

**OFGEM DECISION LETTER No. 0511**  
"Removal of NDM Forecast Deviation from Imbalance Calculations"  
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Transco, Shippers and other interested parties

Our Ref: Net/Cod/Mod/0511  
Direct Dial: 020 7901 7374  
Email: paul.smith@ofgem.gov.uk

Dear Colleague

**Network Code modification proposal 511 "Removal of NDM Forecast Deviation from Imbalance Calculations"**

Ofgem has decided to direct Transco to implement Network Code modification proposal 511 "Removal of NDM Forecast Deviation from Imbalance Calculations" with effect from 1 October 2002. This letter sets out the background to the issue, the nature of the modification proposal, respondents' and Transco's views on the proposal, Ofgem's views and Ofgem's decision.

**Background**

The current gas balancing regime provides shippers with incentives to balance their supply and demand over the gas day. Imbalances between shippers' supply and demand over the gas day are cashed-out. If a shipper does not deliver enough gas onto the system to meet its customers demand, it is 'short' gas, and pays Transco the System Marginal Buy Price (SMPbuy) for the gas it is short. SMPbuy is set by the higher of: the highest priced Transco buy trade on the gas day; and the System Average Price (SAP). SAP is the weighted average of the price of all trades on the On-the-Day-Commodity-Market for the gas day, plus a fixed differential of 0.0287 p/kWh, calculated to reflect the cost of storage. If a shipper delivers more gas onto the system than is demanded by its customers, it is 'long' gas, and receives from Transco the System Marginal Sell Price (SMPsell) for the gas it is long. SMPsell is set by the lower of: the lowest priced Transco sell trade on the gas day; and SAP less a fixed differential of 0.0324 p/kWh, calculated to reflect the cost of storage. The costs/ revenues incurred/ received by Transco for cash-out, known as 'neutrality', are redistributed amongst all shippers based on the amount of gas they put through Transco's system.

When the New Gas Trading Arrangements (NGTA) were implemented from 1 October 1999, there were a range of tolerances for shippers balancing to recognise what were considered to be the difficulties of managing some of the risks associated with imbalances. In August 2000, Ofgem approved Network Code modification proposal 415 "Phased Reduction in Shipper Tolerances", which reduced shippers Imbalance Tolerance Quantity (ITQ) (excluding the Non-Daily Metered (NDM) forecast deviation tolerance) by 50% immediately and removed the remaining 50% of the tolerance from April 2001.

The only remaining tolerance is the NDM demand forecast deviation tolerance for all shippers with NDM supply points. Shippers' imbalances within this tolerance are cashed-out at SAP rather than SMPbuy or

SMPsell. This tolerance was intended to mitigate shippers imbalance risk arising from errors in Transco's demand forecasting.

### **The modification proposal**

The modification proposes that the NDM demand forecast deviation tolerance should be removed so that all shippers' imbalances are cashed-out at System Marginal Prices (SMPs) rather than some imbalances being cashed-out at SAP. The modification proposal would be implemented by setting the ITQ to zero.

### **Respondents' and Transco's views**

Seven responses were received to the modification proposal, with one respondent supporting the modification proposal and six respondents against the modification proposal. Having considered respondents' views, Transco did not recommend implementation of the modification proposal at this time. If the modification proposal were to be implemented it recommended that it should not be implemented until April 2003.

Two respondents believed that the removal of the NDM demand forecast deviation tolerance would increase incentives on shippers to balance their supply and demand, thereby reducing the need for Transco to take balancing actions. Two respondents did not believe that the removal of the NDM demand forecast deviation tolerance would improve shippers incentives to balance, but instead lead to shippers going 'long' or 'short' depending on their assessment of the cash-out risk. Three respondents believed that it was not clear how the modification proposal would result in Transco taking less balancing actions. One respondent stated that making improvements to Transco's demand forecasting would be more likely to reduce the need for balancing actions by Transco. Another respondent believed that only if shippers had the means to calculate the NDM demand forecast deviation would the modification proposal result in less Transco balancing actions, while another shipper suggested that some shippers may use their own forecasts of NDM demand, and therefore, it was unclear what effect that would have on the need for Transco to take balancing actions.

Transco believed it was possible that implementing this modification proposal may decrease shippers' incentives to balance because SMPs, to which shippers will be exposed to for all of their imbalances under the modification proposal, are not designed to be a fair or neutral price on the day, whereas the SAP has been specifically formulated to achieve this objective. Transco did not believe that the modification proposal would reduce its balancing role because it would not receive better information about forecast demand on which to determine the need for balancing actions.

Two respondents believed that the current cash-out prices on days when Transco does not take balancing actions do not reflect the actual costs of shippers being out of balance. A number of respondents believed that shippers would go 'long' to hedge the increased cash-out risk if the modification proposal was introduced.

Transco recognised that some shippers may face difficulties in forecasting NDM demand, and thereby achieving a balanced supply and demand position. Transco believed that its demand forecasting had achieved a level of accuracy that conferred commercial and operational efficiencies for the industry, without the need for incurring the costs of additional demand forecasting by shippers.

Four respondents believed that the modification proposal would lead to increased charges for NDM customers because of the need to hedge the increased risk. Respondents believed that the

modification proposal might deter potential new entrants and lead to some existing companies exiting the market.

Two respondents supported the continued provision of a demand forecasting service by Transco if the modification proposal was implemented. Two respondents expressed concerns about the accuracy of Transco's NDM demand forecasts. Five respondents expressed concerns about the difficulties and costs associated with forecasting their own NDM demand. Three respondents believed that shippers would be unable to forecast their NDM demand more accurately than Transco. One respondent believed that second tier suppliers would be at a disadvantage when forecasting NDM demand compared to the incumbent supplier. One respondent did not believe that it was efficient to make a change to cash-out leading to shippers being charged for Transco demand forecast errors. One respondent believed that the current regime, whereby Transco manages the national daily variance in demand was the most efficient way to manage NDM demand forecast errors.

Transco stated that it was not the intention of the modification proposal to dispense with the provision of its NDM demand forecast service, which it is obliged to provide under the Network Code. Transco noted that shippers might wish to use their own demand forecasts. Transco also noted the concerns of some shippers about the cost of forecasting their own demand, but stated that shippers would only invest in their own demand forecasting if it was beneficial relative to other available information.

A number of respondents believed that if the modification proposal was to be introduced it should be phased in over a suitable time period. One respondent suggested a 12 month implementation timetable, with information currently held by Transco regarding demand forecasts being provided to shippers. This respondent noted that electricity suppliers had two years to prepare for a similar change under NETA. Another respondent believed that NDM demand forecast information should be made available on a non-discriminatory basis if the modification proposal was to be implemented. One respondent believed that the modification proposal should be implemented in October 2002, at the same time as Network Code modification proposal 496 "Improvement to NDM Demand Determination". Two respondents noted that October 2002 was also the date Ofgem suggested for the implementation of reforms to the gas balancing regime. "The New Gas Trading Arrangements, Reform of the gas balancing regime, Revised proposals", Ofgem, February 2002. One respondent believed that piecemeal changes should not be made to the gas balancing regime, but that all changes should be considered together.

Transco believed that if the modification proposal was implemented, shippers should be given sufficient time to develop alternative demand forecasting and risk mitigation tools as appropriate. Transco stated that it currently provides its last NDM demand forecast at 16:00 and that if this modification proposal is implemented it may be appropriate for it to provide an additional forecast later in the gas day. Transco considered that it may be appropriate to implement the modification from April 2003 after the effects of Network Code modification proposal 496 "Improvement to NDM Demand Determination" have been assessed.

One respondent noted that it was envisaged, including by Ofgem, that the removal of balancing tolerances would be accompanied by the development of a linepack service to enable shippers to better mitigate the increased imbalance risks. The respondent expressed concern that to date a linepack service had not been developed and therefore, this modification proposal would expose shippers to penal cash-out prices for unmanageable risks.

Transco noted that the development of a linepack service was one of the issues to be considered by Network Code review group 513 "Reform of Gas Balancing Regime".

## Ofgem's views

We have responded in turn to each of the main issues raised by shippers and Transco, and then summarised our view on the modification proposal.

If shippers are cashed out at SMPs rather than SAP for all imbalances, the incentives on shippers to balance will be stronger, so it can be expected that this modification proposal will improve shippers incentives to balance, thereby reducing the size of overall system imbalances, and Transco's balancing role. Following the removal of other tolerances, the level of overall shipper imbalances has reduced, as shippers have faced stronger incentives to balance.

Ofgem is prepared to consider any proposals from shippers to change the cash-out regime so that it better reflects the costs of shippers being out of balance. However, within a competitive market, shippers taking responsibility for their own supply demand balance, including demand forecasting, should lead to more efficient balancing than Transco carrying out the role as a monopoly system balancer. The evidence of improved shipper balancing performance following the removal of tolerances as a result of Network Code modification 415 "Phased Reduction in Shipper Tolerances" supports this view.

Within a competitive market, if some shippers are able to manage their supply demand balance, including demand forecasting, better than other shippers, those shippers less able to manage their supply demand balance, should not in general be protected from the effects of the competitive market, e.g. through tolerances. The current NDM forecast demand deviation tolerance may create a cross-subsidy from DM to NDM customers, because shippers are not exposed to SMPs for all imbalances for NDM demand forecast deviations, as they are for DM demand forecast deviations.

Shippers will decide whether to use their own, or invest in their own, demand forecasting, based on whether they believe it will be more accurate than Transco's forecast and considering the potential risks and costs associated with the cash-out regime. If some shippers are able to forecast their own demand, and manage consequent cash-out risks, better than other shippers, they will obtain a competitive advantage. Ofgem would welcome Network Code modification proposals from shippers to improve Transco's demand forecasting service, and would consider proposals to make more demand forecasting information available to shippers.

Ofgem agrees with Transco and respondents that shippers should be given a period of time in which to prepare for the introduction of the modification proposal. Ofgem believes that the modification proposal can be implemented from 1 October 2002. This date takes account of the time shippers have had since the modification was proposed in December 2001 to consider the effects of its possible implementation. The likely effects of Network Code modification proposal 496 "Improvement to NDM Demand Determination" on the accuracy of Transco's demand forecasts was assessed as part of the decision to implement the modification proposal. Ofgem believes that if changes can be made to improve the existing gas balancing regime before Network Code review group 513 "Reform of Gas Balancing Regime" has concluded its work, then these changes should be implemented.

Ofgem would welcome the development of a linepack service, and notes that it is open to Transco and/or any shipper to raise a Network Code modification proposal to facilitate the development of such a service. However, the development of a linepack service is not a necessary pre-requisite to the removal of tolerances. Shippers balancing performance has improved following the removal of other tolerances, suggesting that shippers are able to effectively manage these risks. There has also been evidence that tolerances have previously been used for commercial advantage by shippers rather than as a means to mitigate against unmanageable risks.

Ofgem has considered whether this modification proposal better facilitates the relevant objectives of the Network Code under Standard Condition 9 of Transco's Gas Transporters (GT) licence. The effect of removing the NDM forecast demand deviation tolerance will increase the incentive on shippers to balance their supply and demand, thereby reducing Transco's balancing role. Moreover, shippers operating in a competitive market should more efficiently balance supply and demand than Transco acting as a monopoly system operator. On this basis, Ofgem considers that the modification proposal will both better facilitate the economic and efficient operation of Transco's pipeline system and the securing of effective competition between shippers and between suppliers.

Ofgem recognises that shippers may need some time to prepare for the implementation of the modification proposal, and therefore expects Transco to implement the modification proposal with effect from 1 October 2002.

### **Ofgem's decision**

Ofgem has decided to direct Transco to implement Network Code modification proposal 511 "Removal of NDM Forecast Deviation from Imbalance Calculations" because we believe that it better facilitates meeting the relevant objectives of the Network Code under Standard Condition 9 of Transco's GT licence, and in particular, better facilitates the economic and efficient operation of Transco's pipeline system, and securing effective competition between shippers and between suppliers.

Ofgem expects Transco to implement the modification proposal with effect from 1 October 2002. This will allow shippers additional time to prepare for the introduction of the modification proposal.

If you have any questions regarding the issues discussed in this letter please contact me on 020-7901-7374 or Ayesha Uvais on 020-7901-7307.

Yours sincerely

**Paul Smith**  
**Head of Market Surveillance**