

Cash Out Review Working Group Minutes
Meeting 10- 'Tagging' session 2
02 March 2005, 10:30 pm – 4:30pm
Elexon, 350 Euston Rd, London

Attendees

Simon Bradbury (chair)	Ofgem	Mark Manley	BGT
David Hunt	Ofgem	Martin Mate	British Energy
Matthew Buffey	Ofgem	Eddie Blackburn	NGT
Fiona Lewis	Ofgem	Chris Day	BarCap
Ndidi Njoku	Ofgem	Paul Jones	E.ON
Kevin Dibble	First Hydro	Paul Mott	EDF Energy
Mark Brackley	NGT	Ian Moss	APX Group
Bill Reed	RWE		
Thomas Bowcutt	ELEXON		

All documents associated with this meeting will become available on the Ofgem website www.ofgem.gov.uk under Ofgem's Work > Cash Out Review

Tagging/Review

Key points note of the last meeting

- ◆ The group requested clarification on some minor sections of the drafting.

ACTION: Ofgem stated that the notes of the last meeting will be changed to reflect the group's comments.

NGC's paper on NIV tagging

- ◆ NGC talked through its analysis of the volumes of actions in both the main and reverse stacks between April 2004 and February 2005, split into periods where the market was long or short. The price stacks included both BM and NGC's forward actions, prior to any tagging mechanisms being applied.
- ◆ The analysis shows that there is a substantial volume of actions in the reverse stacks, with the proportion of these actions to the main stack being greater when the system is short. This indicates that when the system is long, the imbalance volume is likely to be greater than when the system is short as a result of the incentives provided by cash out prices. In other words, when the system is short it is more likely to be only slightly short, in which case the main and reverse stacks will be relatively similar in size.
- ◆ The group questioned whether it was likely that the full volume in the reverse stack would have been taken for constraint purposes, as the reverse stack should indicate the volume of system actions taken by the System Operator. It was unclear whether or not this could be identified, and to what degree of certainty this could be calculated.

ACTION: for the purposes of better understanding the breakdown of the trades in the main and reverse stacks, NGC agreed to disaggregate the columns in the charts provided into their constituent parts.

- ◆ NGC's analysis shows that the average NIV tagged volume as a proportion of the main stack volume when the system was short, varied between around 37% and around 77%, such that the cash out price was calculated from the lowest-priced remaining 63% to 23% of the main stack. When the market was long the range of NIV tagged volume as a proportion of the main stack varied between around 20% and 53%, leaving the cash out calculation being taken from the remaining 80% and 47% of the stack.

ELEXON's paper on NIV tagging

- ◆ ELEXON's paper suggests that NIV equates to around 53% of the total volume of balancing actions. However, the analysis shows that on average, NIV is within around 30MWh of the total energy imbalance volume (TQEI)¹, which is an ex-post measure of Party net energy imbalance, indicating that the value of NIV is fairly accurate.
- ◆ As mentioned, ELEXON's paper indicates that NIV is a proxy to the total energy imbalance volume TQEI. One of the problems identified in the formulation of P78 was that you could not calculate TQEI accurately and in a sufficiently timely manner, and therefore it could not be used in the same way NIV currently is. The physical difference between NIV and TQEI is the volume of frequency response, non BM standing reserve and the spot frequency of the system itself (as this can change the volumes delivered). Were we able to insert this information into NIV, it would match TQEI. This raised a question as to how NIV would look with BSAD stripped out.

ACTION: NGC to look at whether it is possible to strip out BSAD and recalculate NIV and compare this with the original value to determine the volume effects.

- ◆ ELEXON questioned whether there was a stronger correlation between NIV and the absolute volume of actions taken by NGC, rather than the net volume of actions.
- ◆ It follows that although NIV may be fairly accurate, it may not follow that:
 - the correct actions are deemed to have met the NIV within the pricing calculation; and
 - the cost of balancing the system correlates with the net total imbalance.

RWE's paper on the different mechanisms for calculating cash out prices

- ◆ RWE re-ran the calculation of cash out prices for the period between 13 and 16 December 2004, based on differing approaches, which included:
 - Gross Offer Price – which includes gross BSAD trades (including some BSAD trades at zero price)

¹ Calculated as the sum over all energy accounts of the Account Energy Imbalance Volume.

- System Buy Price – the current pricing calculation; and
 - Price of Offers – based purely on the offers that were accepted in the relevant periods.
- ◆ Arguably the most important conclusion drawn from the analysis is that there is not a great deal of difference between the Gross Offer Price and the Price of Offers, but in several periods, both of these alternative mechanisms deviate substantially from actual SBP.
 - ◆ To some members of the group, the analysis seems to indicate that market participants are continuing to go long to avoid potentially costly cash out prices, and that this behaviour has not changed a great deal from the arrangements prior to P78. One member of the group questioned whether or not this was an argument for removing the current tagging mechanism, but this view was countered by suggesting that removing tagging may simply increase SBP and reduce SSP, and will further incentivise length.
 - ◆ Some members of the group questioned whether it was appropriate that the current mechanism removes certain large price spikes from cash out. Some of these prices may have been for creating reserve, which returned the group to the question of whether or not reserve is for system purposes, energy purposes or for both.
 - ◆ One member of the group mentioned that the incentives delivered by cash out prices were not accurate, as the current pricing mechanism rolls up reserve into the energy price. Another member of the group considered that this may contribute to prices not responding appropriately to market fundamentals.
 - ◆ Another member of the group considered that there may be a problem with market participants re-pricing their bids and offers. By not re-pricing, this essentially puts a cap on cash out prices as parties don't adequately respond to market signals. This concept was analysed as part of the assessment of P136/7, where under tight market conditions the rational conclusion is that cash out prices calculated on a weighted average basis would tend towards the marginal price. However, there was some evidence in the analysis for P136/7 that the market was not re-pricing and so the two pricing mechanisms would not align.
 - ◆ One member of the group considered that as NGC does not simply buy "vanilla" energy, price signals can be distorted so parties can not accurately predict where price levels might be at a given point in time, and therefore may not consider that it is worthwhile submitting modified prices. This member considered that to address this, it would be necessary to remove system actions to leave pure energy with a set of dynamics, so that participants have a clearer idea of where prices may out turn.

First Hydro's paper on achieving cost reflectivity in cash out prices

- ◆ First Hydro's paper followed up on its submission to previous meetings of the CORWG, and concentrates on the principle of achieving cost reflectivity in cash out prices. This concept is founded on more closely aligning cash out prices with the actual cost of the actions NGC takes to balance the system. First Hydro's proposal removes the concept of NIV tagging and the reverse price, and would return to the pricing mechanism that existed prior to the implementation of P78.
- ◆ First Hydro's rationale for its proposal is that all balancing actions will deliver energy onto the system, and a distinction between energy and system is inappropriate.

- ◆ First Hydro's note outlined that there was a notable difference between SBP and the actual offer price over a range of periods. It was recognised that this was in part due to SBP being the reverse price as the system is mainly long. However, when isolating periods of system shortness, there is a significant difference between the current SBP and the average offer price. First Hydro's analysis shows that the current calculation of SBP is significantly lower than the corresponding average price of accepted offers. This indicates that as well as system trades, the current mechanism may be removing cost-reflectivity from cash out prices.
- ◆ In addition to the above defects, it was suggested that if a party is short and it knows that tagging and the current weighted average price mechanism will remove a large volume of high-prices trades, then it may be able to be in a net position of profit were it to have an offer accepted from another of its units. Of course this would depend on the relative prices of the relevant cash out price and the accepted price of the bid-offer, as well as the relative volumes, but indicates that the current mechanism may be dampening the incentives to balance.
- ◆ First Hydro considers that the defects of the current mechanism could be remedied by either removing tagging or by explicit tagging of system actions from cash out.

Continuing discussion of alternative approaches:

Offset NIV tagging and proportional NIV tagging

Does the group consider these approaches to be worth exploring further?

If so, is there a preference for either or both?

KEMA's paper: to what extent does the group agree with Mike's key principles and approach?

Libby's paper: does the difference between the offer price and the SBP indicate deficiencies?

- ◆ The Group considered leaving the reverse price, and not tagging the main price.
- ◆ The Group considered that the principle assumption was that all actions are either system or energy, and considered leaving the deemed energy in there and tagging out the system trades, so that Parties are working with priced actions.
- ◆ The Group considered that the alternative approach would still tag out 60% system related trades, and considered that this provides the same answers as under the current mechanism, but with differing volumes allocations.
- ◆ Some of the Group considered that the cost of reserve was in the Bid Offer Acceptance or in the Bid/Offer, and the NIV is treated as energy which is inconsistently feed into Cash Out prices. The Group therefore agreed that NIV tagging was an arbitrary set of rules which provides an approximate value for energy imbalance prices (EIP) to provide incentives for Parties to balance.
- ◆ Some of the Group considered that the current methodology for calculating the EIP had a rationale, which takes out the most expensive actions, and reverses the action in the opposite direction. However, the group also considered that there may also be alternative rationales which provide a better proxy for the EIP.

- ◆ These members of the Group considered that this did not necessarily imply that offset tagging and proportionate tagging was bad, and that reverse price can sit together.
- ◆ Ofgem stated that under the current methodology the NIV volume is deemed to be energy, however under the proportional NIV tagging a proportion of the Bid/Offer action is deemed to be energy.
- ◆ The Group asked whether NGT could provide data showing where energy and system trades sit in the stack, to highlight whether system trades were expensive, and sit at the top of the stack.
- ◆ Mark Brackley considered that may be difficult to provide data which showed that expensive bids were system trades, and stated that an ex post analysis that sets actions that are pure energy will be compromised by the data's assumptions such as perfect foresight, plant dynamics, and non zero time runs. Mark therefore considered that such the analysis would not be able to provide any useful information. The Group considered that NGT need only to examine the extent to which NGC can take actions that were defined for energy balancing purposes, to examine whether system trades are more expensive than energy trades, and to test whether NIV tagging is working, by examining whether system trades sit above energy trades in the stack. In order to confirm whether the tagging methodology is required, and is so whether is working. Mark Brackley stated that NGT could examine the feasibility of analysing the stack of available offers, to examine whether plants were despatched in a simple price order, and whether the actions were taken for energy reasons.
- ◆ Some of the Group considered that as a way forward, the Group should firstly analyse whether NIV tagging achieves its rationale of pricing more expensive bids at the top, to obtain whether NIV tagging is required, before the Group considers alternative approaches to NIV tagging.
- ◆ However some of the Group considered that there was no identified justification for energy tagging from the system.
- ◆ Mark Brackley reiterated earlier comments that NGC undertakes actions to create headroom, and that NGT factors not just the value of energy but all costs, and highlighted that NGT's analysis will not be able to identify energy specific actions
- ◆ Some of the Group considered that the current calculation of cash out prices was complicated, and considered that if possible it would be beneficial to reduce the complications in the cash out prices and obtain market transparency, in order to allow the market to react.
- ◆ **Note: In regards to discussion on the alternative approaches: Offset NIV tagging and proportional NIV tagging. Bill said some thing, and the Group said it was a good comment - not sure what it was, but Simon noted this down...I hope.**

- ◆ Ofgem clarified offset NIV tagging. Mark Brackley will circulate a non-BM specific paper that shows NGC's analysis on this issue.

ACTION: NGT to examine the feasibility of analysing the stack of available offers, to see whether plants were despatched by NGT in a simple price order, and to check whether the actions was taken for energy reasons.

ACTION: NGT to examine both energy and system trades and where they sit in the stack.

ACTION: Elexon to obtain analysis on the split of BSAD and CADL on the basis of their relative pricing in the stack at an aggregated and disaggregated level.

ACTION: Mark to circulate NGC's analysis, which demonstrates offset NIV tagging on a non-BM specific basis

ACTION: Mark to circulate data that shows that the value weighted average had no effect on the standard deviation, or on mean bid or sell prices.

Next meeting: Tagging on 21 March 2005 from 1:00pm to 5:00pm at Ofgem