P212 TRANSMISSION COMPANY ANALYSIS AND IMPACT ASSESSMENT – RESPONSE PRO-FORMA

In accordance with paragraph F 2.8 of the Code, please respond to the following questions concerning P212 (including the rationale for each response):

Q	Question	Response
1	Please outline any impact of the Proposed Modification on the ability of the Transmission Company to discharge its obligations efficiently under the Transmission Licence and on its ability to operate an efficient, economical and co-ordinated transmission system.	The impact of this modification on system operation will principally be governed by the influence it exerts on market behaviour and the consequences this has on the System Operators ability to manage the system. Understanding this impact, especially at this stage of the modification process, does present a challenge to the System Operator. As of yet very little analysis, that may help evolve the understanding of the implications of this modification, has been produced. Whilst accepting the limitations of our intended approach, the limitations of the analysis available now make it appear both reasonable and appropriate to apply an economic, qualitative assessment to gauge the likely change in behaviour that would materialise as a consequence of this modification. The principles of incentives on market participants to manage the balance of their energy accounts is based on the assessment on whether they can resolve their energy positions more economically than the system operator, or more accurately the imbalance price derived from SO actions. Whilst understanding the limitations and perceived issues with the current methodology, imbalance price incentives hang on the principle that they represent a proxy of the cost of balancing. This then allows the participant to make an informed opinion on the opportunity cost of managing the risk of imbalance in the forward market. Effectively it provides traders with an expectation of a price to beat. This modification makes three fundamental changes to the manner of the imbalance price calculation and it is the implications of this that must be understood. • Firstly it effectively changes the imbalance price from being Ex-Post to EX-Ante. • Secondly it decouples the link with setting the price on actions taken by or available to the System Operator. • Thirdly the price paid by any participant for energy in the spot market will now have a direct, first order, impact on setting imbalance prices.

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		The question thus becomes are any of these changes likely to have a significant impact on market behaviour. Ex-Ante Pricing Ex-Anti pricing, by its very nature, will estimate the costs that the SO will incur in resolving energy imbalance. This will not reflect the characteristics of the system at real time. There can often be a considerable difference between the forecast position of NIV and the outturn level at real time as demonstrated by within gate plant loss and supplier forecast error. This limits the ability of the forward price to mimic the real time characteristics of the system as it will not capture any within gate volatility and cost. This will in turn have an impact on the incentive to balance. The change in short term risk will impact on the risk mitigation strategies of participants. Given that Likely imbalance exposure informs the appetite for participants to risk going short, a change in this risk may have implications for the level of imbalance that participants are willing to carry into the balancing mechanism. Decoupling It is our understanding that the forecast of imbalance prices is a strong driver in the risk management trading strategies of most market participants. In order that this “price to beat” is appropriate it needs to be a proxy for the cost participants would incur if they were able to resolve their contract positions post gate closure. The imbalance price aims to reflect the opportunity cost of carrying imbalance into post gate closure timescales. The proposed P212 methodology divorces this link and relies on the fact that forward trades will also act as a proxy of this opportunity cost. It is difficult to assess if this will occur. There is however a concern that the imbalance price will effectively be decoupled from the actions taken by the System Operator. In such an environment traders will no longer have this reference price to assess against and as such the principles of imbalance price methodology have altered. This in itself may not mean P212 is not viable it simply suggests that the imbalance price is no longer a proxy for the opportunity cost of balancing and so it may be more appropriate for the merit of the proposal to be measured on other criteria. Direct Spot Market Impact The third fundamental change in this methodology is that the actions taken by market participants

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		rather that activity undertaken by the System Operator will set the imbalance price. Without the concept of a “price to beat” it is important to understand how the incentives to contract will function and if they will align with behaviour that would lead to the functioning of an efficient, competitive market. Participants will only trade if they perceive that doing so will be the least costly option. Determining this position will depend on a number of factors including not only the trading activity a participant undertakes, but also that of its competitors. A participant will also consider whether the differential in the price of the last trade agreed and the next price offered is greater or lesser than 5% (The defined premium offset). Consideration will also be taken of the volume of energy offered at this price in comparison to the volume of perceived energy account shortfall as well as the likely-hood of other market participants subsequently trading in this market. As such there will be a number of factors that drive participants trading behaviour beyond the physical characteristics of the market. It is far from clear that the incentives in these circumstances will produce the efficient outcome desired, particularly in periods of energy scarcity. The ability of the forward market price index to deliver an effective proxy for the price of imbalance will depend on it being a liquid market that is not easily moved by the actions of a single player or single trade. Given concerns raised regarding market liquidity we believe further assessment is needed in this area. If the market, and imbalance price, can be expected to move as a result of the actions of a single player then this poses additional risks in relation to both game ability and the appropriate incentive to trade. In assessing what these incentives mean for market behaviour it is useful to understand the options and consequences available to parties. Does P212 encourage people not to trade? This is difficult to say with any certainty but we would invite participants to reflect on the following scenario. As now there is limited liquidity in the forward market, the market is very short and demand is climbing. There are a number of participants with short energy positions and the next offered volume in the forward market is greater than 5% greater than the last trade achieved. In such circumstances will the market trade out their position in the forward market or carry this imbalance into the Balancing Mechanism? It might be argued that there is a collaborative rationale not to trade in these periods as all parties would be better off taking imbalance price exposure. Although it

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		is difficult to assess how prevalent such behaviour may be this is a very real situation that the System Operator must consider.
2	Please outline the views and rationale of the Transmission Company as to whether the Proposed Modification would better facilitate achievement of the Applicable BSC Objectives.	Although an initial conclusion, and with out the benefit of being able to assess the conclusions from any analysis put forward, we believe that on balance it is likely that modification P212 could introduce greater volatility into the level of NIV and as such will not better facilitate BSC objective B "The efficient, economic and co-ordinated operation of the GB transmission system". In regard to the effect that this modification will have on the market we have articulated several thoughts and questions in the section above that reflect some concerns on how market behaviour may change as a consequence of this modification. However without the benefit of any useful analysis the materiality of such options are difficult to quantify. As such although we do not believe this modification will better facilitate BSC objective C, "Promoting effective competition in the generation and supply of electricity, and (so far as consistent therewith) promoting such competition in the sale and purchase of electricity", neither can we draw the conclusion, at this time, that it would be detrimental to objective C
3	Please outline the impact of the Proposed Modification on the computer systems and processes of the Transmission Company, including details of any changes to such systems and processes that would be required as a result of the implementation of the Proposed Modification.	Given the description of the modification within the requirements specification and in conversation with Elexon we understand that there will be no requirement to provide new streams of information of change the existing flows of information to the SAA or BMRA as a consequence of this modification. Given this understanding the impact on National Grid will be on changes to the systems that capture the information that National Grid receives through the IO14 flow.
4	Please outline any potential issues relating to the security of supply arising from the Proposed Modification.	Given the current uncertainty as to whether this modification will have an impact on market behaviour it is not possible, at this time, to provide a view on the implication on the security of supply.
5	Please provide an estimate of the	An initial estimate of the cost of implementing this modification is approximately £80K with a lead time

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	development, capital and operating costs (broken down in reasonable detail) which the Transmission Company anticipates that it would incur in, and as a result of, implementing the Proposed Modification.	of approximately 7 months
8	Please provide details of any consequential changes to Core Industry Documents and/or the System Operator Transmission Owner Code that would be required as a result of the implementation of the Proposed Modification (and, if applicable, any Alternative Modification).	We are not presently aware that this modification would require consequential changes to any other core industry documents or the System Operator Transmission Operator code
9	Any other comments on the Proposed Modification (and Alternative Modification if applicable).	No

Please send your response by **17:00** on **17 July 2007** to modifications@elexon.co.uk. Any queries regarding the analysis should be addressed to Chris Stewart on 0207 380 4309 or email address chris.stewart@elexon.co.uk.

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