INTERGEN

Phil Slarks
Wholesale Markets
Ofgem
9 Millbank
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Dear Phil,

<u>Wholesale power market liquidity: consultation on a 'Secure and Promote' licence condition</u>

InterGen welcomes the opportunity to respond to the above consultation. A liquid and transparent wholesale market is essential to the success of EMR; to build a robust reference price, encourage new build generation capacity and support independent generators and suppliers, whose competition will bring benefits to the consumer. We set out in our response below our support for the 'Obligation to Trade' proposal and explore how this meets the above objectives.

InterGen would be happy to meet to discuss further any points raised in our response.

Yours sincerely,

Melissa McKerrow
Head of Public Affairs and Regulation

1 Executive Summary

1.1 InterGen has been an integral part of the UK generation fleet since 1998 and currently has 2.5GW of capacity in operation. We are committed to investing in the UK and are planning to add 1.8GW of carbon capture ready gas-fired generation (CCGTs) during this decade, reducing the UK's carbon emissions significantly and providing essential generation flexibility, representing a further £1.4 billion of investment.

1.2 A liquid forward market is essential to enable independent generators, who do not have a large domestic customer base, to sell power forward and secure a stable cash flow. The current deemed improvement in near-term liquidity does not address market shape or prices beyond the immediate short term. Though this matter is a difficult issue to resolve and has been languishing for some time, the Summer 2013 deadline on a decision for intervention is a welcome milestone.

1.3 Improved long-term market liquidity not only allows InterGen to trade more efficiently but has the ultimate result of bringing down costs for all participants and therefore the consumer due to increased competition in generation and supply.

1.4 InterGen believes that in order to generate robust reference prices in the forward wholesale electricity market, intervention in the form of an 'Obligation to Trade' is urgently required.

1.5 The Obligation to Trade will allow independent generators and small suppliers access to forward products essential for hedging and risk mitigation. It is the only intervention proposed that guarantees additional trading of power volume, being also simple to monitor and easily adjusted if the desired effect is not observed. It will also create a robust and reliable reference price, essential for the success of the CfD FiT for low carbon generation.

1.6 InterGen has always believed that the market should deliver the true price reflective of supply and demand fundamentals. However, with current market concentration and vertical integration, liquidity has been driven to such a low level that intervention has become necessary.

2 Obligation to Trade

2.1 InterGen agrees that little progress has been made in relation to developing robust reference prices along the curve and supports Ofgem's proposal to introduce an 'Obligation to Trade' to address this issue. We set out our additional thoughts on the detail of the proposal below.

2.2 The Obligation to Trade should:

- Be placed on the six large Vertically Integrated (VI[1]) companies (via licence conditions) to trade volume on the forward curve;
    - These companies have large domestic supply positions, accounting for 99% of the domestic market between them,
    - Their "sticky" customer base enables them to trade further along the curve, effectively hedging their position in the forward market;
- Ensure that the route to market is not mandated, but must be via a recognised route that most parties can access;
    - For example, the traditional brokered Over the Counter (OTC) market, exchanges, etc;
- Obligate VI's to trade (buy *or* sell) two key products of Baseload and Peak in the Months and Season+1, +2, +3 and +4;
    - Baseload liquidity has been, and remains, essential for hedging,
    - As the volume of renewable generation rises, thermal plant running regimes will become more intermittent and therefore access to peak electricity products will become increasingly important;
- Ensure that the setting of obligated trading volumes for each of the VIs (by Ofgem) is a function of both the supply side and generation side of their businesses;
    - The Obligation needs to be large enough to ensure additional curve liquidity and a continuous market;
- Avoid onerous monitoring requirements by Ofgem;
    - The Obligation sets the volume for the compliance period (e.g. a year),
    - The Obligation also sets the volume for each product over each period (e.g. Baseload and Peaks in Front Month, Month+1, Season+1, etc.),
    - Volumes for each product in each period must be traded each month;
- Utilise the reporting requirements under the new REMIT legislation to ensure Ofgem can easily monitor the Obligation to Trade via data that is already being reported.

[1] VIs are the Vertically Integrated energy companies operating in the UK, namely, Centrica/British Gas, EDF, E.ON, RWE N Power, Scottish Power, SSE

2.3 Robust reference prices in longer-dated products will only be achieved by an increase in traded volume. This is the only obligation either contained within the Secure and Promote (S&P) consultation or that has been developed by market participants as a result of S&P that can guarantee this.

2.4 The Obligation is simple to monitor and finesse by Ofgem. It is also a much lower cost option for the industry as a whole and will place less of a commercial risk to the VIs than the Market Maker solution suggested in S&P.

3 About InterGen

3.1 InterGen is owned by Ontario Teachers Pension Fund (one of the world's largest pension fund investors in infrastructure projects) and China Huaneng Group (the world's second largest power generator). Both of these companies are entities which the UK recognises as being highly attractive to bring much needed foreign investment to the UK and to its energy sector.

3.2 InterGen is one of the UK's largest independent generators, operating a portfolio of high efficiency gas-fired power stations (totalling 2,490MW; an investment of some £2.1bn in today's money) and actively trades in the prompt and forward wholesale power, carbon and gas markets.

3.3 InterGen requires a liquid forward market to be able to hedge our existing assets effectively. Currently the shape required is only available in the prompt market which leads to a volatile cash flow and uncertainty for our shareholders.

3.4 InterGen's owners are very keen to invest further in the UK and have invested substantial sums since 2008 developing the Spalding Energy Expansion and Gateway Energy Centre 900MW CCGT projects in the UK. Both projects are designed to be carbon-capture ready.

3.5 Each project will cost around £700m including interest over their three year build programme – a total of some £1.4bn. InterGen's planned investments will create around 1,200 direct jobs over the three year period and then long term skilled jobs thereafter.

3.6 This investment hinges on the gas fired generation sector being attractive for our owners. Principally, they seek adequate stable long term returns commensurate with an appropriate degree of risk.

3.7 InterGen's existing and planned gas fired power stations are vital to the long term sustainability of the UK's security of supply.

4 Questions

Question 1: Do you agree with our assessment of market developments?

4.1 InterGen agrees that some steps have been made to improve liquidity in the near-term but believes there are still significant issues in relation to liquidity on the curve.

4.2 **Objective 1: Availability of products that support hedging**

- For an independent generator, the availability of products has continued to decline over several years. In particular, it is very difficult to hedge peaks beyond the front month or season and for baseload only the front two months and seasons trade with any regularity. This inability has lead to volatile cash flows since the commencement of NETA, hindering further investment as a consequence.
- The commitments to trade with small suppliers that have been made by the VIs are welcome. The obligations contained in Objective 1 will ensure that these are guaranteed.
- InterGen agrees that the commitments should be targeted at independent suppliers as this group of participants face the largest barriers to entry.
- By obligating, "reasonable credit and collateral arrangements", more innovative credit solutions are likely to be agreed.
- For the obligation to be effective, the range of products should be kept to a minimum. If the baseload and peak products trade with regularity, bespoke products will most likely develop as a consequence.

4.3 **Objective 2: Robust reference prices along the curve**

- InterGen agrees that bid-offer spread gives an indication of price robustness (particularly if spreads are narrow and the products can be traded in sufficiently small volume if required), but we believe that actual trades provide a better measure. The number of trades in the forward months and seasons has fallen to the point that market participants cannot guarantee that they will be able to efficiently enter or exit a power position, something that is not of concern in the gas market. The ability to enter and exit a trade is not only a fundamental tenet of a liquid market but is critical in attracting financial players to the market.
- The financial forwards market has been around for a number of years without gaining much industry support. If these products were going to evolve naturally over time, there would have been some visible improvements by now. It is likely that a major reason for this is the credit costs, particularly for a player that is naturally imbalanced (for example always a buyer or always a seller).

4.4 **Objective 3: Effective near-term market**

- InterGen has always found the near term markets to be sufficiently liquid, and acknowledges that the introduction of the auction has improved access for those players wishing to trade a half hourly Day Ahead (DA) shape (though that does not suit all participants). We believe that the prompt market has and continues to operate effectively and does not require intervention.

Question 2: Do you agree with our description of the policy and regulatory context affecting liquidity?

4.5 EMR and the associated policy changes are intrinsically linked with the liquidity work. A liquid market, and a resulting robust reference price, is essential if the new CfD FiT is to be successful in encouraging new low carbon generation onto the system.

4.6 EMR also supports continued investment in flexible, thermal capacity, such as gas plant. InterGen agrees with the DECC's Gas Generation Strategy published in December 2012 that states 'non-vertically integrated market participants need to be confident that they can manage key risks such as their route to market and imbalance. They therefore need….sufficient liquidity in the forward markets….and reliable forward wholesale prices that reflect supply and demand fundamentals in order to provide investment and operational signals'.

4.7 Currently, the absence of reliable forward price signals makes it more difficult to achieve financing for new projects, urgently required to meet EMR's Security of Supply objectives. InterGen estimates that over 40% of gas-fired plant constructed in the UK during the last 20 years has been done so by independents. It is essential therefore that EMR and associated liquidity work supports the independent sector, as independent investment will make-up a significant proportion of the estimated £200bn required to meet challenging 2020 low carbon and security of supply targets.

4.8 Independent developers like InterGen rely on Project Finance to finance new assets. Project finance is secured by demonstrating to the banks and overseas shareholders that a project will make an adequate return on investment – this is usually demonstrated by taking a look at forward markets and ascertaining the return a plant can be expected to make on electricity sales. Currently, with the forward market constrained to only provide a 'look' a few seasons ahead, InterGen can offer no surety to banks of estimated income level, so the ability to secure project finance is reduced materially with banks needing long term tolling contracts in place to fund projects (with appetite for such contracts low as the Big 6 build their own plant).

4.9 Moreover, current forward prices do not reflect accurately the UK electricity supply demand fundamentals. Ofgem's recent Capacity Adequacy report (published in October 2012) warned of capacity margins dropping to just 4% by 2015/16. The impact this should be having on the market cannot be understated. Low capacity margins should send a signal to investors to keep existing plant open and/or construct new ones to manage the capacity gap. However, the current "spark" and "dark" spreads in 2015 are very low, not reflective of a 'tight' system, therefore independent generators are not receiving the signal they need to invest in new plant. Or indeed keep existing plant open.

4.10 InterGen urges Ofgem to consider new entrant generators, as well as existing independent generators, in its proposed liquidity solution. There is currently more competition in generation than in supply (80% of generation is owned by the VIs as opposed to 99% of supply), and it has been recognised that competition is essential to drive new investment and keep prices down. EMR understands that investment in both new and existing plant is required to meet its objectives, and better forward market liquidity is essential to meet those aims.

Question 3: Are there other factors that we have not identified that may be posing a barrier to improvements in liquidity?

4.11 The current market concentration and the closely balanced positions of the VIs make it more efficient for them to trade internally. However, this creates a barrier to entry for both small suppliers and independent generators.

4.12 InterGen does not believe an increase in exchange-based trading for longer-term products would be of benefit to smaller independent market participants who have limited capacity to provide collateral for margining. In fact InterGen considers it would be detrimental to these players as a cleared market place increases the capital requirements necessary to trade.

4.13 The Carbon Price Floor has dampened liquidity beyond the front 4 seasons. As long as the Carbon Price Support rate remains variable, a generator is unlikely to want to sell forward either a clean dark or spark spread as there remains significant risk that the deal could become uneconomic.

Question 4: Do you agree that the Secure and Promote model presented in this document could help to meet our objectives?

4.14 InterGen agrees that the model is very helpful and, if correctly implemented, could go a long way to improving the liquidity in the power market. It helps level the playing field for smaller suppliers trying to break into a market dominated by the large VIs through the "fair and reasonable terms" but it also addresses the lack of trading along the curve in the "Obligation to Trade".

Question 5: Does our proposed structure for Secure and Promote seem appropriate?

4.15 InterGen agrees with the focus on Objective 1 'Availability of products which support hedging' and Objective 2 'Robust reference prices generated along the curve' as we believe that the two most pressing concerns in the UK power market today are:

- The lack of competition on the supply side as small suppliers find it difficult to enter the market place,
- The lack of trading on the curve making it difficult to hedge forward and an unattractive market for financial players.

However, in relation to Objective 3 'Effective near-term market', InterGen does not believe there is an issue with the prompt market. InterGen would not support further regulation in this area as this could jeopardise the existing OTC market which is vital to maintaining the continuous nature of power trading. There is currently enough volume in the DA auction and through the OTC route to create an index by combining these markets.

Question 6: Do you think the proposed Secure and Promote model would be a more effective intervention than the Mandatory Auction?

4.16 InterGen believes that a continuous market is much more effective than an auction. We can see the value to some players of an auction, either DA or in the curve. However, given that post 2015, the majority of thermal generation will be gas-fired, a continuous power market that mirrors the continuous gas market is essential. A Mandatory Auction (MA) results in power being sold separately to when the gas is purchased which opens up the risk for market participants that the gas price moves, in the interim period, to an extent where the power sold in the MA becomes uneconomic. A Mandatory Auction would not allow a player to exit its position if this were the case, therefore adding extra trading risk. The prompt auction has not been successful in attracting a range of new participants so it is likely that a curve auction would be contested by the same players currently trading on the curve.

Question 7: Do you have any views on the requirements we have set out for trading commitments – in particular those points listed under "outstanding design challenges" on page 25?

4.17 During our conversations with small suppliers, it appears the main problems they have with gaining access to power are volume and shape. They do not require 10MW clips in months or seasons so the 0.1MW requirement mentioned is a helpful step.

Question 8: Do you have any views on our proposed approach to securing existing developments in relation to day-ahead auctions – in particular those points listed under "outstanding design challenges" on page 28?

4.18 We believe that the VIs already trade at least 30% of their annual generation in the DA auction and the gross bidding arrangements incentivise them to do this. Any additional regulation could put the OTC market at risk.

4.19 We agree that the GB hub should introduce better competition in the platform market through the pooling of liquidity across auction platforms.

Question 9: Will trading along the curve naturally develop from the near term market?

4.20 Past history suggests that this is unlikely. The near term market has been liquid for many years and trading along the curve has decreased steadily. In the last 2 years the volume traded in the prompt market hasn't altered a great degree but neither the physical or financial curve has shown any signs of naturally developing.

4.21 The lack of liquidity, especially for shaped curve products, makes it hard to effectively hedge forward our existing assets. As gas plants will generally be the marginal thermal plant, being able to trade baseload is no longer as important. It is therefore essential that players can access a peak market on the curve, allowing stable forward cash flow to be locked in rather than waiting until the liquid prompt market to trade the whole plant volume. Once a curve peak market becomes liquid and reliable, then other products (e.g. EFA 5) should develop allowing both generators and small suppliers to access additional shape.

Question 10: Should Ofgem intervene to ensure that robust reference prices along the curve to develop?

4.22 In the event the industry is unable to resolve this issue then some degree of intervention may be appropriate. It is vital that any intervention is one that ensures an increase in liquidity. The market has had several years to increase forward liquidity on a voluntary basis and it has had no success to date. The S&P model recognises this and presents a balanced package of options to address the flaws in the market.

4.23 The simplest and most effective intervention remains the Obligation to Trade.

- It is simple to monitor as the obligated parties would inform Ofgem of what volumes they will trade in each month and this can be verified through REMIT.
- It is the only intervention that guarantees additional trading.

- The obligated parties are in control of their position. They are only obliged to trade (i.e. can elect to buy or sell) so they can net off their buys and sells to leave a flat position thus minimising any risk.
- It is an easy mechanism to adjust if volumes are not sufficient. With month by month reporting it will quickly become apparent if the desired liquidity increase has been achieved.
- No new credit or trading arrangements will need to be negotiated so it will be quick to implement and there will be minimal additional cost to the industry as a whole.

4.24 InterGen is aware that through the Ofgem Roundtable events, a form of Self Supply Restriction (SSR) has been proposed. The VIs have stated that they provide a churn of at least 2 - 3 already so proposing 100% of their supply volume to be sourced from third parties is unlikely to provide any additional liquidity. A SSR will be difficult to monitor by Ofgem and, as Ofgem stated at a roundtable session, relatively simple to circumvent.

Question 11: Is market-making the most appropriate intervention option to promote robust reference prices along the curve? What is your view on the trading obligation option that is outlined on page 34?

4.25 In the past InterGen has supported the Mandatory Market Marker (MMM) for the curve, however, that was when it was presented as a choice between it and the Mandatory Auction. We acknowledge that market making has some benefits and has been successful in other markets but believe that an Obligation to Trade has a much greater chance of achieving an increase in liquidity for the following reasons:

- A market maker would be difficult for Ofgem to monitor.
- There are currently reasonably tight spreads in the market without any trading taking place. In effect there is market making already in place but this has not encouraged trading execution.
- The obligated parties are not in control of their curve position which exposes them to risks that they have not previously faced.
- Setting up as a market maker would be an expensive and time consuming process and this could lead to delays in implementation leading to a further deterioration in curve liquidity.
- The full impact of MiFID II is still uncertain and it is possible that becoming a market maker could result in players losing their hedging exemption leading to large additional costs through the clearing of all trades.

- InterGen is aware that at an Ofgem Roundtable event, an alternative design to the S&P Market Maker was proposed whereby a third party will take on the role as a market maker through a tendering process. This solution retains all the problems inherent in the S&P Market Maker but has the added potential to increase transaction costs for the industry and may require many parties to negotiate new trading and credit agreements with the new counterparty. This tendering and negotiation process will lead to further delays in addressing the liquidity problems.

Question 12: Do you have any views on the design of the market making intervention outlined in this document – in particular those points listed under "outstanding design challenges" on page 33?

4.26 Not answered

Question 13: Do you have any views on the MA design issues discussed in this chapter?

4.27 InterGen is not supportive of mandatory auctions for either day ahead or forward products as a solution to market liquidity problems. Auctions (such as the UK EU Allowance auctions) can distort the continuous market prices as large volumes are transferred between participants at a single moment and all those participants who have failed to buy or sell their allowances discover this simultaneously.

Question 14: Do you believe that a hub approach to pool liquidity across multiple MA platforms is a viable option?

4.28 Not answered