Responses from P198 Second 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	P198_AR_01	1	0
2.	RWE Trading GmbH	P198_AR_02	11	0
3.	Centrica	P198_AR_03	9	0
4.	Good Energy	P198_AR_04	1	0
5.	National Grid	P198_AR_05	1	0
6.	Airtricity	P198_AR_06	1	0
7.	BizzEnergy	P198_AR_07	1	0
8.	E.ON UK	P198_AR_08	13	0
9.	International Power plc	P198_AR_09	4	0
10.	EDF Trading	P198_AR_10	2	0
11.	Immingham CHP	P198_AR_11	2	0
12.	Highlands and Islands Enterprise (HIE)	P198_AR_12	0	1
13.	Scottish Power UK plc	P198_AR_13	7	0
14.	EDF Energy	P198_AR_14	9	0
15.	Teesside Power Limited	P198_AR_15	2	0
16.	E.ON Energy services Limited	P198_AR_16	0	1
17.	Gaz de France Marketing Limited	P198_AR_17	1	0
18.	Scottish and Southern	P198_AR_18	5	0
19.	Fred. Olsen Renewables	P198_AR_19	0	1
20.	British Energy	P198_AR_20	5	0
21.	Scottish Renewables (*)	P198_AR_21	0	1

(*) Late Response

P198 SECOND 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.

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

Q	Question	Response Error! Bookmark not defined.	Rationale
1.	Do you believe that Proposed Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the current Code baseline? Please give rationale and state objective(s)	Yes	It will better capture the costs associated with transmission losses and allocate those costs to parties who are located in such a position as to increase losses across the system.

Q	Question	Response Error! Bookmark not defined.	Rationale
2.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the Proposed Modification? Please give rationale and state objective(s)	No	It would be more economic for parties to know what the loss factors are and to factor those into trading and operational strategies for the year rather than having changing factors over the seasons which are also phased in. While we appreciate the "soft landing" that the alternative modification would create, in reality there is little any party can do to avoid the new costs so a one off adjustment would be more economic. It will also make it easier for suppliers to adjust contract prices to reflect locational differences for the year rather that having moving charges that could prove difficult to forecast depending on any operational changes that may occur in response to the modification. We would support the use of seasonal factors if it was felt likely that this would alter the generation merit order enough to encourage greater efficiency in the operation pf the market. However, a simple annual allocation would seem more likely to benefit the operation of the market as a whole.
3.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	Yes	A move towards a more cost reflective market framework would lead to a achievement of greater economic efficiency. Any more to better reflect the true costs of delivering and consuming electricity will send investment signals that in the longer term will improve the efficiency of the market.
4.	Do you believe that P198 would have a disproportionate impact on any class or classes of Parties? Please give rationale	No	There would be a redistributive impact between parties. However, discussions about locational losses have been going on for many years and parties should have been aware of the potential risks of a charging regime that would penalise poorly located plant. TNUoS charging already aims to send locational signals and the allocation of losses by region simply aims to reinforce these signals and allocate costs to those giving rise to these costs.

Q	Question	Response Error! Bookmark not defined.	Rationale
5.	Do you believe that P198 would have an impact on perceptions of regulatory risk and/or the cost of capital? Please give rationale	No	The UK power market does have a significant degree of regulatory risk, but Ofgem has always been clear that it believes that locational losses would be the most economic signal to send to the market. The industry must also be mindful that this is a modification raised by a BSC party and not by the regulator itself. The greater degree of regulatory uncertainty stems from where Ofgem proposes change that is not supported by the market. It is true that regulatory risk does impact the cost of capital, but we do not believe that this modification is a significant issue. This is a policy raised by the first regulator under the Pool arrangements, so should have been factored into market expectations some years ago.
6.	Do you support the implementation approach described in the consultation document? Please give rationale	Yes	As with all these modifications we remain concerned about the cost and relatively slow implementation time frame.
7.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	No	
8.	Does P198 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	
9.	Are there any further comments on P198 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 and please entitle your email '**P198 Second Assessment Procedure 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 Kathryn Coffin on 020 7380 4030, email address kathryn.coffin@elexon.co.uk.

P198 SECOND 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.

Respondent:	*Bill Reed*
Company Name:	RWE Trading GmbH
No. of BSC Parties Represented	11
Parties Represented	*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
No. of Non BSC Parties Represented (e.g. Agents)	None
Non Parties represented	*Please list all non Parties responding on behalf of (including the respondent company if relevant).*
Role of Respondent	*(Supplier/Generator/ Trader / Consolidator / Exemptable Generator / BSC Agent / Party Agent / Distributor / other – please state [1]) Supplier/Generator/ Trader / Consolidator / Exemptable Generator / Party Agent*
Does this response contain confidential information?	*No*

Q	Question	Response Error! Bookmark not defined.	Rationale

[1] Delete as appropriate – please do not use strikeout, this is to make it easier to analyse the responses

Q	Question	Response Error! Bookmark not defined.	Rationale
1.	Do you believe that Proposed Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the current Code baseline? Please give rationale and state objective(s)	Yes	We believe that the modification proposal better facilitates the relevant BSC objectives for the reasons set out in the original modification proposal. In particular, the modification will remove market distortions and discrimination inherent in the present arrangements (thereby better meeting Objective A) and the proposal will remove cross subsidies in the present uniform charging arrangements by introducing a cost reflective basis for allocating losses with a consequential improvement competition (thereby better meeting Objective C).
2.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the Proposed Modification? Please give rationale and state objective(s)	No	While we support the seasonal basis for allocating losses, we believe that Alternative Modification P198 will introduce a significant delay in achieving the benefits. Therefore we do not support the alternative modification when compared with the proposed modification.
3.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	Yes	We believe that the alternative modification proposal better facilitates the relevant BSC objectives when compared to the current baseline. This modification will also remove market distortions and discrimination inherent in the present arrangements (thereby better meeting Objective A) and the proposal will remove cross subsidies in the present uniform charging arrangements by introducing a cost reflective basis for allocating losses with a consequential improvement competition (thereby better meeting Objective C). However, we believe that the alternative would introduce a significant delay in achieving the benefits associated with a seasonal losses scheme.
4.	Do you believe that P198 would have a disproportionate impact on any class or classes of Parties? Please give rationale	No	P198 would remove the cross subsidies inherent in the uniform losses scheme by introduced a cost reflective basis to the allocation of losses.

Q	Question	Response Error! Bookmark not defined.	Rationale
5.	Do you believe that P198 would have an impact on perceptions of regulatory risk and/or the cost of capital? Please give rationale	No	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
6.	Do you support the implementation approach described in the consultation document? Please give rationale	Yes	
7.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	No	
8.	Does P198 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	
9.	Are there any further comments on P198 that you wish to make?	Yes	We note that the cost benefit analysis has indicated that the introduction of a zonal losses scheme is capable of delivering a reduction of total losses on the transmission system (a seasonal scheme will deliver increased benefits when compared to an annual scheme). In addition, the pattern of new generation schemes reflects the influence of locational signals (including zonal transmission losses) in the market. We believe that this work demonstrates that there is a strong case for the introduction of a zonal transmission losses scheme.

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P198 SECOND 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.

Respondent:	Dave Wilkerson
Company Name:	Centrica
No. of BSC Parties Represented	Nine (9)
Parties Represented	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
No. of Non BSC Parties Represented (e.g. Agents)	–
Non Parties represented	–
Role of Respondent	Supplier/Generator/Trader
Does this response contain confidential information?	No

Q1: Do you believe that Proposed Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the current Code baseline?

Please give rationale and state objective(s)

No

Centrica does **not** believe that Proposed Modification P198 would better facilitate any of the Applicable BSC Objectives.

Oxera have performed a cost-benefit analysis of the impact of P198 on the market over the next ten years, and have estimated the total net benefit as between £20-£65m. As part of this analysis they have suggested that between £3m-£9m per annum could be achieved by re-despatch of plant responding to the locational signals. Centrica believes that plant operators will take a number of factors into account, such as spark/dark spreads, fuel costs, contractual agreements, carbon costs, outages in the market, constraints, non-BM agreements and other commercial objectives before considering the impact of a transmission losses scheme on their despatch policies. We therefore do not believe that any perceived benefit based on this assumption is valid. This greatly reduces the perceived benefits identified in the Oxera analysis.

The Oxera analysis itself further concludes that "..*the introduction of zonal loss charging has negligible impact on the transmission network operation and development when compared with the same scenarios under uniform loss charging"*. However, when this negligible impact is compared with the significant transfers in cash flow between participants based solely on their historic investment decisions taken prior to any zonal loss charging regime, it is clear that P198 serves only to benefit some participants over others and not the market or the Transmission System as a whole.

It is also noted in the analysis that a number of medium and large power stations are planned over the next 10 years. All of these are planned for the southern half of England, and so it can be seen that market participants have already responded to the sufficiently strong signals from the TNUoS charging methodology, as well as the other economic and practical considerations involved in siting new plant. The addition of P198 would quite clearly not achieve any stronger signals for location of generating plant, nor of siting of demand, than those considerations which already exist.

Renewable generation, however, places greater weight on location as a consideration for investment decisions and also has less of a choice in where to be sited. It can be seen that P198 could have a detrimental effect on, for example, wind powered generation at a time when Government, European and regulatory policymakers are all attempting to encourage renewable investment.

In summary, Centrica believes that P198 would introduce little or no benefit to the market as a whole or to the efficient management of the transmission network, yet would introduce significant material gains to some Parties and losses to others. There is no increase in efficiency or efficacy with regard to the BSC Objectives, and we therefore do not agree that this Modification should be made.

Q2: Do you believe that Alternative Modification P198 would better facilitate 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 Modification or its Alternative 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 P198 than the Annual (Proposed) approach. The suggestion that the implementation should be phased over 4 years means that the wholly disproportionate material gains and losses applied to Parties would be somewhat mitigated against for a short time.

Q3: Do you believe that Alternative Modification P198 would better facilitate 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 P198 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 believe that P198 would have a disproportionate impact on any class or classes of Parties?

Please give rationale

Yes

P198 (and its alternative), as has been noted many times during the progress of the Modification and not least in the Oxera cost-benefit analysis, would allocate large sums of money to those Parties that have a portfolio weighted towards southern generation (and/or northern demand) or northern generation (and/or southern demand). The make-up of these portfolios can be an accident of post-privatisation, or a product of investment decisions made many years before the advent of any zonal losses scheme, and it is therefore wholly inappropriate to reward or penalise Parties for this.

Companies with a renewable generation bias may also be particularly negatively impacted, as the locational element of their decision-making over the last few years has perhaps been stronger than for other generators.

Independent power producers in the north and smaller Suppliers in the south will also have the impacts of P198 magnified, as they do not have a customer base or generation portfolio respectively with which to mitigate any windfall loss on one side.

Q5: Do you believe that P198 would have an impact on perceptions of regulatory risk and/or the cost of capital?

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 that P198 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 P198 are sufficiently weak not to have any meaningful impact.

Q6: Do you support the implementation approach described in the consultation document?

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, P198 (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 P198 to consider their strategies to manage the changes in cashflow.

Q7: 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 believe that the Group has considered all reasonable alternatives and has either discarded or raised them as separate Modifications as appropriate.

Q8: Does P198 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 believe that the P198 Group has examined all pertinent issues.

Q9: Are there any further comments on P198 that you wish to make?

No

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P198 SECOND 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.

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

Q	Question	Response	Rationale

Q	Question	Response	Rationale
1.	Do you believe that Proposed Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the current Code baseline? Please give rationale and state objective(s)	No	We believe the Proposed Modification P198 would have a neutral effect on BSC Objective (a). We believe that the Proposed 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. 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 P198 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 P198 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. We believe that the Proposed Modification would not better facilitate BSC Objective (c). We feel that renewable generation would be disproportionably impacted by the modification as there is a restriction on the suitable sites for renewable generation. This would also have a disproportional impact on suppliers that purchase significantly from renewable generation. We do not agree that the existing arrangements represent a cross-subsidy. 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.

Q	Question	Response	Rationale
2.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the Proposed Modification? Please give rationale and state objective(s)	No	We believe the Alternative Modification P198 would have a neutral effect on BSC Objective (a) compared to the Proposed Modification. We believe the Alternative Modification P198 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. We believe the Alternative Modification P198 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. We believe the Alternative Modification P198 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.

Q	Question	Response	Rationale
3.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	No	We believe the Alternative Modification P198 would have a neutral effect on BSC Objective (a). 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. We believe that the Alternative Modification would not better facilitate BSC Objective (c). We feel that renewable generation would be disproportionably impacted by the modification. We do not agree that the existing arrangements represent a cross-subsidy. We believe that the Alternative Modification would not better facilitate BSC Objective (d). We feel than the modification would add complexity and cost, therefore reducing efficiency.

Q	Question	Response	Rationale
4.	Do you believe that P198 would have a disproportionate impact on any class or classes of Parties? Please give rationale	Yes	We feel that P198 will have a disproportionate impact on renewable generation, as outlined above. We believe it will also have a disproportionate impact on microgeneration connected through NHH (non half-hourly) metering, as any responsive variation in their dispatch is not measured since NHH metered generation is treated as a uniform rated baseload. We believe P198 will have a greater impact on small suppliers as the costs associated with changing systems are proportionally greater. This is anti-competitive as small suppliers are also unlikely to receive any of the perceived benefits to this proposal as they have a smaller generation portfolio and are therefore even less likely to be able to vary their dispatch.
5.	Do you believe that P198 would have an impact on perceptions of regulatory risk and/or the cost of capital? Please give rationale	Yes / No	
6.	Do you support the implementation approach described in the consultation document? Please give rationale	Yes	
7.	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	
8.	Does P198 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	
9.	Are there any further comments on P198 that you wish to make?	No	

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

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

Q	Question	Response	Rationale

Q	Question	Response	Rationale
1.	Do you believe that Proposed Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the current Code baseline? Please give rationale and state objective(s)	Neutral	We are neutral as to whether Proposed Modification P198 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, in order to obtain the overall reduction in losses, there would be a redistribution in the allocation of losses between parties which may hinder competition, and therefore fail to facilitate objective (c), the promotion of effective competition in the generation and supply of electricity. Finally, the introduction of a zonal transmission losses scheme 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.
2.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the Proposed Modification? Please give rationale and state objective(s)	Neutral	We are neutral as to whether Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives 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. However, offsetting this would be the phased introduction of the scheme which would delay the realisation of any benefits. It is therefore difficult to assess whether the Alternative Modification P198 would better facilitate the achievement of objective (b), the efficient, economic and co-ordinated operation of the GB transmission system than the Proposed Modification.

Q	Question	Response	Rationale
3.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	Neutral	Given our neutral views with regards to Questions 1 and 2, above, we are also neutral as to whether the Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives when compared with the current Code baseline.
4.	Do you believe that P198 would have a disproportionate impact on any class or classes of Parties? Please give rationale	No	Although there may be significant redistributive impacts of Proposed Modification P198, we consider that all classes of Parties are treated equally, and that there is therefore no disproportionate impact on any particular class or classes of Parties.
5.	Do you believe that P198 would have an impact on perceptions of regulatory risk and/or the cost of capital? Please give rationale	Neutral	We understand that perceived impact on regulatory risk is in relation to investment decisions regarding generation, and National Grid does not therefore believe that it is appropriate for us to comment on this issue.
6.	Do you support the implementation approach described in the consultation document? Please give rationale	Yes	We believe that the implementation approach described in the consultation document is appropriate.
7.	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 have not identified any alternative solutions that we believe should be considered.
8.	Does P198 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 P198 raises any issues that have not been identified so far.
9.	Are there any further comments on P198 that you wish to make?	No	

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

Q	Question	Response	Rationale
1.	Do you believe that Proposed Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the current Code baseline? Please give rationale and state objective(s)	No	The Proposed Modification acts against the achievement of Applicable BSC Objective (c). The distributional effects of P198 would represent windfall gains and losses, which would penalise existing investment decisions with a negative impact on competition. Renewables, would be disproportionately and detrimentally affected by the Proposed Modification, which is thus counter to facilitating competition and also counter to Govt objectives to combat climate change
2.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the Proposed Modification? Please give rationale and state objective(s)	No	As above, but with even more variability and uncertainty built into the process.

Q	Question	Response	Rationale
3.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	No	As above
4.	Do you believe that P198 would have a disproportionate impact on any class or classes of Parties? Please give rationale	Yes	Renewables must locate where the renewable resource is located. As such any additional locational "incentives" cannot be "responded to" and therefore act as a further unnecessary cost and barrier to development
5.	Do you believe that P198 would have an impact on perceptions of regulatory risk and/or the cost of capital? 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
6.	Do you support the implementation approach described in the consultation document? Please give rationale	No	
7.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	No	
8.	Does P198 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	
9.	Are there any further comments on P198 that you wish to make?	Yes	It should be rejected

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Please send your responses by **12 noon** on **Friday 14 July 2006** to modification.consultations@elexon.co.uk and please entitle your email '**P198 Second Assessment Procedure 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 Kathryn Coffin on 020 7380 4030, email address kathryn.coffin@elexon.co.uk.

P198 SECOND 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.

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

Q	Question	Response	Rationale
1.	Do you believe that Proposed Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the current Code baseline? Please give rationale and state objective(s)	No	**Applicable BSC Objective (a)** In line with the Transmission Company Analysis we believe the Proposed Modification will have a neutral effect on this Objective. **Applicable BSC Objective (b)** The defect identified in P198 will only be addressed where it is both practical and commercially viable for BM Units to respond. In turn the operation of the GB transmission system will only be affected insofar as BM Unit behaviour is modified. This will only occur if the effect of the Proposed Modification outweighs other locational factors in the siting of generation and demand. We do not believe that this will be the case. Furthermore we believe that it is only longer term decisions that are potentially affected. We note that the Oxera Cost-Benefit Analysis supports this view in concluding that P198 would not result in the re-location of any existing generation plant. This is not to say, however, that we believe that no efficiency benefits will be realised from the implementation of this

Q	Question	Response	Rationale
			Proposed Modification, only that they will take considerable time to be realised. **Applicable BSC Objective (c)** Due to limited ability of BM units to respond to the Proposed Modification, we believe that that the initial effect of this modification will be distortionary as windfall gains/losses will result. Unpredictable shifts in the cost base of the supplier and/or perceived instability has anti-competitive effects as it presents a barrier to the entry of new participants into the market. We therefore believe that the Proposed Modification would not better facilitate this Objective. **Applicable BSC Objective (d)** Zonal transmission losses will introduce further elements into an already complex set of trading arrangements. We therefore believe that this Objective will be compromised by the Proposed Modification. **Conclusion** Although we agree that inherent in the uniform allocation of transmission losses is an element of cross-subsidy, this cross-subsidy has a negligible effect as other locational factors far outweigh its influence. We are pleased to note that the Group supports this view. We also recognise that the achievement of Applicable BSC Objective (b) may be better facilitated by the Proposed Modification, although the magnitude of the potential efficiencies remains unproven. We remain concerned that the possibly marginal benefits under (b) would be by far outweighed by the disadvantage under the Applicable Objectives (d) and the even greater detrimental effect on achieving Applicable Objective (c). As a result we believe the overall effect would be detrimental.
2.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the Proposed Modification? Please give rationale and state objective(s)	Yes	**Applicable BSC Objective (a)** As Question 1 **Applicable BSC Objective (b)** We note from the TLF Modelling Exercise that there is significant variation between seasonal and annual TLFs. This would suggest that cost signals will be lost if TLFs are averaged into an annual figure. We therefore

Q	Question	Response	Rationale
			conclude that this objective would be better facilitated by the Alternative Modification. **Applicable BSC Objective (c)** Current plans for new plant development are primarily focused in the south of GB. The long term nature of such development plans means that potential increased efficiencies will not be realised in the short term. We note that the view has been expressed in the Group that any phasing of implementation will delay the realisation of these benefits. We disagree with this view as we believe any potential benefits will only be realised in the longer term (15 years+). Hence the effect of phasing will not be to delay benefits as it would happen over a 4 year timeframe. The phasing element of the Alternative Modification would mitigate the "windfall" effect of the Modification Proposal to some extent and hence would better facilitate the achievement of this Objective. Similarly the anti-competitive aspects of the Proposed Modification described in Question 1 would be mitigated to some extent by the Alternative Modification. A phased introduction would have a lesser destabilising influence. **Applicable BSC Objective (d)** As Question 1
3.	Do you believe that Alternative Modification P198 would better facilitate 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 answers to Questions 1 and 2.
4.	Do you believe that P198 would have a disproportionate impact on any class or classes of Parties? Please give rationale	Yes	Demand and generation BM Units will be differentially affected according to their ability to respond to the Proposed Modification. In addition, generation response will be more significant than that for demand. This assessment is supported by the Oxera analysis which has shown the future benefits for Generation Redespatch to be larger and also differentially affected by different scenarios. Hence suppliers will be differentially affected according to their ownership of generating plant, the nature of

Q	Question	Response	Rationale
			their customer base and the type of contractual arrangements with them that are in place. Ownership of generation assets is a tool that enables companies to offset the risks associated with this Proposal. A large vertically integrated company will lose and gain on both the generation and demand side thus the overall effect will be more balanced. This may give such companies some choice as to when to what extent to reflect the charges in their retail tariffs. A small stand alone supplier cannot do that and if the impact of these charges cannot be absorbed the prices to existing customers must be altered to reflect the change to the cost base. This means that the customers of small suppliers will see the impact of the changes passed on immediately whilst those of customers of larger suppliers may not. Suppliers that have a significant domestic portfolio are protected in that they have the option of revising prices with 28 days notice. Suppliers in the larger end of the market are also protected in that such customers tend to be supplied on pass through terms. For a supplier such as BizzEnergy who sells on fixed term, fixed price contracts primarily to the I&C market no such protection is afforded. Although contractual provisions are made for passing on such charges, these are usually not put into effect by larger players. Should it be necessary to go down this route there are significant and extremely damaging commercial ramifications. The significance of the proposed changes cannot overemphasised in a business where supply margins are so small. For instance larger half hourly customers will have a gross margin in the order of 5%. A significant change in losses, therefore would, if not immediately reflected in customers prices, mean that we could be supplying at a loss. It is also of concern that future development of renewable generating plant will be disadvantaged due the relatively inflexible opportunities for siting such projects.

Q	Question	Response	Rationale
5.	Do you believe that P198 would have an impact on perceptions of regulatory risk and/or the cost of capital? Please give rationale	Yes	We note the point raised in the Assessment Procedure Consultation that all parties must accept a degree of regulatory risk as this is inherent in an industry where trading arrangements are subject to constant review. However, it is also reasonable to expect that regulatory changes will be demonstrably of benefit to the consumer. After all, it is the consumer who will ultimately pay for any changes that are made. Additional costs in administering the industry must be outweighed by genuine cost benefits to the customer or the customer will actually be worse off. Any changes that are made to significantly affect the cost base of suppliers must be seen as introducing volatility into the industry. Cost messages must be stable and predictable in the long term as this is the time scale applicable to investment decisions. This knock on effect of the perceptions on the cost of capital is a barrier to entry and completely at odds with Applicable Objective (c).
6.	Do you support the implementation approach described in the consultation document? Please give rationale	No	The longer the implementation process is the less de-stabilising, anti-competitive effects it will have. It is also true that the longer the notice period for the publication of the TLFs the less the detrimental effect. It is often the case that customers are priced more than 3 months in advance of the supply start date and hence it would not always be possible to incorporate the impact of revised TLFs into new contracts. This problem is compounded where customers have contracts of several years in duration. Similarly the greater the degree of phasing of the de-stabilising modification, the less the impact will be. We would support a longer implementation timescale and longer notice periods for the revised TLFs together with a phased approach.
7.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	Yes	We believe that the Group should give consideration to a more sensitive solution that allows the market to adjust to the impact of the Proposal in a more appropriate way. A solution that allowed for a rolling average of TLFs over multiple years would reduce the possibility of further de-stabilising step changes.
8.	Does P198 raise any issues that you believe have not been identified so far and that should be progressed as	Yes	Although analysis has been carried out to assess the cost benefit of the Proposed Modification on the industry as a whole, there have so far been

Q	Question	Response	Rationale
	part of the Assessment Procedure? Please give rationale		no assessment on the materiality of the change on types of supplier that are fundamentally different. As described in our response to Question 4, the impact of this Proposal will vary significantly according to generation ownership and the size and type of customer portfolio held. Another issue that has not been covered
9.	Are there any further comments on P198 that you wish to make?	Yes	Each time a new measure is introduced into the industry consumer confidence is undermined. Regardless of the merits of the proposal, regularly shifting costs create the impression that current pricing signals are not fixed and constantly subject to change. The sorts of decisions that these price signals seek to influence are long term in their nature so consumers must feel confident in the long term price implications of their demand/investment policies. Making changes of marginal (if any) benefit is ultimately counter-productive as consumers cease to respond not only to the new price signals but the ones already in the market as they are seen as unreliable and subject to change. Oxera have estimated to magnitude of the cost signal in the Proposed Modification to be around one third of that provided by the current TNUoS charging mechanism. This has to raise the question as to whether existing cost signals are effective if there is a continuing mismatch between the location of generation and demand. If they are, then the defect that the Proposed Modification attempts to address would be considerably less pronounced. If they are not, then the Proposed Modification will be of negligible benefit. In either case it is hard to see how increasing the pricing signal by one third will be effective in redressing the mismatch of generation and demand. The environmental ramifications of this proposal are potentially far reaching due to the relatively limited scope for renewable generation plant to respond to these signals. We note that environmental considerations have been excluded from the cost benefit analysis and so we find it contradictory that environmental benefits from the increased efficiency of the transmission system are cited as a reason for implementation.

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P198 SECOND 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.

Respondent:	*Name* Ben Sheehy
Company Name:	E.ON UK
No. of BSC Parties Represented	13
Parties Represented	*Please list all BSC Party names of Parties responding on behalf of (including the respondent company if relevant).*
No. of Non BSC Parties Represented (e.g. Agents)	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.
Non Parties represented	*Please list all non Parties responding on behalf of (including the respondent company if relevant).*
Role of Respondent	*(Supplier/Generator/ Trader / Consolidator / Exemptable Generator / ~~BSC Agent / Party Agent / Distributors / other – please state~~* [1] *)*
Does this response contain confidential information?	No.

[1] Delete as appropriate – please do not use strikeout, this is to make it easier to analyse the responses

Q	Question	Response	Rationale
1.	Do you believe that Proposed Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the current Code baseline? Please give rationale and state objective(s)	Yes / ~~No~~	P198 better facilitates the achievement of Applicable BSC Objectives (a), (b) and (c). Objective (a) is better facilitated in two ways. Firstly, the licensee will be able to discharge its obligations more efficiently with the market distortion of uniform charging for transmission losses removed. Secondly, the licensee's discharge of its non-discriminatory obligation will be enhanced, as charges for variable transmission losses will correspond to the extent to which BSC Parties cause them. Objective (b) is better facilitated as the cross subsidies inherent in the existing charges will be removed, leading to more efficient and economic short-term plant generation decisions and long-term plant investment decisions. Objective (c) is better facilitated as cost-reflective charging for variable transmission losses will enhance competition. Uniform charges are contrary to market principles and hinder the ability of competitive generation and retail businesses to reflect these costs in their tariffs.
2.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the Proposed Modification? Please give rationale and state objective(s)	~~Yes~~ / No	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, the Alternative Modification does not better facilitate the Objectives compared with the Proposed Modification because of the addition of linear phasing. It is not efficient to recognise the benefits of zonal charging (as outlined against the Objectives in the answer to question 1. above) and then delay their implementation.

Q	Question	Response	Rationale
3.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	Yes / ~~No~~	Although it isn't efficient to delay the implementation of zonal transmission losses, the phased elimination of current cross subsidies will still ultimately deliver the benefits (as outlined against the Objectives in the answer to question 1. above).
4.	Do you believe that P198 would have a disproportionate impact on any class or classes of Parties? Please give rationale	~~Yes~~ / No	P198 merely seeks to allocate the costs of variable transmission losses in a way that is fairer than uniform charging. Therefore references to any "windfall" gains and losses throughout the industry are unhelpfully provocative. A windfall is by definition an unexpected occurrence and there is plentiful evidence that the industry has known about the potential implementation of a non-uniform transmission losses scheme for many years. Therefore P198 removes the disproportionate impact of the current TLM calculation and so will have a more proportionate impact on every class of Party.
5.	Do you believe that P198 would have an impact on perceptions of regulatory risk and/or the cost of capital? Please give rationale	~~Yes~~ / No	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. 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.
6.	Do you support the implementation approach described in the consultation document? Please give rationale	Yes / ~~No~~	It is an area of consensus that the Modification Group has considered carefully.

Q	Question	Response	Rationale
7.	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	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.
8.	Does P198 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	
9.	Are there any further comments on P198 that you wish to make?	~~Yes~~ / No	

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Any queries on the content of the consultation pro-forma should be addressed to Kathryn Coffin on 020 7380 4030, email address kathryn.coffin@elexon.co.uk.

P198 SECOND 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.

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

Q	Question	Response	Rationale

Q	Question	Response	Rationale
1.	Do you believe that Proposed Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the current Code baseline? Please give rationale and state objective(s)	Yes	The CBA demonstrates that P198 better facilitates objective b as the reduction in losses (and generation cost savings of between £3m and £8m per year) will improve the efficient and economic operation of the system. We note that all new large generation in the 2006 SYS (apart from wind generation) is locating in the south. Whilst zonal losses will provide a locational investment signal, TNUoS charges and the proximity to fuel sources are far larger factors in this decision. As noted in the Oxera CBA, whilst wind generators will in the main be exposed to an increased charge for transmission losses, ROCs (and also wind strength) play a far bigger factor. However, the removal of the flat rate charge for losses will reduce the cross subsidies that northern generators currently enjoy. Whilst this may not alone drive siting decisions, it will be a contributory factor. This will promote competition in the generation and supply of electricity (objective c) in operational timescales, ensuring more efficient despatch at BMU level.
2.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the Proposed Modification? Please give rationale and state objective(s)	Yes	The CBA suggest that the benefits of zonal transmission losses are further enhanced with the application of seasonal zonal losses. We have some reservations over increasing the granularity of TLM changes, as this can impact on predictability of outcomes and introduce more volatility. However on balance we believe seasonal loss factors better facilitate the Applicable Objectives.
3.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	Yes	Yes – the Alternative Mod at least introduces zonal losses (and better facilitates objectives b and c as noted in Q1 above) but also introduces additional complexity.
4.	Do you believe that P198 would have a disproportionate impact on any class or classes of Parties? Please give rationale	Yes	P198 will create winners and losers in the longer term for existing generation assets.

Q	Question	Response	Rationale
5.	Do you believe that P198 would have an impact on perceptions of regulatory risk and/or the cost of capital? Please give rationale	Neutral	Zonal transmission losses have been a prospect since the days of the Electricity Pool. Generators should therefore take account of the regulatory risk that zonal losses might be introduced in their cost of capital.
6.	Do you support the implementation approach described in the consultation document? Please give rationale	Yes	
7.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	Yes	Phasing as per the Alternative Modification without seasonal TLFs
8.	Does P198 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	
9.	Are there any further comments on P198 that you wish to make?	No	

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P198 SECOND 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.

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

Q	Question	Response	Rationale
1.	Do you believe that Proposed Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the current Code baseline? Please give rationale and state objective(s)	No	Whilst we ccould accept that the introduction of a transmission losses scheme can potentially improve the efficiency in operating a power system in operational (not investment) timescales and hence better facilitate Objective B of the BSC, we still regard the proposal as detrimental overall because of the potential negative impact on competition and the disproportionate reallocation of funds between parties (generators and suppliers) in comparison to the modest system benefit.
2.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the Proposed Modification? Please give rationale and state objective(s)	Yes	The Alternative contains two elements which we believe are essential if a TL Scheme is to be introduced at this time. The Siemens PTI analysis clearly showed that seasonal TLFs provide more accurate results that annual ones and Phasing would be necessary for parties to mitigate some of the negative impacts in the short term whilst their contracts are renegotiated. Hence Objectives B & C are better facilitated when compared with the original.

Q	Question	Response	Rationale
3.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	No	Because at the heart of the Alternative is still the basic P198 proposal and the same concerns exist regarding bettering the BSC Objective C.
4.	Do you believe that P198 would have a disproportionate impact on any class or classes of Parties? Please give rationale	Yes	The Oxera work showed that there were modest system benefits to be had over time, but the transfer of monies between parties was far greater than this and appeared to be a disproportionate. Whilst it may be said that generators in the south and suppliers in the north will gain and that suppliers in the south and generators in the north will lose, the beneficiaries and losers are not evenly spread. Renewable generators will be concentrated in the north and supply is concentrated in the south.
5.	Do you believe that P198 would have an impact on perceptions of regulatory risk and/or the cost of capital? Please give rationale	No	
6.	Do you support the implementation approach described in the consultation document? Please give rationale	Yes	
7.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	No	
8.	Does P198 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	
9.	Are there any further comments on P198 that you wish to make?	Yes	It is interesting to highlight that Oxera came to the conclusion that a TL scheme would have little effect on investment decisions and that TNUoS is a much bigger factor.

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P198 SECOND 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.

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

Q	Question	Response	Rationale

Q	Question	Response	Rationale
1.	Do you believe that Proposed Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the current Code baseline? Please give rationale and state objective(s)	No	ICHP strongly opposes P198, and believe it does not better facilitate achievement of the applicable BSC objectives. In particular: <u>Efficiency</u> It is clear from the Oxera work that any alleged benefits are narrowly confined to short–term despatch effects, and the proposal does not create any longer-term locational signalling. Further many of the benefits can be expected to arise "organically" from wider system changes and new investment in the south, and which cannot be claimed as attributable to P198. Even then the signal for short-term despatch is lagged and is not actually reflective of within year drivers. The potential impacts of P198 could confuse existing locational signals in the market place in the form of National Grid's transmission use charges, and the issue of duplication and overlap with locational elements of TNUoS charges needs to be addressed urgently. Oxera touched on this but concluded that "the effect of P198 in this area was ambiguous" (assessment report, p71). These distortions are aggravated by the use of different generation zonal configurations for TNUoS and losses purposes. Over the longer-term, Oxera also noted that any longer-term locational impacts of P198 would not be realised until beyond 2015, greatly reducing the claimed benefits of the change. They also observed that the effect on new build decisions was uncertain. (assessment report, p71), which is major gap in our knowledge from the assessment phase. The cost and complexity of the change is significant and on the basis of the Oxera analysis understated. Understanding, forecasting and managing the variation in locational TLFs will be difficult and impose further transactional costs on the market, and these costs increase disproportionately the smaller the player.

Q	Question	Response	Rationale
			Locational effects are also dependent on other parties' behaviour. An operator located next to peaking plant could be very adversely affected by something it can neither predict nor control. The example analysed by the group, Hunterston B, illustrates the volatility of the arrangements under P198, and show the randomness of the effects caused by plant retirement. Overall, P198 can be expected to have no more than a neutral effect on applicable objective (b) because the costs to the market and the increased complexity are probably comparable to the savings from redespatch directly attributable to this change. Given the conclusions that longer-term signals could be ambiguous, we conclude that the proposal overall would have a negative effect against this objective.

Q	Question	Response	Rationale
			<u>Competition</u> P198 would also be inequitable and create windfall gains and losses on a discriminatory basis. These distributional effects could be sufficiently material as to lead to cancellation of some committed schemes and discourage significant new investment. We do not accept Oxera's conclusion that the risk associated with P198 is a diversifiable risk, and would further comment that it introduces a further unmanageable risk for certain types of participant. We note the comment at p73 that "Some members... believed that economic counter arguments could be put forward to demonstrate that the impact of P198 in these areas [of risk and cost of capital] could be significant", and agree with it. It is also relevant that integrated players tend to have a natural hedge because of their regional spread. In particular P198 has a more pronounced impact on non-portfolio players. By increasing market complexity and disadvantaging remaining independent generators in the North and Scotland, P198 can be expected over time to create further pressures for integration to the detriment of wider competition in the sector. However, extrapolating these arrangements to participants already committed to investment creates a random redistribution of wealth. For businesses such as our own, where electricity production tends to be a secondary process tied to heat production, the change simply increases arbitrarily the cost of business which can be likened to an operational tax. Economic signals can only work if market participants are able to respond to them. Many participants, e.g. existing generation, CHP (located to suit demand needs on existing industrial sites) and windpower (located where the wind blows), cannot respond to new locational costs in the market.

Q	Question	Response	Rationale
			Demand too is largely inelastic and cannot move in the short- to medium-term, a factor acknowledged by Oxera. It is highly undesirable, given the vast amount of sunk investment, to create such incentives. Similar arguments apply to renewable development, which has limited choice over location. In this regard, it is not appropriate to argue, as Oxera do, that the negative effects of TLFs on renewables would be offset by the protection afforded by the Renewables Obligation. The market premium enjoyed by renewables is part of the counterfactual, and is a directly relevant factor in quantifying the effects of P198. Imposing P198 on a market where there will be skewed ability to respond will lead to market inefficiency through artificially increasing some participants' costs, especially where very large capital investment has already been spent on facilities designed to last 30 years. In turn such change will distort competition. Overall the effect of P198 measured against applicable objective (c) is significantly negative, penalising existing investment decisions and causing a negative impact on competition. The existing arrangements do not represent a cross subsidy any more than BSUoS charging, half hourly energy pricing or the use of profiles (all of which are averaged or approximations). Looking forward, as we have noted, the change increases market complexity and risk, and we do not agree this risk is diversifiable. <u>Efficiency in BSC arrangements</u> The cost and complexity noted above lead us to believe that P198 would create a net disbenefit under objective (d).

Q	Question	Response	Rationale
2.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the Proposed Modification? Please give rationale and state objective(s)	No	Phasing is to be preferred as the lesser evil, as it will mitigate for a brief period the adverse effects of P198 original, in particular by delaying the full impact of the detrimental competitive effects. However, ICHP does not support the inclusion of seasonal TLFs.
3.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	No	Our answers to question 1 apply here. The only difference is the degree to which the arguments hold, owing to the mitigating effects of phasing under the alternative.
4.	Do you believe that P198 would have a disproportionate impact on any class or classes of Parties? Please give rationale	Yes	We believe that the current change proposal disproportionately and systematically disadvantages specific technologies and certain classes of market participants. CHP plant location is largely tied to the industrial site it is associated with, and it would therefore not be responsive to the cost signals these proposals seek to introduce. In terms of capacity, the regions of Scotland, Yorkshire/Humber, the North West and the North East of England - which would be impacted most adversely by the proposal - account for well over 2/3rds of currently installed CHP capacity. As an active developer, we are concerned not only for our consented assets but also for new developments we assessing, which are all CHP or renewables. All these developments are in areas in which would be worse off under other proposed methodologies, and could be put at risk. Additional complexity also impacts disproportionately on smaller players, favouring the large integrated players who are better able to diversify risks arising from change and have more resource to deal with its implications.
5.	Do you believe that P198 would have an impact on perceptions of regulatory risk and/or the cost of capital? Please give rationale	Yes	The change 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.

Q	Question	Response	Rationale
6.	Do you support the implementation approach described in the consultation document? Please give rationale	Yes	An April 2008 implemented is the earliest achievable. If the date should slip further for any reason, the revised date should coincide with the next suitable 1 October or 1 April date to coincide with contract commencement.
7.	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	In abstract terms, a zonal losses scheme that produces accurate dynamic losses could have merit, but subject to three important provisos: (i) it should not apply to already committed and consented plant unless introduced in tandem with a mitigation scheme such as P200 (ideally something simpler) (ii) there should be evaluation of what the "right" level of locationality should be, and changes introduced to ensure consistency in transmission pricing (with losses, constraints and investment signals unified) (iii) factors should be meaningful, that is they should reflect the costs of operation within year, though introducing such a mechanism is by no means straightforward without introducing immense complexity.
8.	Does P198 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	ICHP is disappointed that an SO- or TO-focussed approach to management of transmission losses has not been considered in parallel with P198. While this style of approach does not necessarily address the defect identified by the proposer by providing a solution within the BSC, it evidently is an option for meeting the intention behind the modification of creating an arrangement that enables optimal management of the cost of transmission losses. Several markets internationally apply downward pressure on the cost of transmission losses through mechanisms administered by the transmission entity, and this type of approach would be very compatible with the existing style of approach to setting transmission incentives in the UK.

Q	Question	Response	Rationale
9.	Are there any further comments on P198 that you wish to make?	Yes	Five different approaches to the charging of losses have been proposed since Neta go-live, and three different mitigation schemes have been brought forward. There has also been one successful judicial review. It is now essential that after the current raft of proposals is taken to report stage that the matter is left off the table. The England and Wales electricity market design already incorporates locational signals through NGC's transmission network use of system (TNUoS) charges, which are generally considered within European markets to be comparatively sharp. New generation is currently being constrained by grid access, as this is particularly acute in the North, part of the 'benefit' of this modification is already being effected and should not be deemed to be a benefit of this mod in the cost benefit analysis.

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 and please entitle your email '**P198 Second Assessment Procedure 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 Kathryn Coffin on 020 7380 4030, email address kathryn.coffin@elexon.co.uk.

P198 SECOND 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.

Respondent:	Elaine Hanton
Company Name:	Highlands and Islands Enterprise (HIE)
No. of BSC Parties Represented	None directly.
Parties Represented	As above
No. of Non BSC Parties Represented (e.g. Agents)	
Non Parties represented	HIE is the Government's agency responsible for economic and social development across the northern half of Scotland. Development of renewable energy is a key priority for HIE and as a result it supports the activities of a number of renewable energy companies and their suppliers. In terms of parties with a direct interface with the BSc, the majority of interests represented lie with generators, and in particular exemptable generators.
Role of Respondent	Economic Development Agency
Does this response contain confidential information?	No

Q	Question	Response	Rationale

Q	Question	Response	Rationale
1.	Do you believe that Proposed Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the current Code baseline? Please give rationale and state objective(s)	Yes / No	No. Reiterating our response to the first consultation, HIE is concerned that the introduction of zonal losses will impact negatively on the prospects for renewable energy generators in the North of Scotland. The charges will be additional to those already levied through TNUoS. If renewables generators are discouraged from connecting where the resource is optimal, overall carbon emissions may well increase, even if losses are reduced. Furthermore, it is clear from the Siemens PTI modelling that an annual average zonal loss charge would send incorrect signals in the context of sometimes large variations intra-year and intra-seasonal TLFs. It is also clear from the present OXERA cost benefit analysis that P198 will not have an impact on the movement of existing generation, or decisions on the location of new generation.
2.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the Proposed Modification? Please give rationale and state objective(s)	Yes / No	HIE agrees with the majority P198 group view that the alternative modification is slightly better than P198, in so far as it: would seem to be a better reflection of the variance in TLF values, although it would still give inaccurate signals; the phased implementation mitigates the impact on existing generation which cannot respond.
3.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	Yes / No	No. As noted above, HIE believes that the alternative will not provide the correct signals, and that it shares the same features of P198 in levying charges that ignore the ability of generators to respond.
4.	Do you believe that P198 would have a disproportionate impact on any class or classes of Parties? Please give rationale	Yes / No	Yes – northern generators would be penalised for siting where they are needed to supply demand and / or to meet government objectives for renewables. Furthermore, coupled with TNUoS, there appears to be a greater gain for generators in the south compared to customers in the north.

Q	Question	Response	Rationale
5.	Do you believe that P198 would have an impact on perceptions of regulatory risk and/or the cost of capital? Please give rationale	Yes / No	Yes. The nature of the BSC and the constant prospect of ongoing modifications must have an impact on the perception of regulatory risk.
6.	Do you support the implementation approach described in the consultation document? Please give rationale	Yes / No	If P198 were to be implemented, HIE would support phased implementation, with sufficient lead-times to allow affected parties to take the appropriate measures.
7.	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	No – any additional complexity in time-varying charges would be disproportionate to the issue.
8.	Does P198 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	Yes. The cost to the industry as a whole of progressing a modification which has, as P82, already been rejected by the Panel and the DTI, should be considered.
9.	Are there any further comments on P198 that you wish to make?	Yes / No	Yes. The impact on the environment and customers should be considered by Ofgem in its impact assessment, and should the potential for it to be perceived by customers as a cynical move by southern generators for improving cashflows, while at the same time increasing the cost and value of the Renewables Obligation (by increasing generators costs in the north of Scotland and, if generation is rendered uneconomic, through reducing the extent to which the obligation is met – but still financed through the buy-out price), at a time when electricity prices are rising and greenhouse gas targets are challenged.

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 and please entitle your email '**P198 Second Assessment Procedure 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 Kathryn Coffin on 020 7380 4030, email address kathryn.coffin@elexon.co.uk.

P198 SECOND 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.

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

Q	Question	Response	Rationale
1.	Do you believe that Proposed Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the current Code baseline? Please give rationale and state objective(s)	No	ScottishPower do not believe that a zonal transmission losses scheme as proposed in P198 would better achieve the Applicable BSC Objectives, compared with the current baseline. Indeed, we believe that certain fundamental aspects of P198 would jeopardise the achievement of these Objectives. Against applicable BSC objectives: a) The proposed modification discriminates against certain parties while favouring others through the transfer of capital value and windfalls. b) This modification does not generate the sought after long term locational signal. It gives an inconsistent, contradictory and

Q	Question	Response	Rationale
			uncertain short term signal through despatching. The CBA analysis is based on a central despatch model, whereas NETA is based on a self despatch model. Therefore there is a questionable reduction in losses, and a potential loss of efficiency. c) This modification will create a windfall of gains and losses, which discriminates against certain parties and benefits others. This in turn creates an investment risk which is a barrier for new entrants, and an increased implementation cost for existing parties – both bad for competition. This is detrimental to promoting effective competition. d) This modification will have a higher cost of implementation and admin compared to the baseline, detrimental to efficiency.
2.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the Proposed Modification? Please give rationale and state objective(s)	Yes	ScottishPower believe that an ex-ante TLFs for each BSC Season approach would better facilitate the BSC objectives (b) and (c) when compared with P198 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 time 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. ScottishPower also believes a phased implementation would better achieve BSC Objective (c) - promoting effective competition and (d) - efficiency, compared to P198 Proposed. The effect of the initial introduction of a zonal losses scheme would create windfall gains and losses. Such gains and losses are inefficient and hence distort competition. The effect of such a change would be to increase the perceived regulatory risk associated with the electricity supply industry and would increase the costs of both its players and its customers to the overall detriment of economic efficiency. Risks remain for both existing players and new entrants of future changes in TLFs.

Q	Question	Response	Rationale
			Introduction of such Alternative would retain the alleged benefits of changed incentives under P198 while reducing significantly the windfall gains and losses and providing protection against future changes in TLFs. Furthermore, the presence of the risk of adverse changes in loss factors being imposed on a project increases the uncertainty surrounding the potential return from the investment in the project. The removal or reduction of this risk would be expected to reduce the cost of capital for future projects.
3.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives when compared to the current Code baseline? Please give rationale and state objective(s)	No	ScottishPower do not believe that a zonal transmission losses scheme as proposed in Alternative Modification P198 would better achieve the Applicable BSC Objectives, compared with the current baseline. Indeed, we believe that certain fundamental aspects of P198 would jeopardise the achievement of these Objectives. This alternative still creates windfall gains and losses (although to a lesser extent that P198 Proposed) for Parties. It is discriminatory against certain parties and increases the overall investment risk
4.	Do you believe that P198 would have a disproportionate impact on any class or classes of Parties? Please give rationale	Yes	Implementation of P198 would lead to increased costs for several classes of Parties. Parties who have plant with environmental constraints, such as Windfarms, Nuclear stations, all types of Renewables or fossil (coal) plants who are unable to change their operational regime readily, and are located historically in the North of the country
5.	Do you believe that P198 would have an impact on perceptions of regulatory risk and/or the cost of capital? Please give rationale	Yes	ScottishPower believe that there would be an impact. The effect of implementing P198 would be to increase the perceived regulatory risk associated with the electricity supply industry, increasing the costs of both

Q	Question	Response	Rationale
			its players and its customers to the overall detriment of economic efficiency. Risks remain for both existing players and new entrants of future changes in TLFs. Any form of regulatory risk would effect future investment decisions.
6.	Do you support the implementation approach described in the consultation document? Please give rationale	Yes	Implementation must be planned to take account of all required system and process changes. These are the minimum timescales require 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
7.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	No	During the extensive modification procedure, we believe all viable alternatives have been explored
8.	Does P198 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	There are environmental issues which should be identified and progressed, as well as the potential impact on consumers. Parties receiving windfall gains are unlikely to pass any savings onto customers. Parties who are windfall losers will have to pass price increases onto customers to cover costs. A risk would be that any future shortfall in Southern generation could lead to an increase in bid price as Northern generation recoup costs.
9.	Are there any further comments on P198 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 **Thursday 13 July 2006** to modification.consultations@elexon.co.uk and please entitle your email '**P198 Second Assessment Procedure Consultation**'. Please note that any responses received after the deadline may not receive due consideration by the Modification Group.

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P198 SECOND 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.

Respondent:	David Lewis
Company Name:	EDF Energy
No. of BSC Parties Represented	9
Parties Represented	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 Limited
No. of Non BSC Parties Represented (e.g. Agents)	0
Non Parties represented	0
Role of Respondent	Supplier/Generator/ Trader/Distributor
Does this response contain confidential information?	No

Q	Question	Response	Rationale

Q	Question	Response	Rationale
1.	Do you believe that Proposed Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the current Code baseline? Please give rationale and state objective(s)	No	We do not believe that the Proposed Modification P198 will better facilitate the BSC Objectives for the following reasons. The locational signals provided by P198 would have a negligible effect on the siting of new generation capacity as TNUoS charges already provide these. This point is substantiated by the fact that 90% of proposed CCGT projects identified in NGET's 2006 SYS are in the Southern half of Great Britain. The CBA concludes that P198 will lead to more efficient economic despatch – we dispute this on the grounds that an economic despatch model (as used by Oxera) may not be representative of market conditions. In particular, fuel costs (especially when the gas/coal spread is high), potential changes to TEC 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. Other factors like environmental constraints (particularly for coal plant) are also much more likely to dictate running patterns than zonal loss charging. We therefore see no clear evidence to suggest that the operational benefits of P198 will be realised. Further, any benefits that may be seen as a result of plant re-despatch will only be short-term as proposed new generating capacity in the South comes on line displacing some of the older and less efficient plant in the North. It can therefore not be said that the Modification will better facilitate the economic and efficient co-ordination of the transmission system (Objective B). In relation to Objective C, given the substantial sums of monies that would be transferred between different parties as a result of this Modification, it is impossible to see how this will promote competition. This point will be discussed in more detail in question 4 below.

Q	Question	Response	Rationale
			Finally, by definition this Modification is detrimental to Objective D – the complexity created by the addition of TLFs to the code can only make the administration of the BSC more difficult. This combined with high implementation and operational costs will not better facilitate this Objective.
2.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the Proposed Modification? Please give rationale and state objective(s)	Yes	We believe that the Alternative Modification will better facilitate the BSC Objectives when compared to the Proposed Modification. The Siemens PTI analysis shows that Seasonal TLFs provide stronger economic signals when compared to adjusted annual zonal TLFs. This is because the averaging process in itself produces cross subsidies in that some parties will be responsible for greater losses than if the TLFs had been calculated on a raw nodal basis. This will still be present with Seasonal values but to a lesser extent when compared to annual TLFs. This will better facilitate Objective B when compared to the original Modification. Phasing will also have a more beneficial impact on competition in the generation and supply of electricity as it will mitigate the impact of the large flows of monies between different parties. It will also allow parties time to factor zonal loss charging into their contracts – we agree that for shorter duration contracts (i.e. one year) that the time between an Authority decision and implementation would be sufficient to factor these in, but where contracts are for a longer duration, phasing provides the only practical hedge for these costs. This aspect of the Alternative will better facilitate Objective C when compared to the original Proposal. The impact on Objective D will be negligible compared to the proposal - the implementation and operational costs are not dissimilar and a higher granularity of TLFs will not add a great deal of additional complexity.

Q	Question	Response	Rationale
3.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	No	For the reasons stated in question one above we do not believe that a zonal losses scheme will better facilitate the BSC Objectives.
4.	Do you believe that P198 would have a disproportionate impact on any class or classes of Parties? Please give rationale	Yes	The Oxera analysis highlights the magnitude of the movement of monies between parties under a zonal losses scheme – generators in the South would be £85 million better off to the detriment of Northern generators in the first year of the scheme. Similarly, Southern suppliers would see their costs increase by £73 million whereas Northern suppliers would see their costs decrease by this amount. Demand does not have the ability to appropriately respond to the signals provided by a zonal loss scheme, and some types of generation would find it difficult. For example, intermittent generation like wind energy cannot choose when it generates. The Renewables Obligation Scheme also means that these types of generation would not respond even if they could as the incentive to generate is provided by the ROC's which they receive - these have a significantly higher financial incentive than the impact of zonal loss charging. Other types of generation like Combined Heat and Power are also constrained in their ability to respond to locational loss charging signals as many are contracted to provide heat as well as electricity. Nuclear Power, which accounts for approximately 21% of UK generation, would also be unlikely to respond to the signals provided by zonal loss charging as these plants run at baseload and cannot easily turn on and off. In light of this, it would be fair to say that P198 will have a disproportionate effect on different parties not least because of the substantial movement of monies that will occur. It is also true to say that certain types of generation, and demand in general, will struggle to respond to any signals that P198 might provide. For these parties, transmission losses will simply be an additional cost on the bottom line.

Q	Question	Response	Rationale
5.	Do you believe that P198 would have an impact on perceptions of regulatory risk and/or the cost of capital? Please give rationale	No	Although we are not supportive of this Modification, 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.
6.	Do you support the implementation approach described in the consultation document? Please give rationale	Yes	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.
7.	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.
8.	Does P198 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	

Q	Question	Response	Rationale
9.	Are there any further comments on P198 that you wish to make?	Yes	In summary, we are not convinced by the arguments put forward by the proposer that P198 "will influence both short term plant despatch and long term business decisions". The impact on short-term despatch is questionable and any benefit that may arise would only be short lived anyway as new plant comes on line in the South; long-term signals are already clearly being provided by other means, so it is doubtful that a zonal losses scheme will have any impact on these decisions. We would also again like to highlight our concern at the very significant, unanticipated movement of value between parties – who cannot respond by moving their large, static power station investments - which can only serve to increase regulatory risks in the sector as a whole, in a climate when major investment in new generation capacity is urgently needed for national security of supply. On a final point, we are concerned at the very short length of consultation period for such an important change, especially considering that the P200 consultation period runs in parallel. This may result in industry not being able to comment fairly on these changes.

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P198 SECOND 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.

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

Q	Question	Response	Rationale

Q	Question	Response	Rationale
1.	Do you believe that Proposed Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the current Code baseline? Please give rationale and state objective(s)	No	**Applicable Objective (a)** We concur with the view of the Transmission Company that P198 will have no impact on its ability to discharge its licence obligations. Furthermore, we refute any claim by either a member of the Modification group or Ofgem that the present arrangements discriminate against any BSC Party. **Applicable Objective (b)** We are not aware of any evidence in the work undertaken by either PTI or by Oxera that the introduction of P198 would have any impact on "the operation of the GB transmission system". We accept that there may be a marginal benefit to consumers from any re-despatch of generation as a result of P198, but these will almost certainly be outweighed by the negative impact which P198 will have on the unpredictable nature of charges to generators and the inefficiencies in closure and new build decisions going forwards. **Applicable Objective (c)** We concur with the view of the majority of the Modification Group that P198 will not better promote effective competition but will simply result in windfall gains and losses to BSC Parties. Some members of the Modification Group have asserted that the modification would enhance competition, but only by reference to vague concepts of cost reflectivity; at no point has anyone explained how P198 would enhance the process of competitive rivalry between companies. Furthermore, because of the additional complexity and uncertainty created by P198, we consider that it is likely to adversely effect competition in generation as smaller BSC Parties, particularly those with a single power station, will be unable to respond to changes in losses, compared with larger BSC Parties with multiple sites. As a result, the modification is likely to deter entry to, and to entry exit from, the electricity market by small parties. .

Q	Question	Response	Rationale
1	(continued)		**Applicable Objective (d)** Whilst it is a fact that P198 will add additional complexity, based on the information provided by Elexon, we do not consider that the introduction of P198 will have a significant impact on the implementation and administration of the balancing and settlement arrangements
2.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the Proposed Modification? Please give rationale and state objective(s)	No	We understand that the Alternative Modification P198 might provide a marginal improvement for consumers compared with P198 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. As noted in 1 above, however, any such improvement does not relate to any Applicable BSC Objective.
3.	Do you believe that Alternative Modification P198 would better facilitate 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 P198 is a marginal improvement on P198, 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 believe that P198 would have a disproportionate impact on any class or classes of Parties? Please give rationale	Yes	We believe that P198 would have a disproportionate effect upon generating companies which own a single power station. Whilst BSC Parties with multiple sites in diverse locations will be able to mitigate the effect of P198, single site generators will simply suffer the consequences of the application of the TLF applicable to the zone in which they are located. The effects are particularly disproportionate for those with generation plant at the northern and southern extremities of the system.
5.	Do you believe that P198 would have an impact on perceptions of regulatory risk and/or the cost of capital? Please give rationale	Yes	Please see paper on this subject prepared for Teesside Power Limited by NERA.

Q	Question	Response	Rationale
6.	Do you support the implementation approach described in the consultation document? Please give rationale	Yes / No	We have no view on this question.
7.	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 would refer to P200, which was not the preferred alternative to P198 as decide by a majority of the Modification Group, but which we believe to be superior to P198 (at least).
8.	Does P198 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.
9.	Are there any further comments on P198 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 P198. 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 and please entitle your email '**P198 Second Assessment Procedure 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 Kathryn Coffin on 020 7380 4030, email address kathryn.coffin@elexon.co.uk.

Question 9. Are there any further comments on P198 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 P198.

(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 encourages generation to locate at the extremities of the transmissions 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.

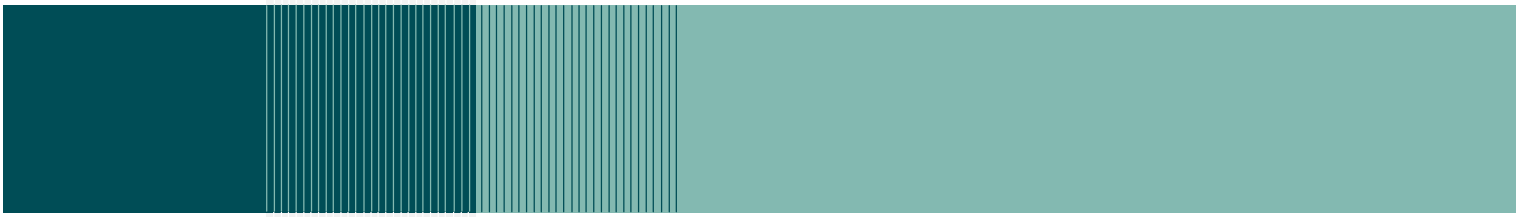
(iv) The Consultation Document discusses the availability of the load flow model to BSC Parties. Given the potential impact which the adoption of P198 would have on any BSC Party, and the fact that it introduces for the first time, as far as we are aware, a different treatment for different BSC Parties, 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.

28 June 2006

Regulatory Risk and the Cost of Capital

For Teesside Power Ltd



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Contents

List of Figures

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 there 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
NPV of cashflows*(£)	-2.12	0.00	2.12
Probability	1/3	1/3	1/3
Payoff (£)	-2.12	0.00	2.12
Expected Payoff (£)		0.00	
IRR		**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
NPV of cashflows*(£)	-3.18	0.00	3.18
Probability	1/3	1/3	1/3
Payoff (£)	-3.18	0.00	3.18
Expected Payoff (£)		0.00	
IRR		**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 $^1/_3$, 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), to 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
Expected Payoff (£)		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
Expected Payoff (£)		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
NPV of cashflows*(£)	-1.31	0.83	2.97
Probability	1/3	1/3	1/3
Payoff (£)	-1.31	0.83	2.97
Expected Payoff (£)		0.83	
IRR		**10.16%**	
Expected Payoff From Delayed Investment(£)		0.83	
Value of waiting (£)		0.00	
Extra return		0.16%	

Year	Scenario 1 Casflows (£)	Scenario 2 Casflows (£)	Scenario 3 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
NPV of cashflows*(£)	-1.98	1.24	4.47
Probability	1/3	1/3	1/3
Payoff (£)	-1.98	1.24	4.47
Expected Payoff (£)		1.24	
IRR		**10.24%**	
Expected Payoff From Delayed Investment(£)		1.24	
Value of waiting (£)		0.00	
Extra return		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
NPV of cashflows*(£)	-2.33	2.03	4.03
Probability	1/3	1/3	1/3
Payoff (£)	-2.33	2.03	4.03
Expected Payoff (£)		1.24	
IRR		**10.39%**	
Expected Payoff From Delayed Investment(£)		1.24	
Value of waiting (£)		0.00	
Extra return		0.39%	

Year	Scenario 1 Casflows (£)	Scenario 2 Casflows (£)	Scenario 3 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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P198 SECOND 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.

Respondent:	*Alastair Barnsley*
Company Name:	*E.ON Energy services Limited*
No. of BSC Parties Represented	*0*
Parties Represented	*.*
No. of Non BSC Parties Represented (e.g. Agents)	*1*
Non Parties represented	*E.ON Energy services Limited*
Role of Respondent	*Party Agent*
Does this response contain confidential information?	*No*

Q	Question	Response	Rationale
1.	Do you believe that Proposed Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the current Code baseline? Please give rationale and state objective(s)	Neutral	The proposed modifications will have no impact on ourselves
2.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the Proposed Modification? Please give rationale and state objective(s)	Neutral	
3.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	Neutral	

Q	Question	Response	Rationale
4.	Do you believe that P198 would have a disproportionate impact on any class or classes of Parties? Please give rationale	Neutral	
5.	Do you believe that P198 would have an impact on perceptions of regulatory risk and/or the cost of capital? Please give rationale	Neutral	
6.	Do you support the implementation approach described in the consultation document? Please give rationale	Neutral	
7.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale	Neutral	
8.	Does P198 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	Neutral	
9.	Are there any further comments on P198 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 and please entitle your email '**P198 Second Assessment Procedure 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 Kathryn Coffin on 020 7380 4030, email address kathryn.coffin@elexon.co.uk.

P198 SECOND 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.

Respondent:	*Name*		
Company Name:	*Gaz de France Marketing Limited*		
No. of BSC Parties Represented	*1*		
Role of Respondent	*Supplier/Generator*		
Does this response contain confidential information?	*No*		
Q	**Question**	**Response**	**Rationale**

1.	Do you believe that Proposed Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the current Code baseline? Please give rationale and state objective(s)	No	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. 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. 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.

2.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives 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 that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	No	See answer to 2 above
4.	Do you believe that P198 would have a disproportionate impact on any class or classes of Parties? Please give rationale	Yes	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.
5.	Do you believe that P198 would have an impact on perceptions of regulatory risk and/or the cost of capital? Please give rationale	Yes	Due to the fact that the cost benefit analysis shows there to be the potential for the reversal of any perceived benefits post 2012. The negative effect is even more pronounced for single plant generators who will not have the additional benefit from a portfolio effect
6.	Do you support the implementation approach described in the consultation document? Please give rationale	No	We do not support a modification to the current losses regime as proposed therefore do not support the proposed implementation approach
7.	Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? 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. This may require further analysis

8.	Does P198 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	
9.	Are there any further comments on P198 that you wish to make?	Yes	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. 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. 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.

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 and please entitle your email '**P198 Second Assessment Procedure 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 Kathryn Coffin on 020 7380 4030, email address kathryn.coffin@elexon.co.uk.

Scottish and Southern Energy

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Our Reference:
Your Reference:

Date : 14th July 2006

Dear Kathryn,

Consultation on Impact of P198 'Introduction of a Zonal Losses 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.

For the avoidance of doubt, nothing that we say in this response should be construed, in any way, as lending support for P198.

Qu 1. Do you believe that Proposed Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the current Code baseline? Please give rationale and state objective(s)

We do not believe that Proposed Modification P198 better facilitates the achievement of the Applicable BSC Objectives when compared with the current Code baseline. This is consistent with the initial view of the P198 Modification Group. Indeed, we are not clear that a defect actually exists. A significant quantity of new thermal generation is expected to come on-stream during the next decade. Completely independent of P198, the vast majority of this will be located in the southern half of GB. This is a strong indication that the appropriate locational signals already exist and that the benefits linked to P198 are not P198-dependent.

The following sets out in more detail the reasons for this view.

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

We believe that the introduction of zonal losses would conflict with existing pricing signals in the transmission pricing methodology of NGET, which is already approved by the Authority. In our view, exposure to both zonal losses and TNUoS would result in an inefficient mechanism, which would overstate the cost of plant locational decisions. This 'double' locational signal would, if P198 was approved, require revisiting of the existing TNUoS charging methodology.

Based on current levels of transmission charging, a 1,500 MW power station in northern Scotland pays around £30 M per annum TNUoS. P198 would impose an additional payment of around £10 M per annum (based upon the PTI modelling). This would take its total locational **payment** to nearly

£40 M per annum. In contrast, a similarly sized power station in southern England would receive a TNUoS payment of £9 M and be credited a further £4 M through P198 (again based upon PTI modelling). This southerly-located station would, therefore, **receive** a locational payment of £13 M per annum. We do not consider that these locational signals would be cost-reflective.

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

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

P198, irrespective of any previous approval from Government, would impose a penalty on those power stations located away from areas of demand. Peterhead power station in northern Scotland could not physically be moved to Petersfield in southern England. Equally, a large industrial user of electricity could not relocate from southern England to northern Scotland. Importantly, even if possible, this behaviour would not deliver an efficient and effective electrical system. System stability is dependent upon generation being located throughout the network.

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

(iii) Impact of P198 is significant

Taken together, points (i) and (ii) have a significant economic impact on generation plant. Oxera's work identifies an overall re-distributional transfer of £158 M (£73 M through demand, £85 M through generation). For an individual generator in the north, this equates to an incremental annual cost of many millions.

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

(iv) Regulatory risk

Approval of P198 would significantly increase the regulatory risk associated with new generation build in GB. This would impose a premium on the cost of capital for both new and existing generation.

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

The Energy Review identified an expected need in the UK of *"around 25 GW of new electricity generation capacity by 2025"*. It is, therefore, clear that even a modest increase in the cost of capital of a few basis points could offset the potential benefit suggested by Oxera (£3.5 - £9.9 M).

(v) Signal is flawed

If P198 was implemented and plants responded to the economic signals and relocated (putting aside the obvious practical difficulties), the following year that economic signal would change and the incentive that instigated the change would reduce or disappear. It is, therefore, a very uncertain and unreliable signal. A party looking to build, for example, a power station in the south, would be unable to 'bank' on the perceived benefit of its locational decision, as that benefit would disappear as soon as the station was commissioned (and the relevant loss factors were recalculated).

Again, it is important to note that generation needs to be located and operated throughout the network.

(vi) DTI Decision on BETTA

In designating the GB BSC for the introduction of BETTA, the Secretary of State excluded provisions relating to zonal losses. The introduction of P198 would, therefore, demonstrably be inconsistent with the intent of the legislation to introduce BETTA.

(vii) Environmental impact

We believe that P198 will impair the achievement of Government's stated renewable generation objectives. It is recognised that most renewable developments will be sited in Scotland, and in particular, in northern Scotland. Approval of P198 would, therefore, by definition, increase the cost of renewable generation and this could undermine new wind/wave technologies and offshore wind, for which the economics are already challenging. We, therefore, question whether approval of P198 would be consistent with the Authority's duty to have regard to sustainable development.

Given the potential substantial impact of P198 on new and existing renewable generators, many of which are located in extreme parts of the network that would attract a high loss factor under the proposals, we believe that implementation of P198 could be inconsistent with the Renewables Directive.

Given the location of GB plant - 1.3 GW of hydro in northern Scotland, large quantities of environmentally efficient plant such as gas-fired CCGTs and FGD-equipped plant in the north and less environmentally efficient OCGTs and oil-fuelled plant in southern GB, we are not certain that there will be any overall environmental benefit from this proposed change. Indeed there is the potential that generation output from the most benign environmental plant would be reduced, whilst the most environmentally damaging plant would increase their output. We believe this could be in excess of the reduction in emissions from any potential reduction in transmission losses claimed for the original P198.

Indeed, noting that new emissions limits will cap operation of more carbon-intensive plant, even if certain plant (opted-out limited hours coal plant) could increase their running, this would simply advance the date of their closure with its consequential effect on security of electricity supply.

(viii) Inconsistency of locational signal

Looking specifically at northern Scotland, figure 3 (pg 11) of the PTI report clearly shows that the intended 'signal' from the introduction of P198 not only varies between seasons, but also within seasons and, indeed in some cases, within month. This finding is repeated throughout the PTI report and reflected in the Oxera report.

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

(ix) Analysis critique

Whilst PTI has examined 623 half-hourly periods in a year (3.5% of the total), Oxera's analysis relies upon just 12 periods (or 0.068% of the total). As a result, as shown in Figure 2.3 (pg 9) of the Oxera report, comparison of the adjusted seasonal zonal TLFs with those of the PTI shows significant variations, which in some cases are diametrically opposite. For example, in northern Scotland, the "Summer" graph shows PTI indicating a 'positive' TLF whilst Oxera indicates a large 'negative' TLF. Equally, in "Spring", whilst both PTI and Oxera show a 'negative' TLF, the Oxera figure is circa one third larger. Similarly, in "Autumn", there is a significant difference between the PTI and Oxera data. We can, therefore, only conclude that there is a major difference between the modelling

results of PTI and Oxera (particularly in the Scottish Zones) and that this applies across all four seasons of the year.

Such significant differences, coupled with the extremely small sample used by Oxera, leads us to conclude that the Oxera report is flawed and that the supposed benefit is unlikely to be as large as £3M-£9M per annum.

We also note that both the PTI and Oxera modelling were based on 2005-06 data (see section 2.2.2 (pg 7) of the Oxera report and section 5.2 (pg 10) of the PTI report). Given the well-documented shortage in the gas market etc., which led to higher gas prices in 2005-06 and a noticeable decrease in gas-fired generation output and a corresponding increase in other generation output, such as coal, we believe both models will result in a distorted outcome when compared to the 'actual' TLMs likely to be applied from 1st April 2008 (if P198 is implemented). No detailed consideration of this appears to have been taken into account in the PTI and Oxera work.

At the very least, implementation of P198 should be delayed until these inconsistencies have been fully explained.

Qu 2. Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the Proposed Modification? Please give rationale and state objective(s)

Yes. We believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives when compared with the Proposed Modification P198.

As noted in our response to Qu 1, we do not believe that P198 Original should be implemented. If, however, P198 is to go ahead, then a phased introduction over a number of years (as envisaged by P198 Alternative) would be more appropriate. P200 would provide a better approach, but the best approach would be to retain the current Code baseline.

Qu 3. Do you believe that Alternative Modification P198 would better facilitate 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 Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the current Code baseline.

Whilst P198 Alternative is better than P198 Original (see comments in respect to Qu 2 above), it does not overcome the arguments we outline in our response to Qu 1 and it, therefore, fails to better achieve the Applicable BSC Objectives.

Qu 4. Do you believe that P198 would have a disproportionate impact on any class or classes of Parties? Please give rationale

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

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

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

We believe that 132 kV should be excluded from the application of zonal losses if p198 is implemented. This will result in a consistent approach to losses from 132 kV.

Qu 5. Do you believe that P198 would have an impact on perceptions of regulatory risk and/or the cost of capital? Please give rationale

Yes. We refer back to our response to Qu 1 in relation to the impacts on regulatory risk.

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 £85 M 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.

Qu 6. Do you support the implementation approach described in the consultation document? Please give rationale

Whilst we do not believe that either P198 Original or Alternative should be implemented, we support the implementation approach as described in the consultation document. It seems a pragmatic solution to implement P198 from 1st April 2008.

We believe that it would be both useful to the market and helpful to the TLM Agent if, once approved, the Agent was to undertake a 'dummy-run' in 2007 using real data for 2005-06 to produce 'real' annual TLM (rather than the 'snap-shots' so far available). This would also enable the Agent to iron out any problems before going live with the 2006-07 data in the autumn of 2007.

Qu 7. Do you believe there are any alternative solutions that the Modification Group has not identified and that should be considered? Please give rationale

No – for the reasons outlined above we do not believe that P198 or any variant of zonal losses should be introduced.

Qu 8. Does P198 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 (11th July) and our response to P198 (and the associated P200) consultation is due in by noon on Friday (14th). There may, therefore, be additional issues that need to be taken into account by Ofgem and the Panel when considering the merits of P198 Original and Alternative.

Qu 9. Are there any further comments on P198 that you wish to make?

- A further anomaly associated with P198 is that it creates zonal loss factors which in many cases are negative. As it is physically impossible to create energy from nothing it is inappropriate to consider a proposal (P198) which has negative zonal loss factors.

- Importantly, the system operator will have an impact on losses across the relevant zones. For example, generation constrained-on in the north to manage the system will adversely impact upon Transmission Loss Factors (TLFs), and hence all generation, in that zone in subsequent years. It is not clear how generators in that zone are compensated for such system requirements (rather than energy) and NGET's actions.

- We note the statement in the "Description of Issue or Defect that Modification Proposal [P198] Seeks to Address" that:-
  "A zonal transmission losses scheme would enable long-term locational signals for losses to be introduced into the GB electricity market."
  In the "Justification for Proposed Modification with Reference to Applicable BSC Objectives", the proposal also states that:-
  "A zonal transmission losses scheme will therefore enhance efficiency through more cost reflective charging which could be expected to influence both short term plant despatch and long term business decisions influencing investment in both generation and demand." [and] "In particular: …..
    - A scheme … of zonal loss factors will enable users of the transmission system to estimate the impact and appropriately reflect the costs;
    - A zonal scheme would provide better information to users of the transmission system regarding the implications of siting generation and new load in different parts of the country; and
    - In the longer term zonal allocation of transmission losses would encourage appropriate investment in generation or new load in areas which currently have limited capacity relative either to generation or demand. This will ultimately bring down the overall costs of losses with benefits for customers and the environment."

  However, it is clear, from both the analysis of PTI and Oxera that this it not the case.

- We note the statement in the "Description of Issue or Defect that Modification Proposal [P198] Seeks to Address" that:-
  "The proposed scheme will enable the variable costs of transmission losses to be allocated on a cost reflective basis and reflected on parties that cause them."
  We further note that Ofgem has included (within the pricing regime that incentivises National Grid) an element to cover steps that National Grid can take to reduce transmission losses.
  Given that the solution for P198 is to allocate the losses to that Party already identified as being (a) responsible for transmission losses and (b) in a position to reduce them by (i) investing in equipment/assets to reduce transmission losses and (ii) despatching generation to operate in certain locations and then being responsible for moving that electricity from there to demand (which gives rise to transmission losses), namely National Grid, rather than any other BSC Parties.

Conclusion
For the reasons outlined above we not believe that P198 will better facilitate:

- *BSC Objective A* relating to the efficient discharge by the licensee (NGC) of the obligations imposed upon it by its licence.

A zonal transmission losses scheme will introduce market distortions and the discrimination when compared with the present arrangements.

- *BSC Objective B* by enhancing the efficient, economic and coordinated operation by the licensee (NGC) of the licensees transmission system.

Adoption of a zonal transmission losses scheme will, as shown by the Oxera report, introduce a disproportionate re-distributional cross-subsidy of £158 M from northern generators to southern generators and from southern customers to northern customers.

It will reduce the operation of more economically and environmentally efficient plant (in northern GB) for less economically and environmentally efficient generation (in southern GB). A zonal transmission losses scheme will, therefore, introduce inefficiency through the use of less efficient and less economic generation and will provide a confusing, contradictory, inconsistent, irreconcilable, paradoxical and conflicting long term signal about where generation and demand should locate.

- *BSC objective C* relating to the promotion of effective competition in the generation and supply of electricity, and (so far as consistent therewith) and the promotion of such competition in the sale and purchase of electricity.

It will increase the regulatory risk and cost of capital for existing and new generation investments. It will result in an overall re-distributional transfer of £158 M (£73 M associated with demand and £85 M with generation) amongst various groups for a reported over all saving of circa £3 M-9 M (figures which we believe are highly inflated).

If this £158 M were to be invested appropriately in the capital market it could be expected to achieve a higher rate of return than £9 M per annum – therefore the overall net benefit, of introducing a zonal losses scheme, could be said to be negative and therefore P198 should not be implemented.

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

Yours sincerely

Garth Graham
Scottish and Southern Energy

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MEMORANDUM

TO : Kathryn Coffin, Elexon

FROM : Nick Emery **DATE :** 14th July 2006

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.

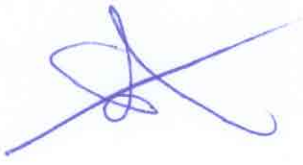
3) We also take issue that renewable generators are protected from transmission losses due to the ROC. Since its introduction, renewable generators have seen substantial increases in TNUOS, Rates and other regulated costs. Each time they are justified as their effects are offset by the ROC. The ROC was 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 singles in the same way as conventional generation, we have to be sited where the resource lies.

Regards.



P198 SECOND 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.

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

Q	Question	Response	Rationale
1.	Do you believe that Proposed Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the current Code baseline? Please give rationale and state objective(s)	No	Under P198, the loss attributed to an individual BM Unit would be uncertain and beyond its control, being dependent on the behaviour of other BM Units. It would often exceed the loss which that BM Unit in isolation would cause. The method of derivation of TLFs for use in settlement would create significant but approximate positive and negative allocations of losses to individual BM Units which not only could be larger than the loss attributable to the BM Unit in isolation, but could be in completely the wrong direction for a particular location and time, due to the various approximations made. The proposal would create windfall winners and losers, who would be largely unable to manage the costs and risks created. The risk associated with existing and future long term locational investment would be increased. There is no indication that the introduction of P198 would significantly affect locational siting decisions to the national benefit, as losses are a relatively minor factor in such decisions.

Q	Question	Response	Rationale
2.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives compared with the Proposed Modification? Please give rationale and state objective(s)	Yes	By introducing P198 gradually (a) the defects with the proposed solution identified above would be delayed and (b) the effect on existing BM Units and their financing and contractual arrangements under the existing shared losses regime would be delayed, reducing the harmful regulatory impact. In principle, determination of seasonal average values of TLF rather than annual would increase the accuracy of loss allocation relative to an annual value. However, the values would still be gross approximations, and due to the method of derivation would sill still create significant winners and losers based on existing investments, and unmanageable risk for new investments in the long term.
3.	Do you believe that Alternative Modification P198 would better facilitate the achievement of the Applicable BSC Objectives when compared with the current Code baseline? Please give rationale and state objective(s)	No	Although P198 alternative is better than the original, the refinement of better reflecting seasonal variation in losses allocation does not outweigh the disadvantages of the method as a whole, once the early stages of phasing in have passed.
4.	Do you believe that P198 would have a disproportionate impact on any class or classes of Parties? Please give rationale	Yes	Parties which have or will make significant investment in a particular location would experience windfall gains and losses. Parties without long term investment or with short contracts or high turnover of customers would be better able to manage the associated risk or pass it through to customers. Similarly, windfall gains and losses would have more impact on existing and future customers with long term locational investments for which electricity is a significant cost of their business activity. They are less able to respond to imposed variations in locational costs.
5.	Do you believe that P198 would have an impact on perceptions of regulatory risk and/or the cost of capital? Please give rationale	Yes	The additional unmanageable uncertainty created by locational allocation of losses under a P198 method will inevitably increase the cost of capital for long term investments. The effect may be small, depending on the level of uncertainty created, but is in our view inarguable.
6.	Do you support the implementation approach described in the consultation document? Please give rationale	Yes	

Q	Question	Response	Rationale
7.	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 group has considered and rejected a number of alternative solutions which in our view might be preferable to the final proposals, but which would require considerable additional analysis. These could be raised as new proposals.
8.	Does P198 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.
9.	Are there any further comments on P198 that you wish to make?		The P198 methodology creates gross cash/energy flows from some parties to others. This seeks to imitate the flows which would be expected to occur in an idealised market situation where a party should be willing to pay another party for any benefit created by the action of the other party. However, in reality there is no market and no rights to losses allocations, and imposing such a scheme represents a regulatory charging regime with associated unmanageable risk.

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 and please entitle your email '**P198 Second Assessment Procedure 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 Kathryn Coffin on 020 7380 4030, email address kathryn.coffin@elexon.co.uk.

embrace the revolution
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SCOTTISH renewables
1996 - 2006 : Delivering the New Generation of Energy

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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 ben 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

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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 Renewbles 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 Scottsh 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

Maf Smith
Chief Executive