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Transco, Shippers and Other Interested Parties

Dear Colleague,

Modification Proposal 0414 'Proposal to reform the Transco Energy Incentive Redesign'

Ofgem has carefully considered the issues raised in Modification Proposal 0414 '*Proposal to Reform the Transco Energy Incentive Redesign*'. Ofgem has decided to direct Transco to implement this modification because we believe that it better facilitates the relevant objectives of Transco's Network Code.

Transco expects to implement this modification once Ofgem has approved the necessary changes to the Operational Guidelines. Transco has indicated that this may take approximately 6 weeks, but it is Ofgem's view that the modification should be implemented as soon as possible and it is not persuaded that modifying the Operational Guidelines will necessarily as long as Transco has indicated.

In this letter we outline our reasons for this decision.

Background to the proposal

Before the introduction of the New Gas Trading Arrangements (NGTA) on 1 October 1999, Transco had limited discretion in how it could ensure that its National Transmission System (NTS) was balanced each day. In addition, Transco was not exposed to any of the costs associated with undertaking balancing actions.

Ofgem consistently argued, in developing the NGTA proposals in consultation with shippers, Transco and customers, that this could lead to Transco taking unnecessary balancing actions and higher balancing costs. Ofgem consistently argues that Transco should be granted greater discretion when choosing how and when to take balancing actions within a new commercial incentive framework designed to align Transco's interests with customers' interests (as they ultimately pay for balancing costs).

As part of the implementation of the first phase of the New Gas Trading Arrangements in October 1999, Ofgem consented to

modification 313, '*Development of the Energy Balancing Regime to facilitate implementation of the on-the-day commodity market*' that introduced new commercial incentives on Transco in relation to its gas balancing role.

Under this daily incentive, Transco receives benefits depending on how close the price of Transco's marginal trade was to the system average price (SAP) in the on the day commodity market (OCM). If Transco's marginal price trade is within 5% of SAP on any day, Transco receives a bonus payment up to a maximum of £2000, which it would receive if it traded at the average price. Conversely, Transco is exposed to a daily penalty of up to £15,000 if the differential exceeds 5% (meeting its cap when the differential is equal to 50% away from SAP). These incentive parameters apply to both Transco's buy and sell actions (e.g. it can receive a total daily bonus payment of £4,000 or penalty of £30,000). If Transco does not take an action on a side of the market, it receives its full benefit for that side of the market. This is consistent with Transco's role to be a residual gas balancer by ensuring that it does not have an incentive to trade simply to receive a bonus.

An annual cap and collar of £2m also limits Transco's overall exposure under the scheme. This overall annual cap and collar is further subdivided via a monthly cap and collar, i.e. it cannot gain or lose more than one twelfth of the annual cap and collar in any one month.

In directing Transco to implement the modification, Ofgem argued that Transco would have improved incentives in relation to its role as residual system balancer. With the greater discretion granted to Transco by the changes made to the Operating Guidelines, Transco would have a financial incentive to undertake more efficient balancing actions and this should lead to balancing costs lower than they would have been under the old arrangements. Under the old arrangements Transco had limited discretion and was not exposed financially to the costs associated with its own actions.

In the July 2000 document¹ that reviewed the new gas trading arrangements introduced on 1 October 1999, Ofgem reported that balancing costs had been lower than during the previous winter. We concluded that under the incentive regime, Transco appeared to be using its discretion to take fewer balancing actions and on most days it only took balancing actions on one side of the market. Transco was active on both sides of the market on less than 5% of days. During these 8 months, Transco earned £300,000 under its incentive regime.

¹ *The New Gas Trading Arrangements: A review of the new arrangements and further development of the regime: A review and decision document*, Ofgem, July 2000

Ofgem also identified that the differential between end of day and target linepack was increasing with the system ending the day longer or shorter than Transco planned. Ofgem concluded that Transco appeared to be using changes in linepack to balance the system on certain days rather than taking balancing actions.

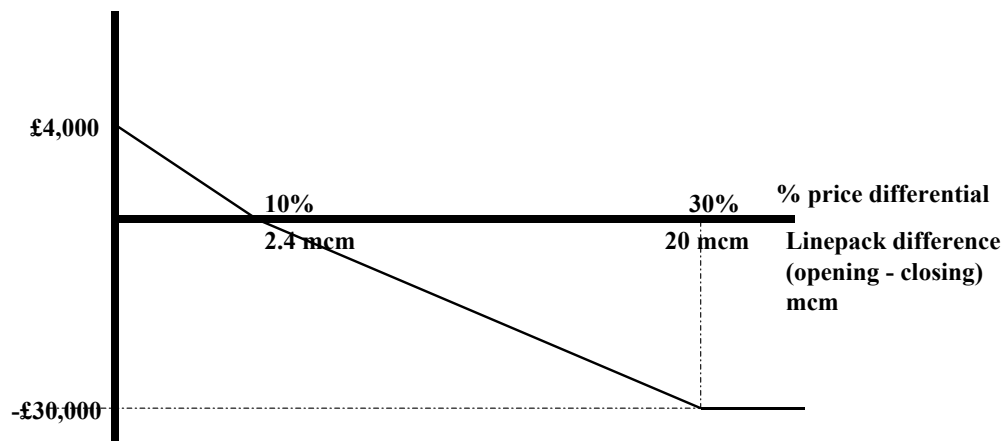
In our review document, Ofgem expressed concern that the incentive regime, by encouraging Transco not to take system balancing actions on a given day but to use linepack, was encouraging shippers to either go very long or very short. Ofgem was concerned that this might lead to mis-targeting of balancing costs from day to day (as Transco was effectively carrying over imbalances from day to day) and could be reducing liquidity on the OCM. This, in turn, could be contributing to the additional volatility in short-term gas prices that was being experienced during summer 2000.

The modification proposal

The modification proposes to introduce a linepack target on Transco as part of the daily gas balancing incentive regime. Under the new incentive regime the daily revenue (cost) to Transco under its incentive would be set equal to the sum of the incentive payment received under both its price incentive (as described above) and its linepack incentive.

The linepack incentive would be designed with a similar format to the price based incentive. Transco would receive its maximum revenue under this incentive component (£4,000) if there were no difference between opening and closing linepack. It would continue to benefit under the incentive regime so long as the difference between opening and closing linepack was less than 2.4 mcm. For any linepack deviations greater than 2.4 mcm, it would lose money under its incentive up to a collar value of -£30,000 at approximately 20 mcm.

We illustrate the additive incentive in the figure below.

Incentive revenue**Incentive cost**

An alternative proposal (the “hybrid”) was raised in the modification report that was similar in intent but introduced a further condition for Transco to benefit from the regime. Under this proposal, Transco would benefit under its incentive only if it met (or bettered) its target under both terms (the 10% price target and the 2.4 mcm linepack target).

These proposals are aimed at encouraging Transco to undertake more efficient linepack management.

Transco has indicated that any implementation of the proposal could only take place once a number of modifications have been made to the Operational Guidelines.

Respondents’ views

Twelve respondents commented on this modification proposal. Of these, nine provided support for the modification, two opposed, and one suggested delaying implementation pending other changes to the gas balancing regime.

Of the shippers that supported the modification, a number argued that the proposal would eliminate the current perverse incentives on Transco to avoid taking balancing actions on two sides of the market. Respondents felt that this should reduce the linepack carry over between days and improve the cost targeting of the regime. A number of respondents also argued that the introduction of the linepack target term would lead to less frequent large daily linepack swings.

Most respondents argued that both the proposed model (the additive model) and the alternative (hybrid) model would improve the incentive properties of the regime. In choosing between the models,

five outlined a preference for the hybrid, four preferred the additive model and one expressed no preference. The additive model was preferred on the basis that it provided a continuous incentive while respondents preferring the hybrid argued that it provided a sharper incentive to hit both targets.

There was general support for the parameters that Transco suggested with only one respondent proposing that a tighter linepack target of 2 mcm be applied. One respondent also argued that the annual caps and collars should be revised given the change in Transco's daily risk / reward profile. A number of respondents highlighted the need to revise the parameters in light of experience with the regime.

Of the respondents that opposed the modification, one argued that as Transco had no control over linepack, it should not have any incentive relating to linepack levels. Another respondent argued that the incentive did not adequately take account of system safety issues. It was also argued by two respondents that the impact of changes already being made to the gas balancing regime on 1 April 2001² should be allowed to operate before a change to the incentive regime is considered.

Transco's view

Transco indicates that whilst the current energy incentive delivers a degree of 'price efficiency' in respect of Transco's system balancing decision making process, the existing incentive structure may not necessarily be consistent with cost containment.

Transco supports the application of the additive incentive model as it believes it creates more continuous incentives on Transco as opposed to the hybrid model. Transco considers that whilst both incentive regimes offer an improvement over the current incentive, the continuous incentive properties of the additive model are more likely to encourage behaviour consistent with the relevant objectives.

Transco has proposed that the daily cap and collar of £4000 and -£30 000 applied to the current price incentive arrangement be maintained for the proposed revised price incentive. The same financial incentives have then been applied to the linepack incentive. The price incentive target value has been set at 10%. The linepack incentive performance target has been set at 2.4 mcm.

² Following the implementation of Modification 433, there will be a fixed differential of approximately 1p/therm between SAP and SMP on days when Transco does not take a balancing action on a side of the market. Following the implementation of Modification 415 and 421, shipper absolute and imbalance tolerance quantities will be removed from 1 April 2001.

The incentive arrangement would continue to be subject to the current +/-£2million annual cap and collar.

Ofgem's views

Ofgem highlighted some of the issues associated with the current incentive regime as part of its July review. Ofgem also made clear in agreeing to the initial incentive as part of the implementation of NGTA that it expected the incentive to run for one year and that the incentive should be modified in the light of experience of operating under it. In particular, Ofgem stressed that the parameters of both Transco's energy and capacity incentives should be modified over time so that Transco faced a stronger commercial incentive in relation to both its gas balancing actions and its actions in the capacity buy-back market. Ofgem is therefore disappointed that consideration was not given to sharpening Transco's incentives by increasing the bonus payment, the penalty and the caps and collars as part of this review.

Ofgem does however, welcome the modification proposal and the workstream discussions that sought to address some of the concerns expressed both by Ofgem and market participants.

Ofgem agrees with respondents that the carry over of system imbalances from day to day through the use of system linepack could result in a misallocation of balancing costs from one day to another. This could lead to a misallocation of balancing costs between shippers if, for example, a shipper was out of balance on the day when no action was taken but in balance on the subsequent day when an action was taken.

We also share shippers concerns about whether the existing incentive encourages Transco to only take actions on one side of the market and that this, in turn, could be encouraging shippers to take large end of day imbalance positions. If in delaying actions and using linepack, Transco is forced to take fewer, but larger actions on one side of the market only, this could have a disproportionate impact on prices in the OCM. This could spill over into forward gas prices.

Ofgem acknowledges that other changes to the balancing arrangements are being introduced from the 1 April 2001. However, Ofgem believes that improving Transco's incentives would be consistent with the proposals already implemented and should complement them in addressing some of the concerns addressed in our July review.

Ofgem believes that as an interim step, this proposal will provide an incentive on Transco to undertake the better management of end of day linepack and enhance the cost targeting characteristics of the regime. This should also sharpen the incentives on shippers to

balance their end of day positions and complement the changes introduced on 1 April 2001.

Ofgem, however, continues to believe that a more fundamental reform of the SO incentive as part of wider reform of the current gas balancing arrangements is necessary. In our February 2001 document *New Gas Trading Arrangements: Further reform of the gas balancing regime*, we outlined proposals for such a fundamental reform.

Ofgem is fundamentally concerned about the scope for within day profiling of inputs and offtakes and the possible impact on system balancing and safety. As a result, in our view, none of the interim reforms, which are all targeted at improving end of day balancing by shippers and Transco, will address our concerns.

Form of incentive

Ofgem agrees with respondents that both the additive and the hybrid models will improve the existing gas balancing incentives on Transco. Ofgem believes that each model has better incentive properties under different circumstances. For instance, the additive model has better incentive properties than the hybrid on a day where Transco reaches (or exceeded) its break even price target early in the day. On such a day, Transco could allow system linepack to move out to its break-even target (or exceeded) without being any worse off. Conversely, the hybrid model should encourage tighter buy – sell spreads when Transco has seen linepack deviate from opening levels to exceed target levels.

However, Ofgem believes that under either model, Transco will be encouraged to reduce end of day deviations away from opening linepack. This should lead to better end of day balancing by Transco, within the current arrangements and reduce the scope for misallocation of balancing costs and/or Transco's actions having a disproportionate effect on the prompt gas market.

Parameters

Ofgem also agrees with respondents that the majority of the parameters proposed by Transco should improve the incentives on Transco to improve its balancing performance when compared to the existing incentives. Although Ofgem believes that the proposed parameters will improve the incentives on Transco, we agree with respondents that argued for a tighter linepack target and larger annual caps and collars would have been desirable. This would sharpen the incentives on Transco and ensure that the incentive stays whole throughout the annual incentive period.

Ofgem agrees, in principle, that the parameters to the incentive should be reviewed in the light of experience. Ofgem believes that the parameters should be reviewed after a sufficient period has

elapsed to provide a strong incentive on Transco to improve its performance. However, as Ofgem is proposing that this is just an interim incentive on Transco, the actual need to revise parameters might be limited if the interim incentive is replaced in April 2002 by the wider incentive outlined above.

Ofgem's decision

Ofgem has decided to direct Transco to implement this modification because we believe that it better facilitates the relevant objectives. In our view, the proposal, by sharpening Transco's existing incentives to balance the system efficiently at the end of the day should better facilitate the relevant objective of the efficient and economic balancing of the pipeline system. In addition, by reducing the incentive on Transco to carry over aggregate system imbalances from one day to the next, this should lead to better targeting of imbalance costs between shippers. This will better facilitate the relevant objective of the securing of effective competition between relevant shippers and relevant suppliers.

Yours sincerely,

Steve Smith
Director, Trading Arrangements