



Consultation Response

By email to europeanwholesale@ofgem.gov.uk

21 May 2012

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Ofgem

9 Millbank

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Dear Martin

ELEXON's response to Ofgem's open letter: 'Implementing the European Electricity Target Model in Great Britain'

We welcome the opportunity to put forward views on the implementation of the European Electricity Target Model in Great Britain.

The views expressed in this response are those of ELEXON Limited alone, and do not seek to represent those of the Parties to the Balancing and Settlement Code. And our response does not seek to favour any particular implementation option – we have limited our response to matters of practicality and advice rather than policy, although, from an implementation perspective, we have noted areas where we think policy is, as yet, not as clear as it might be.

What is the aim of future developments: Harmonisation or Integration?

It is becoming clearer what the Single European Energy market means. However, we detect that, at least until recently, there has been a range of views as to the longer term objective: from changes sufficient to harmonise interconnector trading so that there are no barriers to efficient cross-border exchanges of electricity (and gas) between Member States on the one hand, right through to a single integrated European market, which at its most extreme could imply one TSO, one merit order and one set of trading rules for the entire European Union. We would welcome clarity on this so that we can better understand the implications for the GB balancing and settlement arrangements. For this reason we welcome the recent publication by ACER of the draft Initial Impact Assessment that accompanied the Framework Guidelines for Electricity Balancing, which opens up this question explicitly and suggests a long-term vision with a medium-term objective.

And we believe that there should be clarity in the Framework Guidelines with, as far as possible, a "once for all" approach to change. This does not necessarily imply a "big bang" as opposed to an incremental approach to change, rather that the ultimate destination should be as clear as possible. This will help reduce uncertainty for the electricity sector, and should help avoid the situation where earlier changes have to be undone due to a lack of clarity on that ultimate destination.



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Level of detail in the Network Codes

Clarity on the ultimate destination does not necessarily imply that there should be a high level of detail in the Network Codes. In fact, we understand that Network Codes are more akin to European legislation than traditional GB Codes and therefore may not be easy or quick to amend once implemented. Our experience with the implementation of revolutionary change such as that for the GB Electricity Pool or NETA suggests that urgent modifications can be required, particularly in the early days of new trading arrangements.

This suggests that the less flexible the Network Code change process, the more high level (less detailed) the Network Codes should be and the more should be left to national Codes with their more flexible change processes. With a more flexible Network Code change process, the Network Codes can go to a lower level of detail.

Therefore, dependent on the change process foreseen for Network Codes, we would suggest that there should be clear drafting guidelines to ENTSO-E on the level of detail that Network Codes should have. We believe that high-level principles should suffice with operational detail left to the national codes.

We now address each of the questions raised in your letter in turn.

What are the key aspects of the Target Model for GB?

From a Balancing and Settlement Code (BSC) perspective, the key changes, of which we are aware, are likely to arise from: the Capacity Allocation and Congestion Management (CACM) Network Code; the Electricity Balancing Network Code; and the Comitology Guidelines on Fundamental Electricity Data Transparency.

Therefore we have drawn our list of possible impacts from the latest draft of the CACM Network Code; and the draft Framework Guidelines on Electricity Balancing that are both currently issued for consultation. We see the actual and potential impacts on the BSC (and from a practical perspective, the central systems and processes underpinning it) as follows:

Definite impacts on the BSC (assuming the Framework Guidelines on Electricity Balancing are not changed following the consultation)

- Balancing Mechanism trades settled at marginal price, rather than "pay-as-bid" (though we note the potential for Ofgem's Significant Code Review of cash-out to require this, possibly within a shorter timescale)

Possible impacts on the BSC (assuming the draft CACM Network Code and Framework Guidelines on Electricity Balancing are not changed following the consultation)

- Harmonisation of Settlement Period duration at something other than 30 minutes
- Imbalance calculations and, in particular, imbalance pricing may change
- Market Splitting within GB
- Harmonisation of Gate Closure at something other than 1 hour



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- Changed design of Balancing Mechanism, in particular there will be common standard balancing energy products, which suggests that the format of Bids and Offers may change.
- Interconnector trading with a common merit order (a requirement) may result in changes to the Balancing Mechanism
- Data publication on BMRS, Portal, website harmonised with other European markets

What changes will be needed to GB market arrangements?

The above list shows that the changes could be substantial, although having said that, we note that some changes are left to national or regional processes rather than being prescribed at the pan-European level.

As indicated above, we are limiting our comments to the potential impacts of the policies, but not the policies themselves. In the Appendix to this letter we examine each of the potential changes to the GB balancing and settlement arrangements implied by each of the above elements in turn.

The draft Framework Guidelines on Electricity Balancing clearly indicate the potential for a major programme of system changes, which will need to be carefully aligned with other changes taking place in the GB market arrangements. Because of this, and because the changes could be on the scale of NETA/BETTA changes, we suggest that the establishment of a GB Design Authority would be appropriate, which we would be happy to participate in and support.

Should we try and minimise change or consider holistically the best combination of GB and EU requirements?

Whichever approach is taken, we note that there are more concurrent drivers for change in the electricity sector now than at any time since privatisation in 1990. While there have been significant changes during the past 20+ years these have been driven by a separate changes proposed by the UK Government or Ofgem alone, for example the Pool, 1994 and 1998 competitive supply market expansions, NETA, BETTA, etc. However, currently there are a number of potential interactions and substantive system changes including the output from Ofgem's Significant Code Review, the UK Government's Electricity Market Reform proposals, the European Network Codes, as well as various European energy and financial Regulations and Directives.

To give an example, we have already recognised collectively (Government, Ofgem and industry) that the potential for market splitting may well interact with the reference price needed for EMR FiT CfDs, so that perhaps the FiT CfDs need to be structured for changing reference price sources and/or hedges developed.

As far as possible all these changes should be considered holistically to allow for either a "big bang" or logical and stepwise implementation that would not need significant adjustment later. This would allow for the most cost effective implementation and give as much certainty as is possible to the markets, investors and implementers.



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How can we deliver the best outcomes?

All GB stakeholders must be fully involved. We note that the European process is (probably necessarily given the number of stakeholders) a more restrictive process than we are used to in Britain. Direct input is limited mainly to trade associations, TSOs and the various regulatory and Governmental bodies.

However, once the GB process is considered it is important that all those who are impacted by changes (including those who would need to implement those changes) are fully involved. In that way the best outcome for GB customers can be achieved, including an effective and efficient implementation of changes. Restricting input could mean that important insights or considerations do not come to light in a timely manner. We are happy to share our thoughts on particular implementation solutions if that would be helpful and we have been asked by certain industry members to highlight impacts on the BSC and, as things become clearer, assess costs for any required changes. We can do this most effectively if we are involved from the early stages; and we believe ELEXON has an important role in assessing and implementing change within the GB balancing and settlement arrangements.

What process is needed to take this work forward?

We have already noted our views that:

- It would be appropriate for the pan-European Network Codes to include high-level principles but operational detail should be left to the national codes, particularly given that the Network Codes are more akin to legislation rather than the traditional GB electricity industry codes, and the GB codes are more flexible to change and changing circumstances.
- Given the scale of potential changes indicated by European developments, e.g. in the draft Electricity Balancing Framework Guidelines, and the need to align with other changes taking place in the GB market arrangements, we suggest that the establishment of a GB Design Authority would be appropriate, which we would be happy to participate in and support.

In addition we note that, as far as the BSC is concerned, there is already a fifth Applicable BSC Objective which allows for the testing of BSC Modifications against European requirements. However, we have recently become aware that there is some thought that the Code modification process may be too slow to implement some Network Codes. We would welcome further discussion with you and industry on how we can address this point, while noting that we have the flexibility to implement change quickly if required.

In conclusion, ELEXON remains ready to contribute to the development of the single European energy market at least cost to BSC Parties and GB consumers. With that end in mind, we are ready to offer our views on potential interactions with the current BSC, impacts and costs to central systems; and to help plan and implement the changes that will be required.



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If you would like to discuss any areas of our response, please contact me on 020 7380 4253, or by email at steve.wilkin@elexon.co.uk .

Yours sincerely

Steve Wilkin
Senior Market Advisor

Appendix:

More detailed consideration of the potential impacts of the EU Target Model on the GB balancing and settlement arrangements

Balancing Mechanism “pay-as-marginal”: This is a change from the current “pay-as-bid” arrangement in the BSC, so we will need to identify the marginal clearing price (or prices?) for each Settlement Period. Consideration will need to be given to the interaction with “market splitting” (see below) and with transmission constraints. For example, is the marginal price based only on bids/offers that are classed as energy balancing; and, if so, how are accepted system balancing bids and offers with more extreme prices settled?

We note that this proposal is also within the proposed scope of the Significant Code Review (SCR) of cash-out. The interaction with the SCR should be considered more generally as, depending on the timing, some SCR proposals may be constrained by the European Network Code or at least the Network Code process may cause uncertainties during the SCR process as to what will be possible.

Harmonisation of Settlement Period duration at something other than 30 minutes: We do not know if harmonisation would be at something other than 30 minutes but, if it were introduced, this would be a major change and significant industry discussion would be required to scope out the implications before we could properly understand the impacts and costs. We have some initial views on the BSC impacts, although clearly the impacts would extend further than this, e.g. into forward contracting by the industry:

- One area which would definitely be affected by a change in Settlement Period duration is the Balancing Mechanism (BM), and the Settlement Administration Agent (SAA) software that settles BM transactions.
- Clock changes would be an area of particular complexity. The GB arrangements include a number of complex mechanisms for dealing with clock changes, all of which would potentially need to be revisited.
- Energy contract notifications would need to change, impacting Party and BSC Agents’ systems.
- Half Hourly metering would be impacted. Currently Half Hourly metering is required for Licensed Generators, and for customers above 100kW (although BSC Modification Proposal P272 would extend the requirement to customers in Profile Classes 5-8). A change of Settlement Period duration would, at a minimum, require large generators and other participants in the Balancing Mechanism to reconfigure their metering to record data for something other than half-hourly intervals. In some cases it may be possible to do this remotely; in others a site visit may be required.
- There would then be a decision about whether to extend the requirement for different metering beyond Balancing Mechanism participants. For example, it could be extended to the 120,000 or so customers (predominantly 100kW and above) who are currently settled Half Hourly. Again a process of reconfiguration would be needed, which will in some cases require a site visit (and is likely to be quite complex even when it doesn’t). The alternative to reconfiguring meters is for central settlement systems to ‘profile’ Half Hourly



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data into different time intervals.

- These metering issues also potentially impact the Government's Smart Metering Programme. The current Detailed Design Specification that is intended to support the Smart Metering Equipment Technical Specifications obliges electricity meters to be able to store data for half hourly periods in a 'profile data log' and the meter must be capable of collecting data at 30 minute intervals.
- Metered data Collection and metered data Aggregation and the BSC and Party Agents' systems that carry out these functions under the BSC would be impacted.
- Outside the BSC, there are potential impacts on distribution billing and customer billing systems and processes.

Imbalance calculations and, in particular, imbalance pricing may change: We are anticipating that change may also be mandated through the Significant Code Review of cash out so the important issue is to ensure that the changes mandated by national and European processes are aligned and coordinated. We know that Ofgem is already well aware of this.

"Market splitting": We note that market splitting issues are proposed to be matters for the TSOs and the National Regulatory Authorities, and subject to industry consultation, but we wish to draw attention to some of the practical implications:

- Market splitting is defined for the day-ahead market in ENTSO-E's draft Network Code for Congestion Allocation and Capacity Management through the concept of Bidding Zones. The draft Framework Guidelines on Electricity Balancing defines cross-border balancing to include exchanges of balancing energy and/or reserves between Bidding Zones.
- Hence there could be separate imbalance prices and imbalance calculations for each Bidding Zone, even if the rules for such calculations were identical, e.g. the current BSC imbalance pricing rules could be applied separately to each Bidding Zone. And if imbalance volumes need to be calculated separately in separate Bidding Zones this would seem to imply that energy contracts for BSC would need to be Zonally identified.
- Market splitting would also potentially require a mechanism for allocating each individual customer to the correct Bidding Zone for BSC imbalance purposes. This would be straightforward if the Bidding Zone boundary matched an existing boundary between GSP Groups (e.g. the border between England and Scotland), but could otherwise have a high impact on industry systems.
- If market splitting were to involve the merging of (parts of) GB with (parts of) neighbouring non-GB Bidding Zones in other countries, or more particularly where the merger sought to include two or more different sets of trading arrangements, this is likely to then become a more revolutionary change as it is likely that the national balancing and imbalance arrangements would need to merge or be closely aligned.

Harmonisation of Gate Closure at something other than 1 hour: We do not know if harmonisation would be at something other than 1 hour. But if it were then, from a BSC central systems perspective, we have moved Gate Closure before so, from a central systems perspective, this would not be a major issue for us. However, of course,



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this does not mean that it would not be a major change for BSC Parties; and National Grid may have views on its ability to balance the system with different Gate Closure times.

Changed design of Balancing Mechanism: Our assumption is that Balancing Mechanism Bids and Offers (which are currently the main balancing energy products in GB) may need to be replaced by standardised European products. This would have significant impacts on:

- Balancing Service Providers (who have systems for submitting Bids and Offers, which they may currently be upgrading to interact with National Grid's new Balancing Mechanism system that is being developed);
- ELEXON's SAA and BMRA systems (which settle and report Balancing Mechanism transactions);
- The Grid Code and BSC (which contain the Balancing Mechanism rules).

And again there are potential interactions with Ofgem's proposed Significant Code Review of cash out issues.

Interconnector trading with a Common Merit Order (a requirement of the draft Framework Guidelines on Electricity Balancing): This may also result in changes to the Balancing Mechanism but as yet this is unclear. For example, a system with a common merit order, but which might not require significant change to the GB Balancing Mechanism could be constructed as follows:

- BSC Parties would make Bids and Offers as now, which would then be converted into Euro equivalents, say, and sent to the pan-European common merit order system;
- The European TSOs would act jointly to select/accept offers and bids from the pan-European system;
- then the order to activate the service would be delegated to the local TSO where the required offer or bid is located; and
- if this in GB, this order could be reflected back into the current GB Balancing Mechanism as a normal Bid/Offer Acceptance by National Grid.

This approach would seem to have some attractions not only because it does not require local changes to the Balancing Mechanism, thus saving costs for industry's and central systems but because of the need to convert currencies to and from a common merit order. However, other arrangements with more significant impact can equally be envisaged.

Currency Interactions: It is an obvious statement but the British currency is Pounds sterling, whereas much of Europe has the Euro as its currency. It is therefore likely that the common European platforms, such as the common merit order, will operate in Euros. The design of the GB and European balancing and settlement arrangements need to be clear on where in the processes currency conversion takes place. For example, are GB-based BSC Parties to lodge bids and offers in Euros or is this done centrally for inclusion in the common merit order and then later converted back into sterling for accepted bid/offer payments? As noted above that a local balancing mechanism may be an appropriate part of the overall European arrangements, so that bids and offers and payments arising from Bid/Offer Acceptances can be made in the local currency. The question of currency risk could also play a role here and who should bear it.

Data publication on BMRS, Portal, website harmonised with other European markets: We (ELEXON and BSC Agents)



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already supply data to entsoe.net¹ and are working with National Grid on the possibility of using the BMRS to supply data to the future European platform envisaged under the Comitology Guidelines for Fundamental Electricity Data Transparency.

¹ Entsoe.net is the current European platform for the publication of electricity market data from various European electricity markets.