



Shippers, National Grid Transco
and other interested parties

Our Ref: Net/Cod/Mod/671
Direct Dial: 020 7901 7389
Email: steve.smith@ofgem.gov.uk

13 October 2004

Dear Colleague,

Modification Proposal 671 – “Enhancements to winter injection process”

Ofgem¹ has carefully considered the issues raised in the modification report in respect of modification proposal 671, “Enhancements to winter injection process”, and has decided to not to direct a modification to Transco’s network code in respect of modification proposal 671.

In this letter, we explain the background to the modification proposal and give reasons for making our decision.

Background

Section P of Transco’s network code contains the detailed arrangements concerning the procurement and usage of top up. Modification proposal 671 seeks to modify Transco’s network code in three areas: the calculation of the top up market offer price (TMOP); the information that the top up manager is permitted to use in determining the quantity and the timing of any top up nominations; and the timing of the review and adjustment of surplus top up gas.

The calculation of the top up market offer price

Section P5 of Transco’s network code concerns top up market transactions. Under the provisions in this section the top up manager may withdraw gas from storage facilities at which stocks of top up gas are held and make this gas available to the market via a top up offer. The top up offer is made available to the market at a price determined by the lesser of 99.9999 pence/kWh or the top up market offer price formula which includes the cost of storage capacity booked for top up purposes, the cost of top up gas, the storage withdrawal charge and the system entry overrun charge. The top up market offer price formula also includes a multiplier N, which is applied to the storage capacity cost element of the formula. The top up storage capacity cost element of the formula is defined as the total cost to the top up manager at the date of the top up market offer for all storage capacity purchased in respect of the facility in that storage year divided by the total volume of storage space capacity purchased. The system entry overrun charge element of the formula is defined as the unit rate (pence/KWh) of the system

¹ Ofgem is the office of the Gas and Electricity Markets Authority. The terms ‘Ofgem’ and the ‘Authority’ are used interchangeably in this letter.

entry overrun charge in respect of system entry capacity at the storage connection point on the gas flow day.

Winter injection information

Section P3.4 concerns winter injection. Paragraph P3.4.1 sets out that the top up manager shall determine the winter top up injection requirement and the aggregate winter top up injection requirement immediately after the output nomination time in respect of each day in the winter period.

Review and adjustment of surplus top up gas

Section P2.8 of Transco's network code concerns revised supply and demand estimates. Paragraph P2.8.5 sets out that the top up manager shall determine the difference between the aggregate stored gas and the remaining stored gas requirement for the storage year at the end of any month from November to April in that storage year.

The modification proposal

Transco submitted modification proposal 671 on 19 December 2003. As set out earlier in this letter, modification proposal 671 seeks to modify Transco's network code in three areas.

The calculation of the top up market offer price

The proposer was of the view that, in the event of a winter injection, the top up manager might be able to utilise interruptible storage capacity. However, since the cost of interruptible storage capacity is considerably less than firm storage capacity, the proposer considered that this would lead to a much reduced balancing incentive than was intended by the design of the top up market offer price calculation.

In addition, the proposer was of the view that the calculation of top up market offer price is dependent upon the value of system overrun charge but this is only known after the day. The consequence of this is that the original top up market offer price, entered on the OCM, could be based only on an estimate of this charge, but as the day progressed this estimated price would potentially require review and adjustment. The proposer considered that, as this particular item might be expected to be one of the smaller elements within the price calculation, the value derived prior to the gas day should be adopted and that would then be fixed for that gas day.

The modification proposal seeks to amend section P5.3 (which deals with the top up market offer price) such that the top up storage cost element of the top up market offer price formula is calculated as follows:

- ◆ If the top up manager has made one or more firm storage capacity bookings prior to the winter period at a storage facility, the top up storage cost element should be based on the greater of:
 - The average cost of these bookings multiplied by the total quantity of storage space held by the top up manager at the date of the top up market offer for that storage year at that facility; or
 - The total cost to the top up manager at the date of the top up market offer for all storage capacity purchased by it for that storage year at that facility
- ◆ Or, if the top up manager has not made a booking prior to the winter period at that storage facility, the storage capacity unit rate element would be set to the weighted average price of

firm storage capacity sold by Transco LNG Storage to users prior to the winter period in respect of that storage year.

Reflecting this intended change to the top up storage cost element of the formula, the modification proposal also seeks to amend section P6.4 (which deals with top up recovery) such that the total cost to the top up manager at the date of the top up market offer for all storage capacity purchased in respect of the facility in that storage year is used in the calculation for the top up market offer excess.

In addition the modification proposal also seeks to amend the definition of the system entry overrun charge element of the formula such that it is calculated based on the average of the unit rate of the system entry overrun charge in respect of system entry capacity for each day in the period from 1 November to 30 April in the previous storage year.

The proposer was of the view that improving the consistency of calculation of the top up market offer price in cases where the top up manager has or has not bought storage capacity ahead of the winter would be consistent with the provision of economic incentives for relevant suppliers to meet the gas security standards.

Winter injection information

It was the view of the proposer that, due to the timing constraints associated with the top up manager's determination of the winter top up injection requirement, the top up manager is required to calculate its winter injection nominations based on users' input nominations even where Transco may be in possession of relevant and reliable operating information, which would indicate a different winter injection nomination.

The modification proposal seeks to amend paragraph P3.4 so that the top up manager shall, as soon as possible after 18.00 hours on the preceding day, determine the winter top up injection requirement and the aggregate winter top up injection requirement in respect of each day in the winter period.

It was the view of the proposer that the additional flexibility in making decisions on winter injection would be consistent with the economic and efficient operation by the licensee of its pipe-line system.

Review and adjustment of surplus top up gas

It was the view of the proposer that the present restrictions, which only allow the top up manager to reassess the potential for disposal at the end of each month, do not serve any useful purpose. The proposer considered that the requirement for the top up manager to wait until the end of the month prevents the top up manager from making efficient decisions.

The modification proposal seeks to amend paragraph P2.8.5 such that the top up manager shall determine the difference between the aggregate stored gas and the remaining stored gas requirement for the storage year on each day from November to April in that storage year.

It was the view of the proposer that the additional flexibility in making decisions on disposal of top up gas is consistent with economic and efficient operation by the licensee of its pipe-line system.

Respondents' views

There were seven responses to the consultation in respect of modification proposal 671. One of the respondents supported the proposal and three gave qualified support. Three respondents did not support the proposal.

Ofgem's review of top up

The three respondents who were not in support of the modification proposal were of the opinion that the modification should be considered against the fundamental review of top up then being carried out by Ofgem (this review concluded in August this year²). One respondent stated that the removal of the top up obligation from Transco would allow market forces to apply in this area and would thereby sharpen market participants' risk profiles and deliver more appropriate levels of supply security commensurate with the best available market information.

The calculation of the top up market offer price

The respondent that expressed support for the modification proposal considered that the principles behind the establishment of top up should be consistently applied and the current top up market offer price formula failed to meet these principles. One respondent that expressed qualified support for the modification proposal was of the view that the approximation of firm capacity costs would be an improvement on the current methodology and would prevent under-priced top up gas market offers occurring and therefore top up gas being sold into the market before it is needed.

One respondent that supported the changes to the cost of top up storage and the system entry overrun charge elements of the formula considered that the current unavailability of certain elements used in the formula, a situation which has arisen due to more recent changes to the network code, could lead to unrealistically low top up market offer prices being calculated, which in turn may not create the necessary incentives to encourage shippers to balance their portfolio's. This respondent was also of the view that Transco should immediately release the values of these formula elements to shippers.

One respondent that expressed qualified support was of the view that it was essential to be able to calculate the top up market offer price for all gas days during the winter period.

One respondent that supported the modification proposal considered that the change to the timing of the system entry overrun charge element would simplify the calculation of the top up market offer price.

One respondent that did not support the modification proposal was of the view that the proposed changes to the cost of top up storage element of the top up market offer price formula would not be cost reflective and would not be any more efficient. In particular, this respondent was of the view that it was unclear why costs should be based only on Transco LNG storage.

With regard to the proposed changes to the system entry overrun charge, one respondent that did not support the modification proposal was of the view that circumstances in the previous year could be very different to those in the year in question. This respondent expressed concern that the use of prices from a period so far out could distort prices and participants' activities and would be much less likely to be cost reflective.

² "The review of top up arrangements in gas – conclusions document", Ofgem, August 2004.

Winter injection information

One respondent that expressed qualified support for the modification proposal considered that, whilst it would be beneficial to allow the top up manager to take account of all relevant information, the information that the top up manager receives to make its top up decisions should be made available to the market as soon as possible.

One respondent that expressed qualified support for the modification proposal was of the view that the top up manager's decision making process should be as transparent as possible and that it should be clearly understood what information Transco can use in determining its winter injection requirements. This respondent also considered that it was important that the information that the top up manager uses for security of supply purposes should not be disseminated as it could give unfair commercial advantage to Transco's wider operations.

One respondent that did not support the modification proposal was of the view that Transco should have the most up to date information available and that it is essential that this information is credible and reasonably accurate. This respondent also considered that any information used should be transparent and that Transco should be accountable for all its actions.

One respondent that expressed qualified support for the modification proposals commented that, as winter injection nominations had not been experienced to date, it was difficult to tell with any certainty that these elements of the proposal would achieve their intended outcome. This respondent also considered that allowing Transco the discretion to determine winter injection requirements as soon as possible after 18:00 hours on the proceeding day may lessen the need for counter nominations. However, this respondent also commented that shippers may well re-nominate on the strength of Transco's counter nomination requirements, basing this decision on information provided earlier in the proceeding day, giving shippers more certainty and time to adjust their input nominations to respond to the signals that such actions will send to the market.

Review and adjustment of surplus top up gas

One respondent that expressed qualified support for the modification proposal considered that removing the restriction on Transco regarding the disposal of surplus top up gas would allow Transco to provide surplus gas when it was of more value to the market and would minimise net costs.

One respondent that expressed qualified support for the modification proposal considered that the current arrangements could mean that Transco could lose the opportunity of disposing of the gas at prices close to the price paid to purchase it. However, this respondent was also of the view that the current arrangements might also lead to some winter injection nominations which might otherwise have been made, not being needed.

One respondent that did not support the modification proposal was of the view that it was appropriate for Transco to review monitor levels on a daily basis but that it is unclear how Transco would act on this information. This respondent considered that decisions on the disposal of surplus top up gas should be taken over the entire winter period. This respondent expressed concern that the top up arrangements were not transparent or efficient and that Transco was not being appropriately incentivised.

One respondent that expressed qualified support for the modification proposal considered that allowing the top up manager to dispose efficiently of the gas in storage that exceeds the monitor

level on a daily basis would enable the top up manager to gain revenue, as opposed to only being allowed to review the situation once a month.

Transco's Response

Transco was of the view that the modification proposal should be approved and implemented.

Ofgem's review of top up

Transco supported the suggestion of a top up review but considered that a more fundamental review of the role of top up could not be completed before the end of the present winter period and therefore any changes arising from such review may not be able to be implemented for next winter. Transco considered that, in the interim, attention should be given to the present anomalies within the top up arrangements, particularly in respect of winter injections. Transco considered that it was important to ensure that the principles behind the establishment of top up are consistently applied for the current top up mechanism. Transco was also of the view that, where sensible enhancements to the present regime are identified for which implementation would be consistent with furtherance of the relevant objectives, these enhancements should be raised as network code modification proposals.

The calculation of the top up market offer price

Transco was of the view that the modification proposal would address the consistency issue in respect of the top up market offer price by advocating more stability in the term designed to reflect firm storage capacity unit prices. Transco considered that basing this parameter on LNG auction outcomes in cases where the top up manager has not procured storage capacity ahead of the winter would achieve the principle objective of producing a top up market offer price set at an appropriate incentive level. Whilst other more sophisticated formulations equivalent to storage capacity unit rates might be derived, Transco considered that implementation of this proposal in its present form would yield a straightforward and transparent method for calculating top up market offer price.

With regard to the transparency of the information that would be used in the top up market offer price formula, Transco considered that most of the price elements would be within the public domain, including the average firm LNG capacity rate, which, after applying the multiplier, Transco considered would be the dominant element within the top up market offer price calculation. Transco also stated that, if the demand forecast indicated more than 85% of peak day demand, the relevant prices would be entered on the OCM.

With regard to the system entry overrun charge element of the formula, Transco was of the view that this would be a very small cost component of the top up market offer price and would not be expected to move materially year on year. Transco considered that basing this element on the previous winter would distort neither the top up market offer price nor participant activities, but rather represented an expedient solution.

In response to the cost reflectivity concern raised, Transco was of the view that while the top up market offer price should be as cost reflective as possible, the primary requirement should simply be to generate a very high price. Transco considered that the multiplier applied to the average LNG auction price would achieve this.

Winter injection information

Transco was of the view that the top up manager should have the flexibility to take into account the best information available and to take action on that basis. Transco considered that the additional information used by Transco would be the storage facility nominations and the demand forecast. Transco stated that the commercially confidential nature of such information would prevent Transco from making it available to the market. Transco also considered that it was important to appreciate that Transco would not be in receipt of additional information compared to what it received at present, simply that it would be able to take more information into account in determining the winter top up injection requirement than it is presently able to.

Review and adjustment of surplus top up gas

In respect of disposal of top up gas, Transco was of the view that the current restrictions, which only allow disposal of surplus top up gas at the end of the month, do not serve any useful purpose and stop the top up manager making efficient decisions. Transco was of the view that the top up manager should be able to arrange disposal at whatever date top up stocks exceed the level required to maintain security of supply. In determining whether to take a disposal action, Transco stated that it would consider the magnitude of its top up surplus, the likelihood of further monitor breaches and prompt and forward gas prices. Transco considered that this would both promote efficient operation and allow for a longer term view over the winter.

Ofgem's view

Having carefully considered the modification report, the respondents' views and Transco's view, Ofgem, having regard to the code relevant objectives as set out under amended standard condition 9 of Transco's GT licence, considers that modification proposal 671 would not better facilitate achievement of the code relevant objectives.

The calculation of the top up market offer price

Transco, the proposer of modification proposal 671, was of the view that "while the top up market offer price should be as cost reflective as possible, the primary requirement should simply be to generate a very high price". It is Ofgem's view that the proposed changes to the calculation of the top up market offer price put forward in modification proposal 671 would be likely to increase the top up market offer price over that which would be calculated under the current arrangements. However, Ofgem does not consider that simply setting the formula for the calculation of the TMOP such that it generates a very high price can be expected to result in the TMOP being set at an efficient level, and we do not consider that the proposer has adequately demonstrated that the higher level of top up market offer price that would be likely to result from this proposal would be more efficient.

A notable factor here is that whilst it is likely to be the case that a higher TMOP would make it less likely that a top up market offer would be accepted, it is not clear that the higher price will be more efficient, as it may result in gas being inefficiently withheld from the market for longer than would otherwise be the case. In order for the top up market offer to be priced such that it will provide market participants with the appropriate incentives to make adequate gas supply provision at a reasonable cost to customers, the price should reflect the value of gas to the market at the time that the top up market offer is made. The fact that the TMOP is an administered price makes it unlikely that it will accurately reflect the value of top up gas at the time that the top up market offer is made. This proposal retains the basic formula for setting the TMOP but changes one component. Ofgem not consider that it has been adequately

demonstrated that the proposed change in the TMOP formula would be likely to generate more efficient outcomes than the current arrangements.

With respect to the proposed change to the method by which the system entry overrun charge component of the formula is calculated, we note Transco's view that this component would be likely to be a very small part of the TMOP and would be likely to change very little year on year. Given this, Ofgem does not consider that this change could be expected to have any material impact in terms of better facilitating achievement of the code relevant objectives.

Ofgem therefore does not consider that this element of modification proposal 671 would better facilitate achievement of the code relevant objectives as set out under amended standard condition 9 of Transco's GT licence.

Winter injection information

We note Transco's view that the current arrangements include timing constraints with respect to the determination of winter top up injection requirements that could potentially result in the top up manager determining a specific requirement on the basis of users' input nominations even when it may be in possession of relevant and reliable operating information which would indicate a different view. We also note Transco's view that the proposal would not result in it being in receipt of additional information compared with what it receives at present, and that this proposal would simply allow it to take more information into account in determining the winter top up injection requirement than it is presently able to do.

Ofgem considers that it would be desirable for the top up manager to have the flexibility to take account of available relevant and reliable operating information and to take action on that basis. In particular, to the extent that this change allowed for otherwise unnecessary counter-nomination actions to be avoided, this could be expected to better facilitate the economic and efficient operation by the licensee of its pipe-line system. However, we would note the likely benefits associated with such a change are difficult to evaluate, and Ofgem is not satisfied that these benefits are sufficient to outweigh the concerns we have expressed with respect to other aspects of the modification.

Review and adjustment of surplus top up gas

We note that Transco considers that the present requirement for the top up manager to wait until the end of the month before reassessing the potential for disposal of top up gas prevents the top up manager from making efficient decisions. However, we are not satisfied that the additional flexibility that has been proposed could be expected to better facilitate the economic and efficient operation by the licensee of its pipe-line system. Under the current top up arrangements, Transco would be likely to undertake significant counter-nomination actions even under relatively mild conditions, and these actions would result in Transco incurring significant costs associated with the purchase of gas. Since Transco is currently fully exposed to the net costs of its top up actions, this situation could be expected to give rise to Transco facing significant incentives to seek to recoup these costs through the disposal of top up gas.

This modification proposal would significantly increase Transco's flexibility with respect to the disposal of top up gas. However, the prospect of such an increase in flexibility gives rise to concerns with respect to the broader framework of constraints and incentives that Transco faces with respect to its top up actions, including with respect to the revision and reallocation of top up monitor levels. Given these concerns, Ofgem is not satisfied that this aspect of the proposal can be expected to better facilitate the economic and efficient operation by the licensee of its pipe-line system.

Modification proposal 710

Ofgem would like to note that its decision in respect of modification proposal 710 "Removal of Top-up arrangements" will be published shortly.

Ofgem's decision

For the reasons outlined above, Ofgem has decided not to direct Transco to implement this modification, as set out in the modification report.

If you have any further queries in relation to the issues raised in this letter, please feel free to contact me on the above number or Matt Buffey on 020 7901 7088.

Yours sincerely

A handwritten signature in black ink, appearing to be 'S. Smith', written in a cursive style.

Steve Smith
Managing Director, Markets

Modification Decision Sign-Off Form

Restricted

Network 671 Enhancements to Winter Injection Process.

Raised by:- Transco
Ofgem Expert:- Matthew Buffey

FMR Date 14-Jan-04
Weeks with Ofgem 38

Has a GB Consultation been carried out?



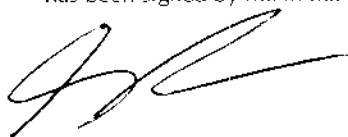
I confirm that the following internal directorates, Executive and Authority have been informed of the intended decision and have been provided with an opportunity to comment.

- | | | | |
|---|--|---|----------------------------|
| <input checked="" type="checkbox"/> Wholesale markets | <input type="checkbox"/> Financial Advisor | <input type="checkbox"/> Environment | <input type="checkbox"/> - |
| <input type="checkbox"/> Consumer markets | <input type="checkbox"/> Distribution | <input checked="" type="checkbox"/> Executive | <input type="checkbox"/> - |
| <input type="checkbox"/> Transmission | <input type="checkbox"/> DN Sales | <input type="checkbox"/> Authority | |

I confirm that I have seen and considered the Final Mod Report and associated documentation and that the Decision Letter:-

- ☒ has been informed where appropriate by legal advice and have noted and accepted any risks highlighted
- ☒ has been proof read and checked for consistency with other decisions on codes and charging and Ofgem policy
- ☒ Contains no confidential material
- ☒ has been signed by me in ink and is ready for publication

Signed

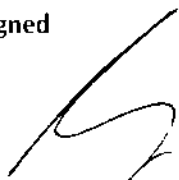


~~Kyran Hanks~~ Steve Smith
Nominal Signatory

I am satisfied that the Decision Letter:-

- ☒ has been subject to the Ofgem procedures including any necessary legal advice, and have noted and accept any process and inconsistency risks that have been identified, legally advised upon where appropriate and mitigated against
- ☒ is not obviously inconsistent with Ofgem Policy
- ☒ is suitable for publication, having been proof read and checked for confidentiality

Signed



Director, Modifications (or MD, CA or Dir,ECFPP or CE)