

**THE COMMISSION FOR ENERGY REGULATION
AN COIMISIÚN UM RIALÁIL FUINNIMH**

**PROPOSALS ON MARKET ARRANGEMENT
PRINCIPLES**



Commission for Energy Regulation

An Coimisiún um Rialáil Fuinnimh

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1. INTRODUCTION

The Commission for Energy Regulation (the “Commission”) published its Consultation Document on Market Arrangement Principles on 28 August 2002.¹ This document proposed principles to be applied in the review of the gas market arrangements in Ireland. An advisory group (the Gas Market Advisory Group or “GMAG”) representing the views of the gas industry was established to discuss the proposed principles.

After considering the responses to the Consultation Document and several discussions with the GMAG, the Commission has developed proposals on the different areas of the gas market arrangements. The aim of this document is to describe the Commission’s proposals on the various principles to be applied in the review of the existing Transmission Code of Operation² and the gas market arrangements in general.

One of the areas covered by the Consultation Document on Market Arrangement Principles was the method of defining capacity rights in Ireland. Since the publication of this Consultation Document the Commission has had several discussions with the GMAG and the Transporter on the desirability of adopting an entry/exit capacity regime in the Irish gas market. The Commission published a report by the Transporter covering its initial estimation of the costs of adopting an entry/exit capacity regime and its proposals on how such regime would operate in Ireland on 30 May 2003.³ The Commission notes that it is currently reviewing this report and discussing its views with the GMAG.

The rest of this document is structured as follows:

- Section 2 describes the Commission’s proposals on capacity definition and trading;
- Section 3 describes the Commission’s proposals on transmission services;
- Section 4 describes the Commission’s proposals on gas nomination and balancing;
- Section 5 the Commission’s proposals on shrinkage and line-pack; and
- Section 6 describes the next steps in the review of the gas market arrangements in Ireland.

¹ Consultation Document on Market Arrangement Principles. CER/02/117. 28 August 2002.

² It would also apply to the Distribution Code of Operations where relevant.

³ Preliminary Evaluation of an Entry/Exit Regime Report to the CER and GMAG. Bord Gais Transmission Business Unit. May 2003. CER/03/134

All interested parties are invited to comment on the issues discussed in this draft decision. Comments should be sent to the Commission by **no later than Friday 18 July 2003**.

The Commission would prefer comments in electronic format. Comments should be sent to:

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The Commission is planning to make these comments public, and would encourage respondents to do the same. Any information that respondents wish to submit in confidence may be submitted separately, clearly marked as such. The Commission would, however, prefer public comment wherever practicable.

2. CAPACITY

2.1. Definition of Capacity Rights

As explained in the Consultation Document on Market Arrangement Principles there are a number of methods of defining capacity rights in a transmission network. The two main methods are (1) the point-to-point system and (2) the entry/exit capacity system. Under a point-to-point system, capacity is defined with respect to specified lengths of pipeline (i.e. from an entry point to an exit point) while under an entry/exit regime shippers make separate reservations for entry and exit capacity.

Under the current Code of Operations shippers are required to book capacity on a point-to-point basis. However, a shipper is allowed, subject to some conditions, to *transfer* all or part of its capacity from one exit point to another exit point provided that the total volume and rate of natural gas being supplied to the two exit points do not, in aggregate, exceed the reserved capacity of that shipper.

The GMAG is considering whether the current Irish point-to-point system is the most suitable option for Ireland or whether another system, such as an entry/exit system, without any link between entry and exit capacity would be a more appropriate option. As part of this analysis the GMAG is considering the costs of adopting an entry/exit regime for the definition of capacity rights in Ireland. As explained before, to help with this analysis the Transporter has published a separate paper with its initial evaluation and estimation of the costs of adopting such a regime. In this paper, the Transporter also describes the Transporter's proposals on how an entry/exit regime may work in Ireland.

The Commission is currently reviewing the Transporter's report and discussing its views with the GMAG in order to develop final proposals on this area.

2.2. Electronic System for Capacity Trading

In the Consultation Document on Gas Market Arrangement Principles, the Commission proposed that an electronic system to facilitate secondary bilateral trading of capacity rights be set up.

Currently trading of capacity rights is arranged bilaterally by shippers over the phone or by fax. While the current system may work for current market participants, it may not provide the same opportunities for new entrants. The Commission believes that an electronic system will ensure that *all (i.e. current and new)* shippers will have available *all (and the same)* relevant information concerning the current and expected usage of capacity by shippers themselves and of the pipeline system as a whole. Such an electronic system will help to ensure a more transparent capacity trading regime that is available to all. In such a system shippers may post bids and offers for capacity via the electronic system, specifying

the location, quantity, and price bid/offered. Most of the respondents to the Consultation Document supported the implementation of an electronic system for capacity trading.

Commission's proposals

The Commission considers that an electronic system should be put in place for capacity trading. This system could be developed either by a third party or by the Transporter. The Transporter *will not* have access to the *prices* at which capacity is traded and will not be the counter-party to capacity right trades. However, the Transporter must receive all the information on *quantities* traded between shippers for scheduling purposes and to determine shippers' capacity overruns.

The Commission also believes that in order to ensure transparency the use of this system should be mandatory for all capacity trades. That is, once the system has been implemented all capacity trades should be agreed electronically and hence in a transparent manner that facilitates trades.

2.3. Time Periods for Which Capacity is Traded

In the Consultation Document the Commission recommended that the minimum capacity trading interval be the balancing period and the maximum capacity trading interval be the remaining duration over which the shipper holds the capacity rights. For example a shipper (the transferee) that has booked capacity for a year will be able to trade that capacity with another shipper (the transferor) for the duration of a balancing period or for a number of balancing periods within the remaining period for which the transferee shipper holds the capacity right.

Most of the respondents to the Consultation Document supported the Commission's recommendation.

The Commission understand that currently the minimum period for capacity transfer is a balancing period and the maximum period is the remaining duration over which the shipper hold the capacity right except for within day capacity transfers which are limited to a maximum of a balancing period.

Commission's proposals

The current situation seems to be consistent with the Commission's recommendations and industry's requirements. Therefore, no change is proposed to the current situation.

2.4. Capacity Overruns

An overrun occurs when a shipper takes gas transportation quantities in excess of booked capacity. As stated in the Consultation Document some gas jurisdictions

have two types of capacity overruns, authorised overruns and unauthorised overruns. Authorised overruns can be considered an additional transmission service. We discuss this service in Section 3.2.

In general capacity overruns should be discouraged because:

- The ability to obtain capacity at short notice from the Transporter at non-penal prices would tend to undermine the value of holding firm capacity rights; and hence
- The authorisation of capacity overruns would tend to discourage the secondary trading of capacity rights; and also
- Overruns may impose costs on others, and, therefore, shippers should not grow reliant on the use of overruns.

Under the current Code of Operations, all overruns are unauthorised overruns and, in principle, attract a penal charge. However, under Modification 13 of the Code of Operations if two shippers take gas at the same exit point in a particular balancing period and one shipper takes gas transportation quantities in excess of its booked capacity while the other takes transportation quantities below its booked capacity, the first shipper does not pay overrun charges and the second shipper does not receive any compensation for the capacity that it has not used if the physical gas flows do not exceed the exit point aggregate capacity. The Commission understands that the Transporter introduced this Modification “*to encourage shippers to reserve an adequate level of capacity and to allow reserved capacity to be utilised in an efficient manner*”.⁴

The Commission does not believe that this modification encourages shippers to reserve an adequate level of capacity. Under this rule shippers are not individually responsible for their own overruns. If shippers are not responsible for their own overruns, they do not have any incentive to reserve an adequate level of capacity or to buy capacity in the secondary market. The Commission believes that it should be each individual shipper’s responsibility to ensure that it has booked sufficient capacity to serve its customers, and to pay the market price for additional capacity or an overrun charge if it fails to do so.

Some GMAG members have argued that this modification benefits gas end-users as it minimises the overrun costs charged to them by shippers. The Commission disagrees. The Commission believes that this modification discourages competition between shippers to the actual or potential detriment of end-users. In a competitive gas market end-users should be able to choose efficient shippers (i.e. those that book an appropriate level of capacity) over inefficient shippers (i.e. those

⁴ Code of Operations Modification Proposal No 13: Utilisation of Capacity at the Specific Exit Point, 11th June 2002.

that do not book enough capacity). The only way that end-users can identify which are the most efficient shippers is if individual shippers are responsible for capacity reservation.

Commission's proposals

The Commission considers that Modification 13 is inconsistent with the principles established in the Consultation Document on Market Arrangement Principles including encouraging competition and capacity trading.

The Commission recognises that if at a particular exit point the physical gas flows do not exceed the aggregate booked capacity, the capacity overruns may not impose costs on the system. However, the Commission believes that a more appropriate way of minimising shippers' overrun charges in those cases is allowing ex-post overrun trading (as proposed in section 4.3.1. of the Consultation Document on Market Arrangement Principles). Overrun trading is a more transparent and efficient approach than Modification 13 as shippers will still pay a price for their overruns and, therefore, they will still try to avoid them. Most of the respondents to the Consultation Document supported overrun trading.

The Commission also believes that shippers should pay an appropriate price for using capacity that they have not already paid for – whether that additional capacity belongs to another shipper or to the Transporter. Modification 13 undermines both the idea of individual responsibility for capacity reservation and the basis for capacity trading between shippers (including the resulting revelation of short-term capacity prices through a market mechanism). Therefore, the Commission believes this modification should be re-considered and overrun trading should be allowed.

3. TRANSMISSION SERVICES

Under the current Code of Operations the Transporter only offers a firm transmission service, and shippers are required to book this service for no less than 12 months. In order to provide more flexibility to shippers the Commission questioned whether the Transporter should provide the following *additional* services in its Consultation Document on Market Arrangements Principles:

- One month firm service;
- Interruptible service; and
- Authorised overruns.

Each of these services is discussed below.

3.1. One Month Firm Service

In the Consultation Document, the Commission sought to examine the desirability of the Transporter offering a one month short-term service.

Currently, shippers are required to book firm transportation service for no less than 12 months. A short-term service could provide shippers with more flexibility.

Several respondents to the Consultation Document supported the introduction of a short-term service. However, several respondents expressed concerns on the implications of the provision of the service for the annual transmission tariffs. Other respondents suggested a daily or a weekly short-term service.

Commission's proposals

The Commission recognises that the current firm transportation service may not provide enough flexibility to shippers. However, the Commission is concerned about the impact of introducing a monthly service on the annual transmission tariffs. The Commission also believes that a more transparent secondary market for capacity trading and the introduction of authorised overruns (see discussion in Section 3.2) will provide additional flexibility to shippers in Ireland. Therefore, the Commission considers that a short-term firm service should not be offered at this stage. The Commission will review this decision at the end of the transmission tariff regulatory period, once it has had opportunity to assess whether the changes proposed on capacity trading and the introduction of authorised overruns provide the necessary flexibility to shippers in Ireland.

3.2. Authorised Overrun

In the Consultation Document, the Commission sought to examine the desirability of the Transporter offering *authorised* overruns. As explained in Section 2.4 of this document, overruns could be authorised in advance if they cause no operational constraints to the Transporter for a period of one day at a time. The Commission highlighted that this service should be priced so as to discourage shippers from persistently seeking authorised overruns rather than purchasing capacity.

Several respondents to the Consultation Document supported the provision of this service by the Transporter. Furthermore, in their comments on the duration of a short-term service, some respondents proposed that the Transporter provided a *daily* short-term service. The Commission would like to highlight that an authorised overrun is virtually identical to a daily firm service.

Commission's proposals

The Commission considers that the Transporter should provide authorised overruns. Authorised overruns will be priced such that this service will not undermine the firm service capacity product offered by the Transporter. The charge for authorised overruns should be set higher than the daily equivalent charge for firm service but lower than the price charged for unauthorised overruns. In addition, the Commission believes that rules should be put in place to avoid shippers persistently seeking authorisation rather than purchasing firm capacity. The Commission will discuss the authorised overrun rules and price with the GMAG.

3.3. Interruptible Service

In the Consultation Document the Commission also proposed that the Transporter could offer an interruptible service once all (or a reasonable proportion of) the capacity is booked. That is, an interruptible service should only be provided when there is a good probability of actual interruption at peak. The Commission also proposed pricing arrangements for this service in the *Transmission and Distribution Tariffs Objectives and Principles Consultation Document*.⁵

Several respondents to the Consultation Document supported the introduction of an interruptible service. However, some respondents pointed out that given the level of the current available capacity it might not be appropriate to introduce this service at this stage. One respondent highlighted that the level of capacity can vary in different parts of the system.

⁵ CER/03/060

Commission's proposals

As stated above the Commission considers that interruptible service should only be provided when there is a good probability of actual interruption at peak. If this probability is different in the different parts of the transmission system it may be appropriate to provide interruptible service only in particular parts of the system.

3.4. Backhaul Services

The possibility of introducing a backhaul service in Ireland has been raised by some gas market participants. The introduction of this service is being considered by the Transporter and, therefore, is not covered by this document.

4. NOMINATIONS AND BALANCING

4.1. Gas Nominations

As the Commission explained in the Consultation Document on Gas Market Arrangement Principles, through gas nomination procedures, shippers inform the Transporter of the quantity of gas they intend to inject into and withdraw from the transportation system, when and for how long such transportation will take place, and at what entry and/or exit points on the system.

Respondents to the Consultation Document and members of the GMAG were generally satisfied with the existing nomination procedures for the Moffat entry point. However, GMAG members highlighted that the current 01:45 re-nomination deadline is driven by the UK gas market and that more flexibility should be provided for nominations at Inch and Corrib.

Commission's proposals

The Commission considers that given the level of satisfaction with the current nomination procedure for the Moffat entry point, the existing nomination arrangements should be retained for the Moffat entry point. Regarding the Inch entry point, Marathon and the Transporter are developing proposal on nominations rules for the Inch entry point. The proposals will be submitted to the Commission for approval. The Commission will review these nomination proposals to ensure that they are as flexible for shippers, especially possible new entrants, as is physically possible.

The Commission would like to highlight that if an entry/exit regime is adopted for the definition of gas capacity rights it would be necessary to develop separate nomination procedures for gas to be delivered into and gas to be off taken from the transmission system.

4.2. Point-to-Point or Entry/Exit Balancing

At present, the measurement of imbalances on the Irish gas transmission system is undertaken on a point-to-point basis, i.e. from a specified entry point to a specified exit point. However, shippers with more than one exit point are allowed to aggregate their imbalances as long as the imbalance at each entry point is *within* the permitted tolerance. That is, a shipper is not allowed to include in the aggregation of imbalances any exit point in respect of which such shipper has exceeded its imbalance tolerance.

In the Consultation Document the Commission proposed an entry/exit balancing regime for Ireland. Most of the respondents to the Consultation Document supported the adoption of an entry/exit balancing regime.

Commission's proposals

The Commission believes that if an entry/exit system is adopted for capacity rights, balancing should also be done on an entry/exit basis under which all entry and exit points are considered equivalent and are aggregated for balancing purposes. Therefore, the current restriction on the aggregation of imbalances should be eliminated. Furthermore, the Commission believes that an entry/exit balancing regime should be adopted even if the current point-to-point capacity regime remains. The Commission has to date seen no evidence to suggest that the current restriction on the aggregation of imbalances is necessary to ensure an efficient system balancing in Ireland.

4.3. The Balancing Period

In the Consultation Document on Gas Market Principles the Commission stated that the balancing period should reflect the need to avoid unnecessary balancing action by shippers (and the added costs of such balancing) while ensuring that shippers are held responsible for any costs they cause. Shippers should not for example be able to impose real balancing costs on the system by going out of balance and then recovering their position *within a balancing period*, hence escaping responsibility for the real balancing costs that they have caused

Currently Ireland has a daily balancing period. Respondents to the Consultation Document on Gas Market Arrangements Principles and GMAG members suggested that a shorter balancing period was not appropriate for the gas market in Ireland at this stage.

Commission's proposals

The Commission agrees with the industry, especially after Ofgem's decision of rejecting the implementation of a shorter balancing period in Great Britain.⁶

4.4. Imbalance Arrangements and Tolerances

Under the current Code of Operations all imbalances falling outside of a tolerance level are charged at a penalty price (i.e. a price higher than the costs that the imbalance creates on the system). That is, the tolerance represents the level of imbalance at which cash-out provisions change.

In the Consultation Document on Gas Market Arrangements Principles the Commission recommended the adoption of a *different* imbalance tolerance system

⁶ As explained in the Consultation Document if there were a daily balancing period in Ireland but several balancing periods per day in Great Britain, shippers' incentives to deliver gas on to the Irish system at different times during the day could lead to substantial swings in line-pack and possible system instability.

in which the imbalance tolerance determines the amount that shippers can carry forward *without any charge* from one balancing period to another. Under this tolerance system the shipper can either offset any such imbalance within tolerance in a future balancing period prior to settlement or (to the extent not offset) have it cashed out at settlement. That is, under this arrangement, the tolerance represents the amount by which a shipper can be out of balance in any balancing period within a settlement period and not face imbalance charges, *as long as the imbalance is offset within the settlement period* (e.g. a month).

This type of imbalance tolerance arrangement allows shippers the flexibility to run imbalances that do not compromise system security. The existence of an imbalance tolerance can be justified as an efficient use of the available physical flexibility in the system (i.e. the available line-pack above the amount needed by the Transporter for system security purposes). However, the Commission would like to highlight that under this imbalance system *all* imbalances that are not traded are paid for (either via an opposite imbalance in the next balancing period or cash-out) by the end of the settlement period. Therefore, the regime does not give rise to gaming opportunities.

Jurisdictions that provide for an imbalance tolerance may also have a limit on the amount of a shipper's cumulative imbalance. (It is also possible in principle to have an arrangement with only a cumulative tolerance⁷ if operational flexibility allows this.) This limit deters shippers from seeking to utilise their full imbalance tolerance in every balancing period, by placing a cap on the total cumulative imbalance that can be accrued before the shipper faces a penalty. However, provided that a shipper remains within this cumulative limit, the shipper is able to carry forward an imbalance relating to that balancing period. The shipper can then offset the carried forward imbalance in a future balancing period prior to settlement or (to the extent the imbalance has not been offset) trade the imbalance or have it cashed out at settlement.

The aggregate level of the tolerance across all shippers should in principle be determined by the amount of available line-pack above that needed by the Transporter. The Transporter would be primarily responsible, subject to regulatory approval, for determining appropriate imbalance tolerances, defined for each shipper, and based upon the amount of available physical flexibility (in the form of available line-pack) in the system. Setting imbalance tolerances thus depends on an estimate of the level at which any overall system imbalance, which may result from aggregate shipper imbalances within tolerance, begin to cause real costs to be incurred by the Transporter. Such estimation may require system modelling, as the amount of line-pack needed to maintain system security could vary depending on the circumstances.

⁷ In effect there would be no restriction on single period imbalances as long as the cumulative imbalance limit is not breached.

Commission's proposals

The appropriate type of imbalance tolerance (i.e. in relation to each balancing period, cumulative imbalance, or both) in a particular gas system depends on the extent of the system's physical flexibility. The Commission's initial assessment of the physical characteristics of the Irish transmission system suggests that an imbalance tolerance per balancing period combined with a limit on the amount of a shipper's cumulative imbalance would be appropriate for the Irish system. The Commission will discuss in detail this proposal and the appropriate levels of tolerance with the Transporter.

4.5. Trading of Imbalances

4.5.1. Time allowed for trading of imbalances

Under the current Code of Operations, shippers are allowed to trade imbalances until D+6. The trading of imbalances is only allowed for imbalances within the "permitted tolerance".

The current arrangements were discussed with the GMAG and GMAG members suggested that shippers should be allowed to trade imbalances until D+9. The Transporter explained that this deadline was imposed by the fact that it has to submit monthly invoices to shippers not later than twelve business days after the start of each month.

Commission's proposals

The Commission understands the timing restriction imposed by the preparation of invoices. However, the Commission believes that there is no need to impose the same restriction on imbalances in balancing periods at the beginning of the month and imbalances in balancing periods at the end of the month. That is, considering the time required by the Transporter to prepare the invoices, shippers should be allowed to trade imbalances for *any* balancing period in a calendar month until the 9th day following the end of the calendar month in which the balancing period occurs.

The Commission understands that restriction on second tier imbalance trading has been imposed because of the existence of some transmission constraints in the transmission system. However, the Commission does not understand how the current restriction on imbalance trading solves the problems created by such constraints. Based on that, the Commission believes that the restriction on imbalance trading should be lifted.

4.5.2. System to facilitate trading of imbalances

The Commission also believes that information systems should be put in place to facilitate the trading of imbalances between shippers. This system could be

integrated with other electronic mechanism operated by the Transporter. This system should provide shippers with the following information for each balancing period:

- The shipper's own imbalance position
- Overall system imbalance position
- The identity of other shippers with whom trade may be undertaken

Some of the respondents to the Consultation Document said that ex-post balancing trading might discourage shippers to balance their injections and off-takes. The Commission does not believe that this will be the case as shippers will not be certain that they will find another shipper with an opposite imbalance with whom to trade their imbalances. If they do find another shipper with whom to trade, this would only show that the initial imbalance did not have any physical consequences. In any case, a shipper always will face the risk that it can only trade out any imbalance at an unfavourable price.

Commission's proposals

An electronic system to facilitate trading of imbalance should be put in place.

4.6. Mechanism for Obtaining Imbalance Gas for System Security

Currently, the Transporter obtains imbalance gas via an annual contract. The contract is awarded following a tender process.

The Consultation Document on Market Arrangements Principles proposed a bid-based mechanism for the provision of balancing gas. Under the bid-based mechanism parties could (but would not be required to) submit bids to increase or decrease gas on the system that the gas Transporter can call on in order to maintain system security. Such a mechanism aims to provide balancing prices that will reflect the costs incurred by other shippers willingly providing the imbalance gas required whenever the Transporter needs to take physical action.

Some of the respondents to these Consultation Documents supported this proposal while others did not. However, nearly all the respondents agreed that they wanted more transparency regarding the method by which such gas was bought or sold. Those parties against the Commission's proposal have raised mainly two arguments:

- There are likely to be insufficient players to ensure adequate liquidity for such a mechanism; and
- The costs associated with this mechanism

Each of these arguments is discussed in more detail below.

4.6.1. Market Liquidity

As was stated in the Consultation Document on Market Arrangements Principles, in the absence of bids the Transporter would still have access to the On-the-day Commodity Market (“OCM”) in Great Britain. In response to this argument the Transporter clarified that it could not purchase gas directly from the GB OCM as it was not a licensed shipper.

The Commission notes the Transporter’s clarification. However, the Commission considers that the Transporter could get access to the OCM in other ways, for example through an independent body. There are at least two options to do that:

- The Transporter could use a registered Irish and GB shipper to get access to the GB OCM when necessary. The Transporter would pay an administration fee for the service that would be passed onto those shippers responsible for the imbalance. This shipper could be selected through a tender process along the lines of the current tender arrangements and subject to an audit by the Commission.
- The Transporter creates a subsidiary company that would be registered as a GB shipper. As in the previous case the Transporter would have to pay an administration fee to its subsidiary for the services.

4.6.2. Cost of Implementation

Some of the respondents to the Consultation Document argued that the costs of putting in place a daily market for the provision of balancing gas could outweigh the benefits. The Commission recognises that putting in place a new regime would result in additional costs in developing the IT system and, depending on the current arrangements for the transfer of data between shippers and the Transporter, there may be some additional costs. However, the Commission does not believe that these costs would be large. A simple bid-selection program could be developed for the selection of the lowest cost bid. All that is needed is an interface for shippers to make their bids, and a notification to go to the relevant shipper when a bid is accepted.

Furthermore, the Commission believes that, in the absence of a formal spot market, a competitive mechanism for obtaining balancing gas will be an important element of the new market arrangements. The Commission believes that such an arrangement is necessary to ensure that new entry into the Irish market is not deterred (as this arrangement will help new entrants to balance their gas supply and demand) and considers that its benefits (in the form of greater competition and more cost-reflective imbalance prices) will outweigh its costs.

Commission’s proposals

The Commission believes that an annual tender is an inappropriate method for obtaining or disposing of imbalance gas in a fully competitive gas market. The Commission considers that a bid-based mechanism will not be simply an alternative to an annual tender as a means of obtaining balancing gas. It also (i) provides a competitive market-based means of determining imbalance prices on a balancing period basis, and hence (ii) effectively substitutes for a spot market for gas until a formal one can be developed.⁸ Therefore, this arrangement will help shippers and, in particular, new entrants to balance their gas supply and demand. However, the Commission would wish to see more detailed proposals developed for discussion with the GMAG members before providing final proposals on this prior to implementation.

4.7. Imbalance Prices

As explained in the Market Arrangement Principles, the Commission believes that imbalance prices should be designed to give shippers an incentive to offset or trade out imbalances wherever such opportunities exist without being unduly penal and hence imposing undue risk on shippers.

Commission's proposals

The Commission considers that shipper imbalances that have contributed to an overall system imbalance (leading to the Transporter taking balancing action) should be cashed out as far as possible at *prices based on the actual marginal prices for incremental or decremental gas* called upon by the Transporter in the relevant balancing periods. For instance, if a bid-based mechanism were implemented the imbalance charge will be determined by the bids accepted by the Transporter in that balancing period for increases/decreases of the amount of natural gas in the transmission system. The prices at the bid-based mechanism would represent what other shippers are prepared to receive or to pay for the relevant gas.

All other imbalances that are outstanding at system settlement should be cashed out at *pre-determined* imbalance prices, which will be approved by the Commission. Such cash-outs could for example apply when shipper imbalances have either (1) not resulted in the Transporter having to take action to balance the system or (2) where the individual shipper imbalance is in the opposite direction to the aggregate system imbalance. Pre-determined imbalance prices should be set in such a way that they do not give shippers perverse incentives to run imbalances. For instance,

⁸ Note that, as the Commission clearly stated in the Natural Gas Policy Framework paper (CER/02/83) the development of a formal spot market should be left to the private sector and not driven by the Commission.

pre-determined imbalance prices could be based on the GB OCM price, with a suitable margin either side for positive and negative imbalances.

4.8. Scheduling Charges

As explained in the Consultation Document, where a shipper has no ex post or ex ante imbalances, but flows gas at a higher or lower level than its nomination, this may cause operational problems (although perhaps less so in current circumstances) and should be discouraged. Small divergences between the amount of gas a shipper flows and the shipper's nomination do not normally impose significant real costs on the transportation system, and some tolerance is generally allowed.

There are provisions in the current Code of Operations for scheduling charges. However, the Commission understands that even though there have been divergences above the tolerance level, the Transporter has not levied these charges to date. The Commission also understands that the Transporter and current shippers agreed not to levy such charges.

Commission's proposals

The Commission has the following comments regarding the current situation:

- The Commission strongly believes that the Code of Operations should reflect the actual market rules and, therefore, any modifications to the rules should be included in the Code of Operations to ensure *transparency*. This is important to ensure that new entry into the Irish market is not deterred. Therefore rules in the Code of Operations should be implemented as stated in the Code. If a rule needs to be modified, the modification should follow the modification procedure of the Code of Operations.
- The fact that the Transporter has not levied these charges to date may indicate that differences between actual flows and nominations have not imposed real costs on the transmission system. This would mean that the current allowed tolerance level (i.e. 10%) is too low and it does not reflect the physical characteristics of the system. The allowed tolerance level should be determined on the basis of the level below divergences between nominations and actual flows do not create operational problems.

The Commission will discuss with the Transporter the appropriate level of tolerance for scheduling charges and the level of scheduling charges. The Commission notes that if an entry/exit capacity regime were adopted, scheduling charges would apply for injections and off-takes as shippers would make separate nominations for gas injections and off-takes.

5. SHRINKAGE GAS AND LINE-PACK

5.1. Shrinkage Gas

5.1.1. Provision of shrinkage gas

Under the current system the Transporter is responsible for purchasing transmission shrinkage gas. To purchase the necessary gas the Transporter issues a competitive tender every year.

As explained in the Consultation Document the Commission believes that shippers should provide shrinkage gas through shrinkage factors. Under this system each shipper will be required to adjust its injected quantities by these factors. For example if shrinkage is 1%, then the shrinkage factor will be 0.99 and a shipper would need to inject 101 units in order to offtake 100 and be in balance. That is, imbalances will be calculated as injections minus actual offtakes divided by the shrinkage factor.

These shrinkage factors will be determined by the Transporter and approved by the Commission. The Transporter will have the flexibility to re-set shrinkage factors at any time subject to the Commission's approval. The Transporter will need to justify any change. The main advantage of this proposal over the current system is that it does not require putting in place financial incentives to the Transporter to minimise the *cost* (as opposed to the amount) of shrinkage as shrinkage will be provided directly in-kind by each shippers in proportion to its gas injection.

Several respondents to the Consultation Document agreed that they should provide their own shrinkage. However, some respondents argued that the Transporter was in a better position to provide shrinkage gas as only the Transporter can know the amount of shrinkage needed each day, and that rarely would shippers deliver the correct quantity to the system. The Commission would like to note the following:

- Usually there are not large fluctuations in the amount of shrinkage gas from one day to another in transmission systems;
- The Transporter should be able to absorb via line-pack any short-term shrinkage gas fluctuations on a daily basis; and
- As we note above the Transporter will be able to re-set shrinkage factors at any time subject to the Commission's approval.

Therefore, the Commission does not anticipate any problems in shippers providing the required gas shrinkage using shrinkage factors.

Commission's proposals

The Commission considers that the responsibility for replacing shrinkage gas is best transferred to shippers. The Transporter should propose shrinkage factors to the Commission for approval.

5.1.2. Shrinkage incentive

As explained in the Consultation Document, the Commission believes that an incentive mechanism should be put in place to incentivise the Transporter to decrease the amount of shrinkage in the transportation system. In general the respondents to the Consultation Document supported this proposal.

Commission's proposals

The Commission proposes to set a target on the amount of shrinkage and appropriate sharing factors that provide rewards/penalties to the Transporter for bettering/exceeding the target. The target could be re-set each year (or as necessary within-year), taking into account previous experience including the end-period level of linepack. The Commission is currently assessing the current level of transmission shrinkage and characteristics of the Irish transmission system in order to define the initial target.

The Commission's initial assessment of the current transmission shrinkage levels, based on the information provided by the Transporter to date, suggests that the Transporter may need to improve the process for measuring the overall quantity of shrinkage and its components (e.g. the measurement of the energy used for gas pre-heating.) The Commission will provide detailed recommendations on this area once it has received additional information from the Transporter.

5.2. Treatment of Line-pack

As stated in the Consultation Documents the Commission believes that *all* the line-pack should be allocated to the Transporter initially. However, the Commission also believes that shippers should have *indirect* access to any *additional* line-pack that is not required by the Transporter for system safety and security purposes. This access can be provided through the imbalance arrangements described in Section 4.4.

Under the imbalance arrangements proposed by the Commission, shippers will be able to run a pre-determined level of imbalance that shippers can carry forward without any charge from one balancing period to other. This tolerance will be determined by the amount of available line-pack above that needed by the Transporter for system security purposes.

Commission's proposals

All the linepack should be allocated to the Transporter initially.

6. NEXT STEPS

The Commission will discuss the proposals discussed in this document with the GMAG before the closing of the consultation process. Following these discussions and after receiving the comments on this paper and on the BGE's entry/exit paper, the Commission in consultation with the GMAG will develop an implementation plan for the modification of the Code of Operations and the developing of the necessary systems.