

## **TRANSCO WORKSTREAM REPORT**

"Title to Gas in LNG facilities"

Version 2.0

**Meetings of the NT&T Sub-Group held on 27 July and 5 August 2002 at 23 Buckingham Gate, London specifically to discuss Modification Proposal 0571.**

### **Present on 27 July:**

John Bradley (Chair)	Transco	Tom Welch	BGT
Nigel Sisman	Transco	Jane Butterfield	Powergen
Diane Ritchie	Transco	Rekha Patel	Dynegy
Chris Bradley	Transco LNG	Stuart Wing	Shell Gas Direct
Kerri Flitcroft	Transco LNG	Steve Ladle	TFE
		John Smith	London Electricity BP
		Sarah Loynton	

Ofgem Representative: Amrik Bal

### **Present on 5 August:**

John Bradley (Chair)	Transco	Tom Welch	BGT
Diane Ritchie	Transco	John Smith	London Electricity
Chris Bradley	Transco LNG	John Costa	London Electricity
Kerri Flitcroft	Transco LNG	Rekha Patel	Dynegy
		Lisa Waters	Dynegy

Ofgem Representative: None

## **1 Background to the Modification Proposal**

British Gas Trading (BGT) raised Modification Proposal 0571 to reflect the concerns held by itself and other LNG Storage Users that title to gas stored in LNG facilities was held by the Storage Operator rather than by the users themselves. The principal driver is its concern over the limits to the claim that users might have on the gas that had been injected into the facility on their behalf in the event that the storage operator entered receivership or liquidation. BGT had no concerns at present where the facilities were owned by Transco but felt the possibility must be acknowledged that following the separation of the LNG business from Transco, the parent group might wish to sell the LNG business to another company. If Storage Users had the option of taking title to gas in store then they would have considerably more protection in the event of financial default on the part of any new operator.

Whilst not part of this Modification Proposal, BGT stated that this issue of title was being discussed with another operator of storage facilities in the UK.

The July Modification Panel referred this Proposal to the NT&T Workstream to enable review prior to consultation and in consequence Transco convened a sub-group meeting on 27 July 2002 and an additional meeting on 5 August 2002.

## 2 Description of the Modification Proposal

The Modification Proposal was as follows:

It is considered that this Proposal raises issues in eight key areas.

### 2.1 Definition of Title

In principle, it is proposed that for the purposes of holding title to gas in storage the gas in a storage facility at any time is divided into three components, as follows -

- Storage Users' gas, defined for each User at any time by that User's "gas-in-storage" providing this is not negative;
- a share of the remainder deemed to be gas being held to the storage manager's account; and
- all other gas in store at any time.

Storage Users would then be permitted to hold title to a quantity of gas which equals their gas-in-storage at any time providing this quantity is not negative.

In principle, this could be achieved by fairly simple changes to Code Section Z1.6, as illustrated in the Annex to this Proposal, but the concept of title to a proportion of the gas in a storage facility introduces a number of additional issues, not all requiring Code changes in the case of TLNGS' facilities.

Any subdivision of title to the gas in storage not "owned" by Users would be at the discretion of the storage facility owner(s), but it is strongly recommended that sufficient of this gas should be nominally "held" by the Storage Manager to allow for operating uncertainties. For example, Users' nominations are generally held whole (at present at least) at LNG Facilities, and to allow cost-effective operations TLNGS are only required to accept or provide the requisite amounts of gas at the NBP and to adjust each User's gas-in-storage appropriately.

TLNGS are however entitled, for example, to bundle the various nominations and can determine to manage their operations differently if, in their judgement, this is likely to prove economic. For example, (subject of course to physical limitations) TLNGS would be entitled to choose to inject or withdraw all the gas presented to them on a day into and out of one site instead of into or out of the sites to which the nominations refer. The original Code concept of the Storage Manager was designed to allow a Storage Operator to make use of this flexibility by maintaining a "balancing account" at any storage facility, in three main cases -

- to enable the Operator to add to or reduce their own inventory when they choose to redirect a physical withdrawal or injection to a different site;
- to trade to alter the total gas injected or withdrawn on a Day; and
- to hold Users' nominations whole when the metered flows are different, by "accepting" all net differences.

Hence it is envisaged that the Storage Operator may, to this end, "own" some of the gas in a storage facility at any stage.

It is in the interests of the Users that apart from their own gas in store there is sufficient in store to facilitate normal operations. For the purposes of this Proposal such gas can be regarded as "cushion gas", required to ensure that pressures or physical quantities do not fall below safe operating limits or levels required to enable Users' overall gas-in-storage to be withdrawn at rates (and notice periods) to meet their contractual entitlements.

The Storage Operator would naturally be the logical owner of gas needed to offset boil-off from LNG facilities. His account would reduce as such gas is exported, and he would (as now) buy additional gas occasionally to replace the boil-off so as to ensure LNG Users' gas can be "held whole".

It is not necessarily desirable from the facility owner's viewpoint for all the "cushion" gas to be regarded as accessible for "operating flexibility". For example, some of the "cushion gas" may be recoverable in due course but only after "normal" storage operations cease or are scaled down: such gas is potentially an asset whose value can be realised in the short term by (for example) being used as collateral for loans. It would not be in Storage Users' interests to hinder such funding provided it does not jeopardise "normal" storage operations. Hence, it is proposed that the gas in storage not "belonging" to Users and not needed for short-term flexibility/operations is capable (at the owner's choice) of being separated for title purposes.

This permits "flexibility" in operations as at present, without jeopardising Storage Users' holdings or the owner's interests.

From time to time the quantity of cushion/native gas in a reservoir (or other storage facility) is reviewed. The above "three-part" model admits this. In effect any redetermination alters the quantity of gas in storage "owned" by the facility owner and any investors, and the model proposed reflects this by any adjustments falling to the owners' holding or (if the owner prefers) the Storage Manager's allocation.

## **2.2 Title of Gas at Entry/Exit to/from Transco's System**

The Network Code assumes that title will move between Transco and the Storage Operator at the point of entry and exit. To this end, title to gas being injected into store should pass at System exit to the Storage Operator and then (where injected to increase a Storage User's gas-in-storage) to the Storage User, and title to gas being withdrawn from store should pass from the Storage User to the Storage Operator so that at the point of entry to Transco's System the title moves from the Storage Operator to Transco.

A possible outline is indicated in the Annex to this note in respect of proposed paragraph Z1.6.4.

## **2.3 Transco Emergencies**

Storage Operators can be required to provide gas for the System in the event of an Emergency without needing to advise Users of any allocation between Users of the withdrawal and without needing Users' agreement.

It does not appear that any additional specific Code changes would be needed. Essentially, TLNGS would withdraw gas and provide an allocation as if Users had authorised a withdrawal. As with any withdrawal, title would move first from the Storage User to TLNGS and instantly from TLNGS to Transco.

## **2.4 Negative Gas-in-Store**

Though title should be based on the defined "Gas-in-Storage" quantities, it is possible for these quantities to become negative. One example would be if a User has a series of trades for a day which would leave gas-in-storage positive but one of the "receiving" trades becomes cancelled.

Negative gas-in-storage then triggers over-run payments, and if not corrected can lead to termination.

The relevant rules should be left unaltered, but it is necessary for a Storage User to be entitled to hold title to a quantity defined at any time as their "gas-in-storage" (defined in paragraph Z1.3.1) providing this quantity is positive, or zero, if that quantity is negative.

## 2.5 User Termination

In the event that a Storage User is terminated, the title to any gas-in-storage held by that User should immediately revert to the Storage Operator, ie TLNGS in this case.

This permits the release of the User's capacity and gas-in-storage as happened with Enron's Rough capacity and gas when Enron "failed" in late 2001.

This can be achieved by an extension to paragraph 10.1.2 so that *"Upon a User's ceasing to be a User for the purposes of this Section Z... Transco LNG Storage shall take Title to any gas-in-storage to which the User holds Title under paragraph 1.6"*

## 2.6 Option to Take Title or Not

The Code should allow the Storage User to take Title to Gas but also leave them the option of retaining the existing contractual structure. This is illustrated in the Annex in respect of the draft paragraph Z1.6.3 -

*"The User shall be entitled to have Title to a quantity of Gas contained in a Transco LNG Storage Facility equal at any time to that User's gas-in-storage, provided that gas-in-storage is not negative. .... The User will advise Transco LNG Storage if he wishes to hold Title to his gas-in-storage in this manner. If the User so elects, his election may not be cancelled other than with the approval of Transco LNG Storage. If the User elects not to hold Title in this manner or does not advise Transco LNG Storage of his wishes then Transco LNG Storage shall have Title to and risk in the User's gas-in-storage."*

This element of choice is essential if prompt benefit is to be available to those Users who desire to hold title to "their" gas, without requiring any Users to hold title if they do not so wish. This gives the choice of the proposed changes (or enhancements) or to retain the existing arrangements.

## 2.7 Risk

This Proposal would allow Users to hold title to "their" gas-in-storage but would leave "risk" as at present with TLNGS.

Essentially at present TLNGS "bear the risks", and the value of this is factored into the prices paid for the services. An area of potential significance is third-party risk, including risk to Transco's systems.

An alternative would be to offer title "with risk". This is simply much more complex, as it would involve "partitioning" any risk exposure.

Also, some Storage Users might conclude that the disadvantages of the transfer of risk are sufficiently material that they should not accept "title and risk", and it might be considered discriminatory and hence unacceptable for some Storage Users to have "title but no risk" and others to have "title and risk" without some "financial adjustment".

This may mean that the benefits (to Storage Users and the TLNGS) of allowing Storage Users to take title would be lost.

As transferring risk can be seen as devaluing the contract's value, it can be argued that the value of risk being held by TLNGS is already covered by part of the prices offered at auction and paid for late bookings, and that there is no convincing case for altering the "status quo".

## **2.8 Monitoring Information**

Holding "title" to gas in store may not fully assuage concerns unless this is supported by assurance that sufficient gas actually exists in each store to enable that store to meet the requirements of the collective bookings.

Each customer can check their inventory via CALMS, but to have sufficient security and confidence there needs to be a composite list of total ownership of gas in store subdivided between the users and the Storage Facility Operator. The distribution of ownership of the gas will at any stage be commercially confidential. It would therefore be wholly inappropriate for a full tabulation of such ownership to be published or accessible by all interested parties. Yet each interested party should have means of ensuring their particular interests and rights are not in any way in jeopardy, or the comfort of third-party checks that sufficient gas is accessible for all valid interests to be protected.

It is therefore proposed that CALMS should be adapted to show overall gas-in-store ownership for each LNG Facility subdivided merely between LNG Users (in total) and others holding title to gas (also in total).

The intent is to demonstrate that, in addition to the necessary cushion gas, sufficient gas is in store to enable the users' withdrawal entitlements to be met. This would therefore need to be supported by an indication of the minimum inventory needed in each facility to enable five consecutive days' withdrawal at the Facility's Total Storage Deliverability. It is proposed that this additional information be provided each year in TLNGS' Annual Storage Invitation.

The additional information envisaged in TLNGS' Annual Storage Invitation would require an additional clause in Code paragraph Z3.1.3. The change to CALMS appears not to be a "Code change".

## **3 Sub-Group Discussion - 27 July 2002**

- 3.1 John Bradley (JB) opened the meeting and explained that the aim of the meeting was to identify issues/actions arising from the Proposal and to reach a consensus on a suitable way forward. Tom Welch (TW) was invited to provide background and detail to the Proposal.
- 3.2 TW explained that BGT had raised this Proposal as it believed that following separation of LNG from Transco (target date 1 September 2002), and the resultant removal of Section Z from the Network Code, it could prove more difficult to effect change to service terms. After this date a contract would exist between LNG and its customers, and it may be that assent would be required from all customers, active or not, to any contractual changes. It was BGT's view that

any apparently desirable changes should be effective prior to the date of separation of TLNGS from Transco.

- 3.3 BGT accepted that this Modification Proposal was possibly only one approach to resolving the concerns about credit risk, but to date it had not received any adverse comments, and would welcome tabling of any other solutions. Emphasis was made that the intent of the Proposal, in seeking title to gas, was not to frustrate in any way the economic and efficient operation of the storage facility by the Storage Operator.
- 3.4 TW outlined the issues raised in each of the eight areas. Subsequent discussion was held and the following actions agreed:
  - 3.4.1 As the Proposal may have an effect on LNG costs due to the hampering of operations. **BGT to consider a refinement.**
  - 3.4.2 LNG may have to withdraw capacity from the market to satisfy balancing operations - **BGT/Transco to consider alternatives. One possibility is for title to be valid over multiple facilities.**
  - 3.4.3 Reference in the Proposal to title transfer at storage points may not be correct - **Transco to confirm.** (See update in 4.2 below.)

TW confirmed that it was important that LNG retains title as gas moves in and out of the facility as other parts of the Network Code would be affected.
  - 3.4.4 The transfer of title to LNG in the event of a Users' insolvency may not be straightforward. Transco's initial legal view was that this may not be an effective solution. (See update in 4.2 below.)
  - 3.4.5 Some sub-group members thought an "option" to take title would not be discriminatory provided it was priced correctly and the option was offered to all parties - **Transco to confirm.**

Note - In the event the proposal proceeds to consultation, views from shippers should be sought on this point.
  - 3.4.6 As a result of this Proposal, implications of within-year changes to LNG operations may adversely affect Transco's risk profile. Possibility of deferred implementation date of 1/05/03 identified as a possible solution. - **Transco & BGT to clarify risk aspects.**
  - 3.4.7 Boil-off issue leads to above gas in store situation - possibly one or more customers to "loan" gas - **Transco & BGT.**

It was agreed that the Sub-Group would hold one further meeting which would be held at 10 am on Monday 5 August at 23 Buckingham Gate. Transco pointed out that if any attendees had alternative solutions to make in order to resolve the underlying issues, it would be beneficial in such suggestions were made in writing and circulated to the other attendees beforehand. Transco were happy to facilitate this process and volunteered to circulate any such proposals sent to them.

#### **4 Sub-Group Discussion - 5 August 2002**

- 4.1 JB confirmed that no further alternative solutions had been received.
- 4.2 Actions/Issues brought forward from 29 July:

- 3.4.1 BGT and Transco had met and considered refinements to the Proposal. These are discussed below.
- 3.4.2 BGT and Transco had now considered other options. These are discussed below.
- 3.4.3 Covered under Network Code Refs: I3.6.2; J3.7.3; J3.7.4 and Z1.6.2.
- 3.4.4 JB confirmed that Transco's lawyers were of the initial opinion that insolvency laws may not allow for an automatic transfer of title to TLNGS in the event of a User's insolvency. However, they recommended that the Proposer seek specialist advice. Lisa Waters (LW) also confirmed that transfer of title in the event of insolvency would be a matter for the receiver or liquidator based upon creditor preference.
- 3.4.5 JB confirmed that he had discussed this issue with Transco's lawyers were of the initial opinion that, providing the two services (ie title and non-title) were sold separately, it would not be discriminatory. In addition, Transco does not believe that only offering one or other type of service to customers would be discriminatory. It was expected that a "without-title" service would not have the same value as a "with-title" service and this would be reflected in the prices obtained. TW reaffirmed that the issue of allowing Users a choice to take title or not was an important element of the Proposal and his view was that there was no reason to vary charges.
- 3.4.6 BGT and Transco advised that as result of the proposed refinements the envisaged risk profile had changed and would be discussed later.
- 3.4.7 Discussed below.
- 4.3 CB stated that there were a number of technical and legal issues involved in this Proposal and whilst TLNGS wished to assist and was prepared to participate in the exploration of issues involved, it would be on a "without prejudice" basis. No commitment could be given without having first secured legal opinion. Should the Modification Proposal proceed to implementation, TLNGS would prefer an implementation date to concur with the start of the 2003/04 Storage Year. BGT confirmed that they would not object to a deferred implementation date of this nature. CB further advised that the proposed date for separation of TLNGS from Transco was now 1 October 2002.
- 4.4 The following paper outlining refinements to the Proposal was issued, without prejudice, for discussion:  

"In principle, TLNGS customers will have title to gas in store, defined as their gas-in-storage, except as modified below:

  - 1 TLNGS will have the right to create "title-swaps" of limited quantities of gas, between 1 May and 31 October in any year, primarily for the purpose of aggregating injections to replace boil-off quantities.
  - 2 At the start of each month [day/hour], TLNGS will determine the quantities to be swapped at each site to cover the maximum expected requirements for that month [day/hour]. TLNGS will initiate swaps at each site proportional to each customer's gas-in-storage at the start of the month [day/hour] at that site.
  - 3 The swaps will be "repaid" at the end of each month, or at the time of creating any replacement within-month swaps, as envisaged by Paragraph 4.



- 4 Customers will thus hold title to a quantity of gas, calculated as their gas-in-storage less the boil-off swap quantity. If, as a result of withdrawals and/or trades of gas-in-storage the above quantity could become negative, the prevailing boil-off swaps will be repaid and a new series of boil-off swaps will be created, using similar principles to cover the rest of the month [day/hour].
  - 5 The total aggregated quantity of boil-off swaps at all sites will not exceed [100] GWh at any time.
  - 6 For VAT purposes, gas swaps will all be assumed to be priced at [1.0] p/kWh.
  - 7 For the avoidance of doubt, there will be no boil-off swaps in any period between 1 November and 30 April."
- 4.5 CB explained that some plants had operational limitations which create a problem in respect of boil-off and could cause the plant to go into "gas-in-store" deficit during the summer although injections could be managed to provide a physical match for gas-in-store at the beginning of the winter period. TW queried, from an operational point of view, as to whether 100 GWh was the optimum figure to avoid swaps between sites. TLNGS confirmed that, from initial analysis, this seemed to be adequate as an aggregate quantity.
- 4.6 LW queried as to whether TLNGS, upon separation, proposed to extend the range of available services eg delivery to the NBP. CB confirmed that TLNGS proposed to honour existing NWC obligations for the remainder of the Storage Year 2002/03 and would be looking to provide new services from 1 May 2003.
- 4.7 Actions/issues arising from the meeting:
- 1 It was noted that there was no actual legal precedent with which to test whether a Tenancy in Common solution could practically work in a commingled context.  
**Action:** Whilst recognising the lack of precedent, this should not at this stage inhibit the development of the Proposal.
  - 2 There would be a further issue with the principle of Tenancy in Common when associated with title extended over several facilities.  
**Action:** Identify solutions which avoid the concept title extending over more than one facility.
  - 3 Swaps of up to 100 GWh may be sufficient to overcome summer operational difficulties with respect to boil-off.
  - 4 During winter operations, although in aggregate there will be enough gas-in-storage, flexibility may be needed for TLNGS to store and deliver gas from other facilities where customers do not hold title. (An alternative solution could be to reserve capacity from the market for operational reasons).  
**Action:** TLNGS to quantify.
  - 5 All to consider legal remedial action in the event of TLNGS being unable to keep Users whole in a specific facility.
  - 6 All to consider how title would be affected by "netting-off" ie simultaneous injection and withdrawal resulting in no actual physical flow of gas.



- 7 All to consider the insurance liability for loss and damage- solution must be accepted by all parties within their contracts.
- 8 It was understood that title presently rests with Users of the Interconnector(s), however, it was not clear whether this was for title to capacity or to title to gas.

**Action:** TW to confirm position.

4.8 Possible alternatives to the Proposal were identified as follows:

- 1 Users to take a legal charge over a specific facility.
- 2 Title to be given to gas in the whole system ie NTS, LDZ etc. (It was stated that a change to primary legislation would be required to effect this. Also, Transco's use of Linepack may be affected.)
- 3 Each User to accept a reduced percentage title to reflect the facility's total boil-off requirements. (This parameter would have to be reflected in GWhs.)
- 4 A service to be provided which delivers gas to the NBP. (It was noted that a Shipper's licence would be required, or a contract between TLNGS and a shipper and also that such a change could not be implemented mid-storage year.)

5 **Recommendation**

It was agreed that a further meeting would be required upon completion of the above actions and a recommendation should be made to the Modification Panel meeting on 15 August that the Workstream submit a report to the September Panel meeting.