



# **Risk Management in the Single Electricity Market: Summary of Responses and Next Steps**

**AIP/SEM/07/28**

**2<sup>nd</sup> March 2007**

# Table of Contents

1	Introduction.....	1
2	Responses.....	2
2.1	Consultation Paper AIP/SEM/122/06.....	2
2.1.1	Option 1: Do nothing .....	2
2.1.2	Option 2: An imposed sector solution .....	2
2.1.3	Option 3: Procurement by the RAs of a third party platform .....	3
2.2	Responses of Interested Parties .....	4
2.2.1	Airtricity.....	4
2.2.2	Bord Gáis Energy Supply .....	5
2.2.3	ESB Customer Supply .....	5
2.2.4	ESB International.....	6
2.2.5	ESB Power Generation .....	7
2.2.6	Northern Ireland Electricity .....	9
2.2.7	Synergen .....	9
2.2.8	Viridian Power and Energy.....	11
2.3	Analysis of responses .....	12
3	Next Steps .....	13

# 1 Introduction

The Regulatory Authorities published a Consultation Paper (AIP/SEM/122/06) on 15th September on what arrangements might be put in place to allow market participants to manage risk in the all-Island single electricity market (SEM).

Eight interested parties submitted comments. They were:

- Airtricity
- Bord Gáis Energy Supply (BGES)
- ESB Customer Supply
- ESB International (ESBI)
- ESB Power Generation (ESBPG)
- Northern Ireland Electricity (NIE)
- Synergen; and
- Viridian Power and Energy (VPE)

This note summarises the responses to the RA's Consultation Paper, sets out the options in the light of those responses and suggests a way forward.

## **2 Responses**

This section briefly summarises the RA's Consultation Paper and the responses to it.

### **2.1 Consultation Paper AIP/SEM/122/06**

The Consultation Paper noted that to manage price and volume risk effectively, generators and suppliers in the SEM would need to be able freely to buy and sell electricity derivatives. Electricity derivatives elsewhere were generally traded either on an organised exchange or on an OTC market or both. They may also be traded bilaterally, without recourse to a broker or an exchange. The issue for the Regulatory Authorities was what role they should play, if any, in facilitating trades on either an organised exchange or an OTC market or through some other arrangement once the SEM starts on 1st November 2007.

The three options put forward in the Consultation Paper were:

#### **2.1.1 Option 1: Do nothing**

Under this option, industry participants would be left to make their own arrangements for the trading of derivatives.

This would have the advantage of leaving market participants, who were best able to judge their needs, to decide for themselves what instruments they wanted to trade and how they wanted to trade them; and, to the extent that they thought it desirable, how best to establish a formal platform on which to trade contracts. Furthermore, the costs of establishing a market in derivatives would fall on those who would directly benefit from its establishment.

On the other hand, the 'do nothing' option would be unlikely to result in the early development of a transparent, liquid, non-discriminatory contracts market in Ireland. This was because of the small size of the SEM in volume terms and the number of potential participants operating in it; the likely illiquidity of the contracts market with a concomitant risk of manipulation; and the high degree of vertical integration.

#### **2.1.2 Option 2: An imposed sector solution**

A second option was for the Regulatory Authorities to direct the two major sellers of derivatives (ESB Power Generation – ESBPG - and NIE's Power Procurement Business – NIE PPB) to set up a formal web-based platform on which they would post offers to sell contracts for differences (CfDs), at posted prices and which

potential buyers would be free to accept through bilateral contracting with either ESBPG or NIE PPB.

The advantage of this option was that, compared with the 'do nothing' option, a formal means of posting derivative offers would be certain to be established. Moreover, the Regulatory Authorities would maintain some control over the nature of that means of trading.

The disadvantages would be that the trading platform would be developed by and be under the control of the two dominant sellers of derivatives in the market. And it was debatable whether this would lead to the development of a transparent, non-discriminatory derivative contracts market.

There was also a question of whether ESBPG and NIE PPB, if they were to develop and operate a trading platform, would need to be authorised by the Irish Financial Services Regulatory Authority (IFSRA) and the Financial Services Authority (FSA) in the UK to undertake a "regulated investment business."

Finally, the costs of establishing and running the market would fall in the first instance on ESBPG and NIE PPB. It was for discussion whether other participants (e.g., other generators as well as suppliers) might be required to share those costs; and if so how.

### **2.1.3 Option 3: Procurement by the RAs of a third party platform**

The third option put forward would have the Regulatory Authorities themselves procuring the development and operation by either an established exchange or a broker (or brokers) of a platform on which standardised electricity derivatives could be traded.

The paper argued that this option would have a number of advantages over either of the other two options:

- *transparency* – for a market to be efficient, prices at which trades have been concluded must be observable, reliable and seen to be independent and independently calculated. They must also reflect the fundamentals of the market. Transparency is critical since it gives participants confidence in the market. Transparency is maximised on an exchange.
- *anonymity* – the identity of parties making offers and bids would not be disclosed, at least until the offer/bid had been accepted in the case of an OTC market and entirely on an exchange;

- *non-discrimination* – because the identities of those bidding would not be disclosed in an OTC market or on an exchange, offers and bids would be non-discriminatory;
- *credit/counterparty risk* – credit risk would be more efficiently managed and at lower cost under this option, and minimised on an exchange with the pooling of counterparty risks;

However, the paper noted that the volume of trades over which the fixed costs of development of a third-party platform would need to be recovered would be small, at least in the first instance. It was likely that the Regulatory Authorities would have to guarantee a given volume of transactions to make it worthwhile for an operator to set up a platform on which derivative contracts could be traded. The cost of providing that guarantee would have to be recovered from all licensees.

## **2.2 Responses of Interested Parties**

Eight interested parties responded to the Consultation Paper. Their responses are summarised below.

### **2.2.1 Airtricity**

Airtricity noted that none of the options put forward by the RAs would necessarily improve transparency or liquidity. For this to occur, an obligation needed to be placed on ESBPG and NIE's Power Procurement Business (PPB) to offer contracts and at 'attractive' market prices. It was only once these obligations were in place that a fledgling traded market may prosper.

Airtricity agreed with the RAs that an efficient and well-functioning contracts market was imperative for competition.

Airtricity preferred Option 3, on the grounds that this was the solution that was most likely to provide liquidity and transparency. There would need to be an obligation on the dominant generators to "make markets" to foster liquidity. An ideal solution would be the procurement of an exchange as this would lessen counterparty credit risk. As recognised by the RAs, there were other benefits such as anonymity, exemption from financial services regulation and transparency. However, all this would need to be set against the cost of procuring such a system.

### **2.2.2 Bord Gáis Energy Supply**

Bord Gáis Energy Supply (BGES) believed there were inherent problems associated with implementing Options 2 and 3 in the SEM. This was because:

- the RAs should have to intervene only in the event that the development of an efficient competitive generation and supply electricity market had been impeded through any exploitation of a (probably dominant) market position; and
- attempts to develop a stand-alone third party trading platform have in the past largely failed because of both market size and liquidity issues. While the idea of platform was appealing for participants, the reality was that such a provision would prove too costly for the SEM.

BGES therefore favoured Option 1: allowing participants the opportunity to develop an open, transparent, fair market to the benefit of all market participants. Assuming that adequate volumes of directed contracts were to be made available to the market to reduce the possible abuse of a market dominance position, BGES believed that additional regulatory imposition would lead to the curtailment of an effective market and would constitute an overly regulated one.

However, the effectiveness of such an arrangement must be proactively monitored by the RAs on a continuing basis. Any evidence that such a market was not efficiently – or promptly - developing or that preferential trading arrangements were in place for certain participants would need to be addressed immediately.

### **2.2.3 ESB Customer Supply**

ESBCS's preferred solution was Option 2, together with a mandatory obligation on ESBPG and NIE PPB to sell all non-directed contract volumes via the web-based platform. This would deliver a platform that would enable forward contract sales offers to be “posted” by ESBPG and NIE PPB and market participants would have a transparent means of identifying, reviewing, and taking up risk management opportunities. Such a mandatory obligation on both generators would be required for successful operation of this platform.

There was no guarantee that the “derivatives” traded via such a platform would meet the needs of all market participants. In particular, due to its significant AER contracts with wind generation and high levels of temperature-sensitive demand, ESBCS had significant risk management needs which such a platform was

unlikely to meet in full. ESBCS would have to pursue other procurement methods in parallel.

It was ESBCS's view that there should be a consistent solution to guarantee uniform quality provided by both ESBPG and NIE PPB working together. There may also be cost efficiencies to be gained from adopting this approach. This may require the RAs, as "sponsor", to take a role in overseeing the design and delivery of the project.

While the costs of this solution would fall initially on ESBPG and NIE PPB, arguably all those trading would benefit. Consequently, the shared cost should be capable of recovery, possibly through a realistic transaction charge. Given that trading volumes may initially be low then a proportion of the cost could be recovered from all licensees.

Finally, if the arrangements relating to Economic Purchasing Obligation (EPO) and Public Service Obligation (PSO) levies are not applied equitably and fairly in each jurisdiction, significant distortions of the market could result, severely undermining the success of the SEM. These regulatory aspects should urgently be reviewed and clarified and action taken by the RAs to ensure that these would not undermine the achievement of market reform goals.

#### **2.2.4 ESB International**

ESB International (ESBI) submitted a response on behalf of both ESB Independent Energy and Independent Generation.

Transparency was the principal attraction for ESBI of directing the dominant generators to offer forward contracts to all suppliers. To fulfil the objective of full SEM transparency, participation in the exchange would have to be mandatory for both dominant incumbents. Neither could be permitted to engage in bilateral contracting with any other party except through the exchange. This would prevent the 'grandfathering' of NIE inter-company contracts in the SEM.

ESBI argued that decisions on risk management could not be completed until there had been further progress with related workstreams such as market power (the NIE contractual arrangements need to be examined by the ring-fencing review team) and PSO harmonisation. ESBI continued to hold the view that the regulators should not be involved in the establishment or operation of a forwards market, which would rule out Option 3 as described. Although ESBI would have no objections to the generators contracting with a third party to operate an

exchange if this did not entail excessive cost, there are no indications of what the cost of any alternative may be other than 'do nothing.'

### **2.2.5 ESB Power Generation**

ESB Power Generation's view on the most appropriate form of risk management arrangements for the SEM reflected its concern over the operation of the NIE PPB PSO. ESBPG considered that it was important that there was no obscurity regarding the implementation of this PSO. It was in the best interests of the market that all electricity power sales associated with the PSO were market tested, to ensure that they were transacted at fair market prices and did not distort competition.

To ensure that this was the case, ESBPG proposed that NIE PPB be required to trade any power hedges outside the Pool, either via directed contracts (DCs) or via CfDs traded on a Bulletin Board with open access to all market participants; and that NIE PPB be precluded from undertaking any over the counter (OTC) or other power trades. This was necessary to provide sufficient price transparency given the continuing existence of the PSO, and to provide market confidence that the PSO was not distorting competition.

In return for such guarantees of pricing transparency on NIE PPB, ESBPG would be prepared to accept a similar requirement to post any hedges other than DCs on the Bulletin Board. However, this was subject to the proviso that the Bulletin Board was designed with an appropriate set of products and contractual terms. Mandating both ESBPG and NIE PPB would also bring sufficient liquidity to the process.

ESBPG firmly believed that if a mandatory order was not placed upon both NIE PPB and ESBPG a Bulletin Board would not be successful. Before a decision was taken on this workstream, the PPB PSO issue needed to be clarified.

ESBPG believed that this approach would be more attractive to other market participants than the default "do nothing" option. But if there were a satisfactory resolution to the issue of NIE PPB PSO transparency, a "do nothing" approach may be the best solution.

In ESBPG's view, whilst PPB NIE and ESBPG would be required to post any offers (or bids) on the Bulletin Board, they should have discretion over what volumes to hedge (or to leave exposed to the Pool) and over the timing of the offers, to allow them to manage their own volume risk and fuel liquidity risk. If they so chose, they should be allowed to leave any or all of their volume not

covered by DCs unhedged in the spot market. Other market participants would be able to post bids and offers on the Bulletin Board at their discretion (subject to meeting appropriate credit cover requirements).

In ESBPG's view, ESBPG/PPB NIE would tender for a third party to operate the Bulletin Board, on the grounds that existing power exchange operators or brokers were likely to be able to provide such a service more efficiently than ESBPG/PPB NIE using existing third party platforms and/or expertise. Another advantage of using a third party to operate a Bulletin Board was that it was likely to promote greater confidence amongst other market participants than a Bulletin Board operated by ESBPG/NIE PPB.

Once an appropriate operator has been appointed, market participants would need to work with the operator to develop appropriate products and contractual terms for the all-Island market. ESBPG had two observations at this stage:

- *Available products.* The market would require an appropriate mix of short term, weekly, monthly quarterly and seasonal products to provide a range of potential instruments to meet the risk management requirements of market participants. However, ESBPG/PPB NIE should have discretion over which products they wished to post offers (or bids) at any given time.
- *Credit cover.* The terms and conditions would need to provide sufficient credit cover protection for market participants (including for replacement risk, as well as for delivered but not yet settled power) whilst avoiding tying up excessive cash through margining. Other forms of credit cover such as reliance on credit ratings, letters of credit etc should be considered, in addition to application of initial and full variation margining often practiced by exchanges.

Finally, ESBPG noted that, given the small size of the SEM and the fact that "churn" in traded volumes was unlikely to be high initially, the Bulletin Board operator may be unable to fully recover costs by charging the level of fees typically charged by other brokers/exchanges. In ESBPG's view a smooth functioning Bulletin Board, with levels of charges comparable to other power markets, was in the wider interests of the development of the all-Island market. ESBPG proposed that charges be kept to levels in other comparable markets, and that any deficit be funded by some other market mechanism.

### **2.2.6 Northern Ireland Electricity**

In terms of the options, Northern Ireland Electricity (NIE) believed that the only practical method of developing an appropriate contracts market was via a participant-led initiative. There was strong evidence from other similar markets (e.g., old England and Wales Pool) that contracting markets would develop through market participants joining together to develop suitable arrangements and platforms. The benefit of such co-operation was that the market would be fit for purpose and would support the needs of all participants; the solution would be efficient and transaction costs would be minimised; market liquidity would develop naturally in response to market requirements; and a set of commonly traded products might be developed jointly.

An imposed solution on ESBPG and NIE PPB would not result in the best long term interests of a market with concerns about dominance. It would seem more appropriate to place obligations on the parties to offer contracts to the market to help ensure that there was adequate liquidity for retailers (and generators).

Procurement by the RAs – Option 3 - was an unwise option since it would incur costs for a solution that may receive little use initially. It would seem better to wait and if the exchanges and brokers felt there was sufficient business to warrant extending platforms into the Irish market, no doubt they would voluntarily enter the market. This incremental market based approach would seem to provide the most cost effective solution.

An important dimension of facilitating a market for contracts was the development of a robust framework contract that could underpin all risk management arrangements. NIE believed that the RAs could perform an important role by facilitating the development of such a framework contract, not only for the DCs market, but one that met the requirements of wider risk management transactions.

The process of participants engaging collectively on risk management arrangements could be primed through a number of workshops facilitated by an appropriate independent consultant.

### **2.2.7 Synergen**

Synergen noted in its response that where the seeding of secondary trading arrangements (i.e., Options 2 or 3 in the Consultation Paper) had been considered elsewhere, e.g., in England and Wales and Australia, the decision had been taken not to seed any secondary trading arrangements. As far as

Synergen understood the basis for these decisions, the primary arguments were that:

- the decision on what, and how to trade was best taken by market participants;
- regulators, however well intentioned, were not best placed to replicate or pre-empt market decisions;
- the seeding of one exchange was not competitively neutral from a regulatory standpoint;
- participants should not have to pay for arrangements that they did not want; and
- competition to provide best fit services was desirable and efficient.

Further, Synergen was unconvinced about the precedent for seeding, particularly in the context of a gross mandatory pool, with licensed enforced bidding, and potentially significant un-contracted volumes subject to mandated Directed Contracts at prices determined by the RAs, which are likely to mean that the depth, quality and liquidity in the market would be minimal.

On this basis Synergen's view was that any form of facilitation / intervention was inappropriate at this stage, and that it would be preferable to allow for the secondary contracts market(s) to develop organically. If there were concerns after the SEM has been established that secondary markets have not developed organically, the issue of seeding could be re-visited if participants believed then that it would be an effective way to kick start the market.

Option 2 would amount to an imposed sector solution. Synergen believed that the imposed solution would lock out other service providers and would deter and stifle further development. It was unlikely that the market would support more than one secondary market platform. Thus, whilst Synergen understood the intention to provide short term transparency of available contracts, it was concerned that the specification of form would be detrimental to true market development.

Synergen did not believe that the pre-selection of a third party provider of a trading platform (Option 3) was appropriate. There was no certainty that this would provide the best long term solution – i.e. the solution that participants

would choose. If the wrong provider or product type was chosen, then there would be significant detriment to other secondary trading options.

### **2.2.8 Viridian Power and Energy**

Viridian Power and Energy (VPE) considered it essential that it should be possible for market participants to source sufficient volume of baseload, mid-merit and peaking type swap contracts at reasonable cost from the day the market begins operation. Of the three CfD products, their analysis showed that the majority of market participants would need a greater volume of mid-merit and peaking swap contracts than baseload products.

VPE stated a preference for an exchange or other mechanism that promoted public price discovery. This would enhance liquidity in a small market with high levels of concentration such as the island of Ireland. This process must make available significant volumes of particularly mid-merit and peaking type CfDs. Independent generators should also have a right to sell surplus hedging capacity into this market as well as purchase from this market. The bid offer spreads should be low.

In relation to the role of the Regulatory Authorities (RAs), VPE considered that they should have oversight of these markets for risk management tools to ensure no distortion of the overall competitive dynamic in the market. ESBPG and NIE PPB should act in an economically reasonable manner and should be able to demonstrate that they neither withheld volume from the market nor favoured purchasing from their own plant when cheaper alternatives were available.

VPE also suggested that the RAs should encourage price transparency in all transactions. Both ESBPG and NIE PPB should be required to make CfD contracts available to all market participants using public prices via an exchange or bulletin board. To achieve this it may be necessary to prohibit OTC or bilateral contracts that have not been offered to the market through the public pricing arrangement. Such a requirement could be imposed on both ESBPG and NIE PPB either through licence obligations or another regulatory mechanism. A high degree of transparency in the contracts market would reduce the risk of systemic manipulation of the market.

There had been significant discussion on the form of contract for directed contracts. Assuming that market participant comments will have been fully considered in the drafting of the directed contracts, VPE suggested that a similar (possibly identical) form should be used in the non-directed contracts market. This would reduce the transactions costs for establishing the market.

A standard set of traded products would need to be defined by market participants. To encourage liquidity, the products should be few in number and simple. These products should be tradable over different timeframes: quarterly, monthly, weekly and daily.

VPE were not convinced that a 'do nothing' strategy by the RAs would necessarily preclude the development of a transparent liquid and non-discriminatory contracts market in Ireland. The RAs should be aware of and facilitate the process, not control it. The RAs should facilitate an industry working group to consider the issue. Recognising that many market participants were significantly resource constrained in responding to SEM decisions and processes, it would be useful if the RAs supported an industry working group with consultant support from the bank of consultants currently retained.

### **2.3 Analysis of responses**

Of the eight responses:

- one (Airtricity) was in favour of Option 3;
- four (Bord Gáis Energy Supply, Synergen, NIE and VPE) argued in favour of Option 1, the 'do nothing' option, albeit with some regulatory facilitation;
- two (ESBCS and ESBPG) were in favour of Option 2, involving the procurement by ESBPG/NIE PPB of a web-based bulletin board on which ESBPG and NIE PPB would be mandated to trade any CfDs;
- one (ESBI) offered no opinion, arguing that no decision should be taken until further progress had been made on PSO harmonisation and the treatment of NIE's existing contractual arrangements in the SEM.

Four of the eight respondents argued that the RAs should impose an obligation on ESB Power Generation and NIE's PPB to offer all their non-directed contract volumes on a web-based platform. ESB Power Generation was willing to accept an obligation to post offers or bids on such a platform, it argued that it should have discretion over when and what volumes to hedge and at what prices.

The three ESB respondents (ESBCS, ESBI and ESBPG) all made the case for an urgent review of the regulatory arrangements relating to the EPO and PSO levies in both jurisdictions and the treatment of existing PSO-supported contracts in the SEM.

### 3 Next Steps

The responses to the Consultation Paper were generally in favour of less rather than more involvement by the Regulatory Authorities in the making of arrangements for the trading of contracts in the SEM than might have been expected. Option 3, in particular, found little favour among the respondents. The RAs have therefore decided to rule out Option 3.

As a number of respondents pointed out, the volume of contracts which might be traded on whatever platform is eventually put in place will depend in part on what decisions are taken about:

- the regulatory treatment of the two PESs in the SEM, including the way in which they will both be obliged to meet their economic purchasing obligations.;
- the treatment of PSO-supported contracts in the SEM; and
- the regulatory treatment of ESBPG and NIE PPB in the SEM, including what obligations will be imposed on them regarding their offering of non-directed contract volumes on a web-based platform.

The RAs therefore decided that a decision on risk management arrangements would be deferred until decisions have been taken on these related issues. As a first step, the RAs have just published a Consultation Paper on a Strategy for the Regulation of ESB and NIE in the SEM (AIP/SEM/07/16). The paper includes the proposal to explore with the industry the option of directing ESBPG and – if appropriate - NIE PPB jointly to set up a web-based platform on which offers of and bids for CfDs might be posted. The RAs will now explore with the industry how best this might be achieved and by when.