

## **ENERGY MARKET INVESTIGATION**

### **Summary of hearing with Elexon and the Balancing and Settlement Code Panel on 30 October 2014**

#### **Industry codes and the roles and governance of the Balancing and Settlement Code Panel and Elexon**

1. The Balancing and Settlement Code (BSC) was one of ten codes which governed the operation of the energy markets. The BSC regulated how electricity generators and suppliers were paid for energy they traded as part of the electricity market's Balancing Mechanism. There were six codes, including the BSC, which governed the electricity markets, three which covered the gas markets, and the Smart Energy Code, which had roles in both gas and electricity. It was noted that there were also six renewable energy schemes operated by E-Serve which were relevant to the operation of the energy markets.
2. While each of the codes had some common aspects, each had its own funding, credit requirement, rules, administration, governance and reporting arrangements. This made what was already a complex industry even more complicated, especially for small companies and new entrants, and a review of the number of codes and their associated mechanisms might help to simplify matters. Elexon's understanding was that Ofgem, which had overall responsibility for the codes, had carried out a review of the arrangements in 2008 and had concluded at that time that there was no need for any consolidation. Elexon noted that there had been changes in the industry since 2008, so a further review might now prove beneficial. The BSC Panel noted that there had been difficulties caused where a matter had been considered under two different codes by more than one code panel or where one panel had made a decision which affected the operation of others.
3. The BSC Panel consisted of 12 members. Five members were elected by the energy industry. Elections were held every two years. The voting mechanism was designed to ensure that companies with large market shares could not dominate the Panel. A further industry Panel member was appointed by the Panel Chairman, as were two independent members, one of the independent members would be the Deputy Chairman, and the other would be appointed because he/she had specific expertise or skills which other Panel members did not. There were also two places on the Panel for consumer

representatives, which were appointed by Citizens' Advice. Currently only one of these places was filled. In addition National Grid and the distribution operators each appointed a representative as a Panel Member. Panel meetings were also attended by representatives of Ofgem and Elexon. Acting as a Panel member required a commitment of resource which made it difficult for small companies and new entrants to put forward candidates for election. Part of the role of the Panel and Elexon was to ensure that the views of small companies and new entrants were heard.

4. The approximately 200 parties to the BSC had equal voting rights (one body, one vote) in elections for the five members of the Panel which represented the industry. None of these five places on the Panel were specifically designated for representatives of larger or supplier participants.
5. Both Elexon and the Panel endeavoured to ensure that the Panel's decisions and the BSC's operation were presented in as clear and transparent a way as possible. The Panel's meetings were fully minuted and a range of publications and information were made available through the internet and other means. The Panel consulted with the industry about the issues it was considering and went out of its way to inform persons who it suspected had views about issues but might not normally bring them to the Panel's attention.
6. Of the current five elected Panel members, only two actually worked for generators or suppliers. Of the other three, two worked for consultancies and the remaining one was from Energy UK, the trade association. The Panel's discussions did not tend to be on a polarised large company versus small company basis. In many cases, decisions, including code modifications, were carried unanimously. Panel members and members of the committees which supported it had to sign an obligation to operate independently and not on behalf of their employers. This obligation was also confirmed by the members' employers.
7. In order to agree a code modification, the Panel members had to decide that the change would better facilitate the achievement of one or more of the BSC's six objectives, which included the promotion of effective competition in the generation and supply of electricity and promotion of efficiency in the implementation and administration of the balancing and settlement arrangements'. A simple majority was required to agree. Not all members had voting rights. Ofgem and the distribution system representative were not entitled to vote, and National Grid could not vote on code modifications, but it could on other issues. Ofgem, as the industry regulator, would make the ultimate decision on code modifications. Ofgem would take the Panel's recommendation into account and often agreed with it. If Ofgem disagreed

with the Panel's recommendation, then Ofgem's decision could be appealed to the CMA.

8. Elexon supported the Panel by acting as an independent manager of its processes. It chaired the Panel's committees and prepared the papers which they and the Panel considered. It ran the Panel's consultations and published information about the Panel's work. It also offered free training to industry participants who wanted to better understand the BSC, and Elexon provided an operational support manager to all companies who were participating in, or who were considering entering, the industry.
9. Small suppliers did face a significant burden both in getting to grips with the Code and in playing an active role on the BSC Panel. Their views were taken into account in the Panel's decision process at Panel level and through the various working groups and consultations which looked at specific modifications.
10. National Grid was Elexon's sole shareholder, but under the BSC National Grid was not allowed to be involved in Elexon's governance and had no representation on Elexon's board or in its decision-making. Elexon's accounts were not included in National Grid's. Elexon's board consisted of a part-time executive Chair and five non-executive directors who were all independent. Three of the non-executive directors were required to be from the industry and the remaining two were independent of industry. Currently, no members of Elexon's executive team sat on its board. The BSC Panel set the strategy for Elexon, while Elexon's board was responsible for its budget, its contractual arrangements and how it supported the Panel. The fact that the Elexon board did not set its own strategy was currently under review, with the intention of making its governance arrangements more straightforward and closer to the Corporate Governance Code. As Elexon received funding from the whole industry, it consulted with the industry on its budget and strategy. This consultation covered over 200 industry participants, but Elexon usually only received two or three responses to it.
11. Elexon was not incentivised in the same way as other companies. Its board and senior management had focused on reducing its costs, which had come down from around £70 million to around £35 million over the past 14 years. Elexon needed the support of the industry to operate, and it conducted an annual customer survey on which it regularly received good feedback in terms of value for money. Elexon was paid for by industry participants, with each participant's bill being calculated in proportion to its market share.

12. Elexon's responsibilities under the BSC were delivered by around 120 staff. Other Elexon staff had roles in the settlement of the new Contracts for Difference (CfD) and the capacity mechanism.
13. The Panel conducts a number of its responsibilities via six committees including a trading disputes committee, a performance assurance board, the supplier volume allocation group, and the imbalance settlement group. There were also a number of further sub groups under these committees which dealt with even more technical aspects of the Code's operation.
14. In 2013, Elexon held 22 market entry meetings with potential new entrants. Topics discussed at these meetings included the BSC and the steps that a party would need to go through to validly operate under the Code. Elexon would also inform these parties about the other codes that they would need to engage with. Elexon updated interested parties weekly about changes to the Code and related news. Thirteen new entrants signed up to the Code in 2013; around half of those who had expressed an interest.
15. Elexon also held a market entry meeting with entrants who used 'suppliers in a box' in order to ensure that they met the Code's requirements and were ready to enter the market. For entities looking to enter the market, 'suppliers in a box' were an attractive option as entrants were able to use the experience of advisers who understood the requirements of the BSC and other codes, but consequently, there was a risk that some entrants who joined the market in this way did not have all the necessary skills and capabilities to operate in the market once the initial entry phase was complete.
16. It could take between six to nine months for an entrant to join the BSC. Under the Code, entrants had to meet a number of operational requirements before they could start operating in the market. Ofgem had established a 'licence-lite' process in 2009 under which an entrant did not have to sign up to the Code itself, but could employ a third-party supplier who was already licenced under the Code to handle its obligations, but no one had yet successfully gone through that process. As noted above, every entrant had an operational support manager, who would provide assistance with questions.
17. Industry participants had raised 72 disputes with the Trading Disputes Committee in 2013, and there were currently 30 disputes which were still under consideration. Where a dispute was appealed to the Panel and concerned Elexon's activities in any way, then the Panel Chairman, who was an Elexon employee, would stand aside and the Deputy Chairman would chair that particular dispute hearing.

18. The BSC included a Performance Assurance Framework intended to ensure the correct and efficient operation of the Code. The framework included the dispute-handling process and the BSC Panel's obligation to carry out audits of parties' compliance with the Code. 168 audits had been carried out in 2013.
19. Since the beginning of the market, around 320 modifications, ie proposed changes to the Code itself, had been progressed along with over 1,000 change proposals to subsidiary Code documents. Elexon reported monthly on the progress of modifications and change proposals. Following consideration of a modification or change, Elexon would conduct a survey of the relevant parties in order to check that their expectations had been met as to Elexon's handling of the process.
20. Elexon also provided other services to the industry including assisting Department of Energy and Climate Change (DECC) and Ofgem with smarter-markets work, managing the warm-home discount reconciliation mechanism and providing the settlement service for the Electricity Market Reform (EMR) processes.

### **The balancing and settlement process**

21. The BSC's settlement process operated over a 14-month period. Initial payment occurred around a month after the transaction, and a number of further settlement runs which refined the payment amount based on improved data (eg household meter readings) took place over the remaining 13 months. Electricity suppliers aimed to have 97% of payments based on actual data. Payment disputes would be resolved over a further period of up to 14 months. The introduction of smart meters was expected to lead to a significant reduction in the 14-month timetable.
22. Parties had to meet credit requirements under the BSC to ensure they could meet their potential liabilities. Parties which failed to meet their credit requirements and pay their bills could face action under the Code within a few days. There was no mandatory requirement to post credit under the BSC, so if a party was perfectly balanced or if it only ever provided energy to support national grid in balancing the system, it would not need to have any credit in place.
23. The CMA noted that the BSC's current credit requirements encouraged smaller market participants to adopt a very risk-averse position and over-collateralise in order to ensure that they were not expelled from the Code. Elexon explained that the BSC Panel was currently considering a number of modifications which should help to reduce the amount of money that small parties felt they needed to lodge. The BSC's process for considering these

had a set timetable before they were sent to Ofgem for decision. At least one of these would be implemented in June 2015 if approved by Ofgem. Taken as a whole, the collateral requirements of the BSC and the other industry codes could certainly lead parties to over-collateralise.

24. As well as expelling a party from the Code, the BSC Panel could impose a range of penalties, such as removing a party's right to vote or restricting its ability to take on new customers. Expulsion only occurred rarely.
25. Parties were billed monthly for any imbalance charges they incurred. There was no 'smoothing' process for these, although Elexon's own charges were spread over the year.
26. DECC had published a report on the amount of collateral lodged under the various codes across the whole industry. The total amount was just over £4 billion. Currently £383 million of collateral was lodged to meet the BSC's requirements (£73 million in cash and £310 million in letters of credit). Smaller companies had lodged £41 million in cash and £118 million in letters of credit, while larger companies had lodged £32 million in cash and £192 million in letters of credit. It might be possible to reduce the total amount of collateral required over the whole industry if the various codes could be rationalised and consolidated. The industry as a whole was posting 90% more credit (cash and letters of credit) than it actually needed to meet its requirements for any one-month period under the BSC.
27. The introduction of smart metering and other smart innovations in the energy market were being overseen by DECC and Ofgem. Elexon and the BSC Panel had supported the smart metering programme by ensuring that necessary minor changes to the BSC had been implemented. Smart metering would not change any major aspects of the settlement process; it would simply provide another way of collecting meter-reading information.
28. Elexon, the BSC and Ofgem had been working for some time on how smart metering could shorten the settlement timetable. It might be possible to reduce the timetable from 14 to seven or even five months once the roll-out of smart meters had been nearly completed, but the current deadline for the roll-out was 2020, so any major reductions in the timetable were some way off. Elexon and the BSC were also working with Ofgem and the wider industry on the change-of-supplier process in order to ensure that energy volumes were correctly allocated to energy suppliers and also on ways of giving effect to increased demand-side response. Elexon had also worked with network operators and published discussion papers on various parts of the 'smart-grid' proposals including localised balancing and increased demand-side response and micro-generation.

29. Elexon was currently looking at how, with the rollout of smart meters, it could move to full half-hourly settlement using data supplied by the meters. This would reduce the costs involved in the settlement process as there would be a reduced need for the various checks which were necessary to ensure the accuracy of the manual processes and data transfers required by the current system.
30. Under the current system, all settlements for meters which were not actually read every half-hour were initially done on a half-hourly basis using suppliers' customer profiles. Elexon allocated the total amount of energy consumed by customers to each supplier. It did this on a geographic basis by splitting Great Britain into 14 regions called 'grid supply-point groups'. Elexon metered all the energy which entered each of these regions and then used the profiles to allocate the amount of energy used by each suppliers' customers per half-hour. This initial allocation based on profiles would be amended with data from meters when they were read at a later date.
31. The introduction of smart metering would not necessarily eliminate the need for profiles. It would depend on how many customers had smart meters and whether suppliers began to offer time of use based tariffs to their customers and the uptake of these tariffs by customers. If these tariffs proved popular, then the current profiles would cease to be useful. There was also the question of how to handle those customers which either could not or would not have smart meters.
32. While in theory smart metering could allow for the settlement process to be shortened to a few days, currently energy suppliers only had a right, once smart meters were installed, to get a meter reading for monthly consumption. They currently had no right to collect half-hourly or daily consumption data, although customers could opt-in to provide data in this manner. Concerns about the privacy of customers' data would need to be overcome to enable suppliers to automatically collect this data.
33. Smart metering would not remove or change the obligation on market participants to self-balance. They would still need to contract for their energy, although the information from smart meters should enable them to forecast their requirements more accurately, but any errors in forecasting or non-delivery would still result in imbalance charges. There would be significantly less delay in reconciling the settlement payments or charges than under the current profile and manual meter-reading system.
34. There was nothing in the BSC preventing suppliers from providing Elexon with settlement data on a half-hourly basis, but there were slightly different (higher)

charges for this service because of the increased number of communications between the supplier and Elexon.

35. Elexon had a range of concerns about the codes which governed electricity. First of all, the number of codes (six electricity industry codes and the Smart Energy Code which covered both electricity and gas) led to inefficiencies and delays in decision-making for the industry as a whole. Some changes to the industry needed to be coordinated across a number of codes and taken through each code's decision-making process separately. Elexon would welcome a review of the number of codes and their consolidation where possible. As noted above, a reduction in the number of codes would likely also reduce the overall credit burden on industry participants.
36. As part of the overall settlement process, Elexon had to account for all the energy that had been supplied to the 14 regional grid supply-point groups. It did so using data for half-hourly metered energy, profiles, information about unmetered supplies and micro-generation and consumption information. When all the information about the energy supplied to a region was compared to the information about the energy consumed, there was always a difference which needed to be accounted for. This difference was called the Group Correction Factor (GCF). A share of the GCF for each region was allocated to suppliers of non-half-hourly metered energy on the basis of their share of the total amount of energy consumed in that region. As this adjustment would alter the energy volumes (and therefore potentially its imbalance liabilities) a supplier would receive under the settlement system, suppliers spent considerable effort in predicting what the GCF would be. It was suggested by the CMA that it was inefficient for each supplier to attempt to predict the GCF, and that it might be better if Elexon predicted the GCF itself and provided suppliers with this information. Elexon noted that four or five working days after settlement it would be able to provide an initial settlement figure, but that a slightly more accurate figure could be provided after 28 working days.
37. As Elexon was concerned with settlement, it did not handle customers' problems arising from their switching suppliers, although it was able to deal with any consequential issues for settlement which arose from a customer's switch being erroneously handled. The BSC obliged suppliers and their agents, who were required to be accredited under the Code, who handled switching and data collection (eg meter operators, data collectors and data aggregators) to provide correct and timely information about customers' switches in order to ensure settlement accuracy. If a supplier or its agents failed to process this information correctly, then the usual financial penalties arising from a failure to properly settle would be enforced against the supplier as the signatory to the Code. Elexon would not be aware as to whether a



particular supplier had erroneously transferred customers or had attempted to frustrate the switching process.

38. When the New Electricity Trading Arrangements (NETA) were established in 2001, it was intended that the imbalance price should reflect the cost of balancing the electricity system. This principle had been maintained throughout the various changes since then. However, over the years, what had changed was that distinctions had been drawn between those balancing actions taken by National Grid which arose from a supplier's or generator's failure to meet its contractual obligations and those actions which simply arose from the operation of the system. Therefore, a number of actions which had previously been included in the calculation of the imbalance price had been removed from it. Many of these changes had been initiated by parties to the BSC.
39. A number of proposed changes to the imbalance price calculation were currently being considered by the BSC, initiated by Ofgem. The ultimate effect of these changes would be to create a single imbalance price based on the most expensive one megawatt hour (reduced from the most expensive 500 megawatt hours) during a balancing period, thus leading to higher imbalance prices. The BSC Panel was considering the elements of these changes which dealt with the distribution of costs between large and small suppliers and generators.
40. Ofgem had recently considered two proposed modifications to reduce the number of megawatt hours used to calculate the imbalance price from 500 megawatt hours to 350 megawatt hours, and from 500 megawatt hours to 250 megawatt hours. Ofgem had rejected these modifications, in line with the BSC Panel's earlier decision, so the only modification remaining under consideration was the one which would create a single imbalance price and reduce the number of megawatt hours used to calculate that imbalance price from 500 to one. This modification was next due to be considered by the BSC Panel in December and would ultimately go for determination by Ofgem.
41. There were a number of changes to network codes arising from Europe and new network codes being introduced. One of these, the Electricity Balancing Network Code, might include some rules about the calculation of imbalance prices. Elexon noted that the CMA would need to be aware of this code, whose rules would take precedence over other codes, when considering these issues.
42. Under the BSC, in some circumstances, half-hourly metered customers were able to appoint their own meter operators and data collectors, who then acted as agents of these customers' energy suppliers. Some energy suppliers were

concerned by this as it meant that they were liable under the Code for the actions of, and to pay the costs of employing, agents they had not appointed themselves.

43. The BSC addressed those aspects of the switching process which were relevant to settlement. Other parts of the switching process were governed by other codes, such as the Master Registration Agreement (MRA), overseen by the MRA Executive Committee (MEC). The reason why the electricity market was governed by a number of codes, while gas only had one, was historic. The codes for electricity had originally been designed to cover whole aspects of the industry's operation, eg balancing and settlement, and applied across the entire market, while in gas there had been different network codes for each area of the country, so it had been necessary to unify them for efficiency purposes.