

**Modification Report**  
**Treatment of Constrained Top-up Costs for 2000 to 2002**  
**Modification Reference Number 0391**  
Version 4.0

This Modification Report is made pursuant to Rule 8.9 of the Modification Rules and follows the format required under Rule 8.9.3.

Transco agreed with Ofgem (and has followed) the following procedures for this Proposal;

Ofgem Decision on Urgency	13 March 2000
Modification Proposal out for representations	13 March 2000
Close out for Representations	27 March 2000
Final Modification Report to Ofgem	31 March 2000
Ofgem Decision	7 April 2000

**1. The Modification Proposal**

**2. Transco's Opinion**

Transco believes that the Licence obligation to meet peak transportation requirements should be funded properly. In the current regime, there is a Network Code obligation on Transco, in its capacity as Top-up Manager, to book and fill Constrained LNG capacity in defined circumstances. Modification Proposal 0297 should not have removed funding of this role which is designed to ensure that peak demands for transportation can be met.

The argument for recovery of Constrained Top-up costs should not be deflected by the debate about National Top-up. The two have very different purposes, but happened to share the same cost recovery processes. Transco still intends to remove National Top-up from the Network Code subject to clearance from the HSE of its recently submitted Safety Case revision.

Investment for the provision of appropriate capacity has already taken place in the form of LNG assets. Along with the Rough and Hornsea storage facilities, these assets were not taken into account when Transco's regulated asset base was considered by the MMC at the time the present transportation price control was set. Transco is of the opinion that investment in additional pipelines and compressors to replace LNG facilities would conflict with Transco's obligation under PGT Licence Standard Condition 7 (1) (a): the efficient and economic operation by the licensee of its pipeline system, and the Gas Act Section 9.

Transco believes that Shippers should bear the cost of Constrained Top-up for the following reasons:

- At the time of the last price control review the Network Code provided for the recovery of Top-up costs reflecting both National and Locational requirements. It was therefore anticipated that Transco would not be responsible for Top-up costs; indeed this was the case until implementation of Modification Proposal 0297.
- Transco pays for this substitute transportation capacity directly to the extent that Shippers do not book in aggregate up to or beyond the constrained requirement, without such costs passing to Shippers. Transco believes that the intention of Modification Proposal 0297 was to challenge the need for National Top-up. Transco believes there was never an intention to remove or reduce Transco's obligation in relation to the provision of capacity to satisfy 1 in 20 peak firm day demand.
- The LNG facilities provide transmission support. Constraining gas in the LNG facilities to provide transportation capacity thereby avoids uneconomic investment in pipeline and transmission assets. Such investment would increase costs, in due course increasing transportation charges to Shippers as these additional assets would need to be remunerated.
- Whilst LNG facilities are utilised to provide transmission support, Transco has invested incrementally in pipeline and other transmission assets to satisfy demand growth on the system. This is demonstrated by the fact that the constrained requirement at constrained facilities has not significantly changed despite firm load growth. This assertion is substantiated when the constrained requirement at the relevant LNG facilities is compared for the storage year 1996/1997 (at the beginning of the formula period) and the constrained requirements for 1999/2000.

<b>Constrained Levels at LNG Sites</b>		
<b>Storage Year</b>	<b>% of Space (Less OM Requirement)</b>	
<b>Avonmouth</b>	<b>Dynevor</b>	<b>Isle of Grain</b>
<b>1999/2000</b>	<b>713</b>	<b>2650</b>
<b>1996/1997</b>	<b>624</b>	<b>5720</b>

- Transco believes constrained facilities allow more flexibility in connecting new loads in areas supported by those facilities because of the length of time it takes to build additional pipeline capacity to support incremental load growth.
- The investment signals to Transco are distorted. Since Modification Proposal 0297 Transco receives no income for providing transmission support through Constrained Top-up.

Some Users have claimed that the redistribution of costs via Top-up Neutrality apportionment methodology appears to be unfocussed. However, Transco has considered a number of alternative methods which ultimately result in a levy on transportation charges for all Users, but to date neither Transco, nor any User, has identified a method of apportionment that better facilitates the relevant objectives.

Transco believes that calls for a methodology to better focus the costs to those benefiting from the service indicates an oversimplification of the benefit that Constrained Top-up confers. The provision of transportation capacity by Constrained Top-up does not just benefit consumers downstream of the constrained facility but, by its use, frees up capacity upstream of the constrained facility therefore conferring a benefit to a wide group of Users. Transco believes it is impractical to identify individual supply points supplied by each User within the zone of influence of the constrained facility, which varies with demand, and then target constrained Top-up costs to those Users.

If, as Transco believes, Constrained Top-up benefits all Users then it is appropriate for all Users to share a proportion of the costs, if any, of Constrained Top-up. Since capacity is provided for firm transportation only, Transco believes it is appropriate for the apportionment of costs to be based on each Users firm UDQOs on each day of the winter period when this service has a direct benefit.

If a requirement exists for the Top-up Manager to purchase gas and storage services to satisfy the residual quantity required to meet the constrained requirement then Transco will have to pay for these services up front, net of any entry capacity rebates. If, as a result of using the gas and storage services purchased, there is revenue into the Top-up account, Transco will calculate the net cost at the end of the Storage Year. It is this net cost that would be used to calculate the daily charge which will be applied across all Users.

No financing costs would be included in the net cost determination, instead these would be borne by Transco directly. Transco believes this would act as an incentive for Transco to minimise the requirement for Constrained LNG and hence any expenditure ultimately passed through to Shippers. Under this Modification Proposal the daily charge would not be calculated until the end of the Storage Year.

Given the constrained requirement for 2000/01 Transco's financing cost exposure, based on the entire constrained requirement being met by Transco at a current borrowing interest rate of 6.875%, would be in the range given in the table below, dependent on the level of entry capacity rebates:-

<b>Financing Cost Exposure</b>	<b>Rebate rate</b>	
	<b>Old (£m)</b>	<b>PC52 Proposed (£m)</b>
<b>Capacity</b>		
LNG (Avon 441, IOG 591 GWh)	12.60	12.60
Rebates	(0.90)	(12.50)
Net capacity cost	11.70	0.10
<b>Gas</b>		
Existing Stock 333 GWh @ 0.7p/kWh	2.30	2.30
Gas Purchase 699GWh @ 0.43 p/kWh	3.00	3.00

Injection cost 699 GWh	1.901.90
Total expenditure	18.907.30
<b>Financing Cost @ 6.875%</b>	<b>1.300.50</b>

Transco believes it has demonstrated, in regular reports to Ofgem, that it has not under invested, nor intends to under invest in the NTS, against the MMC forecasts. Whilst there is some variation between actual and MMC forecast from year to year this is as a result of lower than expected project costs and some project re-phasing. As a result current LRMCs, as calculated for NTS transportation charges, reflect the cost of providing incremental transportation capacity based on the actual system investment to date. Following optimisation and scaling these exit charges provide the price relativities for making available additional capacity between various points on the system.

The LRMC methodology takes into account capacity currently provided by LNG facilities. Transco believes that not using LNG in this way would both inflate and distort price relativities.

However, Transco has not increased dependence on LNG facilities in respect of transmission capacity and therefore cannot be considered to have under invested. Transco therefore believes that the LNG facilities provide an economic and efficient method of providing transportation capacity. To reflect the value Transco places on Users' bookings in constrained facilities Transco is proposing an entry capacity rebate outlined in PC52 which is comparable to exit capacity prices.

Transco believes the arguments Shippers have proposed suggesting that Shippers that have made full provision for their customers' needs, including gas placed in constrained facilities, should not incur a proportion of any Constrained Top-up costs are mixing the issues of a Users obligation to secure gas supplies for national peak day demands and Transco's obligation to provide peak day capacity. Transco, through entry capacity rebates, incentivises Shippers to book services in constrained facilities. The gas they deposit in these facilities allows Shippers to benefit from the rebates and at the same time contribute to the quantity of gas required to satisfy their licence obligation to secure appropriate gas supplies to meet the expected demands of their customers.

If in aggregate Shipper bookings are insufficient to meet the constrained requirement then Transco cannot unduly discriminate between Users when charging for the benefit, applicable to all, for the provision of capacity from those constrained facilities.

Transco believes that should insufficient bookings by Users in aggregate produce a requirement for constrained Top-up, then the costs of this should be borne by the whole community.

Transco also believes that this Modification Proposal should be transitional and apply up to the end of the current price control formula period. It agrees with Ofgem that a fundamental review of the treatment of LNG should be conducted as part of the Periodic Review.

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

The most economic and efficient method of providing capacity to meet 1 in 20 peak day firm demand in certain locations is through the use of CLNG. Currently Transco funds any shortfall which is inconsistent with the treatment of pipeline investment, an alternative source of capacity provision. This implies a perverse incentive on Transco to invest in the more expensive pipe rather than to utilise existing LNG assets. Such investment may conflict with Transco's obligation under PGT Licence Standard Condition 7 (1) (a): the efficient and economic operation by the licensee of its pipeline system.

Implementation of this Modification Proposal would mean that legitimate functions of Transco are adequately financed as identified in Special Condition 9C of Transco's PGT Licence.

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

#### **a) implications for the operation of the System:**

There are no implications for the operation of the System

#### **b) development and capital cost and operating cost implications:**

There are no development or capital cost implications for Transco if this Modification Proposal is implemented.

Implementation of this Modification Proposal would restore financing of a licence obligation originally provided for at the last price control review.

If this Modification Proposal is implemented Transco would be responsible for the financing cost associated with the funds required to purchase gas and storage services in anticipation of possible use. The gas and storage service direct costs would no longer be borne by Transco.

**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:**

If this Modification Proposal is implemented it would reestablish the appropriate recovery of the direct costs incurred by Transco in its role as Top-up Manager but only in respect of Constrained Top-up.

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

Implementation of this Modification Proposal, or otherwise, would have no impact on price regulation.

**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**

Implementing this Modification Proposal would reduce the level of contractual risk faced by Transco under the Network Code for the Storage years 2000 to 2002. The level of risk reduction is directly proportional to the level of bookings by Users in the Constrained LNG sites. If Users do not book any storage service in the constrained facilities then this Modification Proposal would allow the Top-up Manager to reduce his cost exposure

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

There are no development or other implications for computer systems of Transco and related computer systems of Users that have been identified that would result from the implementation of this Modification Proposal.

**7. The implications of implementing the Modification Proposal for Users**

Individual Shippers would be exposed to a proportion of the total constrained Top-up costs. Each shippers' proportion of the costs would be based on their firm UDQO's in accordance with the existing Top-up neutrality apportionment methodology, for each Storage Year up to the end of 2001/2002 Storage Year.

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

There are no implications that Transco is aware of that would result from the implementation of this Modification Proposal.

**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**

This Modification Proposal would reestablish the correct financing obligations associated with Transco's existing licence conditions.

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

Advantages:

This Modification Proposal would:-

- Allow Transco to recover money not provided for under the last price control review but permitted under Special Condition 9C of Transco's PGT Licence.
  - Remove undue contractual risk to Transco.
  - Remove the provision of subsidised transmission capacity paid for by Transco.
  - Remove inappropriate investment signals and discourage potentially uneconomic and inefficient investment in pipelines.
- Decouple the identification and recovery of costs for Constrained Top-up from National Top-up.

Disadvantages:

This Modification Proposal would:-

- Increase Users exposure to smeared costs.

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

Three representations were received, from Scottish Power, British Gas Trading Ltd (BGT) and Scottish and Southern Energy plc. Scottish Power, BGT and Scottish and Southern Energy plc do not support implementation of this Modification Proposal.

Scottish Power has accepted that constrained LNG acts as a substitute for pipeline capacity and as such Transco should be allowed a rate of return on its investment.

Transco is encouraged that Scottish Power has recognised the role that constrained LNG performs and recommended that a rate of return should be allowed on those LNG assets which perform the same function as that of pipeline capacity.

Scottish and Southern Energy plc (SSE) note the interaction this Modification Proposal has with the proposed auctions of LNG services covered by Pricing Consultation PC52 and Modification Proposal 0390, and comments that decisions on these aspects are still outstanding.

Transco recognises the interactions between this and other related Modification Proposals and believes it is important this issue be settled ahead of Modification Proposal 0390 and Pricing Consultation PC52 as it has the potential to affect Users purchasing strategies in any sale or potential auction of services at LNG facilities.

SSE is also uncertain how this proposal fits with the long standing expectation that Top-up would be withdrawn.

Transco still aspires to the removal of Top-up from the Network Code, although this is only in respect of National Top-up. Transco still has a licence obligation in respect of ensuring sufficient capacity is provided to meet the peak day firm demand.

SSE believes this Modification Proposal maintains the ability of Transco to discriminate in favour of its LNG facilities over other embedded storage providers that are excluded from offering a form of competing system support.

In Transco's view, embedded storage providers would have to demonstrate to Transco that they can provide additional capacity that had the appropriate impact on the system at peak demand. This could only be achieved through commercial interruption of firm loads by Users. This Modification Proposal, whether implemented or not, does not preclude any User from demonstrating that they have embedded storage services comparable to those facilities which Transco has designated as a constrained facility. Therefore Transco does not accept that this Modification Proposal is in any way discriminatory over other storage providers.

SSE does not believe the Top-up Manager should be entitled to the entry capacity rebates.

Transco believes it is right and proper to identify the role of the Top-up Manager as being similar to that of any other User. Allowing the Top-up Manager to continue to receive the entry capacity rebates would reduce Users' cost exposure through Top-up neutrality should this Modification Proposal be implemented.

BGT has quoted from Ofgas' 1998 Review of Top-up document "Transco should bear the costs associated in their entirety with transportation constraints" and that "Transco should bear the cost of such bookings".

Upon examining the April 1998 Ofgas Conclusions document for the Review of Top-up gas it is clear to Transco that at that time Ofgas had the view that



locational Top-up, as it was described in this document, was used for constraint management and interacted with the Energy Balancing Regime which was, at that time, to be subject to a thorough review. Transco has maintained throughout debates concerning Modification Proposals 0297, 0356 and this current Modification Proposal that bookings in Constrained LNG facilities, including Constrained Top-up if there is a need, are not there to manage a constraint but are there to provide additional transmission capacity.

Constraint management takes the form of managing demand to fit available capacity. Whereas constrained LNG bookings, including Constrained Top-up, provide the capacity itself - no demand management occurs. If this is the case, there are no associated costs of managing transportation constraints by this method and therefore no costs which Transco should bear.

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

Implementation of this Modification proposal is not required to facilitate compliance with safety or other legislation.

**13. The extent to which the implementation is required having regard to any proposed change in the methodology established under Standard Condition 4(5) or the statement furnished by Transco under Standard Condition 4(1) of the Licence**

Implementation of this Modification Proposal would not change the methodology established under Standard Condition 3(5) of the Licence.

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

- Establish the Constrained Top-up requirement following the outcome of PC52 and Modification Proposal 0390
- Purchase and inject the necessary gas and record the costs
- Identify net costs at the end of the Storage Year
- Calculate the daily charge applicable to the winter period
- Invoice Users for their proportion of the net costs

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

This Modification Proposal should be implemented with effect from 1 May 2000 06:00

## **16. Recommendation concerning the implementation of the Modification Proposal**

Transco recommends this Modification proposal should be implemented

## **17. Restrictive Trade Practices Act**

If implemented this proposal will constitute an amendment to the Network Code. Accordingly the proposal is subject to the Suspense Clause set out in the attached Annex.

If implemented this proposal will constitute an amendment to the Network Code. Accordingly the proposal is subject to the Suspense Clause set out in the attached Annex.

## **18. Transco's Proposal**

This Modification Report contains Transco's proposal to modify the Network Code and Transco now seeks direction from the Gas & Electricity Markets Authority in accordance with this report.

This Modification Report contains Transco's proposal to modify the Network Code and Transco now seeks direction from the Director General in accordance with this report.

## 19. Text

### TRANSITION DOCUMENT, PART II

*Delete 'Not Used' at paragraph 8.12 and insert text to read as follows:*

“Section P: Top-up Storage

P6 (1) Paragraphs (2) to (6) shall apply in respect of the Storage Year commencing 1 May 2000 (“**relevant**” Storage Year)

(2) For the purposes of paragraph 8.12 of this Part II in relation to Constrained LNG Facilities in respect of a relevant Storage Year:

(a) the “**Constrained Top-up Costs**” are:

(i) those Top-up Costs which relate to:

(aa) the top-up constrained space requirement, the top-up constrained deliverability requirement; and

(bb) the procurement of gas for injection into Storage Space equal to that amount of the Top-up Space Requirement equal to the top-up constrained space requirement;

(ii) System Entry Overrun Charges in relation to a Constrained LNG Facility;

(iii) Storage Overrun Charges in relation to a Constrained LNG Facility;

(b) the “**Constrained Top-up Revenues**” are those Top-up Revenues which relate to:

(i) Top-up Storage Transfers where the Storage Capacity transferred, in the case of:

(aa) Storage Space, comprised all or part of the top-up constrained space;

(bb) Storage Deliverability, comprised all or part of the top-up constrained deliverability requirement;

(ii) Top-up Storage Transfers where the gas transferred comprised gas injected into Storage Space equal to that

amount of the Top-up Space Requirement equal to the top-up constrained space requirement;

(iii) in the case of Balancing Charges, those relating to any Constrained Storage Day;

(c) the “**Constrained Top-up Annual Adjustment Amount**” is an amount equal to the Constrained Top-up Revenues less the Constrained Top-up Costs.

(3) In respect of a relevant Storage Year, each relevant User shall pay to the Top-up Manager or (as the case may be) the Top-up Manager shall pay to each relevant User, a charge (the “**Constrained Top-up Annual Adjustment Charge**”) calculated as:

$$A * B / C$$

where:

A is the Constrained Top-up Annual Adjustment Amount;

B is the sum of the relevant User’s relevant UDQO’s for each Day in the Top-up Recovery Period;

C is the sum of all relevant User’s relevant UDQO’s for each Day in the Top-up Recovery Period.

(4) The Constrained Top-up Annual Adjustment Charge is payable by the Top-up Manager to relevant Users where the Constrained Top-up Annual Amount is positive and is payable by relevant Users to the Top-up Manager where the Constrained Top-up Annual Amount is negative.

(5) Constrained Top-up Annual Adjustment Charges shall be invoiced and payable in accordance with Section S (and Constrained Top-up Annual Adjustment Charges shall be an Invoice Item to be included on the Balancing Invoice relating to the first Billing Period following the end of the relevant Storage Year).

(6) For the purposes of Section P6 Top-up Costs shall not include Constrained Top-up Costs and Top-up Revenues shall not include Constrained Top-up Revenues.”.

Signed for and on behalf of Transco.

Signature:

**Tim Davis**  
**Manager, Network Code**

Date:

**Gas and Electricity Markets Authority Response:**

In accordance with Condition 9 of the Standard Conditions of the Gas Transporters' Licences dated 21st February 1996 I hereby direct Transco that the above proposal (as contained in Modification Report Reference **0391**, version **4.0** dated **03/04/2000**) be made as a modification to the Network Code.

Signed for and on Behalf of the Gas and Electricity Markets Authority.

Signature:

The Network Code is hereby modified with effect from, in accordance with the proposal as set out in this Modification Report, version **4.0**.

Signature:

**Process Manager - Network Code**  
**Transco**

Date:

## Annex

1. Any provision contained in this Agreement or in any arrangement of which this Agreement forms part by virtue of which The Restrictive Trade Practices Act 1976 ("the RTPA"), had it not been repealed, would apply to this Agreement or such arrangement shall not come into effect:
  - (i) if a copy of the Agreement is not provided to the Gas and Electricity Markets Authority ("the Authority") within 28 days of the date on which the Agreement is made; or
  - (ii) if, within 28 days of the provision of the copy, the Authority gives notice in writing, to the party providing it, that he does not approve the Agreement because it does not satisfy the criterion specified in paragraphs 1(6) or 2(3) of the Schedule to The Restrictive Trade Practices (Gas Conveyance and Storage) Order 1996 ("the Order") as appropriateprovided that if the Authority does not so approve the Agreement then Clause 3 shall apply.
2. If the Authority does so approve this Agreement in accordance with the terms of the Order (whether such approval is actual or deemed by effluxion of time) any provision contained in this Agreement or in any arrangement of which this Agreement forms part by virtue of which the RTPA, had it not been repealed, would apply this Agreement or such arrangement shall come into full force and effect on the date of such approval.
3. If the Authority does not approve this Agreement in accordance with the terms of the Order the parties agree to use their best endeavours to discuss with Ofgem any provision (or provisions) contained in this Agreement by virtue of which the RTPA, had it not been repealed, would apply to this Agreement or any arrangement of which this Agreement forms part with a view to modifying such provision (or provisions) as may be necessary to ensure that the Authority would not exercise his right to give notice pursuant to paragraph 1(5)(d)(ii) or 2(2)(b)(ii) of the Order in respect of the Agreement as amended. Such modification having been made, the parties shall provide a copy of the Agreement as modified to the Authority pursuant to Clause 1(i) above for approval in accordance with the terms of the Order.
4. For the purposes of this Clause, "Agreement" includes a variation of or an amendment to an agreement to which any provision of paragraphs 1(1) to (4) in the Schedule to the Order applies.