

## **Development Workgroup Report**

### **Modification Proposal Reference Number 0373**

#### **1. Introduction.**

The Development Workgroup approached this Modification Proposal based upon the assumption that the current Shipper balancing tolerance regime would be removed with effect from 1st April 2000 but that the Non Daily Metered (NDM) Forecast Deviation methodology would continue to apply alongside a revised Tolerance Regime permitting Shippers to value such tolerances.

Following the Modification Proposal 0373 Workgroup meetings up to and including 6th January 2000 the main proposals in respect of the tolerance service are:

- Transco to release both over delivery and under delivery balancing tolerance via long term and day ahead tolerance auctions from 1st April 2000,
- tolerance quantities to be released to be based upon the quantities currently provided and based upon the demand forecast for the period,
- revenues raised by the tolerance auctions and tolerance over run charges to be treated as Transportation Revenue,
- Transco to facilitate registration of tolerance trading between Shippers, SAP and SMP determination to remain unchanged.

The extent of the tolerance quantities to be released will be discussed at the 26th January 2000 Workgroup meeting and it is intended a recommendation will be included in the Modification Proposal 0373 Draft Modification Report issued for consultation.

The Development Workgroup has also addressed the issue of how the monthly cap and collar in the Transco Energy Balancing Incentives should be removed.

Business Rules are given in appendix 1 for tolerance auctions and appendix 2 for removal of Energy Balancing Incentives monthly cap and collar.

#### **2. Areas of Discussion.**

##### **2.1. Removal of existing Shipper energy balancing tolerances.**

In its October 1999 NGTA conclusions document Ofgem states that it “*expects to see the complete removal of shipper balancing tolerances on 1st April 2000.*” Within the Workgroup meetings Ofgem restated this position that tolerances should be removed with Shippers either opting for zero tolerances or the introduction of a tolerance service whereby Shippers could purchase a level of tolerance.

Shipper representatives within the Workgroup expressed concern over the complete removal of Shipper balancing tolerances prior to the introduction of new “linepack services” that will permit Shipper access to flexibility within the gas transportation system. The group therefore considered the development of a tolerance service for implementation on 1st April 2000 whilst acknowledging that development of “linepack” services should take place before

linepack service implementation potentially on 1st October 2000.

## 2.2. **Retention of NDM Forecast Deviation tolerance.**

The group agreed to retain the NDM Forecast Deviation tolerance. It was considered that this tolerance needed to be retained since Shippers are unable to determine the direction or magnitude of the final demand forecast change and cannot, therefore, manage the cashout risk associated with any change to the forecast demand. Retention of the tolerance would protect Shippers from this risk.

## 2.3. **Definition of tolerance service and method of release.**

At early Workgroup meetings Transco outlined a “straw man” tolerance service to further debate. The key elements were as follows:

- Two types of service to be made available, Under Delivery tolerance and Over Delivery tolerance.
- Shipper holding of tolerance service would provide relief against the relevant SMP exposure.
- Quantity of tolerance services made available to be profiled to reflect the current variability of tolerances.
- Tolerances to be released via auctions.
- Tolerances to be tradable.
- Revenues from primary tolerance release and tolerance over run charges to be regarded as Transportation Revenue.

Discussion within the group following Transco’s initial presentation centred around the following points:

- The sale of separate Under and Over Delivery tolerance.
- Whether auctions should be split between long term and day ahead options.
- Determination of the quantity to be released
- Requirement or otherwise of a reserve price in the auctions.
- Detail of auction specification.
- Invoicing of primary tolerance release.
- Compatibility with the On-the-day Commodity Market (OCM).
- Requirement for hoarding restrictions.
- Retention of funds from tolerance auctions and tolerance over run charges.
- Transco to facilitate registration of Shipper tolerance trading.
- SAP and SMP determination.

### 2.3.1. The sale of separate Under and Over delivery tolerance

It was generally agreed that the tolerance service should feature separate Under and Over Delivery tolerances. This separation would permit Shippers to reflect different values of over and under delivery tolerance and might also facilitate the development of this service to permit Transco an alternative balancing tool. The service would be made available via both

long term release (six months) and day ahead auctions. The quantity to be released should be determined by Transco.

### 2.3.2. Whether auctions should be split between long term and day ahead options.

The group debated the options available and Transco presented data on the historic level of tolerances and forecast variation from the Seasonal Normal System Demand (SNSD) forecasts. The group agreed that the auctions should be split between long term and day ahead availabilities with approximately two thirds of the projected tolerance available being offered in the long term auction thus leaving room for demand variation whilst retaining the likelihood of at least some day ahead quantity still being made available.

### 2.3.3. Determination of the quantity to be released.

For the long term auction the quantity to be released will be 66% of y% of the average level of SNSD demand projected for each calendar month the coming gas year within the Transco publication "Transportation Ten Year Statement 1999". Y% is a factor which will vary by calendar month to take account of the variation in End User demand profile. Figures for y% are given in appendix 1 of the Business Rules included in appendix 1 of this report. The figure in appendix 1 assume that the intent is for y% to broadly release the same level of tolerance in aggregate as is available in the current regime.

This method of determination serves to profile the tolerance released to reflect the current variability of Shipper balancing tolerances. As such the level of tolerance released will reflect the level of demand.

Bidding will be for quantities applicable for every day in that month.

Quantities released in the day ahead auctions will also be calculated as 'y%' of the 13.00 D-1 demand forecast less the quantity sold in the long term auction for that day.

It is intended that a recommendation for the values of 'y' will be determined at the 20th January Workgroup meeting and included within the Draft Modification Report.

### 2.3.1. Requirement or otherwise of a reserve price in the auctions.

It should be noted that Transco intends to issue a pricing discussion paper on the issues surrounding reserve prices in auctions.

It was agreed by the Workgroup that a reserve price of zero would be appropriate for both types of auction so that there are no artificial constraints and the auctions should sell out.

### 2.3.2. Detail of auction specification.

It was agreed that bidding and allocations within the auctions should be based on lot or "tick" sizes compatible with the OCM, i.e., 100,000 kWh, thereby facilitating a standard product for trading and compatibility with the OCM. Transco also confirmed that this functionality would simplify systems building, invoice generation and probably reduce potential User input error during the bidding process.

Long term auctions for six monthly blocks of each type of tolerance will be held in March 2000 for tolerance months April to September 2000 inclusive. Auctions for the following six months (October 2000 to March 2001) will be held in September 2000. The March auctions will be split evenly into two rounds. Shippers will be allowed to place 20 “live” bids in each auction round. No two bids may be for the same price and the maximum bid quantity equals that available in the auction round. Bids must be in whole multiples of 100,000 kWh and allocations will also be made in whole multiples of 100,000 kWh.

Any scaling of bid quantities as a result of the allocation process in regard to equal price bids will be rounded up to the nearest 100,000 kWh. This process of rounding up may lead to a modest over selling of tolerances. The group agreed that this over selling was acceptable given the simplification in the allocations process that this would allow. Should any tolerance be unallocated at the end of the first auction round, due to the lack of valid bids, then the auction of that type of tolerance will be suspended and no further rounds will be conducted.

Allocated tolerances will be applicable to every day in that month.

Day ahead tolerance auctions will be held in the afternoon of D-1. Only one round will be conducted. All other specifications will be the same as for the long term auctions.

### 2.3.3. Invoicing of primary tolerance release.

The group discussed the issue of when primary tolerance released via the auctions should be invoiced. The options included:

- i) Invoice on the next available Capacity Invoice following the auction allocations.
- ii) Invoice in the Capacity Invoice for the month in which the tolerance service was used.

The second option was supported by the group subject to referral to, and discussions within, the Energy Balancing Credit Committee on the issue of whether it considers that this approach will have a detrimental impact on credit term requirements. If the committee considers that there is a detrimental impact then long term auction billing should be completed on the next available Energy Balancing Invoice following the auction allocations.

### 2.3.4. Compatibility with the On-the-day Commodity Market (OCM).

The auction specification detailed the bid and allocation quantities as multiples of 100,000 kWh. The group considered that this would help Shippers to compare the merit of purchasing tolerances against other available balancing options such as “title” trading on the OCM.

### 2.3.5. Requirement for hoarding restrictions.

The group also discussed the issue of hoarding of the proposed tolerance service. It was suggested that individual Shippers should be prevented from being allocated more than x% of the tolerance available in each of the auctions. The group considered that such restrictions should be considered in the light of encouraging transparency within the auction process,

regulatory oversight and the experience of such restrictions imposed as part of the 1999 Rough and Hornsea Storage Service auctions. Therefore, pending Ofgem views on this issue, Transco will provide flexible functionality to restrict an individual Shipper's allocations from each of the long term and day ahead auctions with the issue of hoarding restrictions being included in the Draft Modification Report and decided as part of the consultation process.

#### 2.3.6. Retention of funds from tolerance auctions and tolerance over run charges.

During its initial description of the proposed tolerance service Transco stated that it considered that, since current tolerances are a bundled service included within transportation charges, any funds generated from the auctioning of this service and over run charges should be redistributed to Shippers. The group debated the most appropriate way to redistribute any funds and particularly whether or not such redistribution should be apportioned so as to encourage better Shipper balancing behaviour. However, a number of Shippers preferred redistribution via the current Balancing Neutrality functions.

Other revenue redistribution options put forward during discussions were:

- i) in proportion to tolerance levels implied by the current regime,
- ii) via the Transco's price control 'k' factor mechanism.

In the latter of the above options there would be no immediate redistribution of auction revenues. Instead Transco would retain the revenues as formula revenue and could be interpreted as making adjustments to its transportation charges to reflect the element of formula revenue over recovery as reflected in 'k'.

Since the meeting on 5th January Ofgem has stated in a fax correspondence to Transco that *"Transco is remunerated for linepack through transportation charges. As the tolerance service is a proto-linepack service, revenues from this service should accrue to, and be passed back to shippers, through the price control. This could allow more accurate identification and targeting of costs associated with offering a linepack service in the future."*

*It removes a direct linkage between the price paid for the service and the return of revenue to shippers for the service. This should ease concerns expressed in the development working groups over the abuse of dominant position by making the "effective discount" to large players less clear."*

As such Transco do not intend to build system functionality for redistribution of auction revenue or tolerance over run charges but rather to treat primary tolerance service income and tolerance over run receipts as Transportation Revenue.

#### 2.3.7. Transco to facilitate registration of Shipper tolerance trading.

The Workgroup considered that the provision of a tolerance trading system was not part of Transco's core activities and therefore felt that Transco should not be called upon to provide such a market. It was therefore agreed that Transco should provide a facility for Shippers to

register tolerance trades transacted elsewhere between two Shippers. Whilst Transco will not operate a within day market there are benefits that could arise if an alternative operator could facilitate such tolerance trading. Transco will therefore facilitate the Market Operator to Transco commercial system interface via the publication of a statement defining such interface and the associated terms and conditions for such an interface. This will be published shortly.

Such a facility should be provided as soon as possible following the long term auctions and continue through the Gas Day or perhaps on to M+15, thus providing Shippers with the maximum opportunity to trade the service. Transco is concerned that the trading of Tolerances after the Gas Day will place an additional burden on its energy indebtedness monitoring processes. Shippers who are subject to Cash Calls may wish to trade Tolerances to lessen their cashout exposure. Under these circumstances, Transco will be required to monitor confirmed Trade Registrations during the Cash Call appeal window. High volumes of trading close to M+15 closeout could add volatility to the Cash Call process.

Whilst the majority of Shippers was in favour of permitting trading out to M+15, several Shippers expressed strong reservations and requested Ofgem to state its preference. It is intended that the Workgroup will reconsider and conclude this issue at the meeting on 26th January for inclusion in the Draft Modification Report.

Since the meeting on 5th January Ofgem has stated in a fax correspondence to Transco that they are *“of the view that ATDT (after the day trading) would undermine the energy regime by discouraging shippers to balance and go against the principle of cost targeting”*

Registration and subsequent confirmation of a tolerance trade would be processed by Transco and the tolerance holding of the trading parties adjusted accordingly. It was agreed that Shippers should not be prevented from trading more Under or Over Delivery tolerance than they actually hold and thus adopting a negative tolerance position. However, such Shippers should be penalised if they continue to hold a negative position at the close out of tolerance trading. As such it was agreed that such Shippers should incur a charge based on a multiple of 1.1 of the relevant SAP to SMP differential for the Gas Day.

#### 2.3.8. SAP and SMP determination.

In its October 1999 NGTA conclusions document Ofgem states that *“a revised cash-out regime, based on commodity and flexibility prices should be introduced as soon as reliable information on daily linepack and storage prices is available.”* The Workgroup considered that this should be reconsidered following the introduction of the tolerance market and experience of the traded tolerance market.

### 2.1. **Removal of Energy Balancing Incentives Cap and Collar.**

Transco agreed to removal of the monthly incentives cap and collar from 1st April 2000. However, under the current parameters Transco is not able to breach the monthly cap and therefore removal of this cap is academic. Should the collar be reached Transco intends to continue to pay funds to Shippers over and above the collar amount and at the end of the Gas Year adjust and recover the payments according to Shippers' annual throughput. The sums to

be recovered will be adjusted to take into account interest accrued at Barclays Bank base rate.

Business Rules for the above are included in appendix 2 to this report.

### **3. The Workgroup recommendations**

#### **3.1. Summary of Proposals.**

This Workgroup Report recommends:

- i. separate pay as bid auctioning by Transco of Under and Over Delivery tolerance service in both long term and day ahead auctions,
- ii. the quantity of both types of tolerance service to be released via the auctions to be determined from Transco demand forecasts and be based on a multiple of current tolerance levels,
- iii. funds raised by the auctions and tolerance over run charges to be regarded as Transportation Revenue,
- iv. Transco to provide a facility for Shippers to register tolerance trades as soon as possible following initial tolerance auctions,
- v. calculation of SAP and SMP prices and their use within the cashout regime to remain unchanged.

#### **1. Transco's opinion:**

Transco supports the proposals put forward in this Workgroup Report.

Transco considers that retention of the current cashout methodology is appropriate until alternative approaches to establish the within day value of flexibility exist and are proven. Retention will maintain the level of incentive on Shippers to balance their portfolios and maintain the current incentive to deliver on system balancing trades, thus leaving Transco with a residual balancing role.

Transco also considers that the removal of Shipper balancing tolerances and replacement with tolerance services purchased via long term auctions, day ahead auctions and Shipper to Shipper trading enables these services to be unbundled from other transportation costs. As a result a market value for these services should be established which may encourage Shippers to improve their balancing performance to avoid the costs associated with purchasing a tolerance service, thus potentially reducing Transco's residual System Balancing role further.

The retention of NDM Forecast Deviation serves to protect Shippers from the inherent risk of demand changes late in the Gas Day and as such Transco supports the retention of this tolerance in its present form.

Basing the quantity of tolerance services to be released in both the long term and day ahead auctions on the demand forecast available at the time of the auction, and matching this with the current tolerance levels applicable to that demand level and likely End User Category mix, allows for the quantity made available to closely match that available within the current regime.

During Workgroup discussions a number of Shippers put forward the view that the quantity of tolerances available should be reduced below that currently available. To facilitate this view Transco considers that, once the tolerance service levels have been established, these should be multiplied by a correction factor. This factor may initially be set at one although a lower factor could be considered to maintain or enhance liquidity in the OCM. In future this correction factor could be lowered to reduce the tolerances made available in the long term and or day ahead auctions. Transco recognises that this should be discussed at the Workgroup meeting on 26th January to determine final parameters for the service. These parameters will be included in the Draft Modification Report.

Discussions within the Workgroup briefly centred on the option of Transco providing a cleared trading market in balancing tolerances. The Workgroup dismissed this option in favour of Transco facilitating a simple registration service. Transco supports this approach as it considers that the provision of a cleared market is not within its remit as a Public Gas Transporter and to provide such a service could prove to be a barrier to the entry of third party suppliers of such cleared trading services.

## **2. Extent to which the Workgroup recommendations would better facilitate the relevant objectives:**

The changes to the tolerance regime and the provision of tolerance auctions and trade registration will better facilitate the following relevant objectives:

- Condition 7 a) - *“the efficient and economic operation by the licensee of its pipe-line system”* and
- Condition 7 c) *“the securing of effective competition between relevant Shippers and between relevant suppliers”*.

The key features of the proposals which will help further these relevant objectives are as follows:

- i. removal of existing tolerances and the introduction of the revised tolerance regime enables unbundling of this service and promotes price discovery of Shipper imbalance tolerances,
- ii. provides an additional risk management capability for Shippers,
- iii. introduces a tolerance trading registration service to facilitate Shipper to Shipper trading of the services, potentially reducing portfolio balancing costs,
- iv. retains existing Shipper balancing incentives.

## **6. The implications for Transco of implementing the recommendations, including:**

### **6.1. implications for the operation of the System:**

The removal of bundled Shipper balancing tolerances and replacement, via an auction process, of approximately the same level of tolerances is not considered to have impact on the operation of the System. However, should the quantities of tolerance released differ significantly from those currently provided this may have an effect on the quantity and size of



Transco System Balancing actions within the OCM. Should the quantity released be significantly higher than the quantity currently available this may lead to lower prices in the auctions, followed by increases in the use of such tolerances, resulting in higher levels of Shipper imbalance quantities and an increased role for Transco as residual System balancer. The opposite effect could transpire if the level of tolerances available were to be reduced.

6.2. **development, capital cost and operating cost implications:**

Transco will incur IT development costs associated with the provision of the tolerance service auctions and tolerance trading facilities.

There will also be on-going costs for administration and future development of the systems developed for these recommendations. Pipeline System operating costs are not expected to be significantly affected by the proposed changes. However, should the quantity of tolerance released increase significantly above current levels it could be expected that Shippers will look to utilise this additional level of tolerance availability and as a result increase the level and frequency of System Balancing actions, thereby potentially increasing System Balancing costs.

Further IT system and operating costs will be incurred to capture data, monitor timing of various activities, calculate tolerance overrun charges, and track Shipper tolerance levels.

6.3. **extent to which it is appropriate for Transco to recover the costs, and proposal for the most appropriate way for Transco to recover the costs:**

Transco does not intend to seek to recover any additional costs resulting from the provision of these services in the present price control period.

6.4. **analysis of the consequences (if any) this proposal would have on price regulation:**

The recommended changes are not anticipated to have immediate price regulation consequences. Retention of the auction and over run charges will contribute to Transco's formula revenue and as such may require adjustments to be made at the next pricing review.

6.5. **The consequence of implementing the recommendations on the level of contractual risk to Transco under the Network Code.**

The proposed changes are not thought to affect the level of contractual risk to Transco under the Network Code.

6.6. **The development implications and other implications for computer systems of Transco and related computer systems of Users:**

The current Shipper balancing tolerances will be removed and replaced by tolerance service auctions to which Shippers will need access. Once allocated via the auction processes

Shippers may also wish to trade tolerance services and, as such, will need to be able to register these trades with Transco. In turn the auction allocations and subsequent trades will need to be reflected in a Shipper's cashout exposure.

The new auction processes and trade registration system will be required to interface with existing systems. As such computer systems both within Transco and Shipper organisations will need to be adapted / upgraded to introduce these Proposals. Transco has investigated the effect of these changes to Transco systems and in summary has identified the following system changes:

- b. Establishment of Long Term and Daily auction mechanisms.
- c. Automation of tolerance trade registration on receipt of trade details from Shippers.
- d. Changes to Capacity Invoice.
- e. Systematisation of Shipper net tolerance position and consequent Shipper imbalance net of tolerance holding.
- f. Removal of monthly cap and collar on existing Transco Energy Balancing Incentives.
- g. Removal of current Shipper balancing tolerances.
- h. Invoice production changes requiring new invoices and new charge types.

The computer systems of Shippers may need to be adapted to assess their tolerance requirements prior to auction bidding or tolerance trading. Shippers may also need to include a means of calculating and checking charges and credits invoiced by Transco as part of the new energy balancing invoicing items.

Detail of structural invoice changes are included in the Business Rules in appendix 1 to this report.

#### 6.1. **The implications of implementing the recommendations for Users:**

Shippers will be able to purchase from Transco, and trade with each other, balancing tolerances thereby providing a further tool to manage the risks associated with cashout imbalance exposure. As such the services proposed would provide Shippers with an alternative to OCM or OTC gas commodity trading.

This should ultimately benefit all Shippers as those that are able to achieve consistently better balancing will be able to avoid the costs associated with the purchase of the new balancing tolerance services, whereas, Shippers that are unable to achieve tight balancing of their portfolio will be able to secure an increased amount of balancing tolerance thereby protecting them from the risk associated with SMP exposure.

#### 6.2. **The implications of implementing the Modification Proposal for Terminal Operators, Consumers, Connected System Operators, Storage Operators, suppliers, producers and, any Non-Network Code Party:**

Producers and Terminal Operators may see an increased number of nominations / renominations as a result of within day tolerance trades.

Storage Operators and Connected System Operators will need to purchase and or trade tolerance services in line with other Users.

If efficiency benefits are achieved then these may be passed through to consumers.

**6.3. Consequences on the legislative and regulatory obligations and contractual relationships of Transco and each User and Non-Network Code Party of implementing the Modification Proposal:**

These proposals are not thought to have consequences on the legislative and regulatory obligations and contractual relationships of Transco and each User and Non-Network Code Party.

**6.4. Analysis of any advantages or disadvantages of implementation of the Modification Proposal:**

Advantages

- i. Assists Shippers in managing their exposure to cashout risks.
- ii. Unbundles the provision of balancing tolerances to allow the value of the service to be discovered.
- iii. Improves cost targeting of the provision and use of tolerance services.
- iv. Incentivises Shippers to balance their own daily inputs and outputs potentially reducing Transco's role as residual System balancer.

Disadvantages

- i. May lead to behavioural changes in Shippers which could be of detriment to the regime as Shippers that purchase tolerance may be expected to utilise such tolerances to a greater extent than they presently use their current tolerance allowance.
- ii. Shippers presently do not pay separately for their balancing tolerance. Under these proposals Shippers will be required to purchase these tolerances. The cost of securing these services is dependent on auction and trading prices and as such Shippers are exposed to market fluctuations.
- iii. Cost and complexity of the proposed changes may outweigh the anticipated benefits.

**6.11. Summary of the Representations (to the extent that the import of those representations are not reflected elsewhere in this Report):**

Written representations have been received from British Gas Trading Limited (BGT) and Quantum Gas Management plc (Quantum).

**6.11.1. Tolerance service specification.**

BGT *“considers that Transco should release a single tolerance rather than separate over*

*and under delivery tolerances.”*

Transco response:

The provision of both under and over delivery tolerances unbundles the service further than the release of a single tolerances service and also allows Shippers a wider trading opportunity. The split also enable a close comparison to commodity trading and System Balancing actions where trading of each type of tolerance directly affects the party’s cashout exposure to either SMP buy or SMP sell. In future, should an appropriate within day market develop, Transco can foresee the possibility of utilising these tolerance services as an alternative to OCM balancing actions thereby removing the commodity element from System Balancing actions and potentially reducing the magnitude of System Balancing costs.

#### 6.11.2. Removal of existing Shippers balancing tolerances.

Quantum *“does not support a further reduction of tolerances”*.

Transco response:

In its October 1999 NGTA conclusions document Ofgem states that it *“expects to see the complete removal of shipper balancing tolerances on 1st April 2000.”* As such the Workgroup debated this issue briefly and agreed to remove existing tolerances and replace them with an auctioned service. If implemented Shippers would have the opportunity to purchase the tolerance quantity they require subject only to the aggregate availability of tolerance and the price they are prepared to pay.

#### 6.1. The extent to which the implementation is required to enable Transco to facilitate compliance with safety or other legislation:

Transco is unaware of any such requirement.

#### 6.2. The extent to which the implementation is required having regard to any proposed change in the methodology established under Standard Condition 3(5) of the statement; furnished by Transco under Standard Condition 3(1) of the Licence:

Transco is unaware of any such requirement.

#### 6.3. Programme of works required as a consequence of implementing the Modification Proposal:

- a. Finalise design requirements based on agreed Business Rules,
- b. evaluate systems changes within Transco and Shippers systems,
- c. design and build systems,
- d. test revised systems internally with Transco and Shippers,
- e. test linkages between systems,
- f. implement training programmes within Transco and Shippers,
- g. amend systems to reflect observations during training and testing,
- h. retest systems,

- i. implement changes.

6.1. **Proposed implementation timetable (inc. timetable for any necessary information systems changes):**

Start building systems December 1999.

Systems tests complete by March 2000.

Implementation and revised systems testing complete by mid March 2000.

6.2. **Recommendation concerning the implementation of the Modification Proposal:**

Transco recommends that these proposals are circulated as a Draft Modification Report for consultation.

6.3. **Text :**

To be provided subsequently.