

Meeting name BSC Panel

Date of meeting 10 November 2005

Paper Title STANDING ISSUE 18 'SLEEPER BIDS'

Purpose of Paper For Information

Synopsis Standing Issue 18 ('Issue 18') was raised on 10 August 2005 by Opus Energy

(Annex 1), to examine the submission of 'sleeper' Bids and Offers, their impacts and whether there are any defects to be addressed. The Issue 18 Group ('the Group') met twice to consider Issue 18, and this paper summarises the Group's discussions. The Group concluded that there are some issues surrounding high priced Bids and Offers, and have suggested some potential ways forward for

progression.

1. BACKGROUND

1.1 The Authority decision letters for P173¹ and P175² highlighted the need for more investigation into the concept of 'sleeper' Bids. The concerns raised were that 'sleeper' Bids, if accepted, could 'distort competition and be to the detriment of customers'.

- 1.2 The term 'sleeper' Bids is not defined in any industry code, but it has been a term used by the industry to describe high priced Bids, which may not be reflective of the cost to a Party for acting on an Acceptance.
- 1.3 At the National Grid operational forum of 3 August 2005 (Annex 2), it was shown that there was a more than 30% chance that a 'sleeper' Bid could be accepted if an Emergency Instruction was issued. The consequences of the first Emergency Instruction³ issued under NETA were examined, where a Bid priced at -£9,999/MWh was accepted, resulting in abnormal Energy Imbalance Prices (not representative of energy balancing actions) and Balancing Services Use of System (BSUoS) charges.
- 1.4 Following the implementation of P172⁴ an Emergency Instruction issued again for System balancing reasons, would not impact he Energy Imbalance Prices as the Acceptance volume would be treated as an un-priced volume in the pricing calculation. However the Bid Acceptance is still paid by the System Operator (SO) to the BM Unit owner at the prevailing Acceptance price. The System Operator recovers the cost of this payment and other balancing actions through the BSUoS charge. In the periods impacted by the Damhead Creek Emergency Instruction BSUoS was £73/MWh, compared to £0.44/MWh in the previous period that day.
- 1.5 The SO makes Bid and Offer Acceptances in price order i.e. accepts Bids and Offers which are most economical to the SO. However there could be circumstances other then an Emergency

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¹ P173 'Revised Settlement Arrangements for Emergency Instructions'

² P175 'Development of provisions related to certain Bid/Offer Acceptances issued pursuant to the Grid Code (e.g. BC2.9 and BC2.10)'

³ Damhead Creek Bid Acceptance priced at -£9,999/MWh

⁴ P172 'Removal of Emergency Instructions taken for System reasons from Imbalance Price'

- Instruction where a high priced Bid or Offer could be accepted out of price order and could potentially have impacts similar to the Damhead Creek Acceptance.
- 1.6 The Proposer of Issue 18 was concerned that Bid and Offer prices are being submitted which potentially are not reflective of the cost to the Party for acting on the Acceptance and if accepted these Acceptances proceed to impact the pricing calculations.
- 1.7 ELEXON presented analysis (Annex 3) which showed that a similar proportion of high priced Offers are consistently submitted, hence the issue is not confined to Bids only.

2. GROUP ANALYSIS

The Group agreed that although some of the impacts of high priced Acceptances occur outside the Balancing and Settlement Code (BSC), it was worthwhile discussing these impacts in the context of Issue 18 and highlighting any areas where issues could be progressed.

2.1 When would a high priced Bid/Offer be accepted?

- 2.1.1 The Group discussed in what circumstances the SO might make a Bid/Offer Acceptance on a non-economic basis. The Group outlined two possible scenarios:
 - An Acceptance is made due to an Emergency Instruction⁵ being issued; and
 - An Acceptance is made due to a constraint⁶ on the Transmission System.
- 2.1.2 In both these circumstances the SO could have a limited choice of Bids or Offers to accept because of the geographic area where an Emergency Instruction has occurred or where there is a constraint on the System. The SO would most likely have to take a Bid/Offer Acceptance out of price order, and therefore potentially issue an Acceptance at a high cost to the SO. The Group acknowledged that both these scenarios are rare occurrences but the Acceptance of high priced Bids and Offers could have significant materiality as illustrated by the Damhead Creek Acceptance.

2.2 Impacts

2.2.1 The Group looked at the potential impacts of each of the above scenarios under the current baseline, on BM Unit cash flows, SO Cash flows, the pricing calculation, Energy Imbalance Prices, Residual Cashflow Reallocation Cashflow (RCRC) and BSUoS charges.

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⁵ Emergency Instruction as defined in the Grid Code: An instruction issued by NGET in emergency circumstances, pursuant to BC2.9, to the Control Point of a User. In the case of such instructions applicable to a BM Unit, it may require an action or response which is outside the Dynamic Parameters, QPN or Other Relevant Data, and may include an instruction to trip a Genset.

⁶ Constraints occur when transfer on transmission lines into a region reaches a limit.

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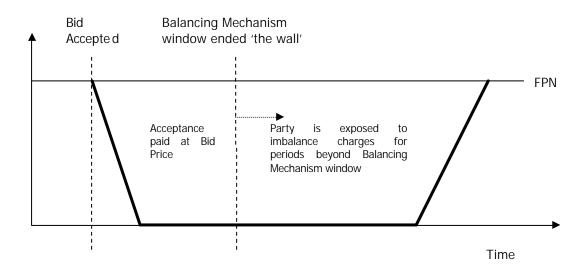
Impact on:	Emergency Instruction High Priced Acceptance due to		
	Acceptance	Transmission Constraints	
BM Unit Cashflow:	Lead Party of the affected BM Unit paid (or pays) for the Acceptance at the prevailing Bid or Offer price via the Period BM Unit Cashflow.		
	Potentially large impact on the BM Unit Cashflow if high priced Bid or Offer is accepted		
SO Cashflow/BSUoS:	SO pays (or is paid by) the lead Party of the affected BM Unit at the prevailing Bid or Offer price. This directly impacts BSUoS charges for all Parties, which recovers the SO costs.		
	Potentially large impact on BSUoS if high priced Bid or Offer is accepted		
Energy Imbalance Prices/RCRC:	Where the Emergency Instruction is issued for System balancing reasons, the associated Acceptance will feed into the Energy Imbalance Price calculation as an un-priced volume.	The Acceptance Volume will feed into the Energy Imbalance Price calculation at the prevailing Bid or Offer price. This may (subject to the existing tagging rules) impact imbalance payments and consequentially RCRC, for all Parties.	
	No Impact, due to P172 baseline	Potentially large impact on System Buy/Sell Price and RCRC. Depends on market conditions. i.e. where market is long (high priced Bid accepted) and market short (high priced Offer accepted)	

2.2.2 The impact analysis revealed two avenues for consideration:

- BM Unit Cashflow and consequently BSUoS will be impacted whenever a 'sleeper' Bid or Offer is accepted. This is because the SO recovers their costs for the Acceptance through BSUoS charges. Some Group members questioned whether or not it is appropriate for high priced Bids and Offers, which may not be reflective of the cost to the Party of acting on the Acceptance, to be submitted and potentially impact other Parties; and
- Energy Imbalance Prices may be impacted for Acceptances made due to Transmission System constraints. Some Group members also questioned the appropriateness of this. The Group agreed that there are issues with the existing tagging mechanisms in respect of removing all System balancing actions from the pricing calculation. This leads to energy prices being affected by System balancing actions and if the System action is high priced the materiality is exacerbated. This was illustrated by the Damhead Creek Acceptance.

2.3 Why are 'sleeper' Bids submitted?

- 2.3.1 The Group considered why high priced Bids and Offers are submitted. The Group agreed that it is difficult to define what a 'sleeper' Bid is. Some felt it is a large Bid which lies in wait to be accepted and some felt it is a high priced Bid or Offer submitted which does not represent costs.
- 2.3.2 The Group stated that there are a number of reasons why Parties submit high priced Bids and Offers. Some Group members expressed that it is not possible for some types of generation not to submit high priced Bids and Offers, because of the financial impacts; Two examples were provided:
 - Combined Heat and Power (CHP) Plant's primary purpose is to provide other industries with heat energy, with electricity being secondary. CHP Plants have contracts in place, to supply energy and not fulfilling these is not an option for them. CHP Plants therefore submit the maximum priced Bid allowed in an attempt to ensure that they are left untouched. These types of Generating Unit cannot make any large changes to generation, as it is not commercially viable for them to do so. They are therefore not flexible, when it comes to large changes in output, and would always like to be the last choice when Bids/Offers are being accepted. For these participants, it was indicated that the limit of £99,999 is not high enough.
 - Nuclear Plants are in a potentially precarious position where, if it is required to shut down, it can take two days, and possibly more, for it to be fully operational again. During this period of time, the Party cannot fulfil any of the contracts it has in place and will be exposed to the imbalance charges. Any potential costs must therefore be recovered through the Bid Price during the period(s) for which the Acceptance is made. The period after the Balancing Mechanism window is know as the 'wall', and can be illustrated by the diagram below.



2.3.3 It was acknowledged that participants factor in the high risks and low probability of occurrence associated with shutting down Generating Units, into their Bid prices. Some members also mentioned that there could be Plant damage resulting from shutdown, where the generator is asked to breach Plant dynamics. The Group noted that under Emergency Instructions, a Plant

- may be asked to operate outside the Plants normal dynamics, and therefore the fear of Plant damage is real. However, normal Bd/Offer Acceptances are based on dynamics which Plants can achieve, and therefore Plant damage should be less of a concern.
- 2.3.4 The Group concluded that Parties under the current rules must include their 'worst case scenario' compensation requirements into Bid prices to insure against the consequences of an instruction which requires the Plant to shut down. The high Bids come from the uncertainty that generators have about how long they will be out of commission if the unit is shut down, i.e. how long the generator does not have access to the Transmission System. This unknown, manifests itself in the Bid prices, as generators are only assured of receiving any compensation during the impacted Settlement Period for which the Acceptance is made and therefore must seek to recover all of their potential costs looking forward during this period.
- 2.3.5 This led to the Group stating that the long standing issue surrounding Transmission Access was contributing to high Bids and Offers, as participants are currently not being appropriately compensated for failure of Transmission Access for their units.
- 2.3.6 The Group felt that if the Transmission Access arrangements could guarantee Parties compensation for all the periods that the Party cannot access the Transmission System, then the Bids may not be priced as high as they currently are, and may be priced more reflective of the variable costs incurred for changing their generation. The Group highlighted the subject of Transmission Access to be a long standing concern.

2.4 Issues

- 2.4.1 The Group broke the discussion on Issue 18 into two fundamental issues:
 - 1. Bids and Offers including a Party's compensation requirements which results from the risk that a Party carries that they will not be fully compensated for lack of access to the Transmission System under the current arrangements; and
 - 2. High priced Bid/Offer Acceptances made for System Balancing reasons potentially polluting the Energy Imbalance Prices.
- 2.4.2 The Group then discussed a number of potential solutions, which either addressed one or both of the issues.

3. POTENTIAL SOLUTIONS TO BE PROGRESSED

3.1 Solution 1 – Threshold Price (Issue 2)

3.1.1 The Group considered the impact of introducing a threshold price to the tagging mechanism. The SO would compare every Bid/Offer Acceptance with a 'to be determined' threshold price. If the Acceptance price breaches the threshold price then the SO would determine whether the Acceptance made was for either System or energy balancing reasons. If the SO determined that the action was for System reasons the volume would enter into the pricing calculation at a replacement price, reflective of the actions which would have been taken if the System action had not been taken. Bids and Offers would still be paid at the prevailing Bid/Offer price.

- 3.1.2 The Group agreed that such a methodology would remove potentially material System balancing actions from impacting the Energy Imbalance Price, and was worth investigating further, but they had a number of reservations.
- 3.1.3 The Group discussed how such a solution could work. The Group agreed it could not realistically work in real time i.e. for the SO to specify that a System balancing action has taken place and to determine a replacement price for each Acceptance which exceeds the threshold price and insert it into the Acceptance data. The Group stated that any such process would have to be applied post event.
- 3.1.4 The Group was unsure of what an appropriate threshold price should be. The example discussed by the Group was a price of ±£1000/MWh. The Group suggested that prices below this could have a material impact. Therefore, whilst it may remove issues around extreme high priced System balancing Bids polluting the Energy Imbalance Price, other System balancing actions could still impact Energy Imbalance Prices. The Group was unsure what the benefit of this would be over the potential cost of progressing and implementing such a change, when it may only resolve the issue partially.
- 3.1.5 The Group believed that a methodology would need to be determined to establish an appropriate replacement price for each Acceptance exceeding the threshold price.
- 3.1.6 The Group stated that some Acceptances may be taken for both System and energy balancing reasons, the Group was unsure about how these should be handled when attempting to differentiate between System balancing and energy balancing actions, under such a methodology. It was suggested that a similar methodology to Balancing Service Adjustment Data (BSAD) methodology⁷ could be used for determining System and energy actions.
- 3.1.7 The Group were also concerned about such a change impacting prompt pricing⁸ and therefore introducing uncertainty for Parties in knowing what their actual imbalance charges is likely to be for a Settlement Period. The concern was over the time taken to establish a replacement price and perform the necessary recalculations and then make these available to industry in a short space of time.
- 3.1.8 The Group concluded that the solution could partially resolve high priced System actions impacting the Energy Imbalance Prices; however the Bid or Offer Acceptance would still impact the BSUoS charge, as Bids/Offers would still be paid at the prevailing prices.

3.2 Solution 2 – Bilateral Contracts (Issue 1 and 2)

3.2.1 The Group discussed the current under use of bilateral contracts between the System Operator and Parties to cover issues such as compensation and risk carried by a Party for a Plant shutdown.

⁷ As well as being able to accept balancing mechanism Offers and Bids, the SO can contract with BSC Trading Parties for the provision of balancing energy, which is accounted for in the cash-out prices. As part of the BSAD methodology, the SO operator specifies whether each action taken is for System balancing or energy balancing reasons.

⁸ Prompt pricing arises from the requirement for Parties to know their potential liabilities on their imbalances as soon as possible to ensure appropriates actions can be taken.

- 3.2.2 The Group agreed that because the risk of losing access to the Transmission System is currently not captured entirely in any other set of arrangements, Parties factor this risk into their Bid prices as insurance in case they are asked to shut down. The Group suggested that if the risk and compensation could be separated from consideration when Parties set Bid prices, then this would potentially lead to prices being more reflective of the cost associated with shutting down for the impacted period(s) and less reflective of the potential compensation a Party may believe it is due for subsequent Settlement Periods when it is unable regain access to the Transmission System and failure to deliver on contracts e.g. heat energy supplied CHP Plants
- 3.2.3 A Party could be compensated by the SO through a bilateral contract agreement for the Settlement Periods following an instructed shutdown during which they are exposed to Energy Imbalance Prices and any other contractual obligations that they cannot fulfil. The view was that using contracts was less restrictive then compensation being received through Bids and Offers. Contracts can cater for multiple circumstances and for different types of generation, and therefore payments would be different under different scenarios. Payments made through the BM Unit Cashflow are paid at the same price regardless of the scenario in which it occurs, e.g. the costs incurred by CHP and nuclear Plants may be different to other types of generation.
- 3.2.4 The Group acknowledged that BSUoS would still be impacted, as the SO would have to make payments to the impacted Party. However the impact if covered through contracts could be spread over a number of Settlement Periods rather then forming a large sum in a single Settlement Period (i.e. the period for which the Acceptance is made).
- 3.2.5 Some members of the Group suggested that, if such an approach was used across all Parties, it could potentially lead to a general decrease in the number of high priced Bids and Offers being submitted. The prices submitted would be less reflective of compensatory elements and more reflective of the cost to the Party of acting upon either an Emergency Instruction or an Acceptance made due to a constraint on the System.

3.3 Solution 3 – Transmission Access Arrangements (Issue 1 and 2)

- 3.3.1 The Group highlighted an industry wide concern relating to the Transmission Access arrangements. It was felt that Transmission Access was a reason why many Parties submit high priced Bids and Offers. It was suggested that the current Transmission Access arrangements do not provide appropriate compensation if a Party is instructed to shut down by the SO due to an Emergency Instruction, or if an Acceptance is made to resolve a System constraint.
- 3.3.2 A solution to resolve industry issues relating to Transmission Access would be outside the scope of the BSC. However, if resolved, it could result in Parties submitting lower priced Bids/Offers which are more representative of cost and less representative of the risks and costs that Parties incur with a shut down.
- 3.3.3 This could lessen the chances of a high priced Bid/Offer being accepted and feeding into the pricing calculations. However the risk of an Acceptance would still be there if Parties continued to submit high priced Bids/Offers.

- 3.3.4 The Group discussed the current arrangements. The failure for access to the Transmission System is covered in both the Connection and Use of System Code (CUSC) and the BSC. It is handled differently in each.
 - The CUSC currently covers provisions for compensation for generators if there is either a planned disconnection or an unexpected disconnection from the Transmission System. Payments for a planned disconnection are paid to the impacted Party through Transmission Network Use of System (TNUoS) payments, while for unplanned events the generator is compensated using the Market Index Price for the first 24 hours of an event or fault, with compensation being paid based on TNUoS charges for periods in excess of 24 hours. 9
 - However, the event of an Emergency Instruction is not covered in the CUSC compensation arrangements. It is dealt with entirely in the BSC, where the Emergency Instruction is treated as a Bid/Offer Acceptance. The Emergency Instruction (depending on the type of Plant) may mean the Plant does not have access to the Transmission System for a significant period of time. This could be exacerbated if the Plant is instructed to operate outside of its dynamics, and there is Plant damage. Depending on the price of the Acceptance, length of time the generator does not have access to the System for and any damage to the Plant, it could mean the Party makes either a gain or a loss.
 - Similarly, System constraints could lead to Acceptance of high priced Bids and Offers, and although there should not be a risk of Plant damage in these circumstances, the Acceptance may mean the generator does not have access to the Transmission System for a period of time.
- 3.3.5 The suggestion from the Group was that such Acceptances made for System reasons could potentially be moved from the BSC (i.e. no longer settled through Bids and Offers) to the CUSC (i.e. settled through compensation arrangements). The Group concluded that Parties would then have the incentive to submit Bid and Offer prices more reflective of the costs of acting on the Acceptance for the affected periods and not the compensatory elements looking forward.

4. CONCLUSIONS

- 4.1 Solution 1 potentially avoids high priced System balancing Acceptances impacting the pricing calculation and could be progressed through a BSC Modification Proposal. However there are a number of questions raised which may be better suited for consideration with the wider issues surrounding the tagging arrangements as part of the Cash Out Review.
- 4.2 Solution 2 and 3 attempts to remove the compensation elements of Bids and Offer from the BSC, and resolves it through bilateral contracts and extra provisions in the CUSC respectively. Solution 2 can be achieved through the existing arrangements and would require Parties and the SO to work together on agreeing the compensation arrangements for different scenarios. Solution 3 would require a CUSC Amendment Proposal to recognise the further compensation arrangements for Acceptances made due Emergency Instructions and System constraints. Therefore a modification to the BSC would not be appropriate for either of these solutions.

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⁹ The compensatory methodology was introduced by CUSC Amendment Proposal 048, approved in 19 March 2004.

Additional Comments

A Group member provided some additional comments after the meeting which were circulated to the rest of the Group. This member objected to solution 1, as the member felt that this will give the System Operator the discretion to treat actions above a certain price as System actions, and because of the impacts on prompt pricing which the Group acknowledged in the meeting.

Regarding solution 2 the member felt that the BSUoS cost would still be the same, as it would just be spread over a longer period and would place more of the costs on parties that have constant demand, and therefore felt that this would not be appropriate.

List of attachments

Attachment A: ELEXON Analysis

Issue 18 Group Attendances

Member	Organisation	14/09/05	10/10/05
Tom Bowcutt	ELEXON (Chair)	✓	✓
Sakib Azam	ELEXON (Lead Analyst)	✓	✓
Nigel Cornwall	Cornwall Consulting (On behalf of Proposer)	✓	х
Roger Salamone	Cornwall Consulting (On behalf of Proposer)	Х	✓
Man Kwong Liu	SAIC Ltd	✓	х
Bill Reed	RWE	✓	✓
Mark Manley	BGT	✓	х
Andrew Colley	Scottish Southern	✓	х
Martin Mate	British Energy	✓	х
Libby Glazebrook	First Hydro Company	✓	х
Steve Drummond	EDF Trading	✓	х
David Lewis	EDF Energy	✓	✓
Jan De Vito	Jade Energy	Х	✓
Rob Smith	National Grid	✓	✓
Rekkha Patel	Conoco	✓	х
Attendee	Organisation		
Barbara Vest	Gaz De France	✓	х
Ben Woodside	Ofgem	✓	х
Hannah McKinney	Ofgem	х	✓
Hugh Morgan	National Grid	Х	✓

ELEXON Analysis

- Data sets exclude
 - Bids: Supplier BMUs, FPN <= 0, Bid levels > 0;
 - Offers: Supplier BMUs, FPN <= 0, Bid levels < 0
- 'sleeper' Offers
- Data across months focuses on 19th of each month and SP 28.

Sleeper Bids Acceptances

Damhead Creek Cashflow

- P27: £ 827,530.08

- P28: £ 2,719,781.30

Since NETA Go Live, few Cash flows >
 100k (all occurred months following Go Live)

