1 CONSULTATION QUESTIONS

1.1 RESPONDENT DETAILS

COMPANY	PrePayPower
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MAIN INTEREST IN CONSULTATION	Retail supplier of electricity

1.2 GENERAL COMMENTS

PrePayPower welcomes the opportunity to respond to the latest paper on the I-SEM design, the Energy Trading Arrangements Consultation (SEM-15-026).

We have the following high-level summary comments:

- Care must be taken in the transitional imbalance pricing arrangements given the short duration of the market trial. Whether this is reflected in a PAR, and/or a structural choice in the pricing formation, e.g. no start-up costs in the cleared price for energy, a simple generation stack with no dynamics, etc., PrePayPower believes that moving to a more constrained, algorithmic pricing algorithm over three months of a market trial (with an intraday market of unknown operation or existence) places an imprudent amount of risk on market participants, and suppliers and their customers more generally.

- The market should not be exposed to unpredictable imbalance volumes arising from Global Settlement or the allocation of ex ante trades over an hour to half-hourly imbalance volumes. PrePayPower supports some options within the paper to remove this unmanageable risk from the market.

- Decisions in relation to the interaction of the imbalance market and the simultaneously opened intraday market should be with the aim of not reducing liquidity in the intraday market. Market power issues around re-trading and reverse trading should be managed outside of the design, rather than placing risk on generators who may be legitimately responding to intraday trade opportunities as they arise. Intraday auctions should be considered, as they are likely to support smaller participants find intraday market trades.

- Operational complexity should be minimised for participants. Demand should not have to submit PNs, ex ante trades should be notified automatically to the imbalance settlement arrangements, and ex ante trades should be allocated automatically and optimally to the appropriate balancing settlement interval.

1.3 SYSTEM OPERATION IN THE I-SEM (CHAPTER 2)

Question	Answer
1. What are the impacts of early action by the TSOs on the Intraday Market?	PrePayPower support early balancing actions taken in the market, to ensure lower cost balancing resources are used appropriately, when they are needed to be utilised.
2. What measures can be taken to minimise early actions by the TSOs?	PrePayPower believes that the early opening of the balancing market should be utilised for the TSO to obtain a safe, secure and economic dispatch, as per their licence conditions. The consultation paper discusses methods of dealing with the complexity of having a simultaneously open balancing market and intraday market. This complexity therefore allows these markets to be open in parallel, and PrePayPower queries whether – as long as intraday market liquidity is not impacted – why there is a need to minimise early balancing actions, if it is to the benefit of the consumer?

1.4 EX-ANTE MARKETS (SECTION 3)

Question	Answer
1. Which of the three options put forward for interim IDM arrangements is most appropriate?	PrePayPower believes that there should be a single exclusive transitional intraday market, if the XBID project has not come to fruition. Ideally, it should be interconnector coupled, to allow for greater liquidity and opportunity for intraday trade. In general, the implementation of the market should be cost effective; an expensive market to implement and operate will out-live the added efficiency in access to intraday trades. The evaluation of the options on the basis of this criterion is not possible prior to the designation of the NEMO, with coordination with the TSOs. If there is no intraday market (or its transitional liquidity is poor), this should have a bearing on the imbalance pricing arrangements, i.e. the imbalance pricing arrangements should be avoidable with prudent trading. If they are not avoidable, then there is merit in examining whether participants should be exposed to such "signals".
2. Should intraday auctions be implemented in I-SEM? Are there any advantages to those auctions not described in this paper?	Subject to the designation of the NEMO, PrePayPower recommends the development of auctions to support players with smaller portfolio reach.

1.5 PHYSICAL NOTIFICATIONS (SECTION 4)

Question	Answer
1. What are your views on the timing of PN submissions to the TSO	Demand should not submit PNs or FPNs to the market. Ex-ante markets should automatically notify the imbalance arrangements of the cumulative traded position (designated Qex in the algebra) rather than placing this obligation on each participant.
2. What are your views on the removal of the requirement on wind generation and non-dispatchable demand to submit PNs	Demand should not submit PNs or FPNs to the market, as the TSO will utilise their demand forecasts to determine whether the market is long or short. Ex-ante markets should automatically notify the imbalance arrangements of the cumulative traded position (designated Qex in the algebra) rather than placing this obligation on each participant. It would be worthwhile, however, in advance of the market go-live and as part of general participant readiness to explore the accuracy of the day-ahead demand forecasts by the TSO in comparison with the out-turn demand served. This would provide an indication to the market of any systemic issues with the forecast, and provide the TSO with the opportunity to improve on those forecasts in advance of market go-live.
3. What are your views on how PNs from participants should be linked to their ex-ante trades and what are your opinions on which of the three options outlined in this chapter is optimal for I-SEM.	This appears to be a fundamental question as to whether generators may notify an imbalance to the market, and whether such imbalances count towards reducing the balancing actions to be taken by the TSO. There may be a use for such activities, particularly if the intraday market is illiquid restricting the markets ability to bring ex ante trades in line with forecast requirements.
4. What are your views on the potential for the inclusion of an information imbalance charge. In addition, comment is sought as to whether this issue is best addressed under	This seems to be an equivalent function as to the Uninstructed Imbalances.

the generator performance incentives.	

1.6 FORM OF OFFERS, BIDS AND ACCEPTANCES (SECTION 5)

Question	Answer
1. Which of the proposed formats should be used for bids and offers for deviating from PNs? • Simple MWh • Relative MWh • Absolute MWh	This is a matter for conventional generators/dispatchable demand.
2. How should fixed costs be represented within bids and offers? • Explicit start up contracts • Block bids • Explicit start-up (and no load) costs	PrePayPower believes that explicit costs should be provided to the market, and recovered exclusively through out-of-market payments. There is too much uncertainty in the pricing arrangements, and recovery of start-up costs in marginal market prices delivered from a new pricing structure, appears foolhardy. Moving to a recovery of start-up costs in the imbalance price can be considered over time, but supported with evidence based on the real-life operation of the ISEM over a number of years.
3. Should it be possible to rebid offer and bid prices following an acceptance? Three options are proposed: • Fixing prices of accepted bids and offers • Undo prices • Freezing all prices	This is a matter for conventional generators/dispatchable demand.
4. Should open or closed instructions be used to move participants away from their PN?	This is a matter for conventional generators/dispatchable demand.

1.7 INTERACTIONS BETWEEN THE BALANCING MARKET AND INTRADAY MARKET (SECTION 6)

Question	Answer
1. Which of the options put forward should apply to participation in the IDM in the event that the TSOs take a balancing action pre-gate closure: • Freeze PNs • Additive PN Changes • Substitutive PN Changes	We believe that generators, once called for an energy balancing action, should be free to reverse those actions, or incrementally add to their position based on available intraday market trades. Either additive or substitutive PNs will meet that criterion.
2. If the substitutive PN Changes option is taken, there are two further options for swapping out or netting IDM trades against bid-offer acceptances: • If the participant wishes to trade in the IDM and substitute the bid-offer acceptance they will need to achieve a more advantageous price in the IDM than the bid-offer acceptance price • Implement a methodology which sees the unit lock in the premium above or below the imbalance price through the bid-offer acceptance	PrePayPower believes that the option which delivers the greatest incentives to trade intraday should be chosen. PrePayPower therefore supports a “methodology which sees the unit lock in the premium above or below the imbalance price through the bid-offer acceptance”.
3. Which of the three options put forward for dealing	We believe that if a generator has access to a suitable trade that makes economic sense on its own merits with a supplier, it should be able to take that trade.

with “Trading in the Opposite Direction” should be implemented: • No specific consideration of this would be reflected in the market design • Implementing a rule that would prohibit PN changes that increase the quantity of any offer or bid acceptances • Permit PN changes in either direction but, in the settlement of the offer or bid acceptances, to limit the quantity on which the premium is payable, such that a change in PN cannot increase this quantity	If the generator could earn imbalance prices lower than its costs due to a TSO action taken early, we believe this will act as a disincentive to trade intraday. Therefore PrePayPower proposes no specific consideration of trading in the reverse direction to be taken account within the market rules. Market power should manage these issues; a blanket rule penalising all generators for reacting to appropriate commercial incentives presented in the intraday market is an over-reaction.

1.8 TREATMENT OF SYSTEM SERVICES (SECTION 7)

Question	Answer
1. What are your views on the proposal whereby a unit that is deployed for reserves should be constrained to the minimum extent possible in the IDM	This is a matter for conventional generators/dispatchable demand.
2. Are there any market power issues that need to be specifically addressed in relation to System Services?	In general, PrePayPower proposes no specific treatment of any market power issues within the balancing settlement algebra. It should be managed by contractual or licence controls on generators which are known to be needed.
3. Which of the two approaches should be utilised where the TSOs have to schedule a plant before the opening of the Balancing Market: • A system services framework would be used to contract with those generators that need to be scheduled prior to the BM opening. • The TSOs would use incremental offers and decremental bids from previous trading day to call a plant pre-BM.	PrePayPower believes that the options that reduce costs for consumers should be chosen. Locking in a long-term start cost or formula is likely to include a risk premium; if long-term contracts are used, they must be procured efficiently.

1.9 IMBALANCE PRICING (SECTION 8)

Question	Answer
1. What are your views on the Tagging and Flagging Approach. A "cause" based method for identifying energy and non-energy actions with the imbalance price being set only on energy actions.	PrePayPower has the following points in general about the market pricing. 1. The pricing must be reflective of actual supply/demand 2. The pricing must be delivered quickly after real-time, to aid intraday market trade decisions 3. The pricing should not attempt to recover start-up or no-load costs through the cleared price. There is no evidence to suggest that such a pricing mechanism would not be massively volatile. This is consistent with delivering prices quickly after real-time. 4. A rationale must be provided as to why all sorts of forms of constraint might be considered within the market pricing. The Network Code for Electricity Balancing only requires Energy Balancing actions to be considered in the pricing. This, in the absence of any rationale why one might do such a thing, appears to introduce constraint costs into the market clearing price while the SEM Committee acknowledge that such constraints are considerable in the SEM context. PrePayPower's main intention is to deliver stable, realistic balancing prices that act as a reasonable signal for balance responsibility. Flagging and Tagging: As long as a mechanism can be determined to appropriately price the net imbalance volume that does not rely on TSO actions, there may be some merit in pricing energy from a dispatch stack (noting that it includes constraints such as minimum must run requirements which have little place – in PrePayPower's view – impacting the pricing stack. Conclusion: Acceptable, with modification from the BETTA rules to make the pricing more like a simple dispatch stack.
2. What are your views on the Simple Stack? With this approach there would be a simple stack of the available bids and offers and the price would be set based on the net imbalance volume.	Simple Stack: PrePayPower could support the simple stack on a transitional basis until the performance of one of the more complicated actions was ascertained. This option does suffer from issues associated with producing non-realistic prices, even though those prices are lower and more stable in line with PrePayPower's requirements. Conclusion: Possible recommendation as a simple transitional steady imbalance price.
3. What are your views on the unconstrained stack with plant dynamics	The unconstrained stack with plant dynamics appears to best meet the requirement of an unconstrained pricing imbalance mechanism. It looks like the imbalance pricing arrangement of Option 2 under the

included. These are two additions that this option would have over the simple stack: • Plant Dynamics • An optimisation time horizon	High Level Design (without the associated traded positions, with the exception of Price Taker Wind and Demand). If the "newness" of this algorithm can be assured to deliver stable prices, delivered hourly shortly after real-time, then this option can be explored further. Conclusion: Acceptable, if algorithm delivers stable results, quickly.
4. What are your views on the price based method – unconstrained unit from actual dispatch?	There is little understanding of the impact of the extra constraints (providing for all classes of non-activated reserves, etc.) will have on the impact on the imbalance price, or the ability of the SEM to "solve" algebraically. No rationale has been provided as to why such constraints should be determined by an algorithm in the energy price calculation, when the TSOs acknowledge that in reality this is a difficult exercise. This does not appear to be a sensible option for a "Day 1" implementation. Conclusion: Excessive complexity for a small unconstrained market. Needs much more study before exposing consumers to its potential volatility.
5. What are your views on the sharpness of the marginal imbalance price? Do any concerns relate to the transition between SEM and I-SEM or are there other broader concerns?	Consistent with PrePayPower's opinion on the treatment of start-up costs, and the more algorithmic market designs, PrePayPower does believe a cautious approach to the start of this market is appropriate. The intraday market might not exist, intraday market liquidity if it does exist may be limited, and participants will be moving up a learning curve in terms of trading. Whether this caution manifests itself in a PAR, or a pricing design such as the unconstrained stack, it is not unreasonable to give a market more than three months of summer market trialling before exposing those participants – and ultimately the consumer – to large imbalance price risk. At the very least politically it will be damaging to go live with the one element of the market design under the control of the SEM Committee – the design of the imbalance pricing arrangements – leading to high prices for certain utilities and ultimately their consumers.

1.10 IMBALANCE SETTLEMENT (SECTION 9)

Question	Answer
1. What are your views on the issues set out in the imbalance settlement section?	As a supplier of non-dispatchable demand, the issues in this section are outside of our commercial scope.
2. What are your views on the refined proposal whereby the payment rule applies only to incremental offer acceptance volumes above the PN and to decremental bid acceptance volumes below the PN?	This is a matter for conventional generators/dispatchable demand.
3. What are your views on the possible consequences of ex-ante trades based on trading periods of different duration to the Imbalance Settlement Period (ISP) and what are your views on the options	Suppliers should not be exposed to such imbalance price risks. PrePayPower proposes an automatic simple optimisation of ex ante trades into balancing periods, to reduce overheads for the entire market. There is some implementation to be done in the imbalance settlement calculations, but this is superior to assuming a simple flat average allocation of ex-ante trades, or placing the obligations on trading participants to correctly allocate volumes into each trading period. PrePayPower is happy to work with the regulators in developing the optimisation, if the SEM Committee agree with the principle above.

put forward in the paper.	

1.11 OTHER ISSUES (SECTION 10)

Question	Answer
1. Global Aggregation – what are your views on the current policy and the three alternative options put forward in the paper for dealing with global aggregation	PrePayPower supports the removal of exposure to imbalance price – or indeed the assignment of unpredictable imbalance volume – to suppliers. This is a change to the current policy, and is warranted on the basis that in the world where ex ante trades are being encourage for prudently forecast volumes, where elements of those forecasts are outside of the suppliers control (profiles, losses, theft), it is unfair to assign those costs to suppliers. In that regard, PrePayPower strongly favours Option 3. The period of the fixed cost or volume should be annual. The fixed cost per MWh served is a more rational approach, as allocating the correct (fixed) and forecast volume to different supplier based on their customer numbers will require updating, and rules around management of those updates. It is much more simple and stable to apply a tariff to all suppliers, set annually, to recover the costs incurred by the central body to these errors.
2. Local Market Power – What are your views on whether there are any specific issues in relation to local market power which need to be considered at this stage.	See previous comments in
3. Metering – What are your views on the proposal for metering put forward in the Consultation Paper.	No comments provided.
4. Instruction Profiling – What are your views on the instruction profiling section. In particular, is it feasible to more accurately model	This is a matter for conventional generators/dispatchable demand.

	the precise loading of units and whether more technical characteristics need to be accommodated in the technical offer data.	
5.	Units Under Test – What are your views on the two options put forward for units under test in I-SEM.	This is a matter for conventional generators/dispatchable demand.