Draft Modification Report
Change to System Cash Out Prices
Modification Reference Number 0433

Version 2.0

1. The Modification Proposal

This proposal is to introduce a guaranteed minimum differential into the mechanism applied for the determination of system cash-out prices. The introduction of a minimum differential would enhance the incentive for shippers to achieve an energy balance and thus improve the balance of the System. In addition an enhanced incentive may encourage greater trading of gas between shippers and thus benefit liquidity in traded markets.

Proposed changes to the mechanism for determination of prices to be used for energy balancing cash-out:

The SMPbuy price for a gas day will be set as the greater of; the SAP plus 0.0287p/kWh (0.84p/th) or the price in pence/kWh of the highest priced Transco market action (excluding those actions specifically exempt).

The SMPsell price for a gas day will be set as the lower of; the SAP minus 0.0.324p/kWh (0.95p/th) or the price in pence/kWh of the lowest priced Transco market action (excluding those actions specifically exempt).

It is recognised that there is an interaction between this Modification Proposal and Modification Proposal 0414 "Energy Balancing Incentive Re-design". The current performance measure for Transco's energy incentive is based upon SMP-SAP differentials. If the cash-out price definition process is amended then Transco believes that it is also appropriate to amend the Network Code in respect of the prices used to determine the Transco incentive to ensure that the intended incentive effect continues. This proposal would ensure that the incentive remains based on the difference between the SAP and the prices set as a result of Transco market actions.

2. Transco's Opinion

The Network Code energy balancing regime was designed to provide commercial incentives for shippers to balance inputs and offtakes on the Transco system by applying system cash-out prices to shipper imbalances measured at the end of each gas day. The prices to be applied to any imbalance volumes were intended to be market reflective and would thus achieve a degree of cost targeting to those shippers out of balance. Imbalances within a tolerance are cashed-out at a System Average Price (SAP), representing a 'neutral' price for 'modest' imbalances. Imbalance volumes falling outside of tolerance are cashed out at the appropriate System Marginal Price (SMP). The use of SMPs should incentivise shippers towards achieving a balance within tolerance. The derivation of these SMPs is dependent on Transco balancing actions and will typically be the highest and lowest prices associated with Transco actions. On days when Transco has taken no balancing actions, or where the highest price of any Transco trade is less than SAP then the SMP_{buy} Price will be set equal to SAP. Similarly, on days where Transco has taken no action or the lowest price for any Transco trade is greater than SAP then the SMP_{sell} price will be set equal to SAP.

There may be circumstances where the SAP is attractive relative to the price at which shippers value gas and shippers thus have a commercial incentive to adopt a particular imbalance position. Unless Transco takes balancing actions that set unattractive SMPs for such shippers there will be no incentive for them to contain imbalances to within tolerances. The current regime does not always facilitate timely discovery of these imbalances and therefore it is not always possible to correct a System imbalance position through the use of market tools. This may lead to significant linepack imbalances at end-of-day.

Transco has expressed concerns that the efficient operation of the System may be adversely affected by the level of gas imbalance that is being experienced, both within day and at the end of day. Such imbalances have caused concerns regarding the efficient operation of the network and may have led to inappropriately targeted costs. The structure of the current cashout regime has remained largely unchanged despite the implementation of NGTA in October 1999. However, the degree of commercial freedom within the energy-balancing regime has changed and it now appears that the current cash-out arrangements may no longer deliver shipper incentives consistent with efficient balancing of the System. If the cash-out incentive regime remains unchanged then Transco may be forced to take a greater number of balancing actions late in the gas day when gas flexibility is more limited and market prices tend to be more extreme. Late and large flow rate changes are problematic and impose additional operational risks on Transco and gas producers/terminal operators. For example, large rate changes may precipitate plant trips that lead to loss of supply.

The issue of system cash-out prices was recently considered under Modification Proposal 0420. The proposal was rejected as it contained a flaw that would cause extreme prices to influence cash-out prices indefinitely. Ofgem believed these flaws would create impacts in the gas market leading to distortions in competition between shippers and suppliers by setting non-market reflective cash-out prices for shippers out of balance. This modification proposal is based on a simple fixed minimum differential. The values proposed have been chosen taking into account the typical size of SAP to SMP price differentials and a methodology described by Ofgem to unbundle Hornsea storage service prices as a proxy for the value of system flexibility. This methodology was described in outline in the workstream report for this proposal.

Transco supports the implementation of enhancements to the cashout mechanism and believes that it would also be appropriate to amend the legal drafting defining the prices used in determination of the Transco energy incentive. Such amendment would ensure that the intention of the incentive is maintained, i.e. to encourage Transco to take balancing actions at prices as close as possible to the market average. Failure to make such a change would unduly bias the incentive.

In the decision letter for Proposal 0420 Ofgem stated that it is convinced that there is a need for reform of the cash-out regime in the short term and that the industry should consider alternative solutions. In view of concerns regarding the operation of the System Transco also seeks to enhance shipper incentives for energy balancing to ensure that the System remains safely and efficiently balanced. Transco believes that this proposal, for a minimum fixed differential between SAP and SMP, provides a simple and pragmatic interim solution until such time as more sophisticated price setting mechanisms are developed.

3. Extent to which the proposed modification would better facilitate the relevant objectives

Transco has argued that a regime with enhanced incentives for shippers to balance would lead to more efficient operation of the System. In addition it could be argued that incentives that encourage increased shipper to shipper trading would promote liquidity in gas markets and facilitate competition between shippers. Greater levels of trading might also lead to more efficient price discovery and potentially lower prices for gas that would benefit gas consumers.

4. The implications for Transco of implementing the Modification Proposal , including

a) implications for the operation of the System:

Transco believes that enhancement to the incentives for shippers to balance would be beneficial for the operation of the System. Transco has expressed concern regarding the apparent change in shipper balancing behaviour and the consequent uncertainty about the requirement for Transco to undertake balancing actions. Any enhancement to the incentives for shippers to achieve a balance would reduce the Transco requirement and thus might provide for more stable and reliable operation of the network.

b) development and capital cost and operating cost implications:

A revision to the mechanism for the calculation of cashout prices would require some changes to Transco systems. In the short term a manual process could be performed to provide cashout prices according to the agreed after the day publication timetable. The availability of information closer to real-time would be dependent on the complexity of the solution chosen. For example, a simple fixed differential about the SAP would be easy to calculate in real time if the derivation of SAP remained unchanged. Capital and operating costs are anticipated to be minimal.

c) 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:

Costs of system development would be met from allowed revenues for such purposes.

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

No such consequences are anticipated

5. The consequence of implementing the Modification Proposal on the level of contractual risk to Transco under the Network Code as modified by the Modification Proposal

The modification proposal is not intended to adversely affect the existing Transco energy the prices considered under the Transco performance measure. If implemented the proposal might lead to Transco taking fewer balancing actions and might therefore influence the outturn of the Transco energy balancing incentive. A reform of the incentive arrangements is being considered separately under modification proposal 0414.

6. The development implications and other implications for computer systems of Transco and related computer systems of Users

A change to the method of calculating System cashout prices might precipitate a need to change functionality within the EnMO system if within-day estimates of SMP prices are still

required. In written response EnMO has indicated that it would be unable to provide online indications of SMPs against the target implementation date of 1 January 2001.

7. The implications of implementing the Modification Proposal for Users

Users would face enhanced incentives in respect of energy balancing as the current regime would be replaced by one where differential prices would always be set for shipper imbalance quantities falling outside the balancing tolerance. It is argued that whilst the existence of differential prices around the SAP may not always deliver incentives for shippers to aim for a neutral balance position, the price differences would provide stronger incentives for shippers to achieve imbalance positions within balancing tolerances. This might be expected to enhance the prospects of within-day trading.

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

No direct implications have been identified in discussions

9. 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

No change to contractual relationships is anticipated.

10. Analysis of any advantages or disadvantages of implementation of the Modification Proposal

Advantages:

- Simple mechanism to set SMP differentials
- Reduction in Transco balancing actions
- Step towards commodity plus flexibility cashout
- Consistent with anticipated longer term solution

Disadvantages:

- Simple fixed differential prices not dynamic

11. Summary of the Representations (to the extent that the import of those representations are not reflected elsewhere in the Modification Report)

Representations are sought

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

Not applicable

13. 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 License

Not applicable

14. Program of works required as a consequence of implementing the Modification Proposal

Changes to AT Link are not required.

15. Proposed implementation timetable (including timetable for any necessary information systems changes)

The proposal requests an implementation date of 1 January.

16. Recommendation concerning the implementation of the Modification Proposal

17. Text

[Draft] proposed legal text

SECTION D OPERATIONAL BALANCING, TRADING ARRANGEMENTS AND ENERGY BALANCING INCENTIVES

Amend paragraph 3.1.1 to read as follows:

"….

(i) System Marginal Incentive Buy Price differs from the System Average Price; and

(ii) System Marginal Incentive Sell Price differs from the System Average Price.".

Amend paragraph 3.1.3 to read as follows:

"(a) ….

((SMIBP – SAP) / SAP) * 100

….

((SAP – SMISP / SAP) * 100

….

SAP is the System Average Price;

SMISP is the System Marginal Incentive Sell Price;

SMIBP is the System Marginal Incentive Buy Price

….".

Add text at paragraph 3.1.5 to read as follows:

(d) ….; New paragraph 3.1.5(d) added by Modification 0373.

(e) for each Day the "**System Marginal Incentive Buy Price**" is the higher of the System Average Price and the price in pence/kWh which is equal to the highest Market Offer Price in relation to a Market Balancing Action taken for that Day; and

(f) for each Day the "**System Marginal Incentive Sell Price**" is the lowest of the System Average Price and the price in pence/kWh which is equal to the lowest Market Offer Price in relation to a Market Balancing Action taken for that Day.".

SECTION F SYSTEM CLEARING, BALANCING CHARGES AND NEUTRALITY

Amend paragraph 1.2.1 to read as follows:

"Subject to paragraphs 1.2.2 and 1.2.5, for each Day:

(i) the "**System Marginal Buy Price**" is the greater of:

(a) the System Average Price plus 0.0287 pence/kWh; and

(b) the price in pence/kWh which is equal to the highest Market Offer Price in relation to a Market Balancing Action taken for that Day;

(ii) the "**System Marginal Sell Price**" is the lesser of:

(a) the System Average Price less 0.0324 pence/kWh; and

(b) the price in pence/kWh which is equal to the lowest Market Offer Price in relation to a Market Balancing Action taken for that Day;

(iii) the "**System Average Price**" for ….".

Signed for and on behalf of Transco.

Signature:

Tim Davis
Manager, Network Code

Date: