

TRANSCO PRICING CONSULTATION PAPER PC61

Monthly System Entry Capacity Floor Prices

Summary

Floor prices for Monthly System Entry Capacity are set in a manner that provides a notional 25% reduction of income when compared to the proportion of projected formula income that Transco would otherwise have aimed to recover from NTS entry capacity charges. In order to achieve that level of discount the floor price calculation must take into account the quantities of entry capacity to be sold at auction.

The present methodology is based upon an assumption that the volume will be equal to average demand, known as seasonal normal demand. Since the introduction of the methodology the monthly quantities have been increased further than average demand levels and it is possible that changes to the quantities could be made in the future.

This proposal will enable the methodology to take into account changing quantities of entry capacity by referencing the floor price calculation to the quantities of Monthly System Entry Capacity that are specified in the Network Code. If further changes to monthly quantities are agreed through the Network Code modification process, then the change will automatically trigger an update in the floor price calculation.

This proposal also removes a reference to calculating floor prices based upon an assumed 50/50 split of NTS entry and exit capacity income.

1. Introduction

This pricing consultation paper presents a revision to the methodology for determining floor prices in auctions of Monthly System Entry Capacity (MSEC). Those auctions were originally held in September 1999 for capacity that was available at the six major entry points, Bacton, Easington, Theddlethorpe, St. Fergus, Teesside and Barrow. In March 2000 a second set of auctions of MSEC were held in which capacity was made available at all entry points to the transportation system. In the period October 1999 to March 2000 the quantity to be auctioned was limited to an assessment of average demand (SND). Following debate amongst the industry, Network Code Modification Proposal 0380 was implemented to increase MSEC quantities to 110% of SND for the period commencing April 2000. The methodology for determination of MSEC Floor prices was set when the quantities to be sold at auction were based on SND. Floor prices are set with regard to a number of key features

1. In a manner best calculated to promote efficiency and avoid undue preference in the supply of transportation services and;
2. Best calculated to promote competition between gas suppliers and between gas shippers.

2. Proposed Methodology

1. Calculation of NTS entry and exit administered charges will continue in accordance with the present methodology.
2. Administered entry charges will be adjusted by a common factor, such that when applied to the full quantities of Monthly System Entry Capacity defined in the Network Code, the total income will be consistent with recovery of 100% of the projected formula income to be recovered on a cost reflective basis from NTS entry charges.
3. Entry points with a Herfindahl-Hirschman index more than 8,000 will continue to be an exception from the uniform scaling requirement. In such instances a unique adjustment factor for each entry point is applied, such that the projected income from sale of monthly quantities at the floor price will be the same as the projected income from administered charges when applied to a constant supply (peak) rate.
4. A uniform 25% discount is then applied to each entry point to arrive at the floor price.

3. Present Methodology

The present methodology differs from the above proposal in two respects. First, an adjustment is made at present to reflect an assumption that entry capacity charges should recover 50% of all capacity charge income. Second, the present methodology is based upon an assumption that the quantities of MSEC will be equivalent to SND.

4. Discussion of the Proposed Methodology

Following completion of the MSEC auctions in March 2000, there has been extensive discussion amongst industry participants about the desirability of the price volatility that may be expected to arise from an auction of a scarce resource. Transco, Ofgem and shippers continue to discuss aspects of the auction parameters that may be

changed in order to increase their efficiency and mitigate against such volatility in the future. Transco is of the opinion that floor prices lend themselves to mitigation of such risks. The lower that floor prices are set, the greater the potential adjustments to other transportation charges that may be required to re-align Transco income with its price control provisions.

The proposal contained in this paper is intended in part to add clarity to the calculation of floor prices by removing the adjustment to an assumed 50/50 recovery of entry and exit capacity. The purpose of this part of the floor price methodology had been a source of some confusion for a number of readers of the methodology. It had been introduced because of concerns that income differences between entry and exit charges might otherwise change from year to year, adding to potential instability in floor price levels, whereas a fixed 50/50 distribution of income between entry and exit may serve to reduce variability. Following the sale of 12 months entry capacity it has become clear that average prices tend to be above floor prices, which implies that the minor adjustment in floor price levels produced by this aspect of the methodology is not material.

The process of determining the quantities of monthly capacity and their allocation to ASEPs is defined within the Network Code. The methodology for determining monthly quantities is based upon an assessment of SND. In September 1999 100% of SND was auctioned for the period October 1999 through to March 2000. In March 2000 the quantities for the period April through to September 2000 were increased to 110% of SND. If the proposed changes to the methodology are not implemented then the minimum potential income from selling all MSEC at the floor price will increase whenever the MSEC quantities are increased through a Network Code change. This could be perceived as moving the balance of risk associated with over and under recovery of formula income in favour of Transco. A further outcome of not changing floor prices to reflect the quantities on offer is an increasing probability of cleared prices converging with the floor prices should the quantities be increased further, since increased supply with unchanged demand would be expected to lead to lower bids. To counter these effects this proposal is intended to provide a methodology that is built with reference to whatever MSEC quantities are identified in the Network Code, and consequently floor prices will automatically be adjusted if MSEC quantities are changed.

Floor prices were set at a level consistent with 75% recovery of projected formula income for the initial MSEC auctions held in September 1999. That level of discount was set to provide a reasonable opportunity for an efficient clearing of the auctions. That is, accepted bids should, on average, be at levels above the floor price. In general the weighted average price of accepted bids has been above the relevant floor price, suggesting that the floor prices in those auctions did not prevent an efficient allocation of capacity. The weighted average prices also provide evidence to suggest that floor prices are sufficiently low not to provide a deterrent to landing gas in the UK.

Table 1.

Comparison of weighted average accepted bid prices and floor prices

Major Entry Points	% above floor price Oct99 to Mar00	% above floor price Apr00 to Sep00
Bacton	50%	1,029%
Barrow	0%	0%
Easington	48%	175%
St Fergus	29%	204%
Teesside	37%	317%
Theddlethorpe	176%	446%

Note, the results for April to September 2000 capacity are reported prior to capacity adjustments introduced by Pricing Consultation Paper PC53.

The present methodology has a provision for entry points with a Herfindahl-Hirschman index of greater than 8,000 to receive a slightly different treatment for the calculation of floor prices. At those entry points an adjustment to the administered charge is made such that projected income derived from a profiled gas demand is the same as income derived from the administered charge applied to peak rate deliverability over a full 12 month period. The resulting adjusted charge is then discounted by 25%. The effect of this provision is to hold floor prices at entry points with limited competition between shippers at a level that does not offer windfall benefits from application of the standard methodology. Since September 1999 this provision has been applied to Barrow and, during that time, all bids for MSEC at that location have been placed at the floor price. That suggests that further reductions to floor prices at that location may provide a windfall benefit to those who require capacity at Barrow, whilst at other locations shippers must compete and consequently bid above floor prices if they wish to obtain capacity. Analysis of the most recent auctions demonstrates that the following locations have a Herfindahl-Hirschman index greater than 8,000: Barrow, Hatfield Moors, Wytch Farm, Glenmavis, Partington, Dynevor Arms, Isle of Grain and Avonmouth.

5. Impact analysis

The proposal set out in this consultation paper would reduce floor prices by around 10% at most locations from the levels that would be applicable if the amended methodology is not implemented. In Table 1, the deviation of weighted average bid prices from floor prices, suggests that floor prices tend to be some distance lower than average prices paid for entry capacity. To that end it can be claimed that floor prices have limited impact upon final prices paid for system entry capacity. It has been the subject of discussion as to how shippers value entry capacity. The rationale for entry capacity auctions was based upon an assumption that shippers would bid according to their private valuation of entry capacity. Whilst that may determine the upper bounds within which shippers are willing to pay, and the recent auctions have demonstrated that the level could be considerably higher than the previous administered charges, individual shippers can be assumed to seek to gain a competitive advantage by paying the lowest possible price for entry capacity. To that end floor prices set the lower

bound above which shippers must bid if they wish to obtain MSEC. Floor prices can therefore in instances of plentiful supply have a material effect upon prices paid for capacity and therefore Transco does not at this stage propose a further reduction in floor prices. The entry capacity auctions held to date suggest that equilibrium of supply and demand for entry capacity has not been reached and average prices will continue to be above the floor prices. Transco would, however, welcome views on how floor prices might be set to further the relevant objectives specified in its PGT Licence:

- Best calculated to promote efficiency and avoid undue preference in the supply of transportation services and;
- Best calculated to promote competition between gas suppliers and between gas shippers.

6. Conclusion

QUESTION FOR CONSULTATION

Transco propose to amend the methodology for calculating Monthly System Entry Capacity floor prices so that the methodology will allow floor prices to be set that reflect a 25% discount from projected formula income after taking into account the quantities of Monthly System Entry Capacity that have been identified for sale in the Network Code. In addition a previous adjustment for an assumed 50/50 recovery of NTS capacity income from entry and exit charges is to be removed.

Transco would welcome respondents views on the appropriateness of implementing the proposal, including the level of discount, in time for the next round of MSEC auctions. Introduction before 1 October would, however, be subject to modification of the Network Code in order to reduce the required notice period.

Views would also be welcome on how floor prices might be set to further the relevant objectives set out in Transco's PGT Licence.