

Liquidity in the GB wholesale energy markets

I welcome the report and its thorough critique of market activity. This is arguably the single most important consultation on the market structure and operation of the electricity sector by Ofgem since the conclusion of the Neta design process nearly a decade ago. My only real criticism is that there is such a limited period to assimilate and respond to the comprehensive analysis and assess its implications.

This letter addresses the consultation issues in general terms, highlighting what I see as the key impacts, challenges and options. The main message is that the problems identified by Ofgem in the *electricity market* in Chapter 2 are very real causing considerable problems for players outside of the Big Six and they are deterring new entry. They will continue to do so unless an appropriate set of responses are progressed. It follows that a proportionate regulatory response given the structural cause of the problems and their deterioration over the recent past—irrespective of the causes identified in Chapter 3—would be one that entails bold regulatory measures, not market evolution. The portfolio of possible remedies identified in Chapter 4 should, if suitably developed, provide the basis of a coherent and proportionate response, but the various options require further development, clearer definition and testing.

Headline points from the response are summarised in the rest of this letter. Responses to the specific questions raised by Ofgem are set out in the attachment.

Wholesale trading in electricity is deficient

Chapter 2 of the report confirms beyond reasonable doubt that the traded electricity wholesale market is falling well-short of expectations both in terms of the volume and structure of trading, and this short-fall is actively inhibiting fair competition and new entry.

Further the current situation described by Ofgem—which seems broadly accurate—is set to deteriorate further. This is because:

- the acquisition of British Energy by EDF and potential subsequent sale to Centrica will remove both a very long and very short player from the market and trigger a significant further reduction in at best patchy liquidity; and
- following the financial crisis, banks are demonstrating a greatly reduced appetite for trading in the market, hence the valuable sources of liquidity they provided is being reduced.

This is a particular problem for the industry and its regulator, but the gravity of this position is not explicitly recognised in the report. The scale of the problem arises because the current electricity trading arrangements and the bilateral trading model on which it is based are designed around and presume the development of healthy traded markets in the absence of a centralised pool. There is an important corollary of this. The central trading rules for residual, uncontracted supplies were specifically framed to incentivise parties to trade on the market, but many cannot because of illiquidity compounded by shape, timing and size issues.

This bilateral trading model was not an end in itself. It was constructed as a means to ensuring that, through participation in the contracts market, significant players would be indifferent to centralised price formation processes, and they could not therefore game market prices as they had done under the Pool. Consequently, if participants are not able to access *volume and shape* for

suitable durations they will not be able to trade efficiently. Often they will be unavoidably exposed to imbalance pricing that in effect loads balancing costs onto them, thus further undermining their ability to compete.

What the market designers failed to see—partly because the rules for pricing uncontracted supplies were untested at the time—was that the inherent volatility in commodity prices after the initial price collapse around the time of NETA implementation would lead those players to integrate in preference to contracting, as Figure 3.2 well-illustrates. It is also relevant that, amid this process, one of the few deterrents on self-supply was removed by Ofgem accelerating the response.

The deliberate relationship established by the NETA designers between traded markets and the rules for uncontracted supplies was intended to boost competition; but in practice it has undermined it. I have described the way it has developed as the “double jeopardy” NETA market: parties outside the Big Six have found it increasingly difficult to trade on the contracts markets (indeed often the Big Six will not trade with many smaller players even where they have volumes to sell). Increasingly pushed back onto short-term markets as default purchasers, they must over-buy at high prices to avoid being short and exposed to high and unpredictable system prices. Ultimately where they are unable to source power on the bilateral market or through the exchanges, they will simply rely on the imbalance market, which has been deliberately made hostile.

This position pertained well before the credit crunch, which has aggravated the problems of contracting faced by smaller participants.

Effects of defective traded markets are severely harming supply competition

The significance of this deficiency goes rather beyond that suggested in the consultation document. Without reasonable access to traded markets, retail competition is, and will inevitably be, much less effective than would otherwise be the case.

In terms of the market as is:

- significant volumes of power have been withdrawn through acquisition of nearly 30% of generation capacity since 2001, potentially removing up to 45%¹ of available volumes from the market;
- the incumbents, because they are heavily vertically-integrated, can self-source large volumes of their power relying upon in-house generation. There is empirical evidence that the Big Six give precedence to their own power stations over traded quantities, especially for sourcing power to the domestic sector, which must increase costs to consumers;
- markets are much less liquid than they would otherwise be, and against the background of aggressively cycling commodity prices, a number of notable supplier failures have occurred aggravated by the absence of affordable risk management options in the market; and
- even without these failures, wider competition is being distorted, generally disadvantaging non-integrated, smaller players and, of course, consumers.

Looking ahead:

- illiquidity in those markets raises basic barriers to new entry as well as increasing the costs of doing business for newer entrants;

¹ After the full British Energy transaction and on-sale to Centrica – 15% and 23% prior to it.

- over the long-run, the lack of credible new entry will significantly increasing the market power of the incumbents;
- in essence, market access can only be achieved through the incumbents, and they can collectively set their own terms of trade; and
- this position will have a detrimental impact on newer types of participants and technologies that the Government assumes will arise in response to its low carbon agenda.

Ofgem must take meaningful remedial measures

As I have said already the report understates the fact that the current trading arrangements—NETA or BETTA—were premised on the development of liquid traded markets to bring proper market based pricing, thus stimulating competition. The challenge facing Ofgem is not how to foster trading *at the margin* or improve liquidity *by degrees* (which is the tone of much of the report), but rather how to bring about the conditions that NETA was supposed to deliver in the first place. To do this it needs urgently to define unambiguously what the characteristics should be of healthy wholesale competition.

It follows from this definition of the challenge that Ofgem needs to develop a remedial programme and specific measures urgently that will address three things:

- how it might best attain this outcome, including development of a much more detailed critique of which measures address particular defects experienced by different types of participant;
- in stimulating liquidity, it should factor in the need to address suitable types and timing of trades and not just volumes; and
- how, given that the hurdles to attainment of liquid markets are considerable, it proposes specifically to address the competitive detriment faced by those in the market outside of the Big Six *until* meaningful and enduring change can be achieved.

Several measures would help, but mandatory trading is the key

Turning to the possible remedies set out in Chapter 4 the foregoing suggests that:

- current market initiatives, while they have merit, are likely to have modest if any impact;
- similarly additional information, provided it is relevant, is always desirable, but on its own will not address the defects that have been identified;
- this is because there are currently no fundamental drivers on the major market participants to encourage or increase trading;
- to achieve such an outcome there is a need for targeted regulatory action;
- an obligation to offer products on a non-discriminatory basis to a party on similar terms as it offers to its own supply business is the key to urgently unlocking liquidity and should be enforced through the relevant licences of the Big Six. Non-discretionary, regular auctions of power by them should stimulate liquidity and attract financial players, intermediaries and large customers to the market. In turn, the development of trading in this way should in the longer term lead to commercially viable market maker services and traded services to smaller players and new entrants;
- the reintroduction of a self-supply restriction would be useful, but other measures would be needed to address granularity and to enable appropriate products to be available. Large 500MW trades of monthly power might be of value to parties subject to such a restriction, but otherwise will not help smaller players and new entrants;

- given the stated problem of market depth and access to it, an obvious part of the solution is to create a market maker backed up by an orderly clearing process, and there are good international precedents for this. However, this approach should not be pursued as an alternative to mandatory trading. Further, if pursued, it should be designed in such a way to avoid “socialised credit” as this will attract players that are not properly capitalised. While this might cause a short-term boost to new entrants, it is likely also to lead to further failures in the longer term, which could deter new entrants that do have the necessary financial resources to operate in this difficult sector;
- important aspects of cash-out remain defective and will continue to be problematic irrespective of steps to stimulate liquidity. Urgent measures are needed to reduce cash-out complexity, price pollution and artificial restraints on trading imposed by timing of gate closure. The linkage between gate closure and contract notification should be broken for all but baseload generation and balancing service providers. The desirability of ex post trading, especially between suppliers with matching imbalances, should be examined urgently. Action is also required to address convoluted rules determining dual price formation that create penal spreads. Indicative prices should be calculated and made available to the market;
- the demand-side is worthy of a specific regulatory stream in its own right; and
- credit arrangements across the industry are fragmented, overlapping and frequently excessive. Rationalisation of credit is an important step in its own right, though it is hard to make a case that the associated costs should be socialised.

Please let me know if you would like any further comment or have any queries on this letter.

Nigel Cornwall

Attachment
Liquidity in the GB wholesale energy markets
Comments on specific questions

Chapter 2

- 1. Do you agree that there is sufficient liquidity in the GB gas market, or are there some segments of the market where liquidity is insufficient? If so, what is the evidence for insufficient liquidity and what is its impact?**

Yes.

- 2. Do you agree that there is insufficient liquidity in the GB electricity market. If not, can you provide evidence to show that GB electricity liquidity is sufficient?**

Yes, we agree that there is insufficient liquidity in the GB market. In particular:

- Ofgem's analysis demonstrates that the current level of liquidity, as measured by churn, is very low as compared to the GB gas market and to a number of other European markets; and
- of equal concern is the trend in the GB market, namely, that the level of churn has fallen substantially over the five years from 2002 to 2008, whereas in the German and Dutch markets the level has grown to overtake the level in our own market.

For non-vertically integrated market participants, a good level of liquidity across the curve is vital to effectively managing risk and therefore to competing successfully in the market. For suppliers, the traded markets should provide access to product; for generators it should provide access to purchasers.

Going forward, the acquisition of British Energy by EDF will inevitably further restrict liquidity.

We support the view that the lack of product further along the forward curve and high bid offer spreads provides further weight to evidence of lack of liquidity.

- 3. Do you consider that the data and evidence presented here portrays a true and fair picture of GB wholesale liquidity for gas and electricity? If not, why not?**

Yes, we agree that the picture is true and fair. But we are concerned that Ofgem has not fully acknowledged the detrimental competitive impacts the illiquidity is creating.

- 4. Do you think that it is right that Ofgem should be concerned by low levels of liquidity in the GB electricity market? If yes, please explain which particular aspects/market segments Ofgem should be concerned with and why? If no, please explain why, in light of the evidence in this Chapter.**

Clearly Ofgem should be very concerned. The central trading arrangements design is premised on liquid traded markets for price discovery and risk management.

Ultimately if consumers are to reap the full benefits of competition then that competition has to be effective. One of the key tools in this respect from the viewpoint of smaller suppliers is access to a wholesale market that is liquid. The more liquid the wholesale markets, as Ofgem itself pointed out in the initial findings for the supply probe, "the easier it is for non-vertically integrated entrants and competitors to participate on the same terms as vertically integrated firms."

It also identified that it is easier for:

- new entrants to be confident that the wholesale markets are not artificially distorted by vertically integrated players;
- all market participants respond to and compete around the risk and hedging preferences of their customers;
- all market participants to secure the full range of products required to hedge their specific profile of risk exposure; and
- all market participants to make long-term hedging and investment decisions on the basis of the traded wholesale price.

Chapter 3

1. What impact has vertical integration had on liquidity in the GB wholesale energy markets? Please provide evidence in support of your view.

We believe that the current industry structure with its high level of vertical integration, when it is combined with the lack of a range of independent generators and suppliers, has significant and a negative impact on liquidity in the electricity market. Ofgem's analysis makes clear that vertical integration has meant that a significant volume of electricity overall is not being traded through the market as vertically integrated companies self-hedge.

It identifies that this factor on its own may not be sufficient to mean that the wholesale markets are illiquid. But the advantaged position held by the incumbent major vertically integrated participants means that not only are they better positioned to manage profile and balancing risks than the independent suppliers and generators, but they also have a limited interest in helping a liquid and accessible market, which might erode their competitive advantage, develops.

2. Is the GB market too small to support higher levels of wholesale liquidity?

Not at all, although further integration of the GB market to other markets would be likely to help in this respect. In terms of the number of participants, we agree that the fact that the GB market has in the past had higher levels liquidity suggest that it is big enough to sustain a market with higher levels. But in this respect we believe that the size of the market is less important an issue than the conditions which have created a high level of vertical integration and a low number of independent generators and suppliers.

3. To what extent has increased interconnection and closer integration in European markets been responsible for higher levels of liquidity observed in those markets? How much of a role has lack of interconnection and integration played in low levels of liquidity observed in the GB electricity market?

We concur with Ofgem's view that a high level of interconnection is neither a necessary or sufficient condition to provide high liquidity, but it is likely to be a contributing factor in the development of liquidity.

4. To what extent has Government/regulatory intervention and policy uncertainty contributed to the low levels of liquidity observed in the GB electricity market?

In respect of Government/regulatory intervention contributing to low liquidity, we consider that it is a *lack* of appropriate action that has been a major contributing factor in the face of an increasingly vertically integrated market. The issue of low liquidity has been repeatedly raised as particularly affecting non-vertically integrated participants. Perversely the primary example

of regulatory action taken in this area is the removal of the self-supply restriction which has contributed to the draining of liquidity.

In terms of policy and regulatory uncertainty, a stable and predictable environment is vital to create the willingness amongst participants to invest and contract ahead.

5. To what extent are current cash-out arrangements reducing GB liquidity and how?

The cash out arrangements have been critical in creating market conditions which have encouraged vertical integration and at the same time created a barrier to entry for smaller, non-vertically integrated market participants. In particular the volatility of the cash out price, which has been increasing, and the complexity of the calculation work against smaller non integrated participants.

The cash-out arrangements have acted as a barrier to entry for smaller participants because they find it more difficult to manage balancing risk. This has a direct impact on overall market liquidity. Compared to the larger vertically integrated parties, smaller parties lacking portfolio benefits are likely to find forecasting more difficult (and the growth of intermittent generation is likely to exacerbate this problem.) Not being vertically integrated, their routes available to manage this risk are further limited by of the lack of liquidity in the market.

6. Are robust, reliable and widely accepted reference prices currently available in the GB electricity market? If not, do you consider the creation of such prices will aid the development of liquidity in the GB wholesale markets?

We consider that robust reference prices on standard products are important to aid the development of liquidity and agree with those who suggested that at the moment the absence of clear market reference prices for standard products has resulted in fewer products being available. In turn agreed robust reference prices are enabler of trading.

7. Why do you think there is a lack of exchange based trading and clearing in the GB wholesale market? To what extent has this been responsible for driving liquidity in European markets?

Lack of development of exchange-based trading and clearing appears to reflect the absence of demand from the larger vertically integrated participants who a) have the resources to manage setting up and ongoing management of the GTMAs for trading on the OTC and b) have the internal financial resources to find the key services offered exchange based trading often less attractive than the alternatives.

This lack of development is important because it has restricted the options for smaller counterparties whose greater presence in the market could provide further liquidity: Ofgem notes that clearing houses could have a number of benefits for smaller counterparties including pooling and netting of credit risk, eliminating of asymmetrical margining which benefits the stronger counterparty, reduce restrictions on the choice of trading partner and aid market assess and entry.

8. We would welcome any evidence market participants can provide us on the difficulties that they are experiencing in obtaining the required products, shapes and volumes.

N/a

9. We welcome views from market participants on whether there is a lack of information that is preventing trading on GB wholesale markets and thus reducing

liquidity. We would appreciate views as to what type of information provision would be beneficial to improve liquidity.

We do not consider that a lack of information of itself is inhibiting trading.

10. Do you believe that price volatility in the GB wholesale electricity market has had a detrimental impact on liquidity?

Yes, as it has been a key driver of integration. This is again an issue which will disproportionately affect smaller participants, whose financial resources are more limited and therefore are restricted in the amount of portfolio rebalancing they can undertake. We accept Ofgem's analysis that traders and smaller participants may tend to restrict their trades in volatile market conditions to limit the risk of a sudden rise in required collateral and that this will tend to reduce liquidity.

In the longer term, volatile prices discourage market entry, particularly where liquidity is already at a low level.

11. To what extent is the current GTMA process acting as a barrier to entry and hence reducing liquidity?

The GTMA process is complex and resource intensive for new entrants wishing to trade and places a higher proportionate cost and resource requirements on smaller participants, primarily because the incumbents make it so. Compared to exchange trading it can also limit the number of counterparties. While not a primary issue it is a further factor which is a symptom of the lack of liquidity and a further barrier to its development.

12. Do market participants believe that credit/collateral requirements have increased over time? What impact has this had on liquidity in terms of the ability of market participants to trade?

Yes. Ofgem states that whereas companies previously relied on weaker instruments for mitigating credit risk, such as an implicit parent company guarantee, in today's market "substantial amounts of cash" are required to back trading activities particularly for smaller participants with weaker balance sheets and credit standing. We concur that the use of collateral and margining is likely to have contributed to the reduction in trading and liquidity.

Chapter 4

1. Do you believe that the current market initiatives to improve liquidity are likely to be successful? If no, then please indicate why.

We welcome the initiatives of the APX Power UK day ahead auction, the UK N2 exchange and the LEBA price indices, but doubt they will have a fundamental impact on drivers to trading.

We note that Ofgem considers that one option would be to "wait and see" how these develop before considering implementing other measures. This will not address the problems that have been identified, and these require a major and focussed response.

2. Is it appropriate to reintroduce some type of self supply licence condition and how useful would such a condition be in addressing the lack of liquidity in the GB electricity market?

Yes. The removal of the licence condition in 2004 was very premature.

3. Are there current market/governance arrangements which act as a barrier to entry and reduce liquidity? If so, what are these and what changes could made?

This is a secondary but important issue. We consider that the basic principles of industry governance of the central trading arrangements based on transparent principles and independence are sound, and the ability to raise a change proposal and have clear processes through which it must be dealt with has obvious merit.

But on the key issue of cash-out arrangements, these remain complex and exacerbate illiquidity and have proved difficult to reform, because the largest players in the market have blocked further beneficial change. Subject to seeing the detail, we consider that the thrust of the code governance review, especially with regard to code administration and requiring code administrators to act as a critical friend, is the right way forward.

4. How could product offering for smaller participants be improved?

Shaping is essential to smaller players. The option for small domestic suppliers to buy baseload and refine the shape closer to delivery is extremely risky due to being short on the peak of the day with its associated high price volatility even with low bid/offer spreads. Going long is an option; however, the cost of this is again unreasonable in comparison the achievable margins. We therefore believe these problems should be taken specifically into account in determining the parameters of the mandatory auctions.

5. To what extent do you feel compulsory auction would help to increase electricity wholesale market liquidity? Would this be a proportionate measure?

We consider that the proposal for compulsory auctions for principally vertically integrated participants is the key to creating a market provided they address issues of frequency, shape and granularity. Yes it is proportionate as the fundamental problems arise from reintegration.

6. Is there any information on the GB energy markets that, which is not available, or available to just some participants that you believe would facilitate greater market participation and enhance liquidity?

We support the provision of additional information as suggested in the consultation. We concur that a lack of relevant information and/or information asymmetry increases risk and can thus reduce liquidity. But ultimately it will not be a significant driver of liquidity. Separate regulatory accounts are essential, together with full disclosure of inter-company transfers.

7. To what extent could market makers improve the level of liquidity in the GB wholesale energy markets? Should such a function be funded by government/industry?

A carefully structured market maker would help over the short-term but should not be seen an alternative to mandatory auctions. See covering letter.

8. What changes could be made to the current cash-out arrangements to reduce barriers to entry, where they exist, and improve the level of liquidity?

Urgent reform of the cash out arrangements is required. Important aspects of cash-out are defective and will remain problematic irrespective of steps to stimulate liquidity. Proactive measures are needed to reduce cash-out complexity, price pollution and artificial restraints on trading imposed by timing of gate closure. The linkage between gate closure and contract notification can be broken for baseload plant and balancing service providers. The desirability of ex post trading, especially between suppliers with matching imbalances, should be examined urgently. Action is also required to address defective rules determining dual price formation and the penal spreads that arise.

9. How could the demand-side be encouraged to participate more actively in the GB wholesale energy market? To what extent could greater demand side participation improve liquidity?

We consider that there is good potential in the demand side to improve liquidity, but this is a major issue for review in its own right.

10. Whilst Ofgem has a limited ability to directly influence the impact on liquidity of higher credit and collateral requirements, we would be interested to hear views from industry parties on possible measures to address this impact. Should costs of credit risk for small market participants be socialised across the market?

It is not clear how this would work or how this could be made cost reflective for all parties.

11. Are there any additional measures which could improve liquidity in electricity markets? Please outline these and explain why they would be appropriate and proportionate.

None identified.