

Interconnector Allocation Arrangements

2004-05

**Ofreg
Consultation Paper
June 2003**

Introduction

- 1.1 Trading arrangements have been in place for the North-South interconnector since February 2000 and for the Moyle interconnector since January 2001. Auctions have been used as the most competitive and economically efficient way to allocate capacity.
- 1.2 This paper presents those issues which require consultation with industry and other interested parties. Following this consultation process, Ofreg will produce a decision paper in July 2003 on interconnector allocation for 2004/05 in accordance with the timetable forwarded to interested parties in May 2003.
- 1.3 The issues to be discussed in this paper are as follows:
 - 2003/04 auction – a recap
 - committed and available capacity 2003/04 and 2004/05
 - Available Transfer Capacity (ATC)
 - allocation methods and type of products offered
 - British Electricity Transmission and Trading Arrangements (BETTA)
 - superposition and the North-South interconnector
 - proposed trading arrangements in the Republic of Ireland
 - proposed East/West interconnector
 - short-term trading
 - EU Inter-TSO Compensation Scheme

2003/04 Auction

- 1.4 The auctions for the allocation of interconnector capacity for 2003/04 were held in December 2002. The process commenced with a consultation paper in August 2002 entitled “Generation and Supply Competition in Northern Ireland – Power Procurement, Interconnection and the Competitive Market”. The Director General then issued a technical paper on interconnector trading in October 2002.
- 1.5 A series of discussions were then held with industry representatives and other interested parties, both bi-laterally and via the IME Group (Internal Market in Electricity: a group convened by Ofreg to discuss the liberalised electricity market in NI) in order to produce a decision paper regarding interconnector allocation. This paper was issued in November 2002. The arrangements for the auction were refined as a result of the consultation process but participant objected ex ante to the basic auction structure.
- 1.6 The 2003/04 auction was conducted via a multi-stage process. The available interconnector capacity was divided into equal amounts over two separate auctions held seven days apart. Any unsold capacity in the first auction became available in the second iteration (by the same product type). The process left open the possibility of a third, or residual auction if the auction did not clear in round two. A pay-as-bid rule applied to the auctions and the

DGES reserved the right, at any time during the process, to declare the auction void if he determined that the process appeared to have been gamed or that the outcome would lead to a anti-competitive situation in the Northern Ireland wholesale electricity market.

- 1.7 The multi-stage approach was decided upon to allow bidders the opportunity to correct/reassess their bids following the disclosure of the average price bid in the first iteration. A time period of one week was given between the first and second iterations to allow bidders to revisit their bidding strategy and reassess the market.
- 1.8 Products of 3,2 and 1 year duration were auctioned, along with an interruptible product. Three-year capacity, auctioned the previous year, was still in place thereby reducing the total amount of capacity available for auction.
- 1.9 The reserve price for one, two and three year Moyle import products was £1,750/MW/Month. The reserve price for the interruptible product was £1,650/MW/Month and for the North-South export product it was £400/MW/Month.
- 1.10 Four bidders were successful out of a total of six in obtaining capacity in the auctions. 35MWs were allocated to 3 year Moyle import, 35 MWs were allocated to 2 year Moyle import, 105 MWs were allocated to 1 year Moyle import, 50 MWs were allocated to 1 year Moyle interruptible and 165 MWs were allocated to North-South export.
- 1.11 The average successful bid price for all Moyle products at the first iteration was £4,517.6 and was £6,422.9 for the second iteration. The average successful bid price for the North-South product was £477.06.
- 1.12 Thus with a combination of pay-as-bid, the ability to reassess bids and the fact that the auction was oversubscribed and fully allocated it is reasonable to maintain that the capacity was allocated according to the value the market placed upon it. The market cleared easily and the Director General did not set a limit on the number of capacity units allocated to any one bidder. In the 2002/03 auction no single buyer secured 40% of the capacity and intervention was not consider to be warranted.
- 1.13 The total revenue collected from the auctions was approximately £18 million. This figure includes the 2003/04 Moyle, North-South and MEE (non-energy) revenues and revenue from the three-year capacity carried from 2002/03.

Committed and Available Moyle Capacity 2003/04 and 2004/05

- 1.14 Interconnector capacity across Moyle has been allocated by product type varying by duration. The fact that three and two year products have been auctioned inevitably means that a proportion of capacity is engaged until these contracts expire. Therefore the amount of capacity allocated to the two and

three year products must be deducted from the total available transfer capacity each year in order to determine what is available to the market.

- 1.15 For the year 2003/04 a total of 400MW were allocated as follows:
- 105 MWs one year
 - 35 MWs two year
 - 35 MWs three year
 - 50 MWs of existing three year – has one more year to expiry in 2004/05
 - 50 MWs of one year interruptible
 - 125 MWs MEE
- 1.16 In addition, for the year 2004/05 the amount of capacity currently committed is as follows:
- 50 MWs of 2002/03 three year product
 - 35 MWs of 2003/04 two year product
 - 35 MWs of 2003/04 three year product
 - 25 MWs of 2003/04 two year MEE product
 - 25 MWs of 2003/04 three year MEE product
- 1.17 Therefore in 2004/05 the capacity remaining available for auction is 155 MWs of Moyle and 75 MWs of MEE.
- 1.18 Moyle Export capacity (ie NI to Scotland) of 80 MW was made available to the market for the 2002/03 period. No bids were received for this product. A similar product will be included in the 2004/05 auctions.

Moyle ATC

- 1.19 The ATC for the 2004/05 trading year will be 400 MW.

Allocation Methods and Type of Products Offered

Allocation Methods

- 1.20 Auctions have the advantage that the buyer or seller does not have to search for the best price for a good. Auctions should be simple by nature and competitors should find it profitable to bid the value of the capacity, rather than seeking to game it. Predicting the effect of rules and rule changes is a difficult matter. Pay as bid auctions have been used to date as it is felt they are less subject to strategic manipulation in a market with only a few traders. Even if a lower value bidder does not bid at the actual level he values the product, the higher value bidder will continue to bid until as long as a lower value bidder continues to bid sufficiently aggressively. In addition, a sealed bid auction is currently the most cost effective method given the existing systems. Alternative auction formats, for example electronic bidding through a screen based auction, would require the development of new systems and hence there would be an associated cost burden.

- 1.21 Reserve prices are a way of possibly increasing expected revenue. Economic theory suggests that the effect of a reserve price upon expected revenue can be significant, especially when the number of buyers is small. It is the intention that the reserve price will be set on the same basis as in previous years i.e. to recover approximately half the cost of the interconnector. Any surplus made from the auction receipts is used for the benefits of electricity customers in Northern Ireland.
- 1.22 Therefore a pay-as-bid sealed auction remains the preferred auction format with a reserve price calculated via the same method as previous years. It is also proposed that the two iteration nature of last year's auction be repeated. The detailed form of the procedure has yet to be finalised, and the views of respondents would be helpful in this regard.

Types of Products Offered

- 1.23 The 2003/04 auction offered a variety of products of varying duration. The minimum was a one-year product and the maximum was a three-year product. This consultation needs to address whether the same variety of products should be offered for the 2004/05 allocation, whether some should be excluded or whether new products should be added.
- 1.24 The concept of an auction product of a longer duration than three years was highlighted at a meeting of the IME Group and again in the responses to the Director General's consultation paper on competition and customer empowerment.
- 1.25 In the case where interconnector revenues do not meet the operational cost, then the TUoS charge makes up the remainder.
- 1.26 In order to decide on the optimum duration of products one must decide what the overriding objective of the auction is. In the case of Northern Ireland there are potentially three broad objectives:
- (1) to design an auction which maximises revenue from capacity sales
 - (2) to design an auction which facilitates the maximum/optimum number of competitors
 - (3) to design an auction which extracts maximum revenues from capacity sales with concurrent regard to the competitive structure of the market place.
- 1.27 The auctions to date in Northern Ireland have tended towards the third objective. However even in relation to each of the objectives it is very much individual preference as to how the desired outcome is achieved. One individual's chosen method of maximising revenue receipts may be disagreeable to another and there is essentially no way of knowing ex ante, assuming reasonable methods are chosen, which will actually result in the desired outcome. Therefore a balance must be struck between the presence of certainty in the market, achieved by products of a longer duration, and short-term trading which enhances competition.

- 1.28 The current and future market conditions also influence the type, duration and value of products which should be offered for sale. To this effect factors would should be considered are:
- (a) *the demand/supply dynamics* – supply in terms of available capacity will be operating at a relatively tight margin until the proposed 400 MW CCGT at Coolkeeragh is commissioned. Therefore demand for Moyle will most likely be greatly in excess of the supply of available capacity given the lack of alternatives in the market place to serve the eligible sector. Hence in accordance with standard economic theory Moyle capacity should have a high market value;
 - (b) *market opening in Northern Ireland* – changes to the structure of the Northern Ireland electricity market in order to comply with EU Directives may mean that market participants want to build up and secure their customer base and market share. Hence it may be preferable to have auction products of longer duration in order to secure their continuation in the market;
 - (c) *uncertainty in trading relations with neighbouring markets i.e. the Republic of Ireland and Great Britain* – both of Northern Ireland's neighbours are in the process of changing their internal trading arrangements. This may increase risk for Northern Ireland market participants and may want auction products of a shorter duration which are subject to less uncertainty until the systems in the neighbouring markets are finalised.
- 1.29 In addition to varying product duration, previous auctions have seen the introduction of certain distinctive products, for example transit, green and interruptible. However for the 2004/05 allocation it is proposed that only firm capacity products, which simply differ by duration, will be auctioned. The bulk of the capacity will continue to be one year Moyle import and one year North-South export.

BETTA

- 1.30 The Department of Trade and Industry and Ofgem, are developing the necessary modifications to the existing arrangements in England & Wales and Scotland to allow the introduction of the BETTA system. The stated aim, given appropriate parliamentary time to put in place the relevant legislation was to have the system in place on 1 October 2003. However, Ofgem have announced (18 June 2003) that BETTA will now be delayed until 1 April 2005. The BETTA development however remains of interest in this auction process as the longer term products purchased in this auction will be in use when BETTA comes into force.
- 1.31 The generation market in Scotland, at present, is not fully competitive and wholesale prices are pegged against those in England and Wales. In addition, the Scottish companies run their own arrangements to balance the system.

However with the implementation of Betta, all generators will have greater choice when they sell their electricity into the wider GB market. Betta will create a common set of trading rules and rules for access to, and charging for, the transmission network. Under Betta, a GB system operator will be established.

- 1.32 The implementation of Betta will have an effect on trading across the Moyle interconnector. The potential impacts are currently being investigated by Ofreg and SONI, in consultation with Moyle Interconnector Ltd, but may not be known with any degree of certainty before the 2004/05 auction takes place.
- 1.33 However Ofreg would encourage market participants to pursue their own enquiries with the relevant Scottish generators, NGC and Elexon in order to assess how Betta may impact on their individual business interests.

Superposition and the North-South Interconnector

- 1.34 Superposition was introduced in April 2003 due to constraints on the physical transfer capacity of the interconnector as a result of transmission system congestion in RoI. Superposition allows trading greatly in excess of the physical limits on flows of electricity. Capacity allocation does not guarantee that a transfer will occur and therefore it would be risky and inappropriate for superpositioning to be introduced on a capacity basis. Superposition can however be accommodated when committed transfers of energy are known.
- 1.35 SONI and Eirgrid recently carried out a survey of north-south interconnector users and this will be useful in developing the nature of N/S trading for 2004/05. The introduction of superposition for the trading year 2003/04 took place after the long term capacity auction was held and thus the concept was not priced into the value of capacity in any way.
- 1.36 Superposition does not increase the long-term capacity available to the market but does maximise the utilisation of the physical transfer capacity by making available short-term capacity allocated two days prior to the trading day. It is proposed that this approach be continued in the 2004/05 trading year.
- 1.37 Ofreg, CER, SONI and ESBNG intend to hold a seminar in September 2003 to discuss the 2004/05 superposition arrangements with participants, and deliver the results of the interconnector user survey. The forum will also be an opportunity for SONI and ESBNG to describe the mechanism used to determine the NTC in each direction for the next year. Comments are however welcome at this point on the issues raised above.

N/S capacity is defined month by month and indicative figures should be available as required.

Proposed Trading Arrangements in the Republic of Ireland

- 1.38 CER has recently published a draft decision paper in relation to the trading arrangements from 2005 onwards. The Republic of Ireland's trading

arrangements will be based on a mandatory gross pool accepting energy only bids and volumes. In addition the system will use locational marginal pricing.

- 1.39 Decisions have yet to be made on how the broad principles of the new trading arrangements will actually be implemented at the micro level. Ofreg and CER will, along with the two system operators, examine any likely implications of the new arrangements for trading across the interconnector.

East/West Interconnector

- 1.40 National Grid and Eirgrid have recently completed a feasibility study into the construction of a sub sea interconnector between Ireland and Wales. CER have recently published the results of this preliminary study (www.cer.ie) .

Short-term Trading

- 1.41 Ofreg favours short term trading as a means of making the market more competitive and will work with industry members and SONI to facilitate this.

EU Inter-TSO Compensation Scheme

- 1.42 Ofreg will continue to follow best practice as evident from other EU member states in the allocation and access arrangements for interconnectors, bearing in mind the specific circumstances under which interconnector trades to NI and RoI take place.

2. Consultation Summary

- 2.1 The above discussion has led to a number of key questions relating to the Moyle and North South Auction which necessitate answers as part of this consultation process, namely:

Question 1.

- 2.2 Should the auction be conducted on a pay-as-bid or some other basis (bearing in mind that any fundamental changes to previous procedures may require new systems to be developed, will add to cost and may add time delays)?

Question 2.

- 2.3 Should the auction have one, two or more iterations?

Question 3.

- 2.4 Is there a need to hold an auction for long term North-South capacity (particularly in light of the introduction of superposition)?

Question 4.

- 2.5 If a North-South auction is desirable then should a reserve price be set and how do you feel superposition could potentially affect the value of any capacity auctioned?

Question 5.

- 2.6 What is the optimum blend of products in terms of duration of product?

Response

Respondents are asked to comment by Wednesday 31 July 2003

Ofreg, in consultation with Moyle Interconnector Ltd and SONI, will consider the responses and Ofreg will publish a Final Proposals Paper containing details of allocation methods, interconnector products and prices in the first week of August, allowing auctions to take place in September 2003.

A prompt response is welcomed.

Responses should be sent to:

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Please include a one-page summary with responses.