitigate the issues surrounding the increased cost of capital that would arise if a zonal losses scheme were to be introduced without an associated transitional scheme.

**Q10 Does P200 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure? Please give rationale**

We believe that a large quantity of documentation has arisen from this particular consultation. In addition we are mindful that the Government's Energy Review and National Grid's Winter Outlook Update was only published on Tuesday (11<sup>th</sup> July) and our response to this P198 (and the associated P200) consultation is due in by noon on Friday (14<sup>th</sup>) and, therefore there may be additional issues that need to be taken into account by Ofgem and the Panel when considering the merits of P200 Original and Alternative.

**Q11 Are there any further comments on P200 that you wish to make?**

We look forward to commenting on the recommendations of the Panel at the appropriate time.

Yours sincerely

Garth Graham  
Scottish and Southern Energy

## P200 ASSESSMENT PROCEDURE CONSULTATION QUESTIONS

BSC Parties (“Parties”) and other interested parties are invited to respond to this consultation expressing their views or provide any further evidence on any of the matters contained within this document. In particular views are sought in respect of the following questions. Parties are invited to supply the rationale for their responses.

<b>Respondent:</b>	David Lewis
<b>Company Name:</b>	EDF Energy
<b>No. of BSC Parties Represented</b>	9
<b>Parties Represented</b>	EDF Energy Networks (EPN) plc; EDF Energy Networks (LPN) plc; EDF Energy Networks (SPN) plc; EDF Energy (Sutton Bridge Power); EDF Energy (Cottam Power) Ltd; EDF Energy (West Burton Power) Ltd; EDF Energy plc; London Energy plc; Seeboard Energy Ltd
<b>No. of Non BSC Parties Represented (e.g. Agents)</b>	0
<b>Non Parties represented</b>	0
<b>Role of Respondent</b>	Supplier/Generator/Trader/Distributor
<b>Does this response contain confidential information?</b>	No

Q	Question	Response	Rationale
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Q	Question	Response	Rationale
1.	<p>Do you believe Proposed Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)</p>	No	<p>We do not believe that the proposed Modification P200 will better facilitate the BSC Objectives for the following reasons.</p> <p>In relation to Objective B, we are not convinced that a zonal losses scheme will lead to more efficient despatch of plant and therefore believe that it is unlikely that plant will respond to the signals that P200 will supposedly provide at the margin. In particular, fuel costs (especially when the gas/coal spread is high) and other operational factors such as plant dynamics are likely to have a much more significant impact on a plants decision to run or not to run than a zonal loss charging scheme. We would also question the signals that such a scheme would provide anyway as it seems quite clear that as qualifying BM Units deviate more from their F-factor volumes, the resulting TLMs for all zones become more difficult to determine. This effect would worsen over the 15 years of the scheme as the potential for variance between F-factor values and actual output increases. We also think that it is perverse for qualifying plant to be credited or debited energy in any settlement period for not running – this is inefficient and will lead to complex contractual problems for affected plant. We therefore believe that that the Modification would not better facilitate Objective B.</p> <p>We believe that new power plants (bar renewables) are being located on the basis of TNUoS charges, such that the fixed, 15 year F-factors will become increasingly at odds to variable TLFs (which will change with the location of new and closure of existing plant). We would not want to see a zonal losses and grandfathering scheme that adversely affects the operation of the transmission system through TLFs and F-factors providing mixed signals to generators.</p>

Q	Question	Response	Rationale
			<p>In regards to Objective C, this Modification is clearly discriminatory in that both SVA registered and new plant are not able to benefit from the scheme. It is also difficult to understand how a large industrial facility, which is a sunken investment similar to a power station, should not also be protected from regulatory change. Again, we believe that the Modification is detrimental to this Objective.</p> <p>In terms of Objective D, the inherent complexity of this Modification was clearly shown by the difficulties in expressing the Proposal in algebraic terms during the Assessment Procedure. It is also likely that BSC Parties will struggle with the additional complexity that this Modification will add to the settlements process. This combined with very high implementation costs can only be detrimental to this Objective.</p>
2.	<p>Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the Proposed Modification? Please give rationale and state objective(s)</p>	Yes	<p>Seasonal TLFs will strengthen the signals (if any) provided at the margin by this Modification. However, even if these signals materialise, we are not convinced that plant will necessary respond to these.</p>
3.	<p>Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)</p>	No	<p>For the reasons stated in question one we do not believe that a scheme of this nature will better facilitate the BSC Objectives.</p>
4.	<p>Do you support the implementation approach described in the consultation document/the implementation option preferred by the Modification Group? Please give rationale</p>	Yes	<p>However, it may have been prudent for Elexon to factor in the possibility of any legal challenge that may arise from the Authority's decision, as all previous change proposals relating to zonal charging for losses, both in the Pool and under NETA, have been taken to court. This is even more acute for P200 as it requires additional lead time over P198.</p>

Q	Question	Response	Rationale
5.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	No	It is our opinion that the introduction of a zonal losses scheme within the BSC is not the best way to encourage economic location of generation (or location of demand). With this rationale we believe that transmission issues are best managed through transmission charging and the CUSC not the BSC, and that the cost of connection and system reinforcement for new generation will usually be a very much more material issue, when cost-reflectivity in relation to transmission is considered, than electrical transmission losses.
6.	Do you agree with the 15 years duration for applicability of F-factors? If not please propose any other value with justification. Please give rationale	No	We believe that the 15 years figure is arbitrary and therefore difficult to justify. The application of fixed F-Factors (calculated on 2005/06 operations) until 2022/23 is an unwarranted intervention which is likely to have unforeseen consequences on the future running of the market.
7.	Which option do you support for the definition of the Baseline Period for calculation of F-factor values, either a) 1 April 2005 – 31 March 2006; or b) 1 April 2002 – 31 March 2006 (48 months). Data for England and Wales is available centrally for all of this period. c) Other period. Please give rationale	(a)	As data is only available in BSC systems from April 2005, it would seem practicable that this is the starting point for the baseline period. It would also be prudent for this period to end no later than 31 <sup>st</sup> March 2006 as otherwise there would be opportunity for qualifying plant to manipulate their F-factor values. Option (a) is therefore the only practicable solution, even though it is unlikely to form a good proxy of running pattern for all qualifying plant.  Option (b) is completely impracticable and would add another layer of discrimination to the Modification in that parties in Scotland would have data used that may be subject to different auditing requirements and not of the same accuracy. It is also not clear that Elexon could use the SAS data anyway; there have been problems obtaining and converting it for use in BSC systems in the past.
8.	For option (b) data for BM Units in Scotland for the period 1 April 2002 - 31 March 2005 would have to be sourced directly from the registered Parties (as this was pre BETTA) with supporting confirmation? Please provide a view on the practicality of this requirement	View	For the reasons stated above we believe that this is completely impracticable. It is also worth noting that as this information would be sourced direct from parties, that this data could be open to manipulation.

Q	Question	Response	Rationale
9.	Do you believe the cost of capital is affected by zonal TLMs with and without the addition of a hedging scheme? Please give rationale	No	We believe that the impact on the cost of capital is negligible - regulatory risk is something that any party who is a signatory of the BSC is subject to and the presence of a Modification Process in the code merely re-iterates this point.
10.	Does P200 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure? Please give rationale	No	
11.	Are there any further comments on P200 that you wish to make?	Yes	<p>We would like to re-iterate that this is a very costly and complex scheme that would provide few, if any, benefits to the efficiency of the GB Transmission System. P198 is a costly and complex change in itself with few discernible benefits and P200 merely exacerbates this.</p> <p>We would also like to note that the nature of the F-factor calculation means that generators will inevitably deviate from these volumes, and that this will become more so over time. This is because F-factors are calculated on the basis of monthly averages and then applied to individual settlement periods – this takes no account of intra-day running patterns or weekday/weekend differentials. The electricity market will also be markedly different towards the end of the scheme, and it is likely that plant will operate (because of the hedged volume) in a manner that is not efficient for the overall system.</p> <p>We would also like to point out that the baseline data would be based on a period of very high gas prices. This has meant that coal plant has been running more at baseload and therefore F-factors would be more favourable for these plants. It is however highly likely that if gas prices fall, then CCGT's would run at baseload instead of peak. This issue again highlights the arbitrary nature of the F-factor calculation.</p>

Parties are encouraged to provide financial information with regard to either the costs or benefits of the Modification Proposal to support the Assessment

Procedure. Where requested this information can be treated as confidential, although all information will be provided to the Authority.

Please send your responses by **12 noon on Friday 14 July 2006** to [modification.consultations@elexon.co.uk](mailto:modification.consultations@elexon.co.uk) and please entitle your email 'P200 **Assessment Consultation**'. Please note that any responses received after the deadline may not receive due consideration by the Modification Group.

Any queries on the content of the consultation pro-forma should be addressed to Justin Andrews on 020 7380 4030, email address [justin.andrews@elexon.co.uk](mailto:justin.andrews@elexon.co.uk).



## P200 ASSESSMENT PROCEDURE CONSULTATION QUESTIONS

BSC Parties (“Parties”) and other interested parties are invited to respond to this consultation expressing their views or provide any further evidence on any of the matters contained within this document. In particular views are sought in respect of the following questions. Parties are invited to supply the rationale for their responses.

<b>Respondent:</b>	Gary Henderson
<b>Company Name:</b>	SAIC Ltd. (for and on behalf of ScottishPower)
<b>No. of BSC Parties Represented</b>	7
<b>Parties Represented</b>	Scottish Power UK plc, ScottishPower Energy Management Ltd, ScottishPower Generation Ltd, ScottishPower Energy Retail Ltd, SP Transmission Ltd, SP Manweb plc, SP Distribution Ltd
<b>No. of Non BSC Parties Represented (e.g. Agents)</b>	0
<b>Non Parties represented</b>	N/A
<b>Role of Respondent</b>	Supplier / Generator / Trader / Consolidator / Exemptable Generator / Distributor
<b>Does this response contain confidential information?</b>	No

Q	Question	Response	Rationale
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Q	Question	Response	Rationale
1.	<p>Do you believe Proposed Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)</p>	<p><b>Yes</b></p>	<p>The effect of the introduction of a zonal losses scheme as in the case with P198 (and previous P82) creates windfall gains and losses. Such gains and losses create uncertainty and distort competition. The introduction of P200 would retain the marginal incentives of P198, while reducing significantly the windfall gains and losses and providing protection against future changes in TLFs. This gives certainty of investment signal and reduced risk for investment giving rise to increased investment which would better facilitate competition. ScottishPower therefore believe P200 would better facilitate the achievement of BSC Objective (c) (promoting effective competition) and (b) (efficient network operation), through more stable long term investment signals.</p> <p>While the introduction of P200, as is the case with P198, would detriment BSC objective (d) (efficiency), due to the increased cost of implementation and administration. We believe that the introduction of P200 should reduce the number of future modifications on transmission losses issues and thus the implementation costs of P200 would be well spent and the effect on Objective (d) could be neutral.</p>
2.	<p>Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the Proposed Modification? Please give rationale and state objective(s)</p>	<p><b>Yes</b></p>	<p>ScottishPower believe that an ex-ante TLFs for each BSC Season approach would better facilitate the BSC objectives (b) and (c) when compared with P200 Proposed. This would more accurately allocate the relevant TLFs to parties. From previous analysis, TLFs do vary throughout the year. Some parties may only operate at certain times of the year and the demands of certain parties differ throughout the year. These parties should therefore be allocated a more applicable TLF. The provision of Seasonal TLFs would therefore be more appropriate.</p>

Q	Question	Response	Rationale
3.	Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	<b>Yes</b>	For the same reason as Question 1 above.
4.	Do you support the implementation approach described in the consultation document/the implementation option preferred by the Modification Group? Please give rationale	<b>Yes</b>	Implementation must be planned to take account of all required system and process changes. These are the minimum timescales required to ensure as risk free an implementation as possible. Implementation in April 2008 is the earliest date possible, and in line with contract rounds and Party business planning.
5.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	<b>No</b>	During the extensive modification procedure, we believe all viable alternatives have been explored.
6.	Do you agree with the 15 years duration for applicability of F-factors? If not please propose any other value with justification. Please give rationale	<b>Yes</b>	ScottishPower accept that 15 years duration is applicable as this is typically the timescale used by banks in modelling on investment decisions.
7.	Which option do you support for the definition of the Baseline Period for calculation of F-factor values, either a) 1 April 2005 – 31 March 2006; or b) 1 April 2002 – 31 March 2006 (48 months). Data for England and Wales is available centrally for all of this period. c) Other period. Please give rationale	<b>(a)</b>	(a) - ScottishPower believe this option is the simplest and certain, avoiding argument and any complications with data provision, particularly for Scottish generators.

Q	Question	Response	Rationale
8.	For option (b) data for BM Units in Scotland for the period 1 April 2002 - 31 March 2005 would have to be sourced directly from the registered Parties (as this was pre BETTA) with supporting confirmation? Please provide a view on the practicality of this requirement	View	ScottishPower believe this could be time consuming, potentially costly, potentially erroneous and open to auditability/verification complications.
9.	Do you believe the cost of capital is affected by zonal TLMs with and without the addition of a hedging scheme? Please give rationale	Yes	ScottishPower believe that the cost of capital is affected by zonal TLMs (without a hedging scheme), as it increases the perceived regulatory risk associated with the electricity supply industry. Any form of regulatory risk would affect future investment decisions and increase the cost of risk management.
10.	Does P200 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure? Please give rationale	No	Applicable issues have already been discussed during the modification procedure.
11.	Are there any further comments on P200 that you wish to make?	No	

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Please send your responses by **12 noon on Friday 14 July 2006** to [modification.consultations@elexon.co.uk](mailto:modification.consultations@elexon.co.uk) and please entitle your email 'P200 **Assessment Consultation**'. Please note that any responses received after the deadline may not receive due consideration by the Modification Group.

Any queries on the content of the consultation pro-forma should be addressed to Justin Andrews on 020 7380 4030, email address [justin.andrews@elexon.co.uk](mailto:justin.andrews@elexon.co.uk).

## P200 ASSESSMENT PROCEDURE CONSULTATION QUESTIONS

BSC Parties (“Parties”) and other interested parties are invited to respond to this consultation expressing their views or provide any further evidence on any of the matters contained within this document. In particular views are sought in respect of the following questions. Parties are invited to supply the rationale for their responses.

<b>Respondent:</b>	<i>Dr Phil Lawless</i>
<b>Company Name:</b>	<i>Teesside Power Limited</i>
<b>No. of BSC Parties Represented</b>	<i>2</i>
<b>Parties Represented</b>	<i>Teesside Power Limited, Teesside Energy Trading Limited</i>
<b>No. of Non BSC Parties Represented (e.g. Agents)</b>	<i>0</i>
<b>Non Parties represented</b>	
<b>Role of Respondent</b>	<i>Generator</i>
<b>Does this response contain confidential information?</b>	<i>No</i>

<b>Q</b>	<b>Question</b>	<b>Response</b>	<b>Rationale</b>
1.	Do you believe Proposed Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	No	<p>P200 better facilitates the achievement of the Applicable BSC Objectives (a), (b) and (c), in the same way and to the same extent as Modification Proposal P198, if it should be determined that P198 better promotes these objectives.</p> <p>Furthermore, the features of P200 over and above those of P198 avoid the introduction of a higher cost of new entry, thus better achieving BSC Objective (b) and hence stimulate competition in the market for generation, thus better meeting BSC Objective (c).</p> <p>As is evidenced from the response to the Assessment Consultation on P198, TPL does not consider that P198 better meets the Applicable BSC Objectives, compared with the current baseline.</p>

Q	Question	Response	Rationale
2.	Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the Proposed Modification? Please give rationale and state objective(s)	No	We understand that the Alternative Modification P200 might provide a marginal improvement for consumers compared with P200 because the seasonal loss factors should be more representative of the actual loss factors and so are more likely to affect the pattern of generation in a beneficial way. Nevertheless, any benefit is likely to be negated by the increased volatility and uncertainty associated with the more complex arrangement. Any such improvement does not in our view, however, relate to any Applicable BSC Objective.
3.	Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	No	Whilst, for the reasons given in 2. above, we consider that Alternative Modification P200 is a marginal improvement on P200, for the reasons given in 1., we consider that neither proposal better facilitates the achievement of the Applicable BSC Objectives compared with the current baseline.
4.	Do you support the implementation approach described in the consultation document/the implementation option preferred by the Modification Group? Please give rationale	Yes	We support the implementation option preferred by the Modification Group as being a sensible and pragmatic approach.
5.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	No	We consider that the Modification Group has explored all of the options which are consistent with P200 itself.
6.	Do you agree with the 15 years duration for applicability of F-factors? If not please propose any other value with justification. Please give rationale	Yes	We consider that a 15 year duration is consistent with the timescale which generators and industrial customers would adopt when considering major capital investment.  We also note that in its response to the recent Government's Energy Review consultation, Ofgem consider 15 years as the investment time horizon for industries included in the EU Emissions Trading Scheme, which includes the electricity generation sector and the large consumers of electricity.

Q	Question	Response	Rationale
7.	Which option do you support for the definition of the Baseline Period for calculation of F-factor values, either a) 1 April 2005 – 31 March 2006; or b) 1 April 2002 – 31 March 2006 (48 months). Data for England and Wales is available centrally for all of this period. c) Other period. Please give rationale	(b)	As identified by the Modification Group, using as many years of historic data as possible in the F-factor calculation will help to smooth out any atypical behaviour.
8.	For option (b) data for BM Units in Scotland for the period 1 April 2002 - 31 March 2005 would have to be sourced directly from the registered Parties (as this was pre BETTA) with supporting confirmation? Please provide a view on the practicality of this requirement	View	Whilst we are not familiar with the details of the trading arrangements in Scotland prior to BETTA, we are aware that there was a Scottish settlement system in operation and hence, we feel that the metered data should be available and that it should be applied to all trading units located in Scotland which require an F-factor.
9.	Do you believe the cost of capital is affected by zonal TLMs with and without the addition of a hedging scheme? Please give rationale	Yes	Please see paper on this subject prepared for Teesside Power Limited by NERA
10.	Does P200 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure? Please give rationale	No	We are not aware of any further issues
11.	Are there any further comments on P200 that you wish to make?	Yes	There are a number of important points we wish to draw to the attention of the BSC Panel when it considers P200 which refer to the related proposal, P198, and the associated Assessment Consultation.  Please see attached sheet

Parties are encouraged to provide financial information with regard to either the costs or benefits of the Modification Proposal to support the Assessment Procedure. Where requested this information can be treated as confidential, although all information will be provided to the Authority.

Please send your responses by **12 noon on Friday 14 July 2006** to [modification.consultations@elexon.co.uk](mailto:modification.consultations@elexon.co.uk) and please entitle your email 'P200 **Assessment Consultation**'. Please note that any responses received after the deadline may not receive due consideration by the Modification Group.

Any queries on the content of the consultation pro-forma should be addressed to Justin Andrews on 020 7380 4030, email address [justin.andrews@elexon.co.uk](mailto:justin.andrews@elexon.co.uk).



**Question 11.** Are there any further comments on P200 that you wish to make?

**Response**

Yes: there are a number of important points we wish to draw to the attention of the BSC Panel when it considers P200 which refer to the related proposal P198, and the associated Assessment Consultation.

- (i) The basic argument put forward by the proposer of P198 is that “the Code’s current uniform allocation of variable losses does not provide the appropriate economic signals to site new generation closer to existing demand (and vice versa)”. In fact, neither does P198.: the “signals” which would result from the adoption of P198 would encourage generation to locate at the extremities of the transmission system, where there is limited demand. The adoption of P198 would encourage generation to locate initially in the wrong places and would be inefficient in the use of resources applied to the development of new generation projects.

The inefficiency which would result over the longer term is evidenced by the zonal loss factor which would apply initially to the north east of England. The loss factor for this zone would encourage power stations in that zone to cease generation, thereby, according to the analysis undertaken, reducing the variable losses on the transmission system. The evidence provided in the NGC Seven Year Statement, “SYS”, however, is counter to this. The figures in the latest SYS show that there is a net generation deficit in the north east of England. In other words, whilst demand currently exceeds generation in this zone, nevertheless, the result of adopting P198 would be to encourage the closure of generation in this zone. The result would be that the generation deficit for the zone would increase. This demonstrates a fundamental failing of the proposal: it purports to encourage generation to locate close to demand but in fact, it does no such thing

- (ii) There are a number of references in the consultation document to the current BSC arrangements resulting in a cross subsidy. We do not accept this as a valid argument. At no point has anyone defined what a cross-subsidy is or how P198 will eliminate it. Moreover, the BSC objectives do not provide any basis for identifying, calculating or assessing cross-subsidies. Discussion of such a nebulous concept has no role to play in the assessment of P198. P198 must be shown to be beneficial by the specific standards set out in the BSC. The uniform allocation of variable losses was the result of a policy decision taken by government at the time when the industry was liberalised in 1990. Companies have changed hands since that time and we assume that the prices paid reflected the trading arrangements in place at that time. Whilst the adoption of P198 may, potentially, result in a small saving in the cost of transmission losses, it will definitely result in windfall profits and losses for the companies which currently operate as BSC Parties.
- (iii) The Proposer believes that, in the longer term, “the locational signals would encourage more efficient siting of new plant and load in areas where generation or demand is respectively limited”. There is no justification for this claim. As

noted by Oxera, there are already substantial locational signals, which are reflected in the majority of the new build being located in the south of England. Indeed, if all of the plant in the south is built, as shown by Oxera, the “locational signals” purported to result from P198 will disappear or even reverse, demonstrating the instability which would be created if P198 were to be implemented.

- (iv) The Consultation Document for P198 discusses the availability of the load flow model to BSC Parties. Given the potential impact which the adoption of P198 or P200 would have on any BSC Party, and the fact that it introduces for the first time, as far as we are aware, a different treatment for different BSC Parties, we consider it essential that the model, and all required input data, is made available to all BSC Parties. Building an independent load flow model would be a large and expensive task. To argue that any party is able to build its own load flow model demonstrates the ante-competitive approach of dominant BSC Parties.
- (v) The cost benefit analysis claims a benefit from implementation of P198 resulting from the reduction in system losses. At the same time, certain BSC Parties will suffer a loss which is far greater than the net saving in the costs of variable losses. Such a transfer in wealth between BSC Parties is disproportionate and is not necessary: it demonstrates that the market is subject to significant regulatory risk, which will have an adverse effect on the cost of capital for new projects. Such a negative result is avoided by the adoption of P200.
- (vi) Modification Proposal P200 will ensure that any benefits which might materialise from marginal despatch decisions as a result of the introduction of zonal loss charges will be delivered to the market, whilst avoiding the negative impact of wholesale windfall gains and losses, which are two orders of magnitude greater than the potential marginal savings.

28 June 2006

# Regulatory Risk and the Cost of Capital

## For Teesside Power Ltd

**NERA**  
Economic Consulting

## **Project Team**

Graham Shuttleworth

Vakhtang Kvekvetsia

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## Executive Summary

OXERA, among others, has asserted that regulatory risk does not affect the cost of capital. This statement is derived from analysis of the Capital Asset Pricing Model (CAPM), which is used by regulators in Britain and elsewhere to determine the cost of capital for regulated companies. In the CAPM, the cost of capital of company A depends upon three parameters: (1) the risk-free rate of interest; (2) the rate of return available from a diversified portfolio (normally, the stock market); and (3) the correlation between returns to company A and returns to the diversified portfolio. Regulatory risk does not appear to affect any of these parameters and so does not appear to affect the cost of capital of company A.

However, CAPM is not the only theory of the cost of capital. It may not even be the theory best suited to analysing the cost of capital for long-lived irreversible investments like power stations. CAPM was developed for analysing financial assets, which can be created and liquidated more or less immediately. Investment in power stations, on the other hand, is like exercising an option – once the investor has committed funds to the project, there is no way back. The most modern theories of the cost of capital analyse such investments using a decision tree to examine the possibility of exercising the option now or later. In some conditions, uncertainty lends additional value to the possibility of waiting, which means that the project must offer a higher rate of return, if investors are going to invest now. In that way, regulatory risk increases the required rate of return and hence the cost of investing.

The following sections explain how the theory describes the decision facing investors and how it increases costs. The key points are:

1. Future returns are uncertain, because of regulatory risk;
2. In this example, the regulatory risk is symmetric (i.e. the upside risk is as big as the downside risk);
3. The uncertainty over future returns caused by the regulatory risk will be resolved (or reduced) within the project's lifetime.

Condition 2 is not necessary for the theory to apply, but indicates that the result does not depend on the existence of asymmetric risks, or regulatory penalties. The rise in the cost of capital is caused by regulatory risk, not by a particular kind of risk.

In our example, a risk affecting the annual returns to a project is resolved in year 4 of a 15-year project. (NB: The gap between P82 and P198 is about 4 years.) The base case variation in the project's annual margin is +/-4%, equivalent to +/-2% on annual revenues, if the annual margin is about half of revenues. (NB: Changes to TLFs can easily affect revenues to power stations by +/-2%.)

The effect of this regulatory risk is to raise the required rate of return from 10% p.a. to 10.16% or higher. This may not seem like a large increase. However (1) it shows that regulatory risk does increase the required rate of return and (2) the benefit of avoiding or reversing even this increase in the required rate of return, when applied to forthcoming investments in generation capacity, would be enough to offset the additional costs of implementing F-Factors under P200. Hence, compared with P198, the benefits of P200 will outweigh the additional costs.

## 1. Outline of Paper

This paper examines the effect of regulatory risk on investment decisions. Although some theories of the cost of capital, such as CAPM, imply that regulatory risk does not affect the cost of capital, that result illustrates a deficiency in the theory, rather than a universal truth about investment decisions. In this paper, we apply one of the new theories of the cost of capital – options theory – to show how regulatory risk raises the cost of capital.

For this example, we begin (section 2) by describing out a project for which regulatory risk is symmetric, i.e. upside and downside variation in returns are equally likely and potential upside gains are equal to potential downside losses.

We then show how regulatory risk raises the cost of capital, even when it is symmetric. This example does not therefore depend on any bias in the risk.

Option theory treats an investment as calling an option. Investors can choose between calling their option (i.e. investing) now, or later, but once they have called the option, there is no going back. Investments in power stations are long-lived irreversible assets, so investors cannot reverse their decision and remove the investment if conditions turn out to be adverse. This affects how people make investment decisions in the face of regulatory risk.

To show this effect, we describe the payoff from waiting until the regulatory risk has been reduced or, in this case, removed (section 3). We then examine the potential payoffs from waiting to make this investment.

We then (section 4) compare the payoffs from (1) immediate investment with (2) the payoff from the delayed investment. This comparison gives the value of option to wait until the regulatory risk is resolved. We then calculate the extra return that the investors should be offered today in order to induce them to make investments now rather than wait until the regulatory uncertainty is resolved. Section 5 repeats the calculation assuming that the extra return is only paid out in the interim period, between investing now and investing later.

The result of this analysis is a rise in the cost of capital, i.e. in the rate of return that investors require before they will commit funds to irreversible investments in the power sector. The increase is not large in percentage terms – less than one percent. However, even a small increase has major implications for costs and for prices, sufficient to outweigh any small benefits from increasing regulatory risk.

## 2. Value of a Project Facing Regulatory Risk

In this section we examine the effect of regulatory risk on investment decisions, if the risk is symmetric, i.e. there is an equal chance of upside and downside, and potential gains from upside risk are equal to potential losses from downside risk.

We consider a simple case where an investor is making a decision to invest £100 in a 15 year project. Investment in year 0 produces a return in years 1 to 15. For simplicity we assume that project cash flows are constant over lifetime of the asset. The cost of capital before allowing for regulatory risk (e.g. the CAPM value) is 10%.

The structure of the regulatory risk is as follows. The project will earn a 10% annual rate of return from year 1 to year 4. Starting from year 5, the return is uncertain as a new regulatory decision is expected in year 4 that will affect returns. From year 5, there is an equal chance that net revenues (1) rise by  $x$ , (2) fall by  $x$  or (3) remain at the current level.

Figure 2.1 presents the cashflows faced by the investor in each of these scenarios assuming that the spread of uncertain margins,  $x$ , is 4% of the central value. In all three scenarios, the investment earns 10% until year 5. From year 5, cashflows differ between scenarios as follows:

- § scenario 2 is a continuation of business as usual, which is also an illustration of the case with no uncertainty. The NPV of this scenario is £0.0;
- § scenario 1 cash flows are 4% lower than in the business as usual case, reflecting the downside risk. The NPV of this scenario is -£3.2.
- § scenario 3 cash flows are 4% higher than in the business as usual case, reflecting the upside potential. The NPV of this scenario is +£3.2.

Each of these scenarios has a probability of  $1/3$ . The expected NPV of investing immediately is a weighed average of the NPVs of the three scenarios and it is equal to zero.

This example shows that potential upside risks exactly offset the downside risks and a decision to invest now in an uncertain environment has the same expected NPV as the decision to invest in an environment where there is no regulatory risk. Moreover, this will be true for any value of spread  $x$  as long as the risk is symmetric and there is a same probability of upside and downside movements. Figure 2.2 illustrates the case with the 6% spread.

Such reasoning might lead to the conclusion that investment decisions are not affected by regulatory risk, but such a conclusion would not take into account an option of delaying an investment decision. In the following section we evaluate the expected payoff from delaying investments until uncertainty is resolved.



**Figure 2.1**  
**Invest Now (4% spread)**

	Scenario 1	Scenario 2	Scenario 3
<b>NPV of cashflows*(£)</b>	-2.12	0.00	2.12
<b>Probability</b>	1/3	1/3	1/3
<b>Payoff (£)</b>	-2.12	0.00	2.12
<b>Expected Payoff (£)</b>	0.00		
<b>IRR</b>	10.00%		

  

Year	Scenario 1 Casflows (£)	Scenario 2 Casflows (£)	Scenario 3 Casflows (£)
0	- 100.00	- 100.00	- 100.00
1	13.15	13.15	13.15
2	13.15	13.15	13.15
3	13.15	13.15	13.15
4	13.15	13.15	13.15
5	12.62	13.15	13.67
6	12.62	13.15	13.67
7	12.62	13.15	13.67
8	12.62	13.15	13.67
9	12.62	13.15	13.67
10	12.62	13.15	13.67
11	12.62	13.15	13.67
12	12.62	13.15	13.67
13	12.62	13.15	13.67
14	12.62	13.15	13.67
15	12.62	13.15	13.67

**Figure 2.2**  
**Invest Now (6% spread)**

	Scenario 1	Scenario 2	Scenario 3
<b>NPV of cashflows*(£)</b>	-3.18	0.00	3.18
<b>Probability</b>	1/3	1/3	1/3
<b>Payoff (£)</b>	-3.18	0.00	3.18
<b>Expected Payoff (£)</b>	0.00		
<b>IRR</b>	10.00%		

  

Year	Scenario 1 Casflows (£)	Scenario 2 Casflows (£)	Scenario 3 Casflows (£)
0	- 100.00	- 100.00	- 100.00
1	13.15	13.15	13.15
2	13.15	13.15	13.15
3	13.15	13.15	13.15
4	13.15	13.15	13.15
5	12.36	13.15	13.94
6	12.36	13.15	13.94
7	12.36	13.15	13.94
8	12.36	13.15	13.94
9	12.36	13.15	13.94
10	12.36	13.15	13.94
11	12.36	13.15	13.94
12	12.36	13.15	13.94
13	12.36	13.15	13.94
14	12.36	13.15	13.94
15	12.36	13.15	13.94

### 3. The Option to Wait

Let us assume that in year 4, the investor will know the outcome of the regulatory decision for certain and will invest if, and only if, the project has a non-negative NPV.

Figure 3.1 illustrates the cashflows for the 3 scenarios described before, with the related cashflows delayed by five years, because the investment does not take place until year 4, if at all. The figure also shows the respective NPV of returns discounted to year 0.

- § If scenario 1 materialises, then the project has a negative NPV and the investor will not invest in year 4. The payoff from the rational investment decision is 0 (even though the project has a negative NPV) because the investor can now choose to avoid the investment.
- § If scenario 2 occurs, the payoff from the investment decision is £0, as before.
- § If scenario 3 occurs, the payoff is a positive NPV of £2.48 (lower than before because the benefits are delayed by 5 years).

As in the previous example, each of these scenarios has a probability of  $\frac{1}{3}$ , so the expected value of the investment in this example is £0.83. This NPV is higher than the NPV of investing in year 0 (=£0.0), so the investor has an incentive to wait.

Investment decisions therefore depend on regulatory risk when there is an option to delay an investment: the bigger the risk, or the wider the spread of outcomes, the greater the value of waiting. Figure 3.2 shows calculation of expected payoff from investment with an option to delay and a 6% spread, which raises the NPV of the delayed investment to £1.24.

This comparison demonstrates that regulatory risk can have an impact on investment decision and could delay investments. In the following section we will compute the amount of compensation that investors would require to induce them to invest now rather than to wait for 5 years.

**Figure 3.1**  
**Delay Investments (4% spread)**

	Scenario 1	Scenario 2	Scenario 3
NPV if invested (£)	-2.48	0.00	2.48
Probability	1/3	1/3	1/3
Payoff (£)	0.00	0.00	2.48
<b>Expected Payoff (£)</b>	0.83		

  

Year	Scenario 1 Casflows (£)	Scenario 2 Casflows (£)	Scenario 3 Casflows (£)
0	-	-	-
1	-	-	-
2	-	-	-
3	-	-	-
4	- 100.00	- 100.00	- 100.00
5	12.62	13.15	13.67
6	12.62	13.15	13.67
7	12.62	13.15	13.67
8	12.62	13.15	13.67
9	12.62	13.15	13.67
10	12.62	13.15	13.67
11	12.62	13.15	13.67
12	12.62	13.15	13.67
13	12.62	13.15	13.67
14	12.62	13.15	13.67
15	12.62	13.15	13.67
16	12.62	13.15	13.67
17	12.62	13.15	13.67
18	12.62	13.15	13.67
19	12.62	13.15	13.67

**Figure 3.2**  
**Delay Investments (6% spread)**

	Scenario 1	Scenario 2	Scenario 3
NPV if invested (£)	-3.73	0.00	3.73
Probability	1/3	1/3	1/3
Payoff (£)	0.00	0.00	3.73
<b>Expected Payoff (£)</b>	1.24		

  

Year	Scenario 1 Casflows (£)	Scenario 2 Casflows (£)	Scenario 3 Casflows (£)
0	-	-	-
1	-	-	-
2	-	-	-
3	-	-	-
4	- 100.00	- 100.00	- 100.00
5	12.36	13.15	13.94
6	12.36	13.15	13.94
7	12.36	13.15	13.94
8	12.36	13.15	13.94
9	12.36	13.15	13.94
10	12.36	13.15	13.94
11	12.36	13.15	13.94
12	12.36	13.15	13.94
13	12.36	13.15	13.94
14	12.36	13.15	13.94
15	12.36	13.15	13.94
16	12.36	13.15	13.94
17	12.36	13.15	13.94
18	12.36	13.15	13.94
19	12.36	13.15	13.94

#### 4. Rate of Return Required Now (for Whole Asset Life)

The analysis in this section answers the following question: given the spread of regulatory uncertainty  $x$ , what rate of return must a project offer investors today to make them indifferent between investing now and delaying investment by 5 years?

Figure 4.1 shows the result of adjusting the rate of return for the uncertainty, where the spread is 4% of the net revenues and the rate of return before regulatory risk is 10%. With the rate of return increased to 10.16% for immediate investments, the expected payoff from investing immediately is the same as the expected payoff from delaying investment decision and earning 10%. Therefore an investor is indifferent between investing now and waiting until the regulatory uncertainty is resolved. The required rate of return in this case becomes 10.16%.

**Figure 4.1**  
**Calculation of required rate of return (4% spread)**

	Scenario 1	Scenario 2	Scenario 3
<b>NPV of cashflows*(£)</b>	-1.31	0.83	2.97
<b>Probability</b>	1/3	1/3	1/3
<b>Payoff (£)</b>	-1.31	0.83	2.97
<b>Expected Payoff (£)</b>		0.83	
<b>IRR</b>		<b>10.16%</b>	
<b>Expected Payoff From Delayed Investment(£)</b>		0.83	
<b>Value of waiting (£)</b>		0.00	
<b>Extra return</b>		0.16%	

  

	Scenario 1	Scenario 2	Scenario 3
Year	Casflows (£)	Casflows (£)	Casflows (£)
0	- 100.00	- 100.00	- 100.00
1	13.27	13.27	13.27
2	13.27	13.27	13.27
3	13.27	13.27	13.27
4	13.27	13.27	13.27
5	12.74	13.27	13.80
6	12.74	13.27	13.80
7	12.74	13.27	13.80
8	12.74	13.27	13.80
9	12.74	13.27	13.80
10	12.74	13.27	13.80
11	12.74	13.27	13.80
12	12.74	13.27	13.80
13	12.74	13.27	13.80
14	12.74	13.27	13.80
15	12.74	13.27	13.80

The compensation to forego the option to wait is larger if the spread increases. Figure 4.2 illustrates the results for 6% variation in net revenue, where the rate of return required to compensate for the value of waiting is 10.24%

**Figure 4.2**  
**Calculation of required rate of return (6% spread)**

	Scenario 1	Scenario 2	Scenario 3
<b>NPV of cashflows*(£)</b>	-1.98	1.24	4.47
<b>Probability</b>	1/3	1/3	1/3
<b>Payoff (£)</b>	-1.98	1.24	4.47
<b>Expected Payoff (£)</b>		1.24	
<b>IRR</b>		<b>10.24%</b>	
<b>Expected Payoff From Delayed Investment(£)</b>		1.24	
<b>Value of waiting (£)</b>		0.00	
<b>Extra return</b>		0.24%	

  

Year	Scenario 1 Casflows (£)	Scenario 2 Casflows (£)	Scenario 3 Casflows (£)
0	- 100.00	- 100.00	- 100.00
1	13.33	13.33	13.33
2	13.33	13.33	13.33
3	13.33	13.33	13.33
4	13.33	13.33	13.33
5	12.53	13.33	14.13
6	12.53	13.33	14.13
7	12.53	13.33	14.13
8	12.53	13.33	14.13
9	12.53	13.33	14.13
10	12.53	13.33	14.13
11	12.53	13.33	14.13
12	12.53	13.33	14.13
13	12.53	13.33	14.13
14	12.53	13.33	14.13
15	12.53	13.33	14.13

These examples show how regulatory risk increases the cost of capital, i.e. the expected rate of return that investors require before they are willing to make an investment. In these examples, regulatory risk commensurate with the impact of P198 has added about 0.1 percentage points to the cost of capital.

## 5. Rate of Return Required Now (Until Risk Vanishes)

We can also ask: given the spread of regulatory uncertainty  $x$ , what rate of return must a project offer investors today *for the next five years* to make them indifferent between investing now and delaying investment by 5 years, *if returns are the same from then on?*

Below we estimate the cost of regulatory risk for a variant where the extra rate of return applies only in the period before the regulatory decision removes the risk. As the compensation is spread over fewer years, the increase in the rate of return is higher than in the examples considered in the previous section. For the 4% and 6% spreads, the required rate of return now rises to 10.26% and 10.39%, respectively. The results are illustrated in Figure 5.1 and Figure 5.2.

**Figure 5.1**  
Calculation of required rate of return (4% spread)

	Scenario 1	Scenario 2	Scenario 3
NPV of cashflows*(£)	-1.56	1.35	2.69
Probability	1/3	1/3	1/3
Payoff (£)	-1.56	1.35	2.69
Expected Payoff (£)		0.83	
IRR		10.26%	
Expected Payoff From Delayed Investment(£)		0.83	
Value of waiting (£)		0.00	
Extra return		0.26%	

  

Year	Scenario 1 Casflows (£)	Scenario 2 Casflows (£)	Scenario 3 Casflows (£)
0	- 100.00	- 100.00	- 100.00
1	13.34	13.34	13.34
2	13.34	13.34	13.34
3	13.34	13.34	13.34
4	13.34	13.34	13.34
5	12.62	13.34	13.67
6	12.62	13.34	13.67
7	12.62	13.34	13.67
8	12.62	13.34	13.67
9	12.62	13.34	13.67
10	12.62	13.34	13.67
11	12.62	13.34	13.67
12	12.62	13.34	13.67
13	12.62	13.34	13.67
14	12.62	13.34	13.67
15	12.62	13.34	13.67



**Figure 5.2**  
**Calculation of required rate of return (6% spread)**

	Scenario 1	Scenario 2	Scenario 3
<b>NPV of cashflows*(£)</b>	-2.33	2.03	4.03
<b>Probability</b>	1/3	1/3	1/3
<b>Payoff (£)</b>	-2.33	2.03	4.03
<b>Expected Payoff (£)</b>	1.24		
<b>IRR</b>	<b>10.39%</b>		
<b>Expected Payoff From Delayed Investment(£)</b>	1.24		
<b>Value of waiting (£)</b>	0.00		
<b>Extra return</b>	0.39%		

  

	Scenario 1	Scenario 2	Scenario 3
Year	Casflows (£)	Casflows (£)	Casflows (£)
0	- 100.00	- 100.00	100.00
1	13.44	13.44	13.44
2	13.44	13.44	13.44
3	13.44	13.44	13.44
4	13.44	13.44	13.44
5	12.36	13.44	13.94
6	12.36	13.44	13.94
7	12.36	13.44	13.94
8	12.36	13.44	13.94
9	12.36	13.44	13.94
10	12.36	13.44	13.94
11	12.36	13.44	13.94
12	12.36	13.44	13.94
13	12.36	13.44	13.94
14	12.36	13.44	13.94
15	12.36	13.44	13.94

## 6. Summary

In this paper, we have demonstrated the following points:

- § If regulatory risk is symmetric, it does not affect the expected return on an investment made today; however,
- § Even if regulatory risk is symmetric, investors have an incentive to delay investment until uncertainty is removed or reduced;
- § To overcome this incentive to delay, the returns available from investing now must be higher than if there were no such risk;
- § For a typical generation project, the increase in the required rate of return due to P198-type risks is of the order of a few tenths of a percentage point.

Hence, regulatory risk does raise the cost of capital and should in consequence be avoided if possible.

The scale of the rise in the cost of capital does not necessarily appear very large, given a small variation in returns. However, for each £1,000 million of investment, an increase of 0.1% in the cost of capital increases costs by £1 million per annum. In practice, the rise in the cost of capital appears to be more than 0.1%. If the additional returns are concentrated in the early years of the projects, a rise of 0.2-0.3% is likely. New investment in generation capacity will exceed £1,000 million in the next few years. Avoiding unnecessary risk of the P198-type will therefore save at least £1 million per annum, and probably substantially more.

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## P200 ASSESSMENT PROCEDURE CONSULTATION QUESTIONS

BSC Parties ("Parties") and other interested parties are invited to respond to this consultation expressing their views or provide any further evidence on any of the matters contained within this document. In particular views are sought in respect of the following questions. Parties are invited to supply the rationale for their responses.

<b>Respondent:</b>	<i>Alastair Barnsley</i>
<b>Company Name:</b>	<i>E.ON UK Energy Services Limited</i>
<b>No. of BSC Parties Represented</b>	
<b>Parties Represented</b>	
<b>No. of Non BSC Parties Represented (e.g. Agents)</b>	<i>1</i>
<b>Non Parties represented</b>	<i>E.ON UK Energy Services Limited</i>
<b>Role of Respondent</b>	<i>Party Agent</i>
<b>Does this response contain confidential information?</b>	

<b>Q</b>	<b>Question</b>	<b>Response</b>	<b>Rationale</b>
1.	Do you believe Proposed Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	Yes / No	We maintain a neutral stance on this proposal as it has no impact on our activities
2.	Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the Proposed Modification? Please give rationale and state objective(s)	Yes / No	Please See Question One
3.	Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	Yes/ No	Please See Question One

Q	Question	Response	Rationale
4.	Do you support the implementation approach described in the consultation document/the implementation option preferred by the Modification Group? Please give rationale	Yes / No	Please See Question One
5.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	Yes / No	Please See Question One
6.	Do you agree with the 15 years duration for applicability of F-factors? If not please propose any other value with justification. Please give rationale	Yes / No	Please See Question One
7.	Which option do you support for the definition of the Baseline Period for calculation of F-factor values, either a) 1 April 2005 – 31 March 2006; or b) 1 April 2002 – 31 March 2006 (48 months). Data for England and Wales is available centrally for all of this period. c) Other period. Please give rationale	(a), (b) or (c)	Please See Question One
8.	For option (b) data for BM Units in Scotland for the period 1 April 2002 - 31 March 2005 would have to be sourced directly from the registered Parties (as this was pre BETTA) with supporting confirmation? Please provide a view on the practicality of this requirement	View	Please See Question One
9.	Do you believe the cost of capital is affected by zonal TLMs with and without the addition of a hedging scheme? Please give rationale	Yes / No	Please See Question One

Q	Question	Response	Rationale
10.	Does P200 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure? Please give rationale	Yes / No	Please See Question One
11.	Are there any further comments on P200 that you wish to make?	No	

Parties are encouraged to provide financial information with regard to either the costs or benefits of the Modification Proposal to support the Assessment Procedure. Where requested this information can be treated as confidential, although all information will be provided to the Authority.

Please send your responses by **12 noon on Friday 14 July 2006** to [modification.consultations@elexon.co.uk](mailto:modification.consultations@elexon.co.uk) and please entitle your email 'P200 **Assessment Consultation**'. Please note that any responses received after the deadline may not receive due consideration by the Modification Group.

Any queries on the content of the consultation pro-forma should be addressed to Justin Andrews on 020 7380 4030, email address [justin.andrews@elexon.co.uk](mailto:justin.andrews@elexon.co.uk).

## P200 ASSESSMENT PROCEDURE CONSULTATION QUESTIONS

BSC Parties ("Parties") and other interested parties are invited to respond to this consultation expressing their views or provide any further evidence on any of the matters contained within this document. In particular views are sought in respect of the following questions. Parties are invited to supply the rationale for their responses.

<b>Respondent:</b>	<i>Barbara Vest</i>
<b>Company Name:</b>	<i>Gaz de France Marketing Limited</i>
<b>No. of BSC Parties Represented</b>	<i>1</i>
<b>Parties Represented</b>	<i>Please list all BSC Party names of Parties responding on behalf of (including the respondent company if relevant).</i>
<b>No. of Non BSC Parties Represented (e.g. Agents)</b>	
<b>Non Parties represented</b>	<i>Please list all non Parties responding on behalf of (including the respondent company if relevant).</i>
<b>Role of Respondent</b>	<i>(Supplier/Generator</i>
<b>Does this response contain confidential information?</b>	

Q	Question	Response	Rationale
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Q	Question	Response	Rationale
1.	<p>Do you believe Proposed Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)</p>	No	<p>We believe that the apparent beneficial locational messages the proposer ascertains will be enhanced by this modification proposal to be already delivered via the Transmission Network Use of System (TNUoS) charging methodology. The supporting evidence for this is the number of new large scale generation projects being planned for and located in the South as opposed to Northern regions.</p> <p>If Modification Proposal 198 were to be implemented we feel that the BSC Objectives would be adversely affected. Particularly Objectives c) promoting effective competition in the generation and supply of electricity and promoting the sale and purchase of electricity. The current methodology, which is applied in a uniform manner across generation and supply, is fair in that current participants have little opportunity to relocate to a zone which may be, under charges applied on a Locational basis, more favourable. It is highly unlikely that Drax Power Station for example would relocate to a more Southern, and therefore less penal zone. Domestic Demand is even less likely to relocate as a result of higher losses charges being applied to their energy bill. Historically generation located where there was appropriate Transmission Capacity, fuel source access (be that coal or gas) and access to the required workforce not where they would eventually incur the lowest fee for losses if and when a scheme were to be introduced.</p> <p>This Modification Proposal has the potential to introduce significant windfall gains to those with generation in the South or demand in the North but especially those Vertically Integrated companies with Southern generation and Northern Demand. This modification proposal introduces a potential 'double whammy' for end consumers who will see any increased generation or demand costs passed on immediately but not necessarily the cost reductions associated with demand located in the North or generation in the South.</p>



Q	Question	Response	Rationale
2.	Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the Proposed Modification? Please give rationale and state objective(s)	No	We do not support a modification to the current losses regime as proposed therefore cannot support an alternative that simply delays the effect of the full impact over a four year period.
3.	Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	No	We do not support a modification to the current losses regime as proposed therefore cannot support an alternative that simply delays the effect of the full impact over a four year period.
4.	Do you support the implementation approach described in the consultation document/the implementation option preferred by the Modification Group? Please give rationale	No	We do not support a modification to the current losses regime as proposed therefore cannot support an alternative that simply delays the effect of the full impact over a four year period.
5.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	No	We do not support a modification to the current losses regime as proposed therefore cannot support an alternative that simply delays the effect of the full impact over a four year period.
6.	Do you agree with the 15 years duration for applicability of F-factors? If not please propose any other value with justification. Please give rationale	No	Due to the fact that the cost benefit analysis shows there to be the potential for the reversal of any perceived benefits post 2012
7.	Which option do you support for the definition of the Baseline Period for calculation of F-factor values, either a) 1 April 2005 – 31 March 2006; or b) 1 April 2002 – 31 March 2006 (48 months). Data for England and Wales is available centrally for all of this period. c) Other period. Please give rationale	(a), (b) or (c)	We do not support a modification to the current losses regime as proposed therefore cannot support an alternative that simply delays the effect of the full impact over a four year period.

Q	Question	Response	Rationale
8.	For option (b) data for BM Units in Scotland for the period 1 April 2002 - 31 March 2005 would have to be sourced directly from the registered Parties (as this was pre BETTA) with supporting confirmation? Please provide a view on the practicality of this requirement	View	We do not support a modification to the current losses regime as proposed therefore cannot support an alternative that simply delays the effect of the full impact over a four year period.
9.	Do you believe the cost of capital is affected by zonal TLMs with and without the addition of a hedging scheme? Please give rationale	No	We do not support a modification to the current losses regime as proposed therefore cannot support an alternative that simply delays the effect of the full impact over a four year period.
10.	Does P200 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure? Please give rationale	Yes	Transmission Losses occur across the Transmission System, which is managed by the National Grid Electricity Transmission company. There is no reference in this document about the impact their actions have upon the amount of 'Losses' which occur across the Transmission System

Q	Question	Response	Rationale
11.	Are there any further comments on P200 that you wish to make?	Yes / No	<p>The cost benefit analysis does not show that there is significant benefit in adopting this new approach. At a time when the industry are being faced with the potential of a large transfer of revenue due to the recently announced Income Adjusting Event request submitted by National Grid for example, one has to question whether there is merit in introducing this complex and unnecessary amendment to the adjust the cost allocation of variable losses.</p> <p>Though out of scope for the modification group and panel we would look to Ofgem, using their wider regulatory powers, to ensure that the full impact and effect upon the environment is taken into account. For example, justifying the appropriateness of facilitating additional windfall gains to generation with higher environmental emissions located in the South.</p> <p>As stated in our answer to question 1 above, we believe there to be locational messages already in existence due to the impact of the TNUoS scheme. For generation such as renewables who must locate in the North due to the existence of suitable sites the introduction of Zonal losses will have very little effect, other than to increase one element of the charges that they ultimately face. This type of generation will not be able to relocate in the South, therefore the additional costs will ultimately be factored into their running costs, ultimately feed through to cashout and be borne by the end consumer.</p>

Parties are encouraged to provide financial information with regard to either the costs or benefits of the Modification Proposal to support the Assessment Procedure. Where requested this information can be treated as confidential, although all information will be provided to the Authority.

Please send your responses by **12 noon on Friday 14 July 2006** to [modification.consultations@elexon.co.uk](mailto:modification.consultations@elexon.co.uk) and please entitle your email 'P200 **Assessment Consultation**'. Please note that any responses received after the deadline may not receive due consideration by the Modification Group.

Any queries on the content of the consultation pro-forma should be addressed to Justin Andrews on 020 7380 4030, email address [justin.andrews@elexon.co.uk](mailto:justin.andrews@elexon.co.uk).

## MEMORANDUM

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**TO :** Kathryn Coffin, Elexon

**FROM :** Nick Emery

**DATE :** 14<sup>th</sup> July 2006

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**SUBJECT :** Introduction of zonal transmission losses scheme P198 & P200

Fred. Olsen Renewables Limited would like to make the following points.

- 1) On behalf of renewable generators we would request Elexon to confirm with OFGEM that ROCS will be allocated on gross generation before losses are applied.
- 2) We note on page 71 that introduction of new generation in the south would reduce transmission losses to zero by 2010. We would question if this amendment is necessary.
- 3) We also take issue that renewable generators are protected from transmission losses due to the ROC. Since its introduction, renewable generators have seen substantial increases in TNUOS, Rates and other regulated costs. Each time they are justified as their effects are offset by the ROC. The ROC was introduced to provide a subsidy to renewable generators so they could compete with conventional plant. That benefit is being systematically eroded.
- 4) We note that P200 allows a transition period and our assumption is that northern generators would opt out while southern generators would opt in. We question if that is practical.

- 5) We believe that a regulatory impact assessment is required to assess the effects beyond the narrow remit of the BSC. Northern generators are currently facing large and potentially volatile TNUOS charges. The recent Energy Review could potentially diminish the value of ROCS for onshore wind. We believe a wider assessment of the impact this change may have is required.

Renewable generation cannot react to locational signals in the same way as conventional generation, we have to be sited where the resource lies.

Regards.

A handwritten signature in blue ink, consisting of several overlapping loops and a long horizontal stroke extending to the right.

## P200 ASSESSMENT PROCEDURE CONSULTATION QUESTIONS

BSC Parties (“Parties”) and other interested parties are invited to respond to this consultation expressing their views or provide any further evidence on any of the matters contained within this document. In particular views are sought in respect of the following questions. Parties are invited to supply the rationale for their responses.

<b>Respondent:</b>	<i>Martin Mate</i>
<b>Company Name:</b>	<i>British Energy</i>
<b>No. of BSC Parties Represented</b>	<i>5</i>
<b>Parties Represented</b>	<i>British Energy Power &amp; Energy Trading Ltd, British Energy Generation Ltd, British Energy Direct Ltd, Eggborough Power Ltd, British Energy Generation (UK) Ltd</i>
<b>No. of Non BSC Parties Represented (e.g. Agents)</b>	<i>-</i>
<b>Non Parties represented</b>	<i>-</i>
<b>Role of Respondent</b>	<i>Supplier/Generator/ Trader / Consolidator / Exemptable Generator / Party Agent</i>
<b>Does this response contain confidential information?</b>	<i>No</i>

<b>Q</b>	<b>Question</b>	<b>Response</b>	<b>Rationale</b>
1.	Do you believe Proposed Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	Yes	Use of locational TLFs should improve the efficiency of short term locational decisions, for example the despatch of generating plant, by better reflecting the cost of those decisions. The provision of hedging for existing plant, for which locational investment decisions have already been made, would reduce the uncertainty and associated risk inherent in those decisions and reduce the level of windfall gains and losses amongst existing plant. On balance, we believe these benefits outweigh the approximations in the methodology, and should better facilitate BSC Objective (c) relating to competition.
2.	Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the Proposed Modification? Please give rationale and state objective(s)	Yes	There appears to be significant variation of TLF values with season. Use of seasonal TLFs in settlement should better reflect this variation.

Q	Question	Response	Rationale
3.	Do you believe Alternative Modification <b>P200</b> better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	Yes	For the reasons given above, on balance we believe P200 Alternative would better facilitate the applicable BSC Objectives.
4.	Do you support the implementation approach described in the consultation document/the implementation option preferred by the Modification Group? Please give rationale	Yes	
5.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	No	None at this time.
6.	Do you agree with the 15 years duration for applicability of F-factors? If not please propose any other value with justification. Please give rationale	No	It would be preferable to use a timescale commensurate with the investment life of the affected plant. 15 years represents a compromise average for simplicity, which is not necessarily appropriate for all affected plant.
7.	Which option do you support for the definition of the Baseline Period for calculation of F-factor values, either a) 1 April 2005 – 31 March 2006; or b) 1 April 2002 – 31 March 2006 (48 months). Data for England and Wales is available centrally for all of this period. c) Other period. Please give rationale	(a), (b) or (c)	As we understand the modification, ideally the F-factor would be representative of the expected volume for the relevant plant at the time the scheme is approved. Given the difficulty in establishing this value objectively, the methods proposed represent compromises. We believe there should be opportunity for appeal of values derived using a base methodology, for cases where the baseline period is clearly unrepresentative or inappropriate.



Q	Question	Response	Rationale
8.	For option (b) data for BM Units in Scotland for the period 1 April 2002 - 31 March 2005 would have to be sourced directly from the registered Parties (as this was pre BETTA) with supporting confirmation? Please provide a view on the practicality of this requirement	View	We would expect data to still be available for relevant Scottish flows prior to BETTA, which would be capable of an independent verification if required. Data may not be precisely in the format of, or as accurate in aggregate, as for the post-BETTA period, but given the other approximations in the methodology we believe some approximations in this area are acceptable. Some adjustment of any such data provided might be required to ensure no overall bias in values provided (for example systematic over or under estimate of generation).
9.	Do you believe the cost of capital is affected by zonal TLMs with and without the addition of a hedging scheme? Please give rationale	Yes	An increase in uncertainty of costs or benefits of energy transmission by a BM Unit would change the cost of capital for investments. Although likely to be relatively small compared to other factors, it could nevertheless represent a significant amount for large long term investments. A reduction in uncertainty, for example a hedging scheme such as P201, will reduce the uncertainty and is likely to reduce the cost of capital overall.
10.	Does P200 raise any issues that you believe have not been identified so far and that should be progressed as part of the Assessment Procedure? Please give rationale	No	None at this time.
11.	Are there any further comments on P200 that you wish to make?	No	None at this time.

Parties are encouraged to provide financial information with regard to either the costs or benefits of the Modification Proposal to support the Assessment Procedure. Where requested this information can be treated as confidential, although all information will be provided to the Authority.

Please send your responses by **12 noon on Friday 14 July 2006** to [modification.consultations@elexon.co.uk](mailto:modification.consultations@elexon.co.uk) and please entitle your email 'P200 **Assessment Consultation**'. Please note that any responses received after the deadline may not receive due consideration by the Modification Group.

Any queries on the content of the consultation pro-forma should be addressed to Justin Andrews on 020 7380 4030, email address [justin.andrews@elexon.co.uk](mailto:justin.andrews@elexon.co.uk).

[modification.consultation@elexon.co.uk](mailto:modification.consultation@elexon.co.uk)

13 July 2006

Dear Sir/Madam

**Zonal Transmission Losses: Consultation on P198 & P200 and proposed changes to the Balancing & Settlement Code**

Scottish Renewables is Scotland's leading renewables trade body with over 190 members involved in the renewable energy business in Scotland. While not a Balancing and Settlement Code party, our representative nature makes it important that we respond to your consultation on proposed changes to the BSC.

We would like to make the following points as part of this consultation.

1. We would like Elexon and Ofgem to confirm that gross generation as still metered will still qualify for ROCs. We would assume that the netting off of any losses will happen after the gross generation has been registered for ROC purposes. If this is not to be the case, then Elexon and Ofgem must realise that the Scottish contribution to the overall UK Renewables Obligation and targets will be reduced, and the financial cost of operation on Scottish renewable project operators will be increased.
2. On page 71 of paper no.106 it is noted that there are several proposals to introduce new generation in the south, which would have the effect of reducing transmission losses to zero by 2010. If it is the case that all this is planned already, then it is worth questioning why the proposed alterations in P198 and 200 are needed, given that the market is already moving to deliver a dispersed mix of generation in the GB market.
3. One relevant issue raised by proponents of transmission loss charging is that it sends a signal to developers to locate generation in areas where such charges can be avoided or minimised. On this we would like to note that transmission use of system charges already do this effectively, and provide very strong locational charges within Scotland. The cost of transmission use in Scotland must surely be acting as a negative incentive on project to developers to seek to alternative sights where low or even negative transmission charges are available.

However, we would note that despite the introduction of higher transmission charges into Scotland, there remains substantial interest in the development of new renewables generation here. This is not because the charges do not impose a real penalty to



developers in these sites compared to equivalent sites in southern England, but because such developers in Scotland have little choice but to pay such charges. Essentially this is because the development of renewables is being stimulated by Government targets and delivery of the Renewables Obligation. To ensure delivery renewables operators must seek sites that have good resource, network access, and a reasonable chance of seeing planning success for any application. Given that a substantial element of the renewables resource of GB is in Scotland, there is therefore little option on developers to move to lower charge areas. This is because they would need to move to areas of low resource or areas unsuitable in planning terms.

4. Our fear over the introduction of transmission loss charging would be that its imposition would not send the appropriate signal for renewables generation, and the best sites tend to be in areas where such charges will be highest. Developers will therefore have to pay the penalty of such charges, as in reality they cannot respond. Because of this factor we do not see that implementation of P198 or P200 would achieve its purpose of providing a location signal for siting of generation and demand so as to reduce system losses and improve transmission operation efficiency.
5. In comparing the two options we note that P200 varies from P198 in that it gives an option for a transition period to the existing generators and allows them to opt in or out of the new scheme. As far as we can see, this will mean that generators in the north will seek to opt out to save costs while those in the south will opt in to increase revenue. Under such circumstances it is hard to see that the changes will be workable.
6. Our overall concern is that this change is being looked at in isolation without being able to consider all related facts of influencing factors. To ensure that this happens we therefore call on Ofgem to conduct a **Regulatory Impact Assessment** before any change is made. The BSC Panel will be unable to consider this wider picture: only the defined issues surrounding loss charging.

We would note that there is a cumulative accretion of additional costs and charges facing northern generators. Individually each might be acceptable, but none are acceptable if they are delivered as a loose ill-coordinated packages. Relevant issues that need to be considered are as follows.

- a. TNUoS which could vary from circa £10-40 per kW per annum depending on overall GB plant balance and level of decommissioning. Future impacts to charges include the development of transmission links to Scottish islands and the connection of offshore technologies into the grid.
- b. While not yet applicable, by 2010 distribution use of system charges (DUoS) could be as high as £5-10 per kW per annum.
- c. Zonal losses could vary between 0 & 5% plus depending on the amount of generation connected and conclusions of the BSC

All of the above charges or proposed are variable, meaning annual prices ranging from £15 to £52 per annum per kW for renewable site operators in Scotland. These only cover regulatory burdens which are known to date. The probable outcome is a regulatory charge per annum of £30 per kW per annum which is equal to 33% of the total capital costs of onshore wind every year for the right to generate. Given this it is hard to see longer term viability of renewables in northern Scotland. .

7. We also note that the cost benefit analysis that has been conducted as part of this consultation is constrained by examining the charges that relate to the current charging system, not other expected changes, and the cost benefit analysis also makes no examination of any impacts on the environment or on consumers.

Furthermore, while the cost benefit analysis includes modelling of a range of renewable technologies, the total resource and build costs are only examined for onshore wind. We think this is inappropriate, given the expected developments of offshore wind, bioenergy, wave and tidal within Scotland, where the introduction of transmission losses will be most keenly felt. In particular, Scotland has significant resource in wave and tidal which is focused on the western and northern parts of Scotland. While developers of onshore wind have some flexibility of site location, the resource of wave and tidal is highly focused, leaving almost no flexibility for site location away from these peripheral areas.

In conclusion, we are of the view that the debate on appropriate levels of charge and charging systems should start with discussion on whether our charging system is based on introduction of locational signals that an important class of generation – i.e. renewables – that cannot easily respond to these signals, or whether our charging system is are more equitable balance of ensuring value to the consumer alongside delivery of wider Government Energy Policy objectives.

If locational charges remain high in the area of GB with greatest potential for delivery of Government renewables targets then this will necessitate Government providing additional support or at least support over a longer time period for renewables projects in these locations, to ensure that targets are delivered.

Given this we feel that it is important that before making any recommendations for changes in line with P198 or P200, Elexon first clarifies whether the remit of the consultation has considered the wider issue of whether renewable generation should be subject to Zonal Transmission Losses given that they are less able to respond to locational signals due to resource constraints.

I trust that this submission will be of benefit to you in your work. If you would like any further details please do feel free to contact me for more information.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Maf Smith', with a stylized flourish at the end.

**Maf Smith**  
Chief Executive