



The Bidding Code of Practice

A Response and Decision Paper

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1 Introduction

On the 18th May 2007, the Regulatory Authorities published a consultation paper entitled “Proposed Bidding Code of Practice in the SEM.”¹ That paper noted that the Regulatory Authorities had developed a market power mitigation strategy that required, among other things, that market participants adhere to principles that price bids be submitted at Short Run Marginal Cost (SRMC); and that the requirement to bid at SRMC was reflected in proposed conditions in electricity licences. The proposed licence conditions would have required licensees to adhere to a Bidding Code of Practice, which would set out the principles to be used in calculating the costs to be reflected in the commercial offer data which generators submit to the Market Operator. A proposed Bidding Code of Practice was appended to Consultation Paper AIP/SEM/07/198 and the views of interested parties were sought.

The Regulatory Authorities received comments from ten interested parties on the proposed Bidding Code of Practice. Two asked that their responses be treated as commercially confidential and not be published. The other eight respondents were:

- Airtricity
- Bord Gáis Networks
- Bord Gáis Strategic Investments
- ESB International (ESBI)
- ESB Power Generation (ESB PG)
- NIE
- Premier Power
- Viridian Power & Energy (VPE)

The following sections summarise these eight submissions by category of comment. A response by the Regulatory Authorities is provided in each case as appropriate.

Having considered these comments the Regulatory Authorities have decided that a Bidding Code of Practice, which sets out the principles according to which generators should formulate their commercial offer prices in the SEM and with which licensees are obliged under their licences to conform,;

- continues to be a necessary element in the monitoring and regulation of market participant behaviour in the SEM; and
- provides licensees with the necessary guidance on how their price bids should be calculated.

The Bidding Code of Practice to which licence holders are required to adhere is attached at Annex A.

¹ See AIP/SEM/07/198.

2 Comments on the Draft Bidding Code of Practice and Responses

The comments of respondents to the Consultation Paper are summarised below, by category of comment.

2.1 Suitability of approach

A number of respondents questioned the suitability of the general approach being adopted by the Regulatory Authorities, namely that market participants adhere to principles that price bids should be submitted at SRMC and that these principles would be embodied in a Bidding Code of Practice that licensees would be required to adhere to in formulating their bids.

While Airtricity was broadly supportive of the Regulatory Authorities' proposed approach, and believed that a detailed Bidding Code of Practice was necessary to prevent market abuse, all the other respondents were critical, on the grounds that the proposed approach:

- represented a significant move from 'principles' to 'rules,' in contradiction of prior decisions by the Regulatory Authorities;
- was overly prescriptive;
- contained excessive detail (sometimes with a doubtful economic basis);
- would – if adopted – be a disproportionate response to a perceived problem of potential market power;
- may become an impediment to a fully competitive market; and
- would result in Ireland being Europe's most heavily regulated electricity market.

NIE in particular thought that there was legitimate scope for different interpretations to be made on the various costs items making up a bid. Going further than requiring generators to make bids in accordance with their avoided costs of generation was not helpful and would be likely to result in error and dispute.

Two respondents also argued that the Bidding Code of Practice– as an explicit part of the package of measures designed to mitigate market power - should contain its own sunset provisions.

Response

The Regulatory Authorities continue to believe that requiring all generators to bid at SRMC is an essential element of their strategy to mitigate market power and that a Bidding Code of Practice is the appropriate way to set out the principles according to which generators would be required to formulate their SRMC bids.

It is important to note in this context that the mitigation of market power is not the only objective which the requirement to bid at SRMC is designed to achieve. As previous decision papers have stated, the obligation on all generators (not just those generators with market power) to bid at SRMC prevents the double payment for capacity, while being

consistent with the decision to include in the design of the SEM an administered capacity payments mechanism (CPM).² The avoidance of a double payment for capacity was one of the criteria used to select the CPM. No respondent to this Consultation Paper argued that the double payment for capacity was a necessary element of market design. And since bidding principles are necessary not just to mitigate market power, it follows that sunset provisions would not be appropriate.

Nonetheless, the Regulatory Authorities recognise that the draft of the Bidding Code of Practice that was consulted on could be viewed as too detailed and consequently might have been interpreted as prescriptive. The final version, which is at Annex A, is both more general in scope and less prescriptive and one which the Regulatory Authorities believe more closely embodies the principles to which participants should adhere.

Finally, the Regulatory Authorities wish to confirm the conclusions set out in AIP/SEM/02/06 that:

- the bidding principles would give market participants considerable latitude in determining aspects of marginal costs that require judgment;
- the Regulatory Authorities are keen to avoid becoming involved in the business decisions of generators; and
- the Regulatory Authorities want to let the market innovate through bidding strategy.

Nonetheless, the Regulatory Authorities believe that, given the capacity payments mechanism, the degree of market concentration and the concerns expressed by participants over predatory pricing, a principle that bids should reflect Short Run Marginal Costs continues to be appropriate. The Regulatory Authorities have adopted the SRMC Bidding Principle because the capacity payment mechanism makes it feasible and the concentration levels make it an important element in the mitigation of the potential exercise of market power.

2.2 Definitional problems

2.2.1 General comments

A number of respondents had comments to make on the definition of opportunity cost. ESBI, for example, argued that an absolute definition was inappropriate and could not be defined globally. NIE thought that attempting to define opportunity costs and replacement costs, as the Code of Practice did, introduced confusion not clarity; and that a Code of Practice that narrowly prescribed how opportunity costs should be calculated would undermine competition and market innovation.

Respondents had particular difficulty with the stipulation that the fuel price element of a bid “should reflect the prevailing price at which that cost-item could be acquired or disposed of by the generator in that market at the relevant time” on the grounds that the time dimension was not necessarily the right one and that it ignored transport and transactions costs.

² See AIP/SEM/116/06

Response

The Regulatory Authorities have consistently argued that opportunity cost is an appropriate way to measure real resource costs and that bidding in line with real resource costs (i.e., SRMC bidding) is consistent with competitive behaviour, adequately compensates the investors of generating units, and uniquely sends consumers proper signals about the social cost of the electricity they consume. In previous consultations, no generator respondent argued that opportunity cost was not the correct conceptual construct.

The Regulatory Authorities have also recognised in previous papers that quantifying opportunity costs may be difficult. Nonetheless, the Regulatory Authorities are satisfied that the definition in the Bidding Code of Practice – that the “Opportunity Cost of any cost-item shall comprise the value of the benefit foregone by a generator in employing that cost-item for the purposes of electricity generation, by reference to the most valuable realisable alternative use of that cost-item for purposes other than electricity generation” – provides sufficient guidance to market participants when formulating their bids, while allowing them the flexibility to determine their SRMC within reasonable bounds and to allow innovative bidding strategies.

The Regulatory Authorities acknowledge that the previous definition of the time dimension of the fuel price element of a bid was not necessarily the right one; and that it ignored transport and transactions costs. The final version of the Bidding Code of Practice includes a more general time dimension definition. It also now makes specific allowance for the costs of acquisition or disposal of fuel on a recognised market, which is intended to include transport and transactions costs, as appropriate.³

2.2.2 Particular cost items

A number of respondents made comments on the specific cost items mentioned in the proposed Code of Practice.

2.2.2.1 Contractual costs

Airtricity and VPE were insistent that generators should not be allowed to reflect elements of their contractual fuel positions in their bids. VPE wanted a specific obligation on Intermediaries to ensure that their bids accurately reflected generators’ SRMC values, not contract costs.

By contrast, NIE argued that to bid anything but its PPA contract costs would be to the disbenefit of customers in Northern Ireland and would cross-subsidise the generator counterparties to the PPAs.

Response

The issue of whether or not generators should bid their hedged fuel prices rather than the opportunity cost of fuel, as measured by reference to the prevailing market price, was

³ The specific issue of the treatment of the capacity element of gas transport costs is discussed in Section 2.2.2.2.

addressed in both Bidding Principles and Local Market Power (AIP/SEM/73/06) published on 5th July 2006 and the Decision Paper on Bidding Principles and Local Market Power (AIP/SEM/116/06) published on 8th September 2006. The Regulatory Authorities at that time reiterated their belief that economic costs are minimised when real resource costs are minimised and that SRMC bidding aligns physical generation decisions with real resource costs because the principle of bidding SRMC is designed to represent the real marginal cost. Hedges, by way of contrast, are purely financial (not physical) decisions and bidding hedged fuel prices would therefore not be consistent with minimising real resource costs. The Regulatory Authorities continue to believe that the best indication of the resource cost from not consuming fuel is the prevailing price of the fuel, (i.e., its opportunity cost) no matter what the fuel cost to the generator

2.2.2.2 Gas transportation costs

Almost all respondents mentioned fixed gas transportation costs, arguing that, because they were not explicitly included in the calculation of the annual capacity payment (since the BNE peaker was assumed to be a distillate not a gas plant), they should be included in SMP, and therefore be an admissible element of a short run marginal cost (SRMC) bid.

Response

Without the ability to buy or sell gas transportation capacity for a trading day, as is the case currently in Ireland, payments for capacity on gas transportation networks are best understood as (semi) fixed costs. This means that, to meet licence conditions applying both in Northern Ireland and the Republic of Ireland, such costs should not be reflected in price bids submitted to the Market Operator. This means that the fixed costs of gas transportation would be recovered through either the CPM or the energy market through infra-marginal rents or both.

The Regulatory Authorities are conscious that the trading of gas capacity is currently undergoing change, not least due to EC Directive compliance. As gas transportation capacity markets develop, costs which are currently incurred on an annual or monthly basis may become capable of being traded in such a way that allows them to be reflected in bids.

2.2.2.3 Carbon credits

Bord Gáis argued that, whereas fuel in the most part can be bought on a short-term basis for a relatively short period, carbon credits are typically purchased on an annual basis, with a considerable minimum quantity. It was therefore impossible to hedge an increased carbon cost for a specific period using the carbon market. It was inequitable that generators should bear this risk. Generators should be allowed to pass through any under-recovery in subsequent bids.

Response

The Regulatory Authorities are satisfied that the over-the-counter market in European Union Allowances (EUAs) is sufficiently liquid as to allow participants to reflect the market price in their SRMC bids. Moreover, the Regulatory Authorities believe that the annual nature of the scheme allows generators more, not less, flexibility in hedging their carbon requirements.

As with fuel, the market price of allowances is the relevant opportunity cost to be bid, irrespective of the cost at which the allowances were acquired. Nonetheless, the Regulatory Authorities are concerned at the implications for the wholesale price of electricity and ultimately for end- customer tariffs of requiring generators to bid the full opportunity cost of carbon. While the Regulatory Authorities acknowledge the need for wholesale electricity prices to provide a signal to promote cleaner technologies, they are concerned that the reflection in wholesale electricity prices of the full opportunity cost of carbon will result in significant windfall gains for generators at the expense of end-customers.

The Regulatory Authorities are therefore minded to signal greater flexibility in the Bidding Code of Practice in the bidding of carbon costs alone, in part to allow generators the flexibility to compete away some or all of the benefits of the allocation of free carbon allowances. It is the Regulatory Authorities' intention to publish a Consultation Paper on this issue in the near future. Greater flexibility in the Bidding Code of Practice can only be facilitated by a modification to existing SEM generation licences and this will also be subject to public consultation.

2.2.2.4 Other costs

Despite the common theme in the responses that the proposed Code of Practice was unduly prescriptive, a number of respondents wanted more, not less, detail.

For example, Airtricity wanted an acknowledgement that the opportunity cost of Renewable Obligation Certificates to a renewable generator was a valid bid cost. Bord Gáis were concerned that allowing energy-limited plant to bid to reflect expected market prices would not be transparent. ESBI wanted a reference in the Code of Practice to the risk that a plant may be forced by the SO to run at times when a planned outage was scheduled. ESB PG thought that plant with a limited ability to start up or shut down should be able to factor this into their bids; that for certain generation technologies all maintenance was running specific so that the cost of this maintenance should be included in bids; and confirmation that staff costs associated with maintenance could be included when maintenance was running specific. Finally NIE thought the proposed Code of Practice excluded or ignored truly avoidable costs, e.g., price movement risk and the cost of securing volume flexibility.

Response

The Regulatory Authorities are concerned that to include this sort of detail in what is intended to be a high level Code of Practice would run the risk of turning it into a set of rules rather than principles. Previous Consultation Papers (i.e., Bidding Principles and Local Market Power, AIP/SEM/73/06, published on 5th July 2006) have discussed a number of these sorts of issues at some length, e.g., the treatment of variable operation and maintenance costs, start-up and no load costs, deferred maintenance costs and the variability of spot fuel prices.

2.3 Governance issues

A number of respondents commented on the governance arrangements.

A number of respondents pointed to a lack of the right to appeal any determination surrounding the enforcement of the Code of Practice. For example, NIE noted that the Code of Practice included powers of direction, without any recourse or right of appeal, which introduced a fundamental change in the basis of NIE's regulation. And VPE wanted the same due process for modifications to the Code of Practice to apply as is applied to the Trading and Settlement Code.

Airtricity believed that the Code of Practice would be difficult to enforce through licence conditions and wanted a series of penalties for participants who were found to be in breach of the Code of Practice.

Response

The Regulatory Authorities have accepted the point that issuing by the Regulatory Authorities of directions to comply with the Bidding Code of Practice would introduce a fundamental change in the regulation of licensees. Moreover, the process to be followed in amending in the Bidding Code of Practice now mirror those in paragraph 5 of the relevant conditions of electricity generating licences.

Finally, on the point raised by Airtricity, the Regulatory Authorities do not have the powers to impose penalties on licensees for a breach of the Bidding Code of Practice.

3 Conclusion

The Regulatory Authorities have previously set out the requirement for generators to bid SRMC, why this is the correct principle to avoid double payment for capacity and to mitigate market power and why it will work in the SEM. The Regulatory Authorities have now developed licence conditions which will implement this bidding principle, by reference to a Bidding Code of Practice.

The Regulatory Authorities are now satisfied, having considered the comments of interested parties on the draft Bidding Code of Practice published on 18th May 2007, that the Bidding Code of Practice, as at Annex A, gives sufficient guidance to market participants on how they might be expected to bid in the SEM consistent with their licence conditions, while leaving participants with a degree of flexibility and without going so far as to prescribe rules and formulae.

ANNEX A: BIDDING CODE OF PRACTICE

INTRODUCTION

1. This Bidding Code of Practice (**this Code**) is published jointly by:
 - a. the Northern Ireland Authority for Utility Regulation (**the Authority**), in accordance with paragraph 5 of the following conditions of licences in Northern Ireland:
 - (i) Condition 17 of each electricity generation licence; and
 - (ii) Condition 57 of the public electricity supply licence granted to Northern Ireland Electricity plc under Article 10(1) of the Electricity (Northern Ireland) Order 1992 under a licence document dated 31 March 1992 and transferred to NIE Energy Limited; and
 - b. the Commission for Energy Regulation (**the Commission**), in accordance with paragraph 5 of the following conditions of licences to generate electricity in the Republic of Ireland:
 - (i) Condition 17 of the interim electricity generation licence granted to the Electricity Supply Board on 21 April 2006;
 - (ii) Condition 16 of the electricity generation licence granted to Synergen on 31 July 2002; and
 - (iii) Condition 15 of electricity generation licences granted to all other licensed generators of electricity.
2. For the purposes of the licence conditions under which it is made (**the relevant conditions**), this Code defines the concept of Opportunity Cost, makes provision for the calculation of cost-items and sets out other principles of good behaviour in the Single Electricity Market.
3. In accordance with paragraph 6 of each relevant condition:
 - a. electricity generators are required to comply with the provisions of this Code in submitting Commercial Offer Data under the Single Electricity Market Trading and Settlement Code, whether by themselves or through Intermediaries; and
 - b. the Power Procurement Business of NIE Energy Limited is required to comply with the provisions of this Code in submitting Commercial Offer Data under the Single Electricity Market Trading and Settlement Code.
4. This Code aims to facilitate the efficient operation of the Single Electricity Market by ensuring that:

- in combination with the Capacity Payment Mechanism established under the Single Electricity Market Trading and Settlement Code, generators are appropriately compensated for making available their generation sets or units (as appropriate) and for generating electricity in the Single Electricity Market;
 - generators cannot exercise market power in the generation of electricity on the island of Ireland or any part thereof; and
 - the Power Procurement Business cannot exercise market power by virtue of generation sets or units contracted to it under long term power purchases agreements in Northern Ireland, in respect of which it has been appointed an Intermediary.
5. **Words and expressions used in this Code and not defined shall, unless the context otherwise requires, have the same meaning as when used in the licences containing the relevant conditions or (where appropriate) in the Single Electricity Market Trading and Settlement Code.**

DEFINITION OF OPPORTUNITY COST

General Principles

6. When calculating the Short Run Marginal Cost of a generation set or unit in respect of a Trading Day, constituent cost-items are to be valued at their Opportunity Cost, and so that a reasoned explanation of the calculation of that Opportunity Cost is capable of being given to the Authority or the Commission (as appropriate) on request.
7. The Opportunity Cost of any cost-item shall comprise the value of the benefit foregone by a generator in employing that cost-item for the purposes of electricity generation, by reference to the most valuable realisable alternative use of that cost-item for purposes other than electricity generation.
8. In calculating the value of the benefit foregone in employing a cost-item for the purposes of electricity generation, the following principles shall, unless it can be demonstrated to the satisfaction of the Authority or the Commission (as appropriate) that there is good cause not to, be applied:
- (i) where there exists a recognised and generally accessible trading market in the relevant cost-item, the Opportunity Cost of that item should reflect the prevailing price of the cost-item, which may be for immediate or future delivery or use as appropriate to the circumstances of the relevant generator, having regard to:
 - (a) costs the relevant generator would incur in offering that cost-item for sale, or acquiring that cost-item, on a recognised and generally accessible trading market;

- (b) reasonable provision for the variability of the prevailing price of a cost-item on a recognised and generally accessible trading market;
 - (ii) where no recognised and generally accessible trading market exists in the relevant cost-item the Opportunity Cost of that item should reflect the costs which would be incurred by the relevant generator in replacing that cost-item; and
 - (iii) reasonable provision for increased risks to plant and equipment as a result of the operation of a generation set or unit may be included.
- 9. Subject to paragraph 12, all Commercial Offer Data submitted in respect of a generation set or unit are to reflect the costs relating to that generation set or unit when considered on a stand-alone basis.

Start-Up and No Load Costs

- 10. Start-up and no load costs should reflect the actual start-up and no load costs of the generation set or unit unless it can be demonstrated to the satisfaction of the Authority or the Commission (as appropriate) that the scheduling algorithm and associated software operates in such a way that the bidding of actual start-up and no load costs would distort the true economics of the generation set or unit.

Energy, Emissions or Time Limited Units

- 11. Where there is a constraint on:
 - a. the total time a generation set or unit may run, or
 - b. the total emissions a generation set or unit may emit over a period of time, or
 - c. the total amount of energy available to a generation set or unit for a period of time,

bids should reflect the Opportunity Cost of the generation set or unit over that period of time.

Co-Generation

- 12. Where the generation of electricity is associated with additional processes other than generation, the Opportunity Cost of generating electricity for delivery to the Single Electricity Market should reflect the value of the use of

electricity, or heat used to generate electricity, or both, in those associated processes.

CHANGE MANAGEMENT

13. In accordance with paragraph 5 of the relevant conditions, this Code may, following consultation with the holders of generation licences and such other persons as the Authority or the Commission (as the case may be) consider appropriate, from time to time be amended by direction.