

TRANSCO NETWORK CODE MODIFICATION PROPOSAL No. 0500
"Long Term Capacity Allocation"
Version 1.0

Date: 12/11/2001

Proposed Implementation Date:

Urgency: Non-Urgent

Justification

This Modification Proposal is required if Users are to be provided with an ability to obtain capacity for periods of greater than 1-year and so that they can better match firm entry capacity rights to their longer term supply or demand requirements. The proposal would also enable Users to mitigate risk by choosing from a wider range of entry capacity release processes. For example, the present cliff edge problem where all firm entry capacity entitlements are released at a particular period is replaced by a process that could afford Users with an opportunity for gradual acquisition of entry capacity over a number of years.

The proposal is also necessary if Transco is to be provided with incentives to react in response to market and other signals when planning future capacity provision on the National Transmission System. In this respect the proposal "fits" with the incentive arrangements proposed by Ofgem as part of the Transco System Operator Incentives.

Nature of Proposal

Transco proposes that a capacity allocation procedure is developed and implemented to enable Users to obtain entry capacity for periods greater than 12-months. Discussion on this topic has been ongoing in the Network Code Energy and Capacity Workstream for several months. That debate has informed the content and shape of the proposal described below. Draft business rules are also being made available.

Transco will offer entry capacity for a period up to [13] years in advance of the time of use. Entry Capacity will be offered in segments of differing granularity the further ahead of a gas day that entry capacity is offered. The purpose of this is to reduce complexity for longer term allocation and to offer Users an increasing opportunity to fine tune their capacity requirements as a relevant gas day is approached. It is therefore proposed that capacity is offered in the following bundles:

Quarterly System Entry Capacity (QSEC) offered from year [4] to year [13].

Monthly System Entry Capacity (MSEC) offered from a month in advance of the relevant month up to and including year [3].

Daily System Entry Capacity (DSEC) offered from the day before through to 02:00am on a relevant gas day.

Daily Interruptible System Entry Capacity (DISEC) offered on the day ahead of a relevant gas day.

All capacity will be offered on the basis of an end of day quantity from which is derived an equal hourly flow rate against which Users have purchased a right to flow

gas. Payment, as now, will continue to be due the month after the month of potential use and will be charged on a pence per kWh basis. The payment liability will remain with the primary purchaser regardless of secondary market trading. However, any User liabilities associated with entry capacity management will take into account net capacity holdings and shall reflect the effect of capacity trades. All categories of firm entry capacity will be taken into account when considering Users buy-back liabilities. Payment for primary purchases of entry capacity will also reflect the potential for a substantial elapsed time between obtaining a capacity right and the period of use. Capacity prices to be paid by a User will therefore be subject to indexation whereby any changes (above zero) to the Retail Price Index (RPI) for periods (greater than 12-months) between primary release and the day of use of capacity will be applied to entry capacity purchase prices. The appropriate indexation factor will be calculated on an annual basis each [July].

QSEC will be bundled into calendar months (Starting with January to March) and capacity will be offered on the basis of an equal daily quantity for each day of the period. QSEC will be offered in an annual allocation which will take place in [July] of each year.

MSEC will also be offered on the basis of an equal daily quantity for each day of the monthly block. 12-monthly blocks of capacity, for the period [October through to September] will be offered in an annual allocation which will take place in [July] of each year. In addition, within a year a rolling MSEC allocation may be held to offer capacity for use in the month following the month of allocation.

DSEC will be offered from the day ahead stage and during a relevant gas day. Capacity allocated within a gas day will be allocated on the basis of equal hourly use through to the end of the gas day.

Transco will offer a quantity that, in aggregate, is no less than the appropriate output measure that is expected to be specified in its Gas Transporter licence. The release will be structured so that [90]% of an Output Measure (or the relevant proportion thereof) will be offered initially in the most distant year for which capacity is made available. Thereafter in each annual allocation the residual quantity after taking into account previous allocations in the relevant year will be made available for Users. In the annual MSEC allocation that is held immediately prior to the relevant gas year the quantity to be offered will be at least 10% of the appropriate Output Measure and in total will be no less than 100% of the appropriate Output Measure minus any capacity previously allocated in the preceding QSEC and MSEC allocations. Within a relevant gas year any residual quantity of Output Measure will be offered in a rolling MSEC allocation to be held prior to each relevant capacity month. Transco will be able to offer additional entry capacity (above the allocation requirement described above) in any allocation.

QSEC will be offered in a bid period of [1] business day. Transco will signal an initial cost associated with provision of quantities up to an output measure and it will also signal a series of [20] marginal costs which will broadly reflect costs that may be anticipated for providing an additional increment of marginal output above the preset output measure. Broadly it is expected that the increments should provide indicative costs for providing equal sized increments up an aggregate quantity that is equal to [50]% of an output measure (ie, the costs if capacity provision was to be increased

[50]% above an output measure). Users will be able to signal the volume that they might like to acquire at each of the indicated prices.

At a number of pre-identified times within a bid period Transco will publish a snapshot of aggregate demand associated with each bid price in each period. For example, aggregate volumes at each price will be published at [12:10hrs] for all valid bids recorded on the system at [12:00hrs]. At the same time the system will calculate and notify each User of its aggregate quantity demanded across all Aggregate System Entry Points for each year in which entry capacity is offered. The calculation would be based upon the highest quantity that a User has demanded in each period. Thereafter the system will not allow a User to submit demands that in total exceed its aggregate quantity. This rule is intended to encourage Users to signal bids at an early stage and to afford all Users with an opportunity to observe the extent of aggregate demand. The procedure could be repeated at [15:10hrs] at which time demands registered on the system at [15:00hrs] would be taken into account.

When the bid period is completed Transco will aggregate the quantities demanded at each price to create a demand curve for each period in which demand has been placed. If aggregate demand is less than or equal to an output measure at the initial price indicated then all capacity demanded will be allocated and the initial price against which demand was placed will be payable for all units of capacity. If aggregate demand is greater than an output measure (or capacity remaining available after previous allocations) then Transco will give consideration to, and consultation on, the potential risks and rewards associated with the provision of additional increments of capacity above a relevant output measure. If aggregate demand from Users at the relevant price step (above the initial price) is equal to the aggregate quantity of capacity that Transco is willing to allocate at that price then all Users will receive the quantities demanded and the price step will be the cleared price for all units of capacity. If demand continues to exceed supply but Transco feels unable to satisfy demand at the next price step then a 2-step process will apply. In step 1, Users who demand capacity at the price step above the chosen cleared price will receive 100% of the capacity demanded, which will be less than the aggregate quantity demanded. In step 2, the quantity allocated in step-1 will be subtracted from each Users demand at the clearing price. The unallocated quantity will then be allocated on a pro rata basis in proportion to the extent of each Users unsatisfied demand. The price payable for all capacity obtained in an allocation will be the clearing price consistent with the chosen increment above the Output Measure (or proportion thereof).

For example,

If Transco publishes a range of prices $p_1 = 1p$, $p_2 = 2p$, $p_3 = 3p$ at which it can make differing quantities available $Q_1 = 80$, $Q_2 = 85$ and $Q_3 = 90$.

Shipper A might demand 50 units at p_1 , 50 at p_2 and 46 at p_3 whilst shipper B demands 50 at p_1 , 40 at p_2 and 34 at p_3 . The aggregate demand is 100 units at p_1 , 90 at p_2 and 80 at p_3 . In this instance aggregate demand at p_1 exceeds availability (Q_1) so Transco must consider the extent of demand at p_2 . At that price demand continues to exceed availability (Q_2), however aggregate demand at p_3 is less than availability (Q_3).

Following consideration Transco might clear the allocation at price p_2 and quantity Q_2 . To achieve this it will allocate the full quantities demanded by shipper A and B at the

price level p3, - that is shipper A receives 46 units and shipper B receives 34 units. The remaining unallocated quantity of 5 units ($85 - (46+34)$) is allocated on a pro rata basis between each shipper. The pro-rating activity is based on each shippers unsatisfied demand at p2, that is 4 units for shipper A ($50-46$) and 6 units for shipper B ($40-34$). The pro rata'd quantities in this example are 2 and 3 units respectively to achieve a final allocation of 48 units for shipper A and 37 units for shipper B. The price paid for all 85 allocated units is 2p. Transco has increased capacity availability by 5 units above the base quantity.

An allocation above an output measure may require certain offsetting actions by Transco such as new investment or forward contracting in order to deliver its anticipated firm capacity obligations. Transco believes it is appropriate that any proposed investment should be subject to veto by Ofgem. Only in the absence of the veto can the allocation process be completed and Users informed of the allocation outcome. The process from bid window closure to publication of results will therefore take up to [2-months].

MSEC will continue to be offered on an annual basis (years 1 to 3) in a pay-as-bid blind auction. The reduced quantities implied by a requirement to offer the majority of capacity in preceding (QSEC) allocations and the potential for Transco to expand supply indicate that a single round is appropriate it is proposed that the bid window periods remain unchanged and the reporting arrangements for reporting allocation results and statistics remain unchanged. The date at which an allocation can be completed and consequently the date at which accompanying statistics are produced will be [1-month] after closure of the bid window. The delay is necessary to ensure that appropriate credit arrangements are in place.

Credit guarantees will be required by Users that wish to obtain entry capacity in allocations that occur more than a year in advance. A User will be required to have in place guarantees to cover 100% of the value of bids placed. Failure to establish sufficient guarantees will prevent any bids from being considered in the long term allocation process. At present a sub-group of the Energy and Capacity workstream is considering the appropriateness of a rolling form of credit guarantee to enable capacity to be obtained for periods of greater than 5-years. If a satisfactory arrangement cannot be found then 5-years could become the longest period for which entry capacity can be obtained. The present credit arrangements will continue to apply for within year transportation arrangements. Failure on a Users part to satisfy these credit arrangements would prevent it from obtaining entry capacity in any allocation.

Within a year a rolling MSEC allocation may be conducted each month. The quantity to be offered would be any residual output measure remaining unreleased by Transco for use in the following month. The allocation process will be a single round blind pay-as-bid allocation. The reporting requirements will remain unchanged and the allocation details will be published [2-weeks] after closure of the bid window. It is also proposed that the present "off the shelf" provision of MSEC is discontinued because a more frequent use of market based allocation processes should offer adequate opportunity for Users to obtain MSEC.

Overrun charges should be adapted to reflect the new entry capacity release process. It is proposed that the Overrun charge should be based on a multiple of the highest price

paid for firm entry capacity and firm entry capacity management tools, where the multiples are [8] for QSEC and MSEC and [1.1] for DSEC, buy-back, forward contract and exercise prices of options. In the case of capacity management tools the multiplier is applied to the weighted average (by volume) of the top [25]% of accepted bids for each product.

Monthly Interruptible System Entry Capacity should not be required because the new arrangements will enable capacity provision to be expanded if appropriate. The capacity expansion will also be additional to a minimum offered quantity that is identified as an output measure, which should effectively remove previous doubts about how Transco estimates capacity release quantities.

As previously indicated a single round MSEC is proposed, and the final optimisation round will no longer be required. A release based upon the proposed output measures removes any potential for significant inter ASEP optimisation.

It is also proposed that the requirement to release a daily estimate of use-it-or-lose-it capacity on an interruptible basis should be capped to maintain the release of this product in manageable proportions. Recent moves to a "top down" type entry capacity arrangement have created difficulties in managing this product. With this in mind it is proposed that DISEC capacity release on any day and at any ASEP should be capped at [100] GWh/day and that the scaling factors that may be necessary to manage this product should be proportionate to operational need.

This proposal does not require any changes to entry capacity trading arrangements.

Purpose of Proposal

This Modification Proposal is intended to provide the vehicle by which Transco and its customers can contract to provide an efficient level of entry capacity within the proposed System Operator incentive framework.

Consequence of not making this change

If the status quo remains then Transco will be unable to respond to the proposed System Operator Incentives and it will prove more difficult for Users to signal their entry capacity requirements to Transco in a manner in which the Gas Transporter can meaningfully respond.

Area of Network Code Concerned

Section B
Section L
Section S
Transition Arrangements

Proposer's Representative

Russell D Cooper (Transco)

Proposer

Tim M Davis (Transco)

Signature