



The Office of Gas & Electricity Markets

Summary of responses to the May 2004 consultation 'Electricity and gas cash out review – a Consultation Document'

Should electricity cash out prices be based on some form of marginal pricing basis?

There was a significant split in the responses over the issue of marginal pricing. It was the opinion of several respondents that marginal pricing would provide the most appropriate incentives to balance. This would encourage market participants to trade ahead in order to reduce the likelihood that they would need to enter the balancing mechanism to procure or sell residual energy. One respondent (NGT) conducted some analysis to show that (on the basis that behaviour was unaffected) P78 prices and marginal prices were broadly similar in most circumstances, although the peaks were considerably more "peaky". This respondent went on to consider the effects of chunky marginal prices at different MWh bands and concluded that there was a limited difference between marginal and a 20MWh chunk approach, indicating that some of the concerns that small volume trades would set the price are, in certain cases, unfounded.

The above respondent (NGT) went further, putting forward the view that in a perfect world, a volume-weighted average price would tend towards a marginal price as players attempt to pitch their bids and offers at the margin. However, the lack of perfect information (amongst other things) prevents participants from accurately predicting where the margin will be. Under the current arrangements, it was postulated that generator trips and short-term demand deviations were the main drivers of cash out prices.

Conversely, another respondent considered that if a marginal pricing regime was desired, then it should not matter whether a small volume trade sets the marginal price, providing that it represents the cost to the SO of accepting energy at the margin. Although this respondent agreed with the principle of marginal pricing, it had concerns that the mechanism would neither reflect the costs of energy balancing nor the marginal energy action.

One respondent did not think that a marginal mechanism would be effective unless there were changes to the NIV mechanism and the reverse price. This respondent considered that the current arrangements did not provide an accurate signal of the cost of generation under short conditions. It also had some sympathy for a chunky marginal approach, but viewed this as being a largely arbitrary distinction from full marginal.

Some respondents considered that although they believe in the principle of sending clearer price signals to the market, they did not consider that a marginal mechanism would necessarily achieve this goal. Furthermore, these respondents were of the view that a marginal regime would not incentivise unreliable plant from making itself available, and would have a detrimental effect on capacity. Others were in agreement with this point of view and further cited that the increased risk placed on being out of balance would have a negative effect on competition. One of these respondents expressed concern that if a generator tripped off at times

when the system was particularly short, it could face substantial financial penalty under a marginal regime.

Other respondents considered that marginal pricing could increase the opportunity for gaming, such that if a party was consistently able to have high priced offers accepted it would be able to set the price at the margin. However, another respondent considered that under the existing tagging arrangements, it was extremely difficult to manipulate a marginal price. This respondent mentioned that for a market participant to be able to manipulate these arrangements, it would need access to a level of information that is currently not possible, and would need to have an advanced understanding of the bidding behaviour of other market participants and NGT's acceptance strategy.

Although there were significant numbers of market participants who believed that there were substantial gains to be made from moving to a marginal regime, several responses indicated that the current weighted average approach remained the most appropriate.

Should gas cash out prices be based on some form of weighted average pricing basis (as is currently the case in electricity)?

Respondents were keen to assert their belief that the current gas cash out mechanism was the most appropriate. One of these respondents considered that gas prices have historically been set on a marginal basis, and that a move towards a volume-weighted approach could only serve to weaken incentives to balance. This respondent also considered that any kind of hybrid of a chunky marginal ilk would be largely arbitrary.

Another respondent believes that the current arrangements are sufficient and that any move away from marginal pricing in gas should be similar to electricity in that the main aims should be to reflect the costs imposed upon the system operator and should also provide incentives to balance.

One respondent suggested that it would support a high weighted average price (HWAP) as a proxy for SMPbuy and a low weighted average price (LWAP) for SMPsell. The HWAP could be calculated by taking the volume-weighted average price of the top 5% of trades when total volume exceeds 20GWh, the highest 1GWh when total volume is between 1GWh and 20GWh and the full volume when total volume is 1GWh or less.

A further response mentioned that a marginal mechanism is appropriate as it encourages balance. The volatility associated with a tight system would not improve under a volume-weighted approach. However, this respondent did consider that providing more real time information would enhance price signals.

One respondent mentioned that changing the marginal mechanism may not have a pronounced effect at all considering that for around two-thirds of the time, imbalance prices are established by fixed price differentials under the default mechanism.

Are the current ways in which electricity/gas balancing actions (including NGT's option contracts) are identified and included in cash out prices appropriate? In particular, should the costs of OM gas be included in gas imbalance charges and are the tagging mechanisms used to remove system balancing actions from electricity cash out prices appropriate?

Option Fees

Several respondents considered that option fees should be allocated into the periods in which the services are used. One respondent (NGT) considered that in order to accurately perform this task, it would be necessary to undertake ex-post reconciliation based on contract utilisation. This would take a year to feed into prices, and is therefore not beneficial in terms of providing signals to the market. This respondent was of the view that if the pricing regime remained volume-weighted rather than marginal, then the current method of allocating option fees according to expected utilisation remains the most appropriate.

A further respondent considered that it was imperative that the value of reserve is directly reflected in market prices. In its view, this would promote efficient maintenance and construction of generation plant. The current diluted approach to dealing with the reserve option fees mean that these payments currently only flow to a small subset of plant which is held on reserve. In turn, this also unduly depresses price signals at times of capacity scarcity. This would lead to an ever expanding category of plant covered by reserve contracts as increasingly more plants find it difficult to recover the full value of their output directly through the market.

One respondent mistakenly considered that it would be best to retain the status quo of smearing option fees across all periods in which the service is available.

Some respondents considered that the SO should not be allowed to trade forward, and should leave all decisions relating to security of supply to market participants. One such respondent believed that under the current market structure it would be appropriate to enable all trades undertaken by the SO to feed into cash out prices.

It was suggested by another respondent that further work should be done in assessing the effect of BSAD trades on cash out prices, and whether it is appropriate to include pre gate closure trades at all.

OM gas

Several respondents expressed concern about including OM gas into cash out prices. One such response stated that Transco rarely uses OM gas, and would tend to only do so in extremely tight market conditions. It was considered that this would exacerbate an already difficult situation.

One respondent (NGT) mentioned that even if one were of the view that including OM gas in cash out was desirable, it would be difficult to separate the relevant trades undertaken for balancing purposes. This respondent believes that the infrequent use of OM gas and the complexity of introducing it into cash out are sufficiently problematic to continue its exclusion.

A further response echoed the above sentiment, by stating the complexity of the issue would serve as a barrier to entry. It was also considered that utilisation of OM gas was so infrequent it was not worth including. However, it was mentioned that Ofgem should continue to monitor the use of OM gas, and urged efforts to be made to increase the level of reporting on such trades.

Of the remaining responses that were against including OM gas in cash out, one respondent made the point that the service provided by OM gas is unrelated to daily balancing and should therefore not be included as part of the daily balancing arrangements.

One respondent in favour of including OM gas in cash out mentioned that it should feed through on the basis that it is an emergency action. This respondent drew a parallel with the electricity arrangements whereby Maxgen volumes feed through into cash out prices via BSAD. It was considered that Transco should inform EnMO of the pence per therm price and the therm volume delivered from OM gas, and feed this into cash out.

There was some support from respondents for a review of the current arrangements with respect to OM gas.

Tagging mechanisms

A number of respondents to the consultation considered that the current methodology for separating out system balancing actions from energy balancing actions were largely appropriate. One such response (from NGT) was of the opinion that the current CADL principles remain appropriate as they accurately strip out actions taken for frequency response reasons. This respondent went on to consider that the current P78 principles are appropriate (even under marginal cash out) as trades on the reverse side of the stack would have been taken for system reasons, regardless of the length of the system. The respondent further expounded that there may be merit in looking at the principles of BSAD offset tagging, as tagging the cheapest BSAD trades on the opposite side of the NIV could be rationalised by suggesting that the reverse BSAD stack trades created trades in the main stack, and should be tagged independently. Several respondents were keen to see improvements to the way in which NGC's non-BM trades feed through into prices, by expressing a desire for NGC to develop disaggregated BSAD.

Another respondent to the consultation suggested that for the most part, the actions taken to distinguish between system trades and energy trades seemed to be reasonably robust for most periods. However, during periods where the system is tight, bid acceptances used in the creation of reserve can lead to an excessive volume of offers being tagged, and unduly low cash out prices being generated.

One respondent was strongly against the principles of NIV tagging, and mentioned that the assumption that the highest priced trades should be excluded is fundamentally flawed. The justification for this belief was that the highest-priced acceptances may in fact have been made in order to create short-term reserve. Also, unless an action is taken directly to alleviate a constraint, it is unlikely that it will have been taken for system reasons, and even where it can be proved that it has been, it will have contributed to energy balancing. This respondent also offered up the view that offset tagging would be beneficial in creating enhanced price signals and be more reflective of the costs of balancing the system in the short-term.

Are the current arrangements for returning/collecting the residual imbalance charge cashflows to/from market participants appropriate (this applies to both gas and electricity)?

Several respondents considered that the current mechanisms for redistributing residual cashflows generated by energy imbalance charges are working as intended. However, some respondents felt that the existing arrangements served to bias the larger players. It was also suggested that the mechanisms incentivised shortness. One respondent (NGT) suggested that a review of the residual cashflow arrangements may be more effective as part of a wider review of the current BM cashflows.

A number of respondents felt that the current arrangements were appropriate, and should not be altered prior to this winter. Of these, one respondent felt that there would need to be a change to the residual cashflow mechanisms should there be a change to the methodology for calculating cash out prices.

One respondent considered that the current arrangements do not distort the incentives to balance, especially as parties are unaware of the imbalance positions of other market participants. This respondent went further, saying that the residual cashflows are ungameable due to their unpredictability and their low materiality, as well as the likelihood that they can be a cost rather than a cashflow.

Another respondent felt that the current mechanism could be improved by targeting residual cashflows to those parties that are not in a position of imbalance. This respondent was unclear as to whether the current arrangements are appropriate, believing that this very much depended on whether Ofgem considered that the mechanisms were intended to be cost reflective (currently appropriate) or should incentivise balance (currently inappropriate). A further respondent was of a similar view, suggesting that the residual cashflows in gas should be returned on the basis of shippers balance positions. This respondent felt that it was inappropriate for shippers who are performing well to bear the costs of those that were not.

One respondent was of the view that the current mechanism could have an effect on participants' behaviour, but was unclear to what extent this was the case. On the other hand, this respondent felt that tying in a participant's balancing position with its share of the residual cashflows was worth exploring. However, it was postulated that the mechanism was conceptually intended to not have any effect on the decisions made by market participant as to their imbalance positions.

A further respondent considered that the residual cashflow mechanisms were not designed as a balancing tool, and as such the current mechanisms remain appropriate. Another respondent shared this concern and stated that attempting to tie in residual cashflows and balancing could result in a penal reallocation.

Should the default imbalance price mechanism in gas (SAP plus or minus a differential based on Hornsea costs in 2000) be revised?

Several participants were of the view that there was not a sufficiently strong case to look at revising the current mechanism. One such respondent (NGT) was of the belief that a substantial increase or decrease in the price of storage would have a minimal effect on the values of SMPbuy and SMPsell. With that being the case, this respondent considered that even a considerable increase or decrease in the cost of storage would not appreciably enhance the incentives to balance or the security of supply.

There were a number of respondents who felt that the current fixed differential mechanism was somewhat arbitrary, although it was noted there was clearly a need for some kind of default arrangements, as historically they apply for around 66% of the time. One respondent that cited the dominance of the default price highlighted that the current fixed differentials were unhelpfully small. This respondent went on to say that Hornsea prices from 2000 were no longer appropriate, and that Rough storage was more transparent. The respondent outlined a

potential improvement to the existing mechanism, saying that the default price could be set as the average of the five highest SMPbuy prices minus the sell price over the most recent thirty days. The lower default price could be set on the same basis, but using SAP minus SMPsell. Another simpler mechanism was mentioned by this respondent as being calculated as 25% of average SAP of the previous year.

One respondent felt that as Hornsea is owned by SSE, and the majority of the capacity holdings being in SSE's name, it may be appropriate to look at revising the existing mechanism. This respondent went on to say that it may be beneficial to create a "virtual storage" mechanism or a mechanism that reflects the costs of storage across the whole system.

Another respondent felt that some kind of approximation for flexible gas needs to be retained, and that the current mechanism seemed to be reasonable until a full linepack service is introduced. This respondent felt that the differentials should not be penal and need to be relatively well aligned.

A further response mentioned that a storage reference was required, but believed that there have been several changes since the original differentials were hard-wired into the Network Code. This respondent felt that the values should be updated, and postulated whether these could be altered on an annual basis to reflect the cost of the dynamic nature of a bundled unit.

Is the current methodology for calculating the reverse electricity cash out price appropriate?

One respondent to the consultation was of the opinion that the reverse price mechanism should be entirely removed. The justification for this was that for the reverse price to reflect the costs of balancing the system, and the costs of holding reserve and response, it must be based on these actions, not on trades undertaken on the power exchanges. This respondent felt that it should be replaced by a price that reflects the costs of actions taken in the BM and forward markets by the SO to allow the inclusion of those actions taken for reserve and response.

Some respondents (amongst which was NGT) mentioned that although the reverse price was appropriate at the moment, it may be beneficial to develop a mechanism by which NGC's non-BM actions could be reflected.

Other respondents noted that although they believe the reverse price methodology is appropriate, traded volumes on the power exchanges have fallen since the introduction of P78. Another respondent echoed this view, by stating that it believes the reverse price has reduced the incentives to contract to sell energy which would otherwise be spilled.

One respondent considered that although it was appropriate for there to be a concept of a reverse price, it was concerned that the current mechanism understates the true value of power on the exchanges as it includes an average of block trades undertaken on the UKAPX. This respondent considered that these trades should be given a lower weighting in the Market Index Data Statement (MIDS).

Another respondent considered that the market needs convincing that the reverse price is reflective of market fundamentals in the short-term power markets.

One further respondent was of the opinion that the reverse price was working well, and was strongly in favour of retaining it in its current format.

Scheduling charges – is there a better way of dealing with them or should they be removed?

One respondent (NGT) considered that the current end of day regime should be retained. However, the respondent was concerned at the lack of incentives to provide accurate and timely information for within-day balancing. It was further concerned that removing the scheme would have an adverse impact, in much the same way as the Incentivised Nomination Scheme (INS) had.

One respondent felt that the existing charges were too lenient and recommended changing the arrangements before this winter. This respondent considered that it could be an improvement to have a separate input and offtake scheme. The input scheduling charge should be increased from 5% of SAP to 10% of SAP when the difference between nominations and actual flows exceeds 5%. The offtake scheduling charge would be based on a 1% charge of SAP for differences between shippers existing tolerance level and twice its tolerance level, but there should be a harsher penalty of 10% of SAP where the difference exceeds twice the shipper's tolerance.

One respondent considered that the existing shipper tolerances should be removed in order to provide stronger incentives to balance. This respondent went on to consider that this would ensure more accurate information being submitted.

Of the remaining respondents that specifically commented on scheduling charges, one believed that the current arrangements were a good incentive, whilst one did not, and another considered the issue was not sufficiently important to be dealt with ahead of winter 2004/05.

For all of the above, is there appropriate justification for differences between the gas and electricity cash out arrangements or should the two converge?

Few respondents explicitly commented on this question, whilst those that did were mainly of the view that it was unnecessary to strictly align the two markets out of a simple desire to create consistency. One respondent mentioned that it would not make sense to align two markets that are fundamentally different, due not only to the arrangements that exist at the moment, i.e. no gate closure concept in gas, but also because of the physical differences between the two products, i.e. storability of gas.

Other issues

Ofgem raised other issues in the consultation, mainly surrounding the form of the review, i.e. whether it should be a two-stage review with the second stage coming at some point after winter 2004/05. Respondents did not address these issues in great detail, but several responses warned that any reforms to the existing arrangements sufficient to tangibly improve the incentives to balance and security of supply, to name but two, were unlikely to be possible before winter 2004/05.

One respondent (NGT) noted that a two-stage review would be desirable and that it would be unlikely for there to be material improvements to the current arrangements prior to winter

2004/05. This respondent strongly supported a two-stage review, indicating that were this the approach Ofgem takes, the first stage would need to be initiated shortly. The respondent considered that the focus of the review should be on fundamental reform to the electricity arrangements and incremental reform to the gas arrangements.

Another respondent mentioned that NGT's Winter Outlook Report for 2004/05 was sufficiently optimistic that it would be better to concentrate on getting the right arrangements in place rather than attempting to implement something as quickly as possible.

A number of respondents shared the view that expediting amendments to the existing arrangements could only serve to create uncertainty in the market, and would support an incremental approach with long lead times. The rationale for this is that long lead times would enable market participants to minimise costs and risks by allowing thorough planning.

A considerable number of respondents were of the view that the delay in publication of the review documents has made it impossible for them to provide detailed, quantified responses to the consultation.

On the whole, respondents welcomed Ofgem's review documents, and were of the view that raising certain issues would be beneficial. A similar number of respondents also considered that the initiatives that NGT is developing in order to improve transparency and information provision is a positive step.