EMR FiT CfDs:
Thoughts on credit and payment frequency

By email to: elec.marketreforms@decc.gsi.gov.uk

14 January 2013

Electricity Market Reform Team
Department of Energy & Climate Change

Dear Sir/Madam,

ELEXON's thoughts on Electricity Market Reform FiT CfD credit and payment frequency

On 29 November 2012, DECC issued a Call for Evidence to suppliers relating to the supplier obligation part of its Electricity Market Reform (EMR) proposals. We noted that, as part of this Call, the Government is interested in receiving evidence about the impacts of posting collateral from relevant stakeholders[1].

As you know, ELEXON, as the Balancing and Settlement Code (BSC) Company for Great Britain, is responsible for the proper, effective and efficient delivery of the BSC and has experience of monitoring and processing credit under the BSC for over ten years. We recognise that the Call for Evidence is aimed at suppliers, however we attach some thoughts, which we hope you find helpful, on the posting and monitoring of collateral, settlement (payment) frequency and the interaction between these, based on our experience of administering the equivalent BSC processes.

The thoughts expressed in this response are those of ELEXON Limited alone, and do not seek to represent the views of the Parties to the BSC, and in particular suppliers may take a different view on the optimum frequency of payments and the value of reducing collateral requirements. In compiling these thoughts we haven't spoken to parties (BSC or otherwise) but we are aware that there are different trade-offs for parties between payment cash flows and money bound up in credit. We have looked at the arrangements from a purely credit and payment default perspective and haven't looked at those trade-offs.

So we have assumed that reducing collateral would be an industry and Government objective. And also that ensuring that any difficulties a party might have in making payments due as part of the EMR FiT CfD settlement are identified as early as possible, so that the mutualisation of any payment default is therefore minimised.

[1] Paragraph 288 of Chapter 5 of the EMR Policy Overview Document Annex A refers.

On these assumptions, and based on our long experience of administering similar BSC processes, our thoughts are as follows (further detail is given in the attachment):

- There is value in real time credit monitoring, i.e. monitoring the adequacy of the credit that parties have lodged against the known indebtedness levels on a 24/7 basis;
- Frequent settlement has advantages from a credit and payment default perspective over less frequent settlement (if there is a desire to minimise credit and payment default risks, however DECC may, of course, wish to consider additional factors when determining the payment frequency).
- Shortening the payment period, from 28 days in arrears, is feasible and may have benefits in terms of reduced collateral, but again DECC may wish to consider other factors as well.

We hope you find these thoughts helpful and we would be happy to share our experiences of managing a real-time credit regime. If you wish to discuss this further please contact me on 020 7380 4253, or by email at steve.wilkin@elexon.co.uk.

Yours faithfully

S. Wilkin

Steve Wilkin
Senior Market Advisor

Attachment: Thoughts on the settlement and credit requirements of the EMR FiT CfD Supplier Obligation

1. Call for Evidence

DECC issued a Call for Evidence to suppliers as part of its EMR documentation published on 29 November 2012. Specifically this Call for Evidence addresses a number of questions to suppliers in Chapter 5 of the EMR Policy Overview Document, Annex A. ELEXON has some thoughts on Question 6, from our experience of administering the equivalent BSC processes, that we hope DECC will find helpful in the further design of the FiT CfD settlement process.

2. Question 6 of the Call for Evidence

2.1 Payment Periods and Payment Frequency

We interpret the statement in paragraph 284 of Annex A as suggesting DECC's preference for once per month payments to FiT CfD generators, 28 days in arrears, and a corresponding collection of monies once per month from suppliers, 28 days in arrears. However, there are other statements in Annex A (specifically in paragraph 205) about following the Balancing and Settlement Code (BSC) schedule for invoicing that could be interpreted as suggesting daily settlement, because this is how the BSC works.

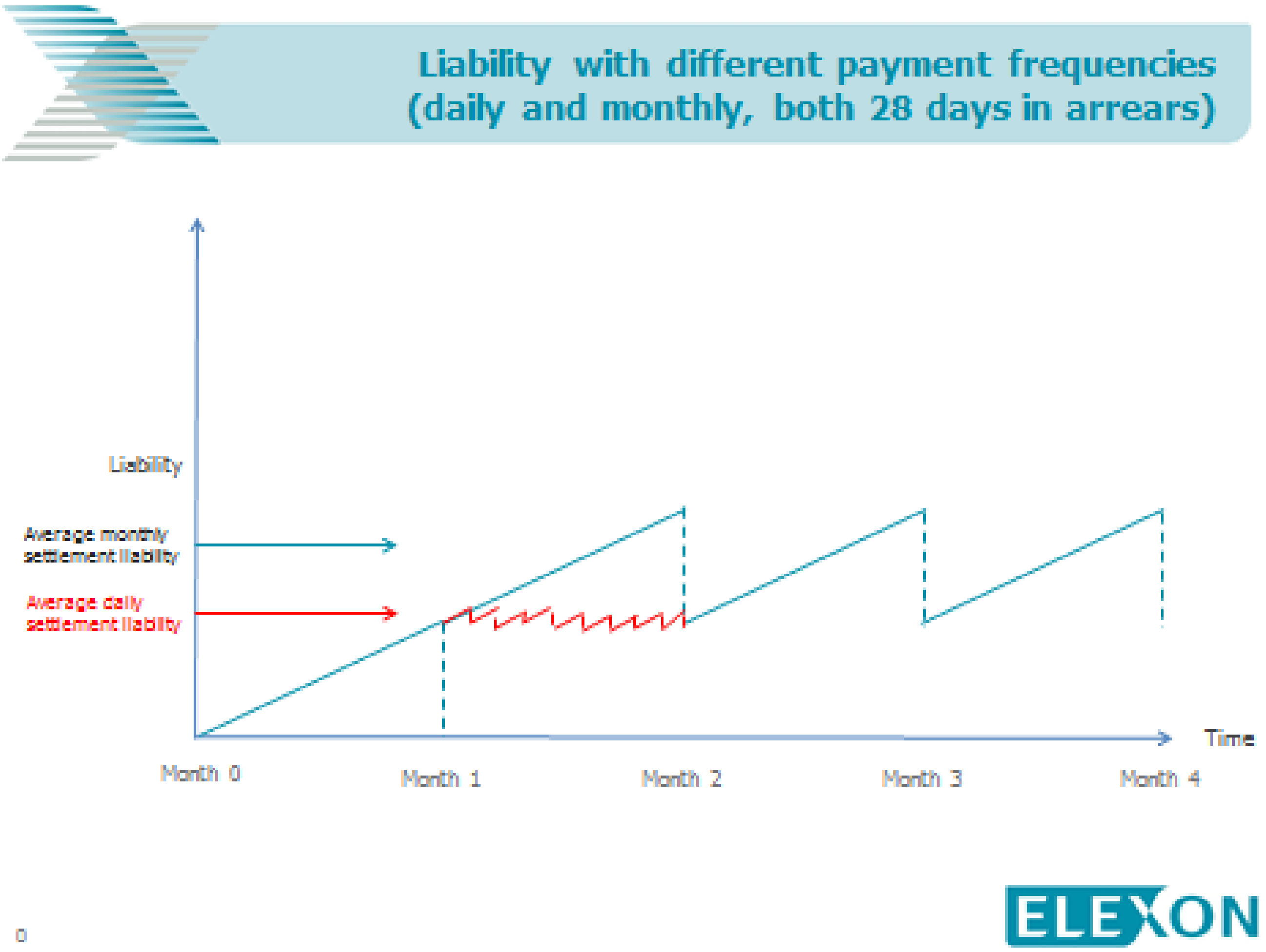
So, firstly, we confirm that if ELEXON were to be appointed as settlement agent for FiT CfDs, we can operate with a daily; monthly; longer payment frequency or anything in between. For example we operate daily settlement for BSC trading charges; monthly settlement for BSCCo (ELEXON) funding charges; and, to date, the issuing of invoices for Warm Homes Reconciliation has been about three times per year.

2.2 The impact of payment frequency and payment period on the collateral required from suppliers

However, we note that, if reduced collateral is an objective, a more frequent payment than once per month and a shorter payment period than 28 days in arrears will both reduce the collateral required from suppliers (assuming that the collateral needs to cover the maximum indebtedness prior to payment).

More frequent settlement will reduce the collateral requirements because liabilities are lessened each time a payment is made and also a shorter period until payment (less than 28 days in arrears) will lessen the need for a given level of collateral. The potential impact of payment frequency is shown in simplified form in Figure 1 below. (This "saw tooth" of liabilities is based on the assumption that FiT CfD payments are always in the direction from suppliers to FiT CfD generators, i.e. the strike price is always higher than the reference price. Of course this may not always be true but is generally expected to be the case, particularly in the early years.)

Figure 1: A saw tooth of liabilities, with monthly or daily payments



Of course, this observation is from a particular perspective that there would be a Government and industry desire to reduce the collateral required, but we are aware that there could be other wider industry reasons why a once per month or less frequent payment is preferred.

2.3 Monitoring collateral requirements on a near real time basis as opposed to forecasting it over a long period

Whether or not the payment frequency is once per month or on a more frequent basis, we see no necessity in either case for the CfD counterparty or its agent to have to forecast collateral requirements over a long period if near real time monitoring of liabilities against credit lodged is employed.

We see forecasting collateral requirements over long time periods as open to criticism if the forecast is obviously inaccurate against liabilities accruing in real time.

The aggregate unpaid liability from suppliers to the FiT generators will change at the end of every settlement period. And there is nothing to stop the central counterparty/its settlement agent from calculating or estimating that liability at the end of each settlement period if the reference price and metered data is available.

It is likely that the reference prices will be known or obtainable because they are derived from forward or day-ahead prices; the strike prices will of course already be known and there are existing processes in the BSC by which we can obtain an early estimate of metered generation and demand which can then be adjusted as soon a real metered data arrives. Therefore it is possible to assess an ongoing aggregate liability by suppliers in near real time, as is done under the BSC for BSC Parties.

To allocate such liability to individual suppliers, it would be necessary to calculate individual supplier market shares. There are many options for calculating market share, which we could analyse for DECC if desired. However, the most obvious option is to calculate market share from Settlement Period metered data. There are two questions to examine when considering credit monitoring: what metered data is available and how accurate is it?

Under the BSC an initial set of all metered data is available by typically the fifth working day after generation/consumption. The last data to arrive within this timescale is the initial metered data for Supplier Volume Allocation (SVA) registered demand[2].

Should DECC wish, we can analyse the accuracy of using initial SVA supplier demand data in an estimate of real-time market share (while noting that the increasing availability of smart meter data should allow such data to be made more accurate).

[2] This metered demand will be derived from profiles for Non Half Hourly meters and so will be increasingly refined as meter reads are obtained over the 14 month BSC reconciliation process.

Subject to this analysis of market share accuracy, it is probable that the collateral requirement does not need to be forecast over long periods, it can be assessed and the individual supplier requested to provide more collateral in real time if the collateral is not deemed to be sufficient. This is how we operate under the BSC now.

With this approach to monitoring collateral, it may even be possible to advise suppliers at the day ahead stage if they are likely to have insufficient credit. The day-ahead reference price would be required[3] and a forecast of metered output at the day ahead stage.

It is also possible that some suppliers would prefer real time credit monitoring, e.g. if they lodge cash (as opposed to Letters of Credit) as collateral and wish to actively manage the credit lodged.

If ELEXON is chosen as EMR settlement agent, we can administer real time credit monitoring under either daily settlement or monthly settlement and indeed we believe there are advantages to real time credit monitoring, whatever the payment frequency adopted. This is discussed further below.

2.4 Interaction of real time credit monitoring and monthly payments

Under the BSC, the credit requirements do not change much from day to day, because we have daily payments, so the as yet unpaid liability for which credit is held is always about 28 days.

With a once per month payment, as we interpret is proposed for FiT CfD funding from suppliers, this would not be true for FiT CfD, as the liability would (probably) rise with every Settlement Period for a continuous period of a month until the suppliers made their monthly payment, at which point the liability would perhaps halve. This is on the assumption that the unpaid liability would vary each month between a minimum of 28 days (the once per month payments have just been received) and 56 days (the once per month payment is due imminently). If credit requirements followed this through real time monitoring, the credit required from suppliers would vary as a "saw tooth" during each month as the liability gradually rose and was then partially paid off once per month (see Figure 1 above).

A smoothed credit requirement, would either require more credit to be held than strictly necessary for most of the monthly period if it was based on the peak credit requirement (just before the monthly payment is due) or be insufficient if it was based on average liability.

[3] It is assumed forward prices for baseload FiT CfDs will be known much further in advance, so it is the day-ahead reference price for intermittent generation that determines how far ahead credit requirements can be forecast based on known reference prices.

We believe real time credit monitoring is important with whatever payment frequency is adopted, but is particularly valuable if there is longer payment frequency, e.g. once per month. With real time credit monitoring, the liability at any point in time would always be known and with a higher degree of accuracy than forecasting the credit requirement once per month. This would allow the settlement agent or CfD counterparty to flag a likely shortfall in credit to the supplier based on accurate information and in a timely manner, so reducing the potential size of any monthly payment default exposure. Requiring a supplier to increase its credit in near real time, will also give an early indication to the central counterparty/its settlement agent of any supplier issues with payments.

It would also support events that can occur mid-month, for example:

- any immediate assessment of liability in the event of a supplier trade sale or Supplier of Last Resort takeover - so the split of credit required from both old and new supplier is known before the monthly payments are due; and
- unpaid liabilities to be determined upon an event of default such as supplier administration/liquidation when the exposure by other suppliers may need to be increased to cover anything not covered by the credit lodged and their credit requirements raised.

Even though we believe that real time credit monitoring is valuable with a monthly payment frequency, payment on a more frequent basis can give additional security because it can give an early indication that a party is in difficulties when there is a payment default, particularly if the credit requirement is being underestimated and the party has not otherwise been called upon to pay, for example by being requested to lodge additional credit. Historically, the BSC's daily settlement has given an early indication of a party in difficulties.

2.5 How soon could the first invoices be issued (how short a payment period is possible)?

As noted above, the collateral required can also be reduced through earlier payment, So, if reducing collateral is the sole objective, we believe that it would be possible, based on the availability of metered data under the BSC, to issue invoices perhaps six working days in arrears, with payment required perhaps nine working days in arrears. Such an approach would necessarily be combined with reconciliation runs because we would be relying on supplier data from the BSC Interim Information run, which is then reconciled in later settlement runs in line with the BSC as more metered data becomes available[4].

[4] With the roll out of smart meters, the accuracy should improve and it may be possible to have fewer reconciliation runs and which complete earlier than the current 14 months as more accurate data should be available earlier – we are assessing this for BSC settlement in the context of our Smarter Markets work for Ofgem.

In stating that invoices could be issued as soon as six Working Days in arrears, we have not examined the availability of metered data in respect of Northern Ireland FiT CfD generators and suppliers, which would of course need to be considered as well in determining the earliest possible invoicing date (another aspect that will need to be considered in due course, is the funding of the central counterparty and, if there is one, its settlement agent and what invoicing arrangements are required for this).

3. Contact details

Should you wish to discuss this note or other settlement aspects of EMR FiT CfDs or Capacity Market further with ELEXON, please contact Steve Wilkin, email steve.wilkin@elexon.co.uk .