

# **SEM Market Power and Liquidity**

## **Consultation Paper**

SEM-10-084

NIE Energy Supply's Response



## **Introduction**

NIE Energy Supply (NIEES) welcomes the opportunity to respond to the SEM Committee's Consultation Paper and general review of market power and liquidity.

NIEES as one of the few non-vertically integrated suppliers active in the SEM is acutely aware of the issues surrounding market power and in particular contract liquidity. Real difficulties were experienced sourcing adequate levels of hedging cover during 2010. Indeed there is strong evidence to suggest that the shortage of available hedges has unnecessarily created a lack of choice for customers and scarcity price premium for the 2010/11 tariff year. The market reality is that the prices secured through hedges set the tariff levels offered to customers. It is being mindful of this that NIEES welcomes the Regulatory Authorities (RAs) review and hopes that tangible improvements will be made, especially in the area of liquidity.

This consultation forms an important element of the RAs review. NIEES is the electricity supplier to circa 780,000 customers within Northern Ireland and as such, has reviewed the documentation cognisant of relevant key issues, presenting our views via some general comments before addressing the specific questions posed by the RAs.

## **General Comments**

In the design of the SEM the RAs were particularly conscious of the portfolio of supply and generation held by market participants active within the market. In the interests of transparency, competition and market development the RAs implemented a range of measures to define market power and mitigate against any possible exploitation of a dominant position. The Bidding Code of Practice (BCoP), Market Monitoring Unit (MMU), Directed Contracts (DCs) and Economic Purchase Obligations (EPO) are all active measures playing an important role within the SEM. As a supplier, NIEES welcomed the implementation of these measures and continues to believe that the BCoP, MMU and DCs are important controls on the cost of wholesale electricity, while the EPO is intrinsically linked to retail competition and deregulation.

NIEES acknowledges the continuously changing nature of the electricity market with increasing competition, investment, divestment, wind capacity and interconnection all potentially changing the current landscape. It is in this context that the RAs must be mindful of the effect regulatory measures have on the opportunity for 'gaming' both in the spot and contract markets as well as the availability of reasonable hedging products and volumes.

Securing effective hedges is fundamental to ensuring competition and delivering products that end consumers want. While little consideration was given to the contract market during the SEM design and development, the fundamental effect the contracts have on end consumers should prompt the RAs to attach greater importance to this area. The lack of liquidity is of real



concern and NIEES would urge the RAs to carefully consider any decision in relation to market structure, participant structure or mitigation measures which reduce liquidity. Consequential increased exposure to fluctuating pool price, contract scarcity and a lack of a reasonable contract market will all ultimately manifest in greater costs borne by end consumers and will make certain participants untenable business entities.

NIEES believe that the current market already suffers from such a degree of scarcity that contract price premiums have been seen in the NDC market. Reserve prices in many cases are far in excess of DC equivalents leaving suppliers and ultimately customers exposed to these high prices, a situation acutely felt in Northern Ireland where fuel poverty levels are in excess of 40%.

In assessing the effectiveness of the BCoP and MMU in regulating the generation offer price into the SEM, the Cambridge Economic Policy Associates (CEPA) study concludes that the measures have been successful but clarify that their success should not be interpreted as a reason for their removal. NIEES concurs with this view and would suggest that enhancing the transparency, engagement and proactive nature of the MMU would benefit the operation of the market.

While the BCoP, MMU and DC measures implemented by the RAs through the SEM design are effective in mitigating against the exercise of market power, there have been few regulatory measures to encourage or enhance any degree of liquidity in the contracting market. DCs, by the RAs own admission, are designed primarily as a market power mitigation measure with their contribution to liquidity a secondary feature.

It is widely acknowledged that the DC product does have a number of flaws such as the contract timing window, type of offer, volume etc however as an active participant in the contracting market, NIEES view the DC provision as essential and would welcome the DC volumes increasing.

During the recent Market Power and Liquidity Workshop<sup>1</sup> CER intimated that there may be legal difficulties in continuing to provide PSO backed Contracts for Difference (CfDs) in the future. This is of significant concern to NIEES. Any reduction in the liquidity of the contract market will have a fundamentally negative impact on suppliers and customers. NIEES urge, in the strongest possible terms, the RAs to continue to facilitate the offering of PSO volumes through the contracting market. Such is the importance of the PSO volumes that, should they be removed; the RAs would have to implement some form of regulatory mandated replacement contract offer / volume.

NIEES cannot over emphasise the importance of the contract market and having sufficient volumes available. The contracting outcomes set the retail price. Loss of volume compounds current scarcity and disproportionately impacts NIEES (and potentially ESBCS). Vertically integrated deregulated businesses use the contract market to balance their overall position, whereas

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<sup>1</sup> Held in CER Offices on Tuesday 18 January 2011



non vertically integrated organisations have no option but to hedge their entire position. Scarcity therefore creates a price premium which is applied to an entire volume potentially facilitating the manipulation of retail prices to artificially high levels. This is passed on to consumers in a disproportionate manner.

NIEES welcomes the detailed level of analysis undertaken by CEPA including the assessment of market power under a range of scenarios.

In assessing market power the CEPA study has suggested that the RAs may wish to consider moving away from the current Herfindahl-Hirschman Index (HHI) to a Residual Supply Index (RSI) calculation. NIEES acknowledges that there are both advantages and disadvantages of both measures. It is however useful to be cognisant of the definition of market power as having the “capability” to unduly influence the market outturn while mitigation prevents the actual exercise of this ability. They are distinct concepts and should be treated as such.

CEPA suggest that contract liquidity could be encouraged by an “RA led transparency programme”. NIEES accept that the effect of such a programme is difficult to measure however concur with the CEPA view that it would remove a potential barrier and certainly increase confidence in the contract market.

Finally, as part of the RAs review of Market Power and Liquidity, Participants were asked to comment on the proposals put forward by ESB in relation to reintegration. To summarise the CEPA finding, some form of horizontal integration seems reasonable while vertical integration would have a negative impact on market power and liquidity. While NIEES acknowledges the arguments put forward by ESB across a range of issues, it remains difficult to envisage a scenario in which the vertical reintegration of the ESB Group would enhance the market even considering the liquidity commitment. Horizontal integration of the supply entities would appear to be a natural consequence of deregulation and therefore is dependent upon ESBCS meeting the criteria laid out by CER. It is unclear however if horizontal integration of generation is something which ESB would advocate. Clarification would be required as to whether this would bring in currently deregulated plant into a regulated portfolio and what affect this would have on contract volumes offered to the market. NIEES opposes any market change which potentially reduces contract liquidity.

## **Response to Specific Questions**

- 1) Do the objectives and criteria for the Market Power Mitigation Strategy remain appropriate today and for the foreseeable future?**



NIEES consider the objectives of the RAs Market Power Mitigation Strategy as an essential element to ensuring ongoing confidence in a transparent and predictable market. The mitigation measures currently in place appear to be effective and therefore should remain in place. The transparency and engagement of the MMU could be enhanced which would benefit the market.

As stated above, the continuously changing nature of the electricity market with increasing competition, investment, divestment, wind capacity and interconnection could all potentially change the current landscape, it therefore incumbent upon the RAs to review market power on an ongoing basis.

**2) Will the new interconnector facilitate more competition from Great Britain? If so, what will be the impact on the appropriate market power mitigation strategy?**

The introduction of the new East-West Interconnector, through the provision of additional available capacity into the SEM, will naturally facilitate more competition with the GB market. It is difficult at this stage to describe the potential extent given that the level of interconnection will remain relatively low. In addition, it is likely that the effect of increased interconnection will only be seen in the medium to long term and will not provide the immediate solutions which are required in the market.

As discussed previously the current Market Power Mitigation Strategies are effective. However NIEES believes that with greater competition the MMU will have to take a more active role in investigating and auditing participants, to ensure compliance with the BCoP and make certain that market objectives such as transparency and efficiency are maintained.

**3) It would be helpful if market participants could explain why they believe demand for hedging products in the SEM exist, and how this demand is not addressed by alternative hedging options, such as through fuel markets.**

SEM Hedging products provide both generators and suppliers with a means to mitigate risk against fluctuating SEM electricity prices. They are a natural hedge with a relevant and transparent reference in SMP. Debatably they are of greater importance to suppliers than generators as the market mechanisms ensure that if a plant is running it recovers at least its short run marginal cost. Although limited in type and duration they allow participants to limit exposure to global commodity price movements which are ultimately one of the key drivers in SMP. The ability to secure sufficient SEM hedges is of particular importance to NIEES where the vast majority of customers are on fixed term tariffs, so the ability to substantially fix the underlying wholesale generation cost is crucial.

Other hedging options, such as through fuel markets, can be looked at when considering effective proxy hedges for SMP, however, these are by their



nature imperfect. There is a reliance on there being a statistically strong correlation between a particular fuel and SMP. Although a relationship may exist it will invariably differ throughout the day and seasonally. General fuel price movements can affect which generator is the marginal price setting unit, causing further deterioration in any correlation and exposing the contracted party to increased risk. The Directed Contracts formula attempts to quantify the relationship between various fuels and SMP and the fact that this formula changes year on year shows how these relationships can change. As the SEM evolves, developments such as increased penetration of wind and the associated intermittency issues will have a distorting effect if using past relationships and correlations as indicative of potential future trends. Mitigating risk via SEM hedging products is the preferred option but if there is a scarcity of products available alternative options cannot be ignored.

**4) In what way could DCs be reformed in order to promote contract liquidity while also mitigating market power? Do you see merits in replacing the HHI with the RSI in determining DC volumes?**

While DCs are an effective tool in mitigating market power, their contribution to liquidity in the market has been restricted by a number of factors. To promote further contract liquidity, a number of steps could be taken to reform DCs. Firstly, the annual contracting window could be changed to a series of regular windows, which would also have a smoothing effect on prices compared to a single window. Also, the volumes and types of products on offer (e.g. monthly products, varied clip sizes etc) could be more diverse, to enable buyers to better manage their positions. These changes however are completely dependent upon sufficient volumes being available via a range of sources. To alter the contracting window in a market faced with a significant volume reduction would compound hedging difficulties and represent a backward step.

When considering whether to replace the HHI with the RSI to determine DC volumes, it is important to note that there are advantages and disadvantages to both approaches. While HHI is an established and widely used index across various industries, it may not be as effective as RSI for use in electricity markets because of their unique properties. It is possible that the market may facilitate non-competitive outcomes even when the market is relatively un-concentrated, a fact which may become more apparent with further expansion of wind power and increasing interconnector capacity, as generators with only moderate market share become pivotal in the SEM. To ensure these outcomes are considered, an in-depth RSI analysis does have merits over the existing HHI metric.

**5) Does the recent removal of the EPO condition from ESBCS for business customers and the earlier EPO removal from NIEES for customers with an annual demand above 150 MWhs, together with the removal of ring-fencing between ESBCS and ESBIE,**



**negatively impact on the SEM spot or contract markets? If you consider that it does, are there any replacement conditions required in the SEM and what should they be?**

The EPO was designed as a regulatory tool to ensure that regulated suppliers did not exploit a dominant position by contracting with affiliated generation at high prices. This was introduced at a time when there was no competition in either domestic supply market and both ESBCS/ESBIE and NIEES had significant shares of the commercial supply market.

Over the past number of years both ESBCS and NIEES have seen their respective market shares eroded to such an extent that partial deregulation has been introduced. The CER Roadmap to Deregulation Paper sets out a series of events which lead to full deregulation in Ireland and despite NIAUR not having published a similar paper it is NIEES's expectation that similar criteria would apply and full deregulation will take place should those criteria be met.

To the extent that the EPO has currently been removed NIEES consider that the current licence conditions regarding business separation as well as the competitive market ensure that both ESBCS and NIEES attempt to deliver the most competitive price to the end consumer. The removal of the EPO therefore has had no detrimental effect whatsoever and NIEES do not consider that there is a need to replace it.

The ring fencing of the retail supply arms of ESBCS and ESBIE was also implemented at a time of significant market share in electricity supply. Through the Roadmap Decision CER detailed criteria for the deregulation of the ESBCS business. While NIEES accept that following deregulation, integration of these business units is inevitable, NIEES would caution the RAs to ensure that sufficient regulatory powers exist that allow CER to step in should the merged units regain market share through a combined marketing or sales campaign.

**6) Do you consider that the planned forthcoming removal of the EPO for domestic customers in Ireland will have an adverse effect on competition and liquidity in the SEM spot or contracts market? If so, what replacement would you recommend for the SEM? Would the removal of the EPO from NIEES for customers below 150 MWh per annum in NI have a similar impact – and if so, what replacement would you recommend?**

NIEES considers the existence of an EPO intrinsically linked to deregulation and market share. Licence conditions provide a powerful enforcement of business group structures and the existence of active competition will always ensure that supply companies deliver the best possible end price to consumers. NIEES therefore does not consider there to be any adverse effect of removing the EPO.



**7) What if any, implications for competition / end customer do you see arising from ESB's proposed reintegration:**

- a. Horizontally**
- b. Vertically**
- c. Horizontally & Vertically**

**What, if any, new measures would you recommend to be put in place for each of the above forms of integration?**

NIEES consider horizontal integration of the ESB Supply entities as a natural consequence of deregulation and therefore is dependent upon ESBCS meeting the criteria laid out by CER in the Roadmap to Deregulation Decision Paper.

The RAs must consider however that the combined ESB Supply position is not only dominant at the point of deregulation but on an ongoing basis. In consideration of an expected communication and marketing campaign surrounding rebranding, ESB may pick up a significant number of customer wins and therefore the RAs may wish to consider delaying horizontal supply integration until an appropriate time has elapsed.

Given that that ESBPG continues to have a significant market share especially in considering actual output rather than installed capacity, it is unclear if horizontal integration of generation in isolation is something which ESB would advocate. Clarification would be required as to whether this would bring in currently deregulated plant into a regulated portfolio and what affect this would have on contract volumes offered to the market. NIEES opposes any market change which potentially reduces contract liquidity.

NIEES accepts that since the beginning of SEM the ESB market share in both supply and generation has been reducing and eventual reintegration is inevitable. The question posed at this stage is one of timing. Given the current size of the combined ESB entity and primarily the impact on market liquidity (even cognisant of the liquidity commitment) NIEES believes that the vertical integration of ESB would have a detrimental effect on the ongoing operation and strategic objectives of the SEM. Analysis of the CEPA findings supports this view.

As vertical integration would have a detrimental effect on the SEM, complete (horizontal and vertical) reintegration compounds this issue.

**8) Would further divestment by ESB encourage deeper competition in the wholesale market?**

Theoretically the divestment of a large participant in any market should increase competition however that is very dependent upon which assets are divested, who invests in the asset and the nature or terms of any divestment agreement. NIEES however would caution the RAs in their consideration of the current ESB assets. Further divestment of generation would only serve to



compound the current lack of contract liquidity and create a situation in which, despite the SEM being a mandatory pool, only vertically integrated business would be sustainable.

**9) What are the current incentives on generators and suppliers to offer and purchase contracts? Are there any impediments to trading contracts? Do you agree with mandating all generators to offer contracts and/or to become market makers? If not all generators, what criteria would you use for mandating generator to offer contracts or to become a market maker?**

The concept of CfDs facilitates Suppliers mitigating the risk of fluctuating prices through the SEM. The certainty they provide enables stability in the retail market price or tariff offered to customers.

In terms of impediments within the contract market, currently, the Master Agreements covering contracts in the market have a finite lifespan with the norm being Q4 to Q3 for each respective Master Agreement. To aid liquidity in the contract market, NIEES would recommend the consideration of converting these Master Agreements to an 'Evergreen' format whereby there is no specified end date for the Agreement. This would aid participants in considering and being able to hedge longer term products if they were available.

NIEES acknowledges that this is a relatively minor impediment with the key issue being the lack of incentive on generators to provide suppliers with hedging opportunities. This issue is undoubtedly related to the vertically integrated nature of the majority of market participants.

The mandating of contract provision and the concept of "market makers" are worthy of consideration and NIEES would ask to RAs to provide more information on these ideas.

**10)What product types and in what proportions should a minimum specification market maker offer? What eligibility restrictions should there be to trading with market makers?**

Without further details on the market maker proposition it is difficult to definitively say which types of product should be offered. Such is the lack of liquidity in the market at present however that any increase in volume would be beneficial.

**11)Do you agree with the CEPA analysis of the ability of structural remedies to address the competition problems presented by the hypothetical structural scenarios outlined in section 6 of the accompanying paper?**

Three structural scenarios (the status quo, horizontal integration of ESB generation and full ESB integration) were described in section 6 of the CEPA report. In assessing both of the proposed changes the conclusions reached suggest that neither form of integration has a positive effect on competition and any regulatory controls put in place only attempts to replicate the status quo. NIEES concurs with the CEPA view that vertical or horizontal integration should not be implemented at this time.

**12) Will ESB's liquidity proposal be effective in assisting contract liquidity in the market if it is allowed to vertically and horizontally integrate? Will this proposal facilitate competition in the wholesale and retail market? If so, why? If not, why not?**

The liquidity commitment is an acknowledgement that the integration of ESB in isolation would have a detrimental effect on the contract market. While the commitment goes a limited way to addressing this, as discussed above this potential problem is avoided by the RAs not allowing integration at this stage.

**13) Will increased wind penetration affect demand for contracts and the need for market liquidity?**

While increased wind penetration should reduce the market spot price, it does not alleviate a suppliers need to hedge the risk associated with SMP price fluctuation. The increase in wind generation however will push thermal generation further down or even out of the merit order. As we have already seen in the SEM, such a change to running order reduces a generators willingness to offer CfDs to the market and therefore increased volume of wind may have a detrimental effect on future liquidity.

## **Conclusion**

NIEES welcomes the RAs review of market power and in particular liquidity. NIEES views the current market as lacking in sufficient quantity, shape and length of products. This scarcity has already caused a degree of price premium to be applied to regulated tariffs and has excluded some suppliers from tendering processes and inhibiting retail competition. This is clearly not in the best interests of consumers. The need for increased contract liquidity therefore represents the single most important issue affecting the ongoing operation of the SEM and requires both urgent short term solutions as well as a viable ongoing arrangement.

The potential loss of PSO contract volumes further compounds price scarcity. It also creates a potential scenario in which vertically integrated organisations, looking only to balance or top up their position, could artificially inflate the contract strike price. This adversely and disproportionately affects non vertically integrated business and the customers they serve.



Within the consultation process the RAs have asked participants to consider a reintegration proposal put forward by ESB. NIEES have given this proposal due consideration and on balance conclude that changing the current market structure at this stage would have a negative impact on market power, contract liquidity and the general operation of the SEM.

NIEES believes that should either the PSO backed contracts become unavailable or the RAs permit the reintegration of the ESB Group, a sudo-vertical integration of NIEES with the Power Procurement Business, facilitating internal hedging, must be expedited on an equivalent timescale. This would be required to assist in offsetting an unreasonable and prejudicial regulatory structure. A detailed roadmap to deregulation in Northern Ireland also takes on an even greater urgency and importance.