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Department of Energy & Climate Change
3 Whitehall Place
London
SW1A 2AW

15 January 2013

Dear Sir,

CfD Supplier Obligation Call for Evidence

Eggborough Power Limited (EPL) is an independent generator which owns and operates Eggborough Power Station (EPS), a 2,000 MW coal-fired power station situated in the Aire Valley in North Yorkshire. EPS was previously owned and operated by British Energy (and latterly EDF) to provide flexible and reliable mid merit support to the "baseload" nuclear portfolio. EPL is now owned by substantial private shareholders and is operating as an essentially merchant power plant in the wholesale market.

We welcome the opportunity to respond to the Government's Call for Evidence on the supplier obligation under the new Feed-in Tariff with Contracts for Difference (FiT CfD). As a potential generator under the CfD mechanism, we consider it vital that there is a robust payment collection system in place to ensure that generators will receive payments in full and as promptly as possible in all circumstances.

1. Pay when paid principle

It is not reasonable to expect generators not to be paid until the counterparty has received payments from suppliers in all circumstances. Were a large supplier to default, prorating the shortfall could reduce payments to generators substantially. For how long would reduced income occur and how would money be recovered? It will be of no benefit to customers to put companies out of business in such circumstances. As an independent generator, it would be imperative that any money due under a contract arrived in a timely manner. While a delay of a few days may be acceptable, some businesses will simply not be in a position to carry debt for weeks on end while the CfD counterparty waits to be paid.

EPL considers that there are two potential ways to limit the risks to generators: over charge suppliers initially to create a fund that would always allow generators to get paid; or make sure generators are always paid by increasing suppliers' obligations to cover shortfalls within 60 days (the Government's recommended payment terms for small companies). This could be backed by some formal obligation on the counterparty to try to recover funds as quickly as possible.

The issues of credit and incentives on the CfD counterparty to collect any money owed by suppliers need detailed consideration. The use of "licence breach" to enforce payment is a rather blunt instrument, with Ofgem often taking a long time to prove breach of licence and levy a fine. The dispute process for monies due should be easy to use and operate in a timely manner as that would offer a better route to try to obtain monies from solvent suppliers.

2. Supplier Obligation

As a generator, EPL considers it essential that the money required by the counterparty body is collected in a robust and timely manner and that it is always appropriately funded to make payments. In any circumstance, we consider that the counterparty body may have to overcollect payments to ensure that there is sufficient money in reserve to make payments in all circumstances. On balance, we consider that the fixed levy approach to supplier collection may facilitate this better than variable recovery. The System Operator should have sufficient information about the progress and performance of projects to forecast future payments from suppliers.

Where the Government talks about suppliers' "market share", we assume that it means by energy consumption rather than the number of meters. EPL considers that the use of metered data to measure energy use would best allocate the costs to the customers. In order to formalise the process, similar contractual terms to those of the BSC seem sensible. If the charging regime is to be run by BSCCo, National Grid could raise a BSC modification to allow the industry to develop appropriate cash-flows once the design is finalised.

EPL assumes that, once the definition of an energy intensive user is outlined, it would be possible to tag their meters out of the relevant settlement calculations. However, such IT solutions under the BSC can often be expensive and take time to implement, so early development work would be prudent. As noted below, rather than following the full BSC reconciliation process, a faster settlement process may best serve the interests of all parties for the purpose of administering the CfDs.

3. Settlement

EPL supports the principle of using the BSC processes for settlement, but the current ongoing reconciliation of supplier charges will create a lag in collecting the "right" amount of payments. The gas reconciliation process provides for a faster, though less exact, reconciliation of energy flows. When designing the revenue collection process EPL would suggest that Government should look to get the money in as quickly as possible so as to limit the credit requirements and ensure the generators receive their income in a timely manner.

EPL would also assume that the cash-flows cannot be billed under the BSC, as the counterparty must be receiving and paying the monies. It may work in a parallel process, using much data that arises under the BSC, but we suspect that ring fencing of funds and associated credit will at least be required.

4. Credit

The two-way payment flows under the CfD mechanism create credit issues for both suppliers and generators. Credit is a significant issue and often cited as one of the key reasons that a liquid electricity market does not exist. A number of the central contracts, such as the BSC already have substantial, even onerous, credit requirements. It is very important that the credit requirements are therefore proportionate, transparent and adjustable. There is not

enough detail at the current time to judge if these criteria will be met, but EPL would urge the Government to commit to the principles outlined here.

5. Next steps

It is vital that all industry parties are appropriately engaged in resolving the remaining CfD design issues. We have continued concerns about the use of the "Expert Groups", which exclude all players from participating in the design process and create a two tiered approach to information dissemination. We would very much like to see DECC undertake a more inclusive design exercise going forward. EPL is considering the operation of its existing asset and investment opportunities for the future, including developing plans to convert the power station to run entirely on biomass. Knowing the details of the market regimes and the final design of the FIT CfD is therefore a critical element of any investment strategy and investment decisions.

We would be pleased to discuss any of the issues raised in this response with DECC. We would also welcome early sight of any papers that are being used to develop policy so that we can feed views into the decision making process.

Yours faithfully,

Head of Policy and Regulation



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

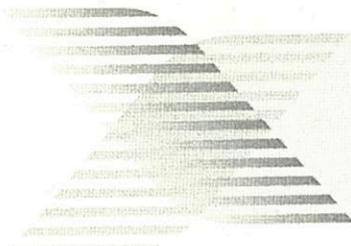
On 29 November 2012, DECC issued a Call for Evidence to suppliers relating to the supplier obligation part of its Electricity Market Reform (EMR) proposals. We noted that, as part of this Call, the Government is interested in receiving evidence about the impacts of posting collateral from relevant stakeholders¹.

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.



**EMR Fit CfDs:
Thoughts on credit and payment frequency**

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 _____ or by email at

_____@elexon.co.uk.

Yours faithfully

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

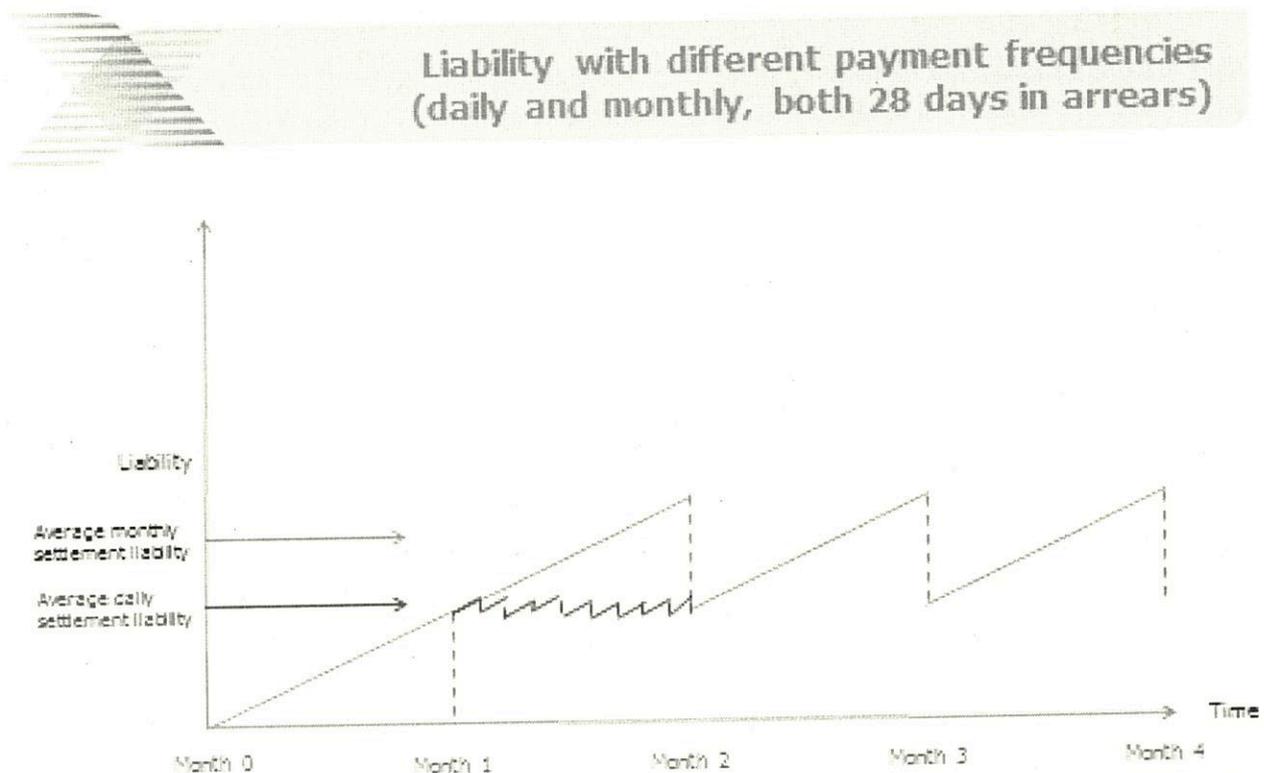
However, we note that, if reduced collateral is an objective, a more frequent payment than once per month and a shorter payment period than 28 days in arrears will both reduce the collateral required from suppliers (assuming that the collateral needs to cover the maximum indebtedness prior to payment).

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

EMR FIT CfDs: Thoughts on credit and payment frequency

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



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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.

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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 demand².

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 required³ 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.

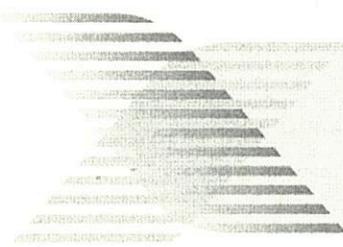
2.4 Interaction of real time credit monitoring and monthly payments

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.



EMR Fit CfDs: Thoughts on credit and payment frequency

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 available⁴.

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 [email 1](mailto:info@elexon.co.uk) elexon.co.uk.



**Response by Energia to the Department for
Energy and Climate Change Call for
Evidence**

Funding the CfD: supplier obligation

15 January 2013

1. Introduction

Energia welcomes this opportunity to respond to the Government call for evidence with views on the proposed supplier obligation approach. In light of our presence in the Northern Ireland market only, the comments contained herein are limited to this market. We do however note from the outset that while the supplier obligation is to be a compulsory levy on all licensed suppliers in Great Britain and Northern Ireland, the jurisdictional split between regulators (UREGNI and OFGEM) are unambiguous and, there are significant and widening differences in regulatory approach to retail market regulation between the two regulators.

By way of background, Energia supplies electricity and gas to business customers in Northern Ireland, and also provides a comprehensive energy efficiency offering. Energia's supplies 27% of all networked electricity to the non-domestic sector in Northern Ireland.

The remainder of this submission contains general comments on the supplier obligation.

2. Comments on the proposed approach

On the basis of the information available on the supplier obligation, comments contained herein are limited to general observations on the published proposals. While a number of the specific questions contained in the call for evidence will be addressed, they are not done so directly as definitive answers are considered to require further information on the approach to implementation and clarity over the distinction, if there is to be one, between Great Britain and Northern Ireland. We consider there to be a number of potential basis for differentiation and consider some of these below.

First, it is unclear from the proposals what the approach to implementation in Northern Ireland is to be. With the extended duration of the Renewable Obligation (RO) scheme in Northern Ireland until 2017, it is unclear how a mandatory supplier obligation is to be introduced and/or transitioned into the Northern Ireland market. It requires further clarity as to whether there is to be an overlap of the RO and supplier obligation, and if so, the policy rationale for such an approach and its practical implications.

Secondly, the market share approach to the calculation of suppliers' obligations must be clarified, specifically in relation to the following two areas; the relevant 'market' for Northern Ireland customers, and; the treatment of Energy Intensive Industry (EII) customers in the calculation. It is unclear whether it is proposed that there is one market for all of Great Britain and Northern Ireland, or, consistent with regulatory policy and standard market definition assessments, the electricity markets in Great Britain and Northern Ireland are to be treated separately. This has a number of knock on implications, including the necessary recognition that Northern Ireland will not construct or in any substantive way benefit from the construction of nuclear facilities in Great Britain as they are part of distinct wholesale markets. Also, the significantly different retail regulatory regimes in both jurisdictions could present

notable complications for the proposals, including through the retention of a regulated tariff for domestic electricity in Northern Ireland and OFGEM's recent retail market reform proposals.

On the treatment of the EII's, it remains to be clarified whether these customers are to form part of the calculation of market share. It would be a significant concern for Energia, with a number of such customers in Northern Ireland and particularly given the relatively small size of the market, if the consumption from these companies was to be included in the calculation of market share but these customers were exempt from paying the levy in the event it is passed on. This would create a disproportionate burden on other eligible customers and would likely represent a barrier to entry for small suppliers who, having entered by attracting EII businesses for scale purposes, are forced to pay the cost of the obligation with no recourse to certain larger customers.

Thirdly, and more generally, there is a significant concern around the predictability of the potential volatility of CfD payments. The predictability of volatility can facilitate in the management of its inherent risk to the business but this needs to be considered on two levels. While the issue of predictability is mitigated the closer one gets to real time operation, there continues to be significant issues for business planning and investment decisions such that the volatility creates a risk for both short-term and long-term business decisions. This risk carries a cost and the appropriate question with respect to such a risk is where does it come from and what group is best placed to deal with it. In this instance, it would appear as though a significant aspect of the investment risk on the generation side is being transferred to supply companies and ultimately to the majority of consumers. While this may be appropriate, it should not be done without regard to the implications on the risk profile of suppliers.

In the shorter term, additional costs associated with financial security requirements around CfD payments will also add to the cost to customers and are likely to add to the tariff volatility inherent in the variable approach. The implications of such tariff volatility could be contrary to wider Government policy objectives, particularly with respect to social policy.

3. Conclusion

Despite the specific questions asked as part of this call for evidence, there remain fundamental issues outstanding in relation to the supplier obligation and its introduction into Northern Ireland. Clarity around these issues must be provided before many of the questions posed can be commented on substantively.

At a high level, it will also be important to recognise differences in markets (jurisdictions) and where appropriate address such differences in the policy formulation and implementation. There would appear to be a number of areas where due consideration must be paid to the differences highlighted between the regulatory and market structures in both Northern Ireland and Great Britain.

Energy UK response to DECC's call for evidence on the Supplier Obligation

January 2013

1. Introduction

- 1.1. Energy UK is the trade association for the energy industry. Energy UK has over 70 companies as members that together cover the broad range of energy providers and suppliers and include companies of all sizes working in all forms of gas and electricity supply and energy networks. Energy UK members generate more than 90% of UK electricity, provide light and heat to some 26 million homes and last year invested £10 billion in the British economy.
- 1.2. We are supportive of the Electricity Market Reform package to bring forward investment in new low carbon generation. We particularly welcome the changes to the CFD payment model in the Energy Bill, however, further work is needed to ensure the payment model is robust.
- 1.3. The Energy Bill includes powers for the Secretary of State to introduce a Supplier Obligation through an amendment to existing licence codes. This Supplier Obligation would require electricity suppliers (hereafter "suppliers") to forward sums to the Contracts for Difference (CFD) counterparty in order for the CFD counterparty to pay low carbon electricity generators CFD difference payments.
- 1.4. It is understood that this levy is likely to be classified as an imputed tax on affected suppliers. This is an additional cost placed on suppliers who are likely to price this cost into service / products they sell to customers.
- 1.5. DECC is considering a variable-rate obligation where the payments are collected as soon as possible after the period in question. It would aim to collect the exact amount owed by suppliers based on generators' actual performance. An alternative option is a fixed-rate obligation in which an estimate of the amount generators would require would be set out in advance, with the CFD counterparty managing any shortfall / surplus.
- 1.6. Both options for a variable or fixed-rate supplier obligation require further development to understand how the mechanisms would work in practice, and in order to fully consider potential or perceived impacts on suppliers.
- 1.7. Our response therefore presents our emerging views on initial discussions. We welcome further engagement with DECC over the coming months to examine the detail of both options. We would urge DECC to continue to develop and undertake a comprehensive analysis of both a fixed-rate and variable-rate obligation.
- 1.8. In developing these models further, it may be helpful to consider some guiding principles on what the mechanism should aim to achieve:
 - a) The design of the Supplier Obligation should not undermine the robustness of the CFD payment model.
 - b) Suppliers need clear foresight of their CFD liabilities. Where the Delivery Body is collecting information that is needed to forecast CFD liabilities, this information should be shared with suppliers, subject to non-disclosure of commercially sensitive information.
 - c) The mechanism should clearly show consumers the pass-through costs, helping to build trust in the market.

- d) The mechanism should, as far as possible, minimise impacts on consumers.
 - e) Collateral requirements must be proportionate to the liability owed.
 - f) Design of the Supplier Obligation should ensure consistency with other ongoing policy initiatives, such as Retail Market Review and smart metering.
- 1.9. Regardless of the option chosen, it is essential that Government and industry work together to ensure consumers understand the cost of the Supplier Obligation and its impact on electricity bills

2. Purpose of the Supplier Obligation

- 2.1. The Supplier Obligation forms an important part of the overall CFD mechanism. It is intended to provide investors and generators with the requisite confidence in the revenue stream to bring forward investment in new low carbon generation.
- 2.2. The key issue for suppliers is to ensure that they are not exposed to risks they are unable to manage in order to forward payments to the CFD counterparty - to comply with their licence conditions - and that these amounts can be recovered from customers. Likewise, the CFD counterparty must be confident that they will receive the right amount of money from suppliers to forward to generators.
- 2.3. Suppliers will look to meet their obligation in a manner that balances volatility to end consumers with the need to operate effectively. They will need to ensure that they have sufficient funds to pay their liabilities, which in turn means ensuring they collect enough income from customers. To do this requires access to certain information on which CFD payments are calculated.

3. Access to information

- 3.1. Regardless of the two options being considered, calculating the amount that each supplier will owe the CFD counterparty will depend on a number of variables. These are, but may not be limited to:
- a) Generation:
 - The mix of generation technologies eligible for CFDs
 - Volumes contracted;
 - Generation forecasts by plant and region;
 - b) Expected start dates for new plant, maintenance plans, outage forecasts;
 - c) Contract flexibility;
 - d) Strike prices and indexation;
 - e) Period the payment covers; and
 - f) Supplier market share.
- 3.2. Electricity suppliers and the CFD counterparty will need access to accurate information on the above variables because:
- a) The CFD counterparty will be setting the collateral requirements for suppliers. This will need to be proportionate to the liabilities a particular supplier will owe the CFD counterparty. Furthermore, if the obligation is fixed-rate, the CFD counterparty would need to forecast ahead and invoice suppliers for the amounts they owe.
 - b) Suppliers will themselves need to ensure they are collecting sufficient sums from consumers' electricity bills to be sure that they are able to meet their liability when the CFD counterparty issues its invoice. This is vital to ensure that pass-through costs to consumer electricity bills are managed to avoid price volatility in the retail market.
 - c) Inaccurate pricing as a result of poor forecasting could have a significant impact on customer bills and / or suppliers' balance sheets.
- 3.3. Both the CFD counterparty and suppliers need access to the same information for the most part. It would be sensible that this information is collected centrally and shared with all parties.
- 3.4. The EMR Delivery Body will also be required to provide information on some of the above variables to the CFD counterparty. It would therefore be logical that this body is required to provide this information to suppliers to help them forecast their liabilities.

- 3.5. Some information needed to facilitate accurate forecasting will be commercially sensitive. Therefore some of our members believe that the CFD counterparty should go further and forecast the total system wide exposure to CFDs on a rolling basis, to assist suppliers to manage the risks of over and under-collection from consumers. Although this would require the CFD counterparty to predict and take into account forward power prices, it would presumably need to do so anyway to calculate the collateral required.
- 3.6. It has been suggested that even with this information it will be very difficult to forecast total CFD exposure, particularly due to the difficulty in forecasting how much electricity will be generated via wind power. It is hard to predict when and how fast the wind will blow. Although this becomes easier closer to the event, forecasting wind generation into the mid/long term is extremely difficult.
- 3.7. The volume of generation that will need to be forecast will increase as the number of CFDs with different strike prices, reference prices, contract volumes and technologies are approved and come online. This further exacerbates the complexity in forecasting.

4. Risks with the supplier obligation

- 4.1. Forecasting will be a risk that all parties will need to manage. The ability to accurately forecast will affect the ability of suppliers to manage other key risks with the Supplier Obligation. These are:
 - a) Over or under-collection from energy consumers;
 - b) Supplier cash position; and
 - c) Changes to customer pricing – including amounts and frequency.
- 4.2. Appendix 1 compares the above risks for the fixed and variable-rate models. The need for a supplier to accurately forecast its CFD exposure and the foresight they will have of changing liabilities appear to be the underlying variables that create the most risk for each model.
- 4.3. There is concern that a supplier's CFD exposure will be very difficult to manage and will increase along with market share; although it has been suggested that suppliers who are able to make appropriate adjustments via their trading platforms and/or their generation arms may find it easier to manage the risk.

5. Collateral requirements

- 5.1. A requirement to hold what could be excessive sums for collateral would affect a supplier's cash-flow position and the ability to secure new finance at an appropriate cost. Some suppliers may not have the credit rating required to be able to use a letter of credit, so they will need to use working capital.
- 5.2. It is important that collateral requirements for CFD payments are set on a level playing field. They should be proportionate to the liability and aim to lessen the burden on all parties.

6. Initial critique of the options

A variable rate obligation

- 6.1. This option would allow payments to flow more frequently and would invoice for the right amount of CFD payment owed to generators. This will require suppliers to forecast their CFD exposure and collect sufficient income from consumer bills.
- 6.2. If a supplier has not forecasted well, they may under-collect, in which case the supplier would be negatively impacted, or over-collect, in which case the customer would be negatively impacted. It could also be argued that under-collection negatively impacts consumers as the short-fall would be collected as a later date. Equally over-collection may result in a reduction in future amounts collected.

- 6.3. Overall, both over and under-collection would require the supplier to adjust the amount they collect from consumers, which could result in frequent variations in the retail market if suppliers are unable to manage this potential cost volatility effectively.
- 6.4. It has been suggested that suppliers can adapt their 'hedging' strategies to manage potential volatility in liabilities owed and subsequent pass through to consumers. While this may help, an increased number of CFDs with different volumes of generation output, (particularly variable generation e.g. wind), and different strike prices would be complicated to forecast and 'hedge' against, and therefore may require structurally different hedging.
- 6.5. This may be further complicated for those suppliers who had "over-bought" on wind at a pre-arranged higher price (e.g. via a PPA) who would need to sell the excess at the lower market price to those who had "under-bought", whereas all bear the same exposure to the increased CFD payment.
- 6.6. Reconciliations would also be needed to adjust for changes in market share with more accurate supply meter readings.

A fixed rate obligation

- 6.7. This option would see suppliers pay a fixed amount that could be factored into consumer pricing. The CFD counterparty would need to forecast accurately to set the right levy. One option would be that suppliers could over-collect with any surplus in a reserve fund. Alternatively, the CFD counterparty could raise additional finance from a third party to cover a shortfall.
- 6.8. In the call for evidence, DECC stated that over-collection is more of a concern as it could "damage investor confidence in the regime"¹. Some companies disagree with this statement as initial over-collection could deliver smoother future prices.
- 6.9. The Energy Bill does contain powers for a reserve fund, which could hold surplus payments. However, powers in the Energy Bill could allow surplus CFD payments be subsumed into an HM Treasury consolidated fund. While we understand that it is not DECC's intention for this to happen², if a reserve fund is available over-collection should be used to lower future amounts required from customers.
- 6.10. Reconciliations would be needed to correct imbalances if the CFD counterparty has under-collected, but also to adjust for changes in market share with more accurate supply meter readings. It has been suggested that this could result in large cash call at the point of reconciliation. However, the CFD counterparty should be monitoring the payments it is accruing, and therefore should a deficit start to build, action can be taken to reconcile at an appropriate point to avoid a significant imbalance. An imbalance could also be smeared across the next period. Notwithstanding this, some companies feel that the impact of a reconciliation process can be hedged, without consequential risks to suppliers' finances.
- 6.11. Any reconciliation would require the supplier to adjust the amount they collect from consumers, which could result in large variations if the CFD Counterparty is unable to forecast well.
- 6.12. The frequency of reconciliations could help to manage collection from suppliers for the liability owed to generators, but this would need to be balanced with shorter foresight of reconciliations. It has also been suggested that the CFD counterparty could raise finance to cover cash-flow from a third party.
- 6.13. Further work is needed to understand any potential balance sheet implications for suppliers, in particular whether a supplier would be required to recognise the total fixed levy on their accounts, even if it has yet to pay the sums listed.

¹ DECC, "Feed-in Tariff with Contracts for Difference: Operational Framework", para 276, p. 75

² Parliamentary question from Tom Greatrex MP to John Hayes MP, 14th January 2013. John Hayes states that "...under any scenario it is not our intention that the CfD will raise any revenue for the Exchequer."

7. Other issues

- 7.1. Energy UK's views on some of those remaining issues raised on DECC's Call for Evidence are provided below:

Method of data collection

- 7.2. Energy UK agrees that data collection, verification, settlement and payment processing functions should be carried out by Elexon on behalf of the CFD counterparty where the skills, systems and data required are similar to those already in place under the Balancing and Settlement Code.
- 7.3. Energy UK believes that market share data should be collected on a monthly basis. DECC will need to consider how to implement their proposals to accurately exempt intensive users, perhaps by isolating relevant meter point administration numbers (MPANs).

Changes to internal systems

- 7.4. Energy UK believes that it is essential for changes to suppliers' internal systems to be embedded within the EMR project plan. Further information and design choices are required to assess the impact on internal systems, alongside with sufficient testing of systems.

Proposed payment periods

- 7.5. This depends on the model chosen. Daily invoices would be easier to manage, but may introduce process complexity. A longer settlement period could simplify processes, but will increase collateral requirements. Energy UK's position is that the period between payments is a maximum of one month.

Are there any factors to consider in order to mitigate risks or shorten the timescale for implementation?

- 7.6. The Capacity Market and transition from the Renewables Obligation (RO) should be considered in conjunction with the Supplier Obligation. In this regard, it is worth highlighting a potential anomaly. Under the RO and Feed-in-Tariff (FiT), payment is made on total generation. Under FIT/CFD, payment is made on a loss-adjusted export. This means that any generation which is used for on-site purposes will not be eligible for the CFD. This is a significant change and may threaten the viability of on-site usage.

8. Next steps

- 8.1. We believe both options of a fixed-rate and variable-rate Supplier Obligation require further development. It is not possible at the stage to fully understand how the each option would work in practice nor the potential or perceived impacts on suppliers.
- 8.2. We recommend that each option is developed further. We would welcome further engagement with DECC officials to examine the models in further detail so that a robust design that support the CFD payment model is achieved.

Contact details

Policy Manager
energy-uk.org.uk

Appendix A – initial comparison for a fixed-rate and variable-rate supplier obligation

	Fixed	Variable	Potential solutions
Forecasting	<p>The CFD counterparty would forecast total CFD payment required from suppliers.</p> <p>Given difficulties in forecasting, it is possible that a risk premium could be factored in. The risk premium would come out of the LCF.</p>	<p>Suppliers are responsible for forecasting their CFD liabilities to the CFD counterparty.</p> <p>Again, if suppliers find this forecasting process difficult, a risk premium could be factored in. The risk premium would not be under the LCF.</p>	<p>The Delivery Body and CFD counterparty should be responsible for providing forecasting information, under either model.</p>
Over/under collection	<p>The CFD counterparty will need to manage this from the perspective of setting the fixed-levy. It is suggested the CFD counterparty could manage this by over-collecting. There is a risk of over-collection being subsumed into HMT consolidated fund.</p> <p>Depending on how well the CFD counterparty can forecast, the levy may need to be adjusted by a larger or smaller amount. Reconciliation is needed to address any imbalances. This could expose those suppliers who actually owe more to a cash call to balance shortfalls in payments. More regular reconciliations and/or spreading reconciliation payments further into the future as been suggested as a way to mitigate this, although some suppliers believe that this could still have negative impacts.</p> <p>Suppliers are therefore likely to want to ensure they are collecting what they need (by keeping up-to-date with regular forecasts) to ensure they have the income to pay.</p> <p>Reconciliation is needed in any case if data on generation supplied changes once meter readings are taken.</p>	<p>Suppliers need to manage this and will need to have access to information to forecast their liability which could result in under or over-collection from consumers. There is the potential for competitiveness issues for suppliers who under / over collect.</p> <p>Suppliers may be more inclined to base collection on maximum predicted under the levy.</p> <p>Reconciliation is needed data on generation supplied changes once meter readings are taken.</p>	<p>The risk of over collection from customers exists under both models.</p> <p>Over-collection can be used to lower the amount required for the next period.</p> <p>In the event of under collection, the CFD counterparty could raise finance from a third party or from central Government to stabilise cash flow whole the levy is adjusted for the next period.</p>
Customer pricing amounts and frequency of changes in pricing	<p>Reconciliation is needed in any case if data on generation supplied changes once meter readings are taken.</p> <p>A fixed levy should allow suppliers to factor it into prices. If there is a large imbalance of monies collected, this could result in a cash call at reconciliation and an uncertainty to the levy amount for the next period. This could be reduced with more frequent reconciliation or smearing the amount across the year. Increased frequency of reconciliations would need to be balance with the degree of foresight of changes in the levy.</p>	<p>Suppliers may accrue for likely levy with a risk premium. There is a potentially greater risk for individual suppliers that under collect.</p> <p>Suppliers will need to price on a worse case scenario initially and then adjust as invoices come in. Frequent adjustments to the amounts collected could result in frequent variations in the retail market as a supplier manages this potential cost volatility would need to be managed.</p>	<p>Both models may need to factor in uncertainty premium. Accurate forecasting information will help, but does not remove the risk to consumer prices.</p>



Call for Evidence on the CfD Supplier Obligation

Call for Evidence by DECC

Response by E.ON

Executive summary

- The proposed variable rate obligation will result in additional and unnecessary costs to consumers.
- Suppliers will not be able to accurately predict some of the causes of volatility associated with a variable rate obligation (such as plant performance and CfD generation output). They will lose the ability to control their own energy cost base.
- Suppliers' portfolios churn continuously and they cannot guarantee to make up under-recovered costs in future years. This will lead to unnecessary increases in risk (and therefore cost to consumers) as suppliers manage this volatility in payments.
- The CfD counterparty body could access cheaper finance to manage volatile payments through its ability to charge costs to all suppliers in the UK. It could also guarantee compensation for over- or under-recovery between years as it is not exposed to customer churn.
- The CfD counterparty body should manage the volatile payments associated with CfDs and charge costs through to suppliers on a fixed rate basis with costs changing no more than every twelve months, set with a suitable lead time of at least six months.

Q1. Do you have concerns about the predictability of the amount and potential volatility of CfD payments?

1. We do have concerns about the potential volatility of CfD payments.
2. Customers often demand low volatility in their prices; this is evidenced by the increasing popularity of long term fixed price contracts in all sectors of the market. Even in the residential variable tariff market, prices rarely move more than twice in any single twelve month period, with suppliers managing the volatility for customers between price changes.
3. With this in mind, suppliers will attempt to provide price stability to their customers. We are concerned that variable recovery of CfD costs will force suppliers to reduce the stability of the prices they offer (more frequent price changes) or increase the risks (and therefore costs) associated with fixed price contracts. This will impact all customers, but the largest industrial customers may see the biggest impact due to the concentration of risk on a single customer.

4. CfD payments to be recovered by suppliers will be based on a number of variable elements. We have summarised the key variable elements and the ability of suppliers to manage these below:

CfD strike price

This element can be anticipated by suppliers provided there is adequate transparency of strike prices and that they are published with sufficient lead-time.

Wholesale market reference price

If the reference price is transparent and can be easily achieved this risk can be managed by suppliers. The proposed day-ahead reference price based on an auction fulfils this requirement. The proposed long term reference price for baseload generation may not, particularly if it is based on a basket of indices due to the difficulty in trading a number of different component prices to attempt to match the index.

Number of CfD contracts issued

This element can be anticipated if the allocation process is transparent.

Supplier market share

This element can be anticipated by suppliers although it may change through time as customers switch between suppliers. We would encourage DECC to provide more detail on the precise methodology to calculate market share.

We would caution that an exemption for energy intensive industries calculated through the supplier obligation (for example through the market share calculation) could limit the ability of suppliers to understand their market share in real time.

CfD generation output

This element will be very challenging to predict and creates significant risk for suppliers. It will depend heavily on wind conditions, plant breakdowns and operational issues with new plant, all of which are difficult to anticipate.

Suppliers will have limited visibility of technology being installed or the location in which assets are being constructed. This will add to the challenges in predicting output.

5. As noted above, CfD generation output at any point in time will depend on the amount of CfD contracts issued (predictable), the range of technologies supported (predictable) and the actual generation output of those technologies at any point in time (very hard to predict).
6. The generation output of CfD plant, particularly in the case of wind, will be very difficult to predict in advance as it will depend on wind conditions.
7. This means a supplier cannot hedge their exposure to the market reference price in advance (as they do not know how much CfD volume to hedge) and therefore do not know how much to recover through energy prices set in advance. We provide more detail on the approach suppliers may take to hedge their exposure in appendix 1.
8. Suppliers are unable to rely on an exposure to the total strike price (market reference price plus difference payments) to hedge as they do not know the volume of that exposure.



9. The output of other (non-intermittent) low carbon generation sources will be easier to predict on an ongoing basis but suppliers are still exposed to unexpected changes in output for example through plant failures or uncertain commissioning or decommissioning dates. If the market reference price is set against a long term index as proposed, suppliers will be exposed to wholesale market volatility during times of plant failure or maintenance.
10. The existing support mechanism for renewable plant (the Renewables Obligation) sets a fixed supplier obligation six months ahead of a twelve month obligation period and sets a cap on price (via the buyout price mechanism). Although there are still challenges in forecasting the volume and cap in the longer term, this process allows suppliers to fix prices more cheaply than under the variable rate mechanism proposed for CfDs.

Q2. Does this differ based on different scenarios for how the generation mix evolves?

11. As described above, the difficulty in predicting CfD generation output presents challenges to supply businesses.
12. As wind generation output is particularly difficult to predict, a higher proportion of wind in the future is likely to exacerbate these problems.
13. However, as described in paragraph 9 above, other low-carbon generation sources could still have unpredictable output (for example as a result of plant failure or uncertain commissioning or decommissioning dates).
14. Therefore the additional risk introduced by the proposed variable rate mechanism will still lead to unnecessary increases in cost even if alternative low carbon pathways are followed.
15. Given that baseload and intermittent CfDs will use different market reference prices, the ratio of baseload to intermittent CfD generation is likely to impact a supplier's hedging strategy as suppliers will need to forecast CfD generation output over different timescales (see appendix 1 for more detail on the impact on hedging strategies). A single market reference price for all technologies at the day-ahead stage would reduce the risk associated with a change in generation mix.

Q3. How would you manage the fact that CfD payments are changeable, noting that they are inversely related to wholesale price movements, and looking at this from the perspective of variations in total costs to serve (i.e. wholesale price/other cost variations in conjunction with CfD payment variations)?

16. The total cost paid by suppliers for CfD generation will be determined by the strike price. If the market reference price can be achieved, and the supplier knows how much volume will be generated and so how much to purchase, the split between the wholesale price and CfD payment is largely irrelevant.

17. In setting customer prices, suppliers would make an assumption that the cost of the CfD asset was its strike price plus any basis risk associated with achieving the market reference price (depending on the index chosen by Government).
18. As described above, it is the exposure to CfD plant performance (how much to purchase) that creates the largest risk for supply businesses and would be the most difficult (and expensive) to manage.
19. The closer wholesale energy prices are to the strike price, the smaller the absolute risk to suppliers. This is because suppliers would then be neutral to the source of the energy, either low carbon (CfD) or conventional (non-CfD). However, in the short term at least, we would expect strike prices for most technologies to be well above the wholesale energy price. In the longer term, if CfD costs fall the volume of renewable power is likely to grow and power prices to become more volatile, again causing problems for suppliers.

Q4. Is there a hedge that suppliers can utilise that may mitigate any risks?

20. As described in our response to Q1 some (but not all) of the risks associated with CfDs can be anticipated by suppliers and managed or passed through to customers. It is the exposure to CfD plant performance (generation output) that would need to be managed to reduce risks and costs to customers.
21. Currently there is no robust derivative market product based on wind conditions. It is possible that such a market could emerge in future although given the variability in wind conditions across different parts of the country, and dispersed location of wind assets, it is likely that a wind derivative market would still carry considerable basis risk.
22. For other CfD plant (for example nuclear or biomass plants), whilst output is easier to predict on an ongoing basis there would not appear to be any way of managing the risk of plant failure through markets, as this is unlikely to correlate to any external factor which could be hedged.
23. Given the difficulties in managing this risk and its scale, customers are likely to see additional costs. It is therefore critical that the party managing this risk is the one able to do so at lowest cost.
24. The counterparty body should be able to raise finance based on its guaranteed ability to recharge to suppliers in order to manage the volatility in payments. This is likely to be at a lower rate than suppliers could achieve on average. This, combined with its ability to guarantee recovery of under payment in future years (as it doesn't need to consider customer churn), should mean that it is able to provide customers with a cheaper cost recovery mechanism than the variable rate mechanism proposed. It also ensures all suppliers face the same costs.
25. The fixed prices charged over a period should be calculated by a fixed and predictable formula. This would enable suppliers to forecast costs in future years when pricing long-term contracts. In addition, generators are likely to be concerned about the ability of the



counterparty to pay if there is any political interference in this price setting process, making transparency and predictability vital.

Q5. Overall what are your views on the proposed variable rate obligation and are there any other issues we should be considering?

Variable rate obligation

26. At the point of delivery of power to a consumer a supplier's income is mostly fixed; any change in cost at this time (such as a variable CfD obligation) results in a change in margin.
27. Under the variable rate proposal we would expect suppliers to forecast the obligation in order to minimise this margin impact. Given the obligation will be difficult to forecast (see above) we would expect suppliers to charge through the cost of managing this variability.
28. Suppliers are also exposed to market churn, where customers switch between suppliers. This means that any over- or under-recovery cannot be passed through efficiently in subsequent years (as customer numbers may be different). This means that suppliers will look to manage their CfD obligation over short period which, again, could result in inefficient costs. This might affect large customers most significantly as they tend to switch suppliers most frequently.
29. We believe the counterparty could manage this cost more efficiently than suppliers (see response to Q7 below). Therefore the current proposal for variable cost recovery is likely to result in unnecessary costs for consumers.

Other issues to consider

Consistency between CfD and capacity mechanisms cost recovery

30. Suppliers will be expected to recover costs for both CfD and capacity schemes. DECC should fully explore opportunities to maximise efficient cost recovery between the two schemes. This could include combined collateralisation and netting off payments/costs between the two schemes.

Interaction between the Renewables Obligation (RO) and CfD cost recovery

31. During the period when developers can choose between CfDs and the RO (2014-2017) there will be a need to co-ordinate the new build assumptions between the two schemes.
32. There needs to be a transparent process in place that ensures new renewable generation that opts for a CfD is not included within the RO calculation.
33. Suppliers who sell long term contracts will need visibility of the CfD uptake up to three years in advance in order to forecast costs under the respective regimes. The proposals on contract allocation for renewables will deliver this for most eligible technologies, excluding the conversion of coal units that choose to run exclusively on biomass.
34. Generators should be obliged to choose either the RO or CfD mechanism before the supplier RO level for any compliance period is set. This will ensure no double counting across the



mechanisms and give suppliers at least six months notice before the first CfD payments are due.

Collateral

35. The requirement to post collateral will increase costs, particularly as only cash or near cash equivalents will be permitted.
36. We do not agree that cash or letters of credit are the only options available for providing a level playing field across the supplier community. These add additional costs which we believe could be reduced with alternative approaches.
37. A requirement to provide cash puts strain on suppliers with limited borrowing facilities and could have an impact on credit ratings. It is also an inefficient use of the balance sheet, tying up funds which could otherwise be used for investment and earning returns (an opportunity cost). Similarly, the impact of providing a letter of credit is to increase cost and use up credit capacity.
38. We would therefore encourage further consideration of alternative approaches such as providing a nominal level of free credit to parties in the same manner as current industry codes or allowing Parent Company Guarantees to be posted as collateral.

Disclosure of data

39. Should the proposed variable rate obligation be implemented, suppliers will need full disclosure of the relevant contract terms within each CfD contract (including strike price, reference price and contract length).
40. Suppliers will need frequent updates of commissioning dates or any planned changes in output (such as maintenance) well in advance. Suppliers will also need information on the expected load factor (based on location) and technology being used by the developer so that technology specific factors can be understood.

Interaction with Retail Market Review (RMR)

41. DECC needs to ensure consistency between RMR and EMR measures that impact suppliers. Any restrictions placed on suppliers under RMR (such as the ability to change tariffs, price structures and so on) must be consistent with the impact EMR will have on suppliers' cost bases.

Further detail necessary

42. We would caution that further detail is necessary in order to understand the full impact of the proposals and to prepare to implement them. In particular more detail is need on:
 - Definition of market share (including timescales over which it is assessed and how energy intensive users will be excluded).
 - Methodology to calculate the level of collateral needed.
 - Precise details of how costs will be paid.



- Details of how payments will flow back to suppliers in the event of the generator's strike price being below the market reference price.

Q6. What are the potential impacts on suppliers of implementing the supplier obligation, including:

- a. cost effects of posting collateral both for the CfD obligation and alongside other requirements in the electricity market;**
- b. method of data collection;**
- c. changes to internal systems;**
- d. and the proposed payment periods?**

Cost effects of posting collateral

43. Suppliers already post collateral associated with their imbalance costs, and will have to post further funds for CfD and capacity payments.
44. The level of collateral to be posted has not yet been determined; neither has the way in which it will be updated as market share changes.
45. Ultimately the cost of funding this will likely be passed to customers through higher bills and, if based on cash or a letter of credit, will be a function of a supplier's cost of capital.
46. Any change in the UK regime of collateralisation needs to ensure it is consistent with European legislation regarding EMIR (European Market Infrastructure Regulation).

Method of data collection

47. We believe data collection should be managed centrally by the party selected as the settlement agent. Such an approach would mean that the data used was consistent and independent, without relying on individual suppliers.
48. Data flows between suppliers and the settlement agent would be relatively straightforward, although the settlement agent and other industry bodies would need to ensure robust processes were in place, and that suppliers had a means of redress against erroneous data.
49. We assume that settlement will follow the normal industry timelines, and that updated settlement runs will result in revised difference payments.
50. Data will need to be published in such a way that individual customers could determine the costs associated with their own supply if required. This is particularly important for larger customers who sometimes prefer to have costs passed through directly.

Changes to internal systems

51. Implementation of the supplier obligation in the planned timescales (possible first payment by mid 2014) will be challenging.
52. Without further details of the cost recovery process it is not possible to commence any system design process or give a view on the complexity of system changes.

53. We would caution that suppliers could be required to make significant system changes associated with Retail Market Review and Electricity Market Reform at the same time. This could increase the time and resource needed.

Proposed payment periods

54. Suppliers often sell fixed-price contracts up to three years in length. Therefore suppliers would need three years' cost visibility to perfectly manage their exposure and minimise costs to customers.
55. We recognise that setting a supplier cost three years in advance may result in inefficiencies elsewhere so is not appropriate. However, a stable and predictable fixed rate obligation would allow suppliers to more accurately anticipate future costs.
56. Payment periods should be aligned with existing industry practise. With this in mind we believe payments should be fixed for a twelve month period and set six months ahead of that period. This is consistent with the existing Renewables Obligation.

Q7. Are there any factors to consider in order to mitigate risks or shorten the timescale for implementation?

57. The cost to consumers can be minimised by ensuring the volatile CfD payments are managed by the body most capable of doing so.
58. The counterparty body should be able to raise finance based on its guaranteed ability to recharge to suppliers in order to manage the volatility in payments. This is likely to be at a lower rate than suppliers could achieve on average. Combined with its ability to guarantee recovery of under payment in future years (as it doesn't need to consider customer churn), this should mean that it is able to provide customers with a cheaper cost recovery mechanism than the variable rate mechanism proposed.
59. The fixed prices charged over a period should be calculated by a fixed and predictable formula. This would enable suppliers to forecast costs in future years when pricing long-term contracts. In addition, generators are likely to be concerned about the ability of the counterparty to pay if there is any political interference in this price setting process, making transparency and predictability vital.
60. The counterparty body should manage the volatile CfD payments and recover costs from suppliers over a minimum twelve month basis.
61. Reconciliation of difference payments could then take place during the following twelve month period.
62. Early certainty of the cost recovery mechanism is also crucial given that system changes are likely to be significant. DECC should confirm the cost recovery process as soon as possible.

E.ON

January 2013



Appendix 1: Impact on suppliers' hedging approaches

Background

- In order to stabilise prices for customers and stabilise returns to shareholders energy suppliers will aim to fix their costs, to varying degrees, ahead of time.
- They do this by purchasing energy from forward markets and forecasting other non-energy costs (such as support for low carbon generation).
- This appendix explores how the move from the current Renewables Obligation (RO) support regime to the Contract for Difference (CfD) regime will change suppliers' approach to managing costs (hedging).

Current approach (RO)

- The RO regime sets an Obligation Level as a % of demand that suppliers must either meet with renewable energy (evidenced by Renewable Obligation Certificates or ROCs) or pay the buy-out cost.
- This level, and the corresponding RO cost, is set independently of wholesale electricity prices.
- Therefore when managing or hedging their costs suppliers do not need to consider interaction between the RO and energy costs.

Energy Costs

- To hedge energy costs suppliers must make a decision about when to purchase energy (using forward markets) and how much energy to purchase (based on a view of expected demand).
- If a supplier wishes to fix prices for consumers for a long period, it could purchase energy in forwards markets a long time ahead of delivery.
- In practice suppliers will choose when to purchase energy based on the products they sell (for example the ratio of fixed price contracts to variable tariffs) and competitive pressures in the retail market.
- Suppliers will have a view of how much energy to purchase based on their own portfolios and will be able to make reasonable forecasts of future energy demand.
- Suppliers are therefore in control of both how much energy to purchase and when their energy cost base is set.

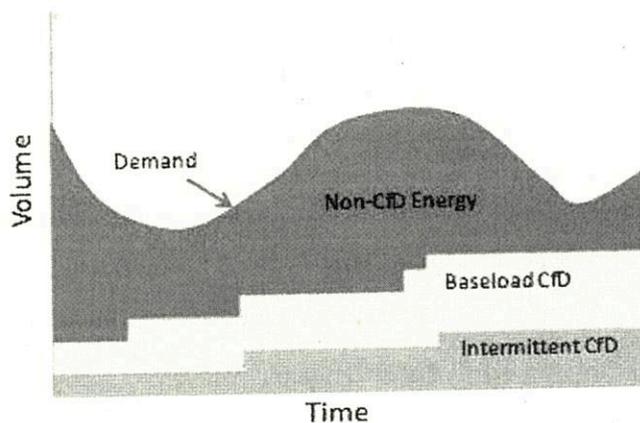
Renewables Obligation

- As outlined above, the RO level is set independently of wholesale electricity prices. The buyout mechanism effectively sets a cap on the price of ROCs.

- The Obligation Level is set each year by Ofgem six months ahead of a twelve month obligation period (suppliers therefore have between six and eighteen months certainty of RO cost).
- Suppliers wishing to manage RO costs beyond the published obligation period will need to make a forecast of expected changes.
- A transparent methodology would allow these forecasts to be more accurate and ultimately cheaper for consumers. We have written to DECC separately on this particular issue.

Future approach (CfD)

- The CfD regime replaces the RO cost for new low carbon investment with a CfD difference payment. This is determined by the amount of low carbon generation and the difference between a wholesale market reference price and the CfD strike price.
- This mechanism therefore introduces an interaction between the low carbon support cost and the wholesale electricity market.
- To provide certainty to customers, suppliers are likely to seek to achieve the market reference price. This ensures the total cost of CfD electricity (cost of energy plus CfD payment) will be equal to the strike price. This cost certainty mirrors the revenue certainty that CfD generators receive.
- Given this interaction between wholesale prices and CfD payments a supplier is therefore likely to manage their energy costs in separate tranches:



Non-CfD energy cost

- The non-CfD energy cost will be managed in the same way as under the RO regime (described above) with suppliers determining when to purchase energy.
- The amount of energy to purchase will depend on the amount of energy purchased to cover CfD costs (see below).



Baseload CfD costs

- Suppliers will seek to match their energy purchase price to the market reference price determined in baseload CfD contracts (at year ahead stage as currently proposed).
- The quantity of energy purchased will be determined by the expected amount of baseload CfD electricity generated at point of delivery and the expected market share of the supplier.
- Short term changes in CfD generation output (such as plant failure or unexpected increase in generation) will be very difficult to predict and therefore cannot be hedged effectively.

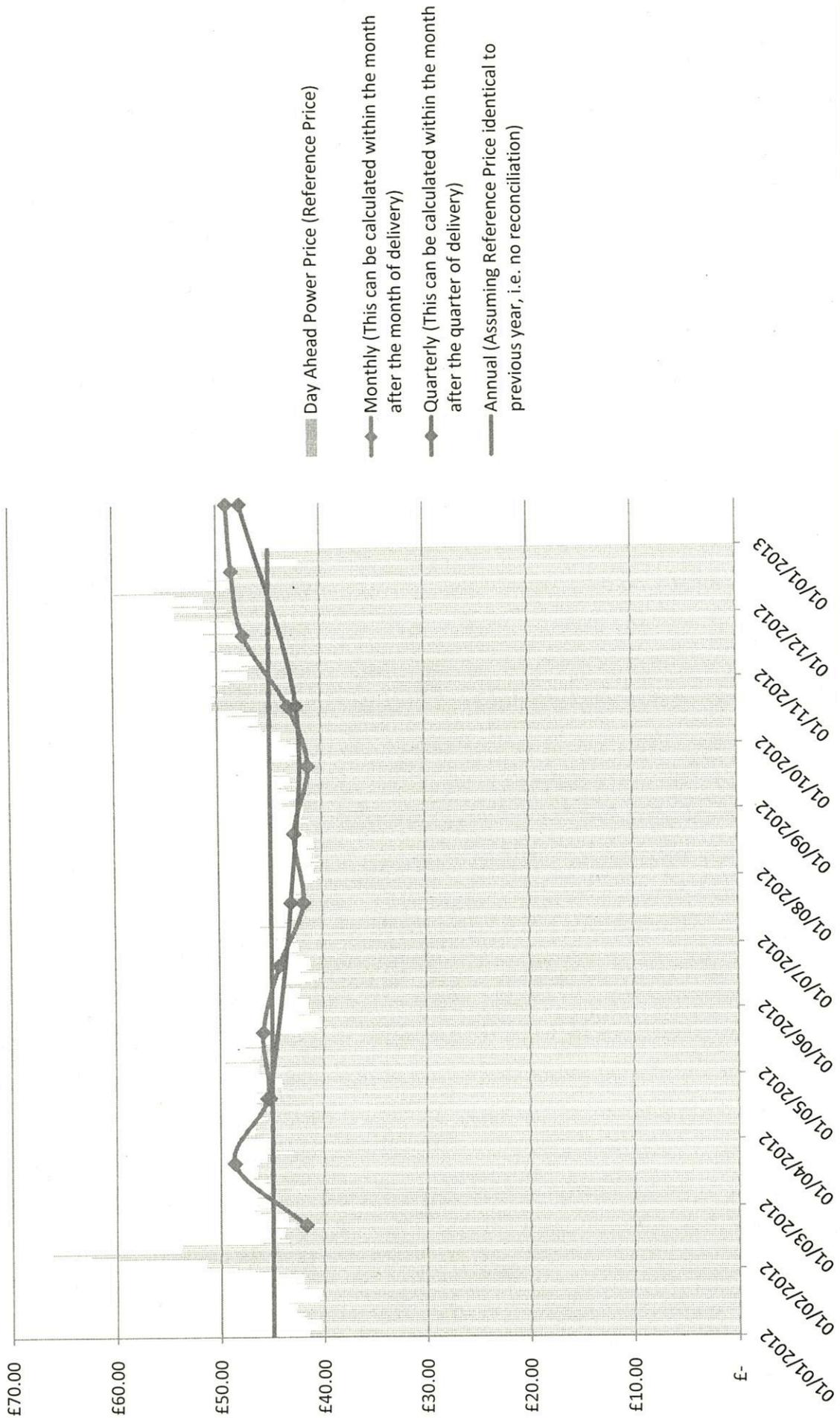
Intermittent CfD costs

- Suppliers will seek to match their energy purchase price to the market reference price determined in intermittent CfD contracts (at day ahead stage).
- The quantity of energy purchased will be determined by the expected amount of intermittent CfD electricity generated at point of delivery and the expected market share of the supplier.
- Short term changes in CfD generation output will be very difficult to predict and cannot be hedged effectively in advance. This presents a particular challenge for intermittent CfD generation which is often determined by weather conditions.

Conclusion

- A fixed CfD obligation would go some way towards reducing the financial exposure and corresponding cost to consumers as suppliers would only be exposed to their ability to meet the market reference price and to make a long term, average forecast of CfD generation output.
- A variable obligation will expose suppliers to short term risks in predicting volatile CfD generation output that is very difficult to anticipate ahead of time and cannot be hedged effectively. This risk is likely to be reflected in additional costs charged to customers who wish to have certainty of energy prices.

A chart showing the difference between various CfD payment time frames, not accounting for variation in generation





January 14, 2013

Dear Sir,

Annex A: Feed-in Tariff with Contracts for Difference: Operational Framework: Call For Evidence on Supplier Obligation

Please find First Utility's response to the above call for evidence below. If you have any further questions, or for follow up discussions, please contact info@first-utility.com or www.first-utility.com (or [@first-utility.com](https://twitter.com/first-utility)).

Regards,

—
Head of Pricing & Risk Management

Annex A: Feed-in Tariff with Contracts for Difference: Operational Framework: Call For Evidence on Supplier Obligation

1. Do you have concerns about the predictability of the amount of potential volatility of CfD payments?

Yes we have some very serious concerns about the design of the Supplier Obligation under CFD FITs, which is why we have proposed an alternative in Appendices A and B. The key issues are that CFD FITs bring forward cash payments by up to 12 months relative to the equivalent payments under the Renewables Obligation (RO), they are required to be collateralised - further increasing the earlier cash requirements, and they will fluctuate in a highly volatile way due to the market indices they relate to, output volumes and CFD strike setting. The proposed design would be a more significant distortion to retail energy competition than all the other significant issues currently damaging retail energy competition in the UK market.

As currently envisaged the CFD payments will be unpredictable, highly volatile and highly gamable in a deeply illiquid wholesale electricity market in a way that disadvantages independent suppliers relative to suppliers within integrated utilities.

Unpredictability:

- Independent suppliers have little or no experience of how to forecast output from intermittent renewable generation plant, or how to manage this risk.
- Independent suppliers have little or no experience of how to account for scheduled and unscheduled outages and how to manage this risk.
- Independent suppliers may be at an information disadvantage relative to suppliers who are part of an integrated utility with an upstream portfolio of CFD FIT plant, unless there is clear functional separation via a Chinese wall between these upstream and downstream businesses.

Volatility:

- Renewable generators like wind farms are intermittent, with output volumes a superliner function of wind velocity. Volumes are thus highly volatile due to the unpredictability of changes in weather pressure fronts.
- Prices for these intermittent generation volumes will be based on market prices in an illiquid and volatile wholesale electricity market.
- Supplier market shares are not well known for Non Half Hourly (NHH) meters less than a month after delivery (the volumes are only known with accuracy for 97% of NHH meters 14 months after delivery of power to the meters), leading to risk of volatility in the deemed market share of each supplier and consequential volatility in cashflow relating to payments and collateral calls under CFD FIT obligations for suppliers.

Gameability:

- Given that some very large CFD payments are likely to be made based on wholesale market reference prices, there will be increased incentives to game market prices in the deeply illiquid electricity market in order to increase CFD FIT payments. This could exacerbate the size and variability of cash and collateral requirements under CFD FITs.

There are other areas of concern too, for example, independent suppliers have a more variable customer base than integrated suppliers across which to share the cost of the CFD FITs which makes it extremely difficult to set tariffs forward when the 'cost per unit supplied' for this scheme is unpredictable. If a supplier factors into tariffs a cautious assessment of high costs, this could lead to over collection (and a likely loss of customers), while under collection due to under assessment of CFD FIT costs could risk significant losses in the retail business that will be hard to predict and cause serious damage. These dangers arise due to (i) the lack of correlation between volumes generated under CFD FITs and volumes supplied to consumers, coupled with (ii) the lack of correlation between prices under CFD FITs and prices at the time hedging decisions are made by suppliers.

There are three key risks that the CFD FIT regime will create for independent suppliers, that are exacerbated relative to those risks in integrated suppliers: collateral risks, cashflow risks and market risks – these are explained in more detail in Appendix A.

As increasing volumes of generation steadily fall under the CFD FIT regime, this will create a more serious risk to retail market competition than any of the other significant risks that already exist downstream of the wholesale electricity market. As risks are transferred away from generation under EMR, this adversely impacts independent suppliers relative to suppliers who are part of an integrated utility. This is highly likely to exacerbate the existing risks and barriers to entry and growth for independent downstream players to the point where it is a clear signal to exit the market or drive further vertical integration. We outline these risks in detail in our general answer and we urge DECC to consider alternative supplier obligation designs that do not damage retail competition in these ways. Key features of a supplier obligation that will not harm competition include:

- A process for converting the variable price and variable volume obligation for suppliers into a fixed obligation cost per unit supplied, always known for suppliers at least one year in advance. Such an approach would facilitate competitive tariff setting, a level playing field between different supplier types and effective retail competition between all the independent and integrated suppliers.
- The obligation might start for suppliers 6 to 12 months in advance of the start of the generator CFD payments, in order that the cashflow cycle is lined up with the RO cashflow cycle, the need for credit and collateral is mitigated for suppliers, and a buffer is built up to protect against under-collection in a fixed rate obligation.
- Any growth or reduction in the cash buffer each year, and interest earned, will be factored into the supplier obligation level to be set for the next forward year.

A detailed proposal is outlined in Appendix B.

2. Does this differ based on different scenarios for how the generation mix evolves?

The exact risks (cashflow, collateral and market risks) for suppliers will be a function of the split between renewable CFDs struck against a day ahead index and Nuclear, Clean Coal or biomass CFDs struck against a year ahead index.

3. How would you manage the fact that CfD payments are changeable, noting that they are inversely related to wholesale price movements, and looking at this from the perspective of variations in total costs to serve (i.e. wholesale price/other cost variations in conjunction with CfD payment variations)?

The CFD payment per unit energy generated is only anti-correlated to specific market indices yet to be defined. The specific market indices are **not** indices representative of the way in which suppliers currently hedge their customer demand. Furthermore, the generation volumes coming from CFD FIT generators are not likely to be correlated to demand volumes from consumers. So the product of CFD FIT generation volume and CFD index price is likely to be quite uncorrelated to the product of customer demand and hedge price.

If DECC believe that one way to mitigate this risk is for suppliers to attempt to purchase volumes consistent with the way the CFD indices are calculated there would be a range of issues and unintended consequences, including but not limited to:

- CFD generation volumes would not in general match customer demand volumes, leading to risk of over or under hedging for customers
- If suppliers did find a way to overcome the volume issue identified above, by purchasing in a way to take advantage of any perceived price anti-correlation between wholesale costs and CFD costs, this would either:
 - Lead to the supplier who did this to price retail offerings in a very different way to their competitors, potentially damaging their ability to compete, or
 - Lead to all suppliers converging on a similar hedging approach defined by the CFD index. This would ultimately lead to all suppliers having a broadly similar cost base and no ability to differentiate themselves via different routes and approaches to the wholesale procurement of energy. This would be very bad for retail competition and would ultimately lead to a market price that is used purely as a reference to set CFD FIT payments and as an internal transfer price in integrated utilities, as there would be very little need or appetite to trade in such a risky market for other reasons.

The product of a highly volatile volume multiplied by a highly volatile and gameable price is very difficult to hedge. We make the point that independent suppliers have no experience of forecasting these factors, and might not gain good visibility of these factors. Managing these risks will require all suppliers to build teams to forecast the generation output for the CFD FIT plant 'stack'. We believe that when factoring in volume variability and unpredictability due to these factors, and price unpredictability due to the deeply illiquid wholesale electricity market against which the CFD FIT contracts will be struck, this will quickly become an unmanageable risk for non-vertically-integrated suppliers. The only way an independent supplier might be able to hedge this risk would be to find a counterparty willing to enter into a financial contract which would need to look much like a financial PPA, which we expect would require the payment of a significant risk premium in order to manage this risk in the deeply illiquid wholesale market. In contrast, this risk has a natural internal hedge on the generation side of a vertically integrated supplier who owns some of these plants and has far better visibility of likely output from the plants. In the absence of a Chinese wall, this crucial information would be very valuable to the supplier arms of the integrated utilities. For these reasons we feel urgent action must be taken so that the central counterparty sets the supplier obligation as a fixed price per unit energy supplied, much like the RO. This is the only way we can see this EMR policy not signalling independent supplier exits from the energy retail space in the medium term. We note that it is the independent suppliers that have brought improved consumer choice and lower

prices in the energy retail market. It would be a backward step for competition and for consumers if these retail market improvements are undermined by this EMR policy.

4. Is there a hedge that suppliers can utilise that may mitigate any risks?

For independent suppliers the answer is No - please see our answer to question 3.

We note that there is a natural hedge for vertically integrated suppliers due to their upstream generation businesses, but there is not a natural hedge for independent suppliers. This is the reason the CFD FIT payment mechanism design as currently proposed, would create significant disadvantages to independent suppliers and is likely lead to market exits.

5. Overall what are your views on the proposed variable rate obligation and are there any other issues we should be considering?

Please see our earlier answers. We feel there are compelling reasons, on the grounds of clear competition distortions, increased barriers to entry and signals to exit energy retail, why strong consideration should be given to setting a fixed price obligation for suppliers.

6. What are the potential impacts on suppliers of implementing the supplier obligation, including:

- **cost effects of posting collateral both for the CfD obligation and alongside other requirements in the electricity market;**
- **method of data collection;**
- **changes to internal systems;**
- **and the proposed payment periods?**

There are three key impacts on small suppliers that will damage retail competition if the CFD FIT obligation is implemented as proposed. These are: Collateral risks, Working Capital risks, Wholesale market price risks. Please see our answer to earlier questions and Appendix A which outlines these risks. This is why we propose a different obligation design based on a fixed price supplier obligation per unit of energy supplier, set at least one year in advance to facilitate tariff setting and a healthy retail competitive environment. This kind of approach is outlined in Appendix B.

7. Are there any factors to consider in order to mitigate risks or shorten the timescale for implementation?

Yes. The key factors to consider include: how to design the CFD FIT in a way that does not materially disadvantage smaller suppliers. Ways to mitigate this risk are outlined in our answers to earlier questions and in Appendix B.

Appendix A

CFD FIT risks to competition: The disadvantage for independent suppliers

The key risks to independent suppliers are:

- 1. Cash flow Risk** – payment of FIT obligations would be up to 1 year earlier versus the existing Renewables Obligation (RO) payment cycle. Suppliers would need to fund the extra working capital requirements this brings. The higher cost of working capital in independent suppliers versus integrated utilities means that this has a larger impact on small suppliers. In contrast the vertically integrated suppliers are largely indifferent (the benefit in working capital on generation is offset by the cost of working capital in supply, and in any case the cost of working capital is far lower in those entities). To quantify the cost on small suppliers, assume a small supplier has 100,000 electricity customers, each having a 15% RO on a 3300 kWh annual consumption, with a buyout price of £42 per MWh of obligation. This results in an RO of approximately £2million per year, or £20 per customer per year. This is paid on average 305 days after delivery. Under the CFD FITs suppliers may have to pay in the month of delivery, so on average within 15 days of delivery, or 290 days earlier than the RO. Assuming the CFD FITs payments are of similar size as the RO, a small supplier would have to finance £2million of working capital for around 9 months. Small suppliers are likely to only get financing at equity like rates of return. Assuming the interest rate is 10% to 15%, the annual cost of working capital to small suppliers of financing this cashflow would be in £150,000 to £250,000 range. This might reasonably equate to a 10% reduction in the number of customers a smaller supplier could service from a working capital perspective, and would therefore damage retail competition.
- 2. Collateral Risk** – extra working capital, over and above that stated in 1, will be required to be posted to collateralise future payments under the CfD FIT. The posting of credit support is not a feature of the RO, meaning this is a significant new working capital requirement. The higher costs of working capital described in point 1 will be exacerbated by this collateral requirement. This impacts independent suppliers more than vertically integrated suppliers. Assuming that suppliers would need to post collateral to cover a month of the obligation, this would be requiring a supplier with 100,000 customers to always have £150,000 to £200,000 posted as collateral. The working capital funding cost per year for this would be up to £300,000. The sum of the costs of 1 and 2 is over £500,000 per year and equates to a loss in ability to serve up to 20% of the existing customer base for a supplier of that size. In contrast, for vertically integrated players, any deterioration in working capital in supply is offset by an equivalent improvement in working capital in generation, meaning this risk is largely cancelled out in a vertically integrated player.
- 3. Market Risk** – suppliers will be exposed to payment obligations based on variable generation volumes and variable prices in the spot market for renewables, and on year-ahead prices for nuclear/biomass/CCS. The CFD FIT prices and volumes are not likely to be well correlated in general to the market prices and supply volumes of independent suppliers. These are new market risks for suppliers that will need to be hedged if a supplier is to be able to offer tariff stability to consumers. As these are financial exposures to market risks,

they will need to be hedged via a financially-settled contract rather than a physical forward. Hedging is more expensive for independent suppliers than suppliers in integrated utilities. This extra risk in supply for vertically integrated suppliers is offset by the benefit in generation for those utilities. No liquid financial market for electricity exists in the UK, so managing this financial risk on variable prices and volumes would be extremely difficult and expensive in the current market structure. It is very hard to assign a value to this risk as it will out-turn based on volatile generation volumes and market prices. Being unable to hedge this could put independent suppliers at serious risk of failure in an volatile market price scenario as it is likely to be dangerous for a supplier to either over estimate or under estimate their costs when attempting to forecast them for the purposes of retail tariff setting.

A Solution

1. **We propose that DECC adopt the central counterparty body model.** The central counterparty would manage the payments and the cash flow funding requirements, at a **lower cost of funding** than any of the integrated or independent suppliers.
2. We propose that **the CfD FIT obligation for suppliers should be set as a 'pence per kWh supplied' rate** in each FIT year, based on a view of the expected total cost of the CfD FIT scheme each year. This rate would be set one year in advance, along with forecasts that are regularly updated for years 2 & 3 forward, based on the volumes and prices delivered so far in year 1 that drive a calculation of the over- or under-collection in that year.
3. **Supplier payments would be collected along the same timeline as the RO**, with the central body managing the basis risk and credit/funding risks between this set of generator and supplier cash flows. These costs and risks already exist; it makes sense to ensure they are managed at the lowest cost for consumers.
4. Any under- or over-collection in a year would be reconciled via **regular reforecasts to the next year forwards' pence/kWh supplied CfD FIT obligation**. Working capital and credit costs would be factored in to reforecasts by the central counterparty along with some reasonable rate of return.

This model would ensure that a robust credit worthy counterparty holds all the credit risks, the working capital risks and the market basis risks, but the cost of managing these risks is passed onto suppliers in a way that smooths them in a forecastable way that enables retail tariff setting. The central counterparty, potentially backed by a government guarantee (or with socialisation of credit costs across the industry in the event of a participant failure) would have a lower cost of capital than any other counterparty to the CfDs, meaning the overall cost of the scheme would be lowered. The reconciliation process in reforecasting and eventual setting of the supplier obligation in subsequent years would ensure that all costs are recovered. The separation of generator contracts and supplier obligations would ensure that funding is collected but in a way that does not increase risk disproportionately in supply companies, and specifically that it does not place disproportionate risks on independent suppliers versus integrated suppliers.

There are two key benefits of this approach. Firstly, given that the working capital and market price risks will exist however this is structured, the central counterparty model would ensure that these

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risks are managed by an entity with the lowest cost of financing, to the benefit of end consumers. Secondly, this approach ensures a level playing field - that independent suppliers are not disadvantaged by CfD FITS relative to integrated suppliers. This is important for supporting the EMR objective of promoting retail competition.

Appendix B: Detailed Methodology for implementation of a Fixed Supplier Obligation

CFD Contract between Generator and CFD Counterparty Body:

Each month the CFD Counterparty Body pays the Generator:

Generator Payment = $\sum_{HH=1}^M V_{HH} \times [K^{CFD} - P_{HH}]$, where:

V_{HH} is the volume (in kWh) generated by the generator in the Half Hour, K^{CFD} is the CFD strike price (in £/kWh), and P_{HH} is the CFD index price (in £/kWh) in half hour HH, and the sum is over all M half hours in that Month.

When the Generator Payment is negative, this represents a payment from the Generator back to the CFD Counterparty Body.

Supplier 'FIT Obligation' in Year Y:

In each 'FIT Obligation Period', the supplier pays to the CFD Counterparty Body:

Supplier Payment = $\sum_{HH=1}^N [V_{HH} \times R^y]$, where :

V_{HH} is the volume (in kWh) supplied by the generator in the Half Hour, R^y is the Supplier obligation Rate (in £/kWh) in year y, and the sum is over all N Half Hours in the Year.

This calculation and payment is made by each supplier to the CFD Counterparty Body by the end of the August following the close of the 'CFD Obligation Period' ending March 31st that year. The timings ensure meter reads have come in so that the invoice is based mainly on actual rather than estimated reads for NHH metered supply points. This would mirror how the RO scheme is administered from a supplier perspective.

CFD Counterparty Body:

The CFD Counterparty Body would manage the working capital funding requirements due to the timing differences between the sum of these two sets of cash flows across all suppliers. In a given month, the shortfall would be:

$$Shortfall_M = \sum_G \sum_{HH=1}^M V_{HH}^G \times [K^{CFD} - P_{HH}^G] - \sum_S \sum_{HH=1}^M [V_{HH}^S \times R^y]$$

Where M denotes Month, S denotes a summation over all Suppliers and G denotes a Summation over Generators. This definition means a positive Shortfall is a cash cost to the scheme over and above the supplier incomes, while a negative Shortfall would denote a cash surplus coming into the scheme.

The cost of financing this Shortfall in a given month of a year in scheme would be based on the cumulative Shortfall requirement built up so far over the scheme:

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$$Cost_M = \text{Max} \left[\left(\sum_{\text{All Months}} \text{Shortfall}_M \times \left(\frac{r}{12} \right) \right), a \right]$$

Where r is the annual interest rate that factors in the cost of financing, the cost of credit, and a reasonable return to the financing body, and a is a minimum monthly fee for the central counterparty body's service in the event that the cash flow is a net benefit to the scheme. In the event that there is a cost in a given month, both the under-collection and its working capital cost will need to be factored into adjustments to the supplier obligation for the following year.

The interest earned by the central counterparty each month would be:

$$\text{Interest}_M = \text{Max} \left[\left(\sum_{\text{All Months}} -\text{Shortfall}_M \times \left(\frac{r_2}{12} \right) \right), 0 \right]$$

Where r_2 is the annual interest rate for deposits collected from the FIT Scheme. Any interest earned would be used to lower the obligation in subsequent years via reforecasts.

This arrangement would ensure that (i) generators are paid out promptly after generation, and (ii) the payment obligation on suppliers was set in advance so that new market price risks and generation volume risks are not imposed on them in a way that would damage suppliers ability to offer tariff stability for consumers. The CFD Counterparty Body would secure the financing for the cash flow mismatches and invest any surpluses to ensure a return to the scheme. We note that these cash flow, credit risk and funding costs will exist under the CfD FIT however it is structured; the main benefit of this central approach is that the CFD Counterparty Body should have a high credit rating which would enable it to secure financing at a lower rate and achieve returns on surpluses that would be higher than any of the generators or suppliers could secure individually. By managing these risks centrally in a way that allows suppliers to set forward tariffs that offer stability to customers, the cost of the scheme will be lower for end users. In essence this scheme should minimise r and a , and maximise r_2 . Given the likelihood that EMR policies will push retail energy prices upwards, this approach to minimising the costs where possible would be an important benefit.

Details: Implementation of Supplier Obligation

In year Y of the scheme, the working capital and credit requirements would be a function of: (i) the evolution of the CFD index prices, (ii) the volume generated by CfD FIT generators, (iii) the level the Supplier FIT Obligation has been set at. During a given year, the cash flows described above could result in an over or under payment by suppliers, which would need to be reconciled in future years. The scheme could achieve this as follows:

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1. CFD Counterparty Body sets the Supplier FIT obligation once the CfD FIT strike prices are known. The obligation for year Y is set [1] year in advance; i.e. the supplier obligation for energy delivered during the year starting April in year Y is set by the beginning of April of year Y-1 as a 'pence per unit supplied' obligation (rather than a pence per unit generated obligation). This rate is based on the CFD Counterparty Body forecast for CFD Index prices in year Y, the forecast of volumes to be generated under the CfD FIT Scheme in year Y, the forecast of the cost of financing of that set of cash flows.
2. At the same time that the CFD Counterparty Body sets the supplier obligation for year Y, it also forecasts the supplier obligation for years [Y+1 and Y+2] forward. These rates are not fixed yet, they are just the current best forecast and will be subject to adjustments during the year, until they are set.
3. After each [month/quarter] of delivery, the CFD Counterparty Body re-forecasts the obligations for years Y+1 and Y+2, so that suppliers can always see the latest best view of the obligation for those years. The reforecasts will factor in the CFD Counterparty body's best view of the over/under collection to date that will need to be recouped in year Y+1, along with adjustments to the view of volumes that will be generated in years Y+1 and Y+2, the market price reforecasts and the cost of financing reforecasts.
4. During a year Y of generation under the CfD FIT scheme (between April and the following March), the CFD Counterparty Body (i) pays out generator payments based on out-turn CFD Index Prices and Volumes generated, (ii) finances the credit and working capital costs for the generator payments that go out before the supplier payments come in, (iii) reforecasts the obligation for years [Y+1 and Y+2] to adjust for the over or under collection from suppliers at out-turn in year Y.

Notes:

If DECC are concerned about credit risks of suppliers, the supplier obligation could start the year before CfD FIT generation starts producing, so that a 'buffer' fund is created. The central counterparty would be well placed to get the best rate of return on that buffer cash to reduce costs under the obligation in future years. The CFD Counterparty body could be tasked to set the supplier obligation each year along with the reforecasts of future years so that they target a buffer fund that remains steady at £[X] or [X]% of a years expected cash flows.

This process would have much in common with the process for setting the Carbon Price floor: each year the chancellor sets the Carbon price support rates and provides indications for the subsequent years based on a market price forecast. This forecast is updated each year until the final level is set based on the out-turn carbon prices. For the CFD FIT supplier obligation it is the out-turn over or under collection that is factored into the determination of the fixed rate supplier obligation.



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Non Confidential

15th January 2013

Dear Sir/Madam,

Reference: Contract for Difference (CfD) Supplier Obligation Call for Evidence.

Due: 15th January 2013

Gazprom Marketing & Trading Retail Limited ("**Gazprom Energy**") would like to thank you for the opportunity to respond to your call for evidence. We do not consider our response to be confidential and we are happy for our comments to be shared with other interested parties.

Gazprom Energy operates in the UK non-domestic sector as a gas supplier and a gas shipper. In addition, we also operate in the UK non-domestic power market as an electricity supplier.

We have significant concerns over the risk that will be placed on electricity suppliers as a result of the CfD Supplier Obligation, in particular the potential volatility of CfD payments. We have tried to explain and expand on these in our response to the call for evidence questions below.

We hope you find our comments useful. Should you have any questions on or would like to meet to discuss our response, please don't hesitate to contact [@gazprom-energy.com](mailto: @gazprom-energy.com) Regulation Analyst or myself directly.

Yours faithfully,

Regulation & Compliance Manager

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Contract for Difference (CfD) Supplier Obligation Call for Evidence.

1. Do you have concerns about the predictability of the amount of potential volatility of CfD payments?

Yes we have significant concerns over the amount of potential volatility of CfD payments. While it is clear that a core aim of EMR is to remove risk from generators to encourage investment, the result is a substantial increase in risk on suppliers. The risk is magnified on smaller suppliers such as ourselves who do not have CfD FIT generation assets.

As a non-domestic supplier, a significant proportion of our portfolio is on a fixed price and fixed length contract, lasting for up to three years. As a result, we need to attempt to forecast our costs for up to three years ahead. However, as a result of the number, and the volatility, of third party costs and levies, it is becoming increasingly prevalent to pass these costs through as a line-item on invoices.

The very nature of the CfD FITs means that there are a number of uncertainties surrounding the payments that will be required from suppliers, causing the costs to be extremely volatile and making it very difficult to recover the costs accurately from customers who are on a fixed price contract. The monies flowing through CfD FITs will be sizeable; an incorrect forecast (of costs entirely outside of a supplier's control) could have severe implications both for individual suppliers and the competitive market.

While parties will know the strike prices in advance, suppliers are not in a position to forecast generation volumes and the market reference price. To be able to accurately price these into contracts up to 3 years in advance will be extremely challenging, particularly for smaller suppliers. Where suppliers attempt a forecast, a significant risk fee would need to be priced into contracts to cover the margin for error, either substantially increasing costs for customers or negatively impacting on competition. The only alternative option is simply for suppliers to pass through costs directly. This can be done in much of the non-domestic sector, where contracts allow, however, it is simply moving the majority of risk onto consumers as they face highly variable bills from month to month. In addition, we are particularly concerned that a fixed price option for consumers will be removed which could be particularly detrimental to competition in the electricity SME sector. As a result, DECC and Ofgem's desire to encourage consumer switching and competition in this sector would be hugely undermined by the introduction of this mechanism in its current form.

Cashflow is also a key consideration for suppliers. As there is likely to be an abundance of wind on the system at certain times; during particular periods, the market reference price will be suppressed and consequently the payments to be made by suppliers will increase. The volatility of payments and the correct charging and recovery of costs will be more pronounced for non half-hourly customers, where reconciliations will occur over the year as meter read data becomes more accurate. This could lead to costs being recovered later than they are being paid out by suppliers. Additionally the volatility of generation, particularly wind output is likely to cause cashflow issues for suppliers with large variation in the payments to be made.

2. Does this differ based on different scenarios for how the generation mix evolves?

The risk to suppliers and the volatility of CfD payments will increase as more generation joins the scheme and its costs increase. In terms of the baseload generation receiving CfD payments, while this will still require resource to forecast, its market reference price and output can probably be predicted more easily and therefore payments relating to baseload should in theory be smoother. However, the volatility of payments will certainly increase with more intermittent generation as by definition; its output is more volatile and weather-dependent. Therefore, any scenario where the amount of generation under the CfD FIT scheme increases will contribute to the unpredictability of CfD payments. We expect this will be more pronounced as the intermittent generation share of the generation mix increases.

From experience in the small-scale FITs scheme, forecasting future generation volumes and its output is extremely problematic, and has resulted in there being unexpected increases in levelisation costs which have impacted substantially on suppliers margins. This has led to reconciliations and increased prices, to ensure the costs incurred are fully recovered. This behaviour is something that suppliers actively seek to avoid as it clearly not popular amongst customers and is detrimental to a competitive market place and has resulted from a relatively small scheme, making up a relatively small amount of consumers bills. The CfD FIT scheme will be much bigger and more variable with a significant risk regardless of the generation mix. But as previously stated, the risk will grow as the volume of intermittent generation grows.

Additionally, it would be important for information regarding generation joining the CfD FIT scheme to be transparently and publically available as early as possible. This would at least allow suppliers some advanced sight of how the generation mix was going to evolve. A potential obligation could be placed, on whichever party is deemed best, to provide this information to the market, perhaps as part of a fixed rate forecast discussed in question 5.

3. How would you manage the fact that CfD payments are changeable, noting that they are inversely related to wholesale price movements, and looking at this from the perspective of variations in totals costs to serve (i.e. wholesale price/other cost variations in conjunction with CfD payment variations)?

The inverse relationship between CfD payments and wholesale price movements will likely not be of benefit to suppliers. As stated in question 1, we offer fixed length deals to customers. The way we, as a supplier, purchase electricity means that the customers volume is hedged at the point the contract is signed and so as a supplier, once a customer has signed we are indifferent to wholesale price movements. Therefore, for much of the time, the market reference price will be significantly different to a customers contracted energy price.

A lot of customers in the non-domestic sector, particularly at the smaller end of the market, prefer a fixed price with a fixed contract length, however, a fixed price is becoming an unbearable risk to offer and as a result contracts with pass-through line-items on invoices are increasingly prevalent. As highlighted in question 1, we are concerned that this may damage competition in the smaller end of the non-domestic market where only the largest suppliers will be able to manage the risk of fixed price contracts.

Customers often want to be able to manage energy costs in advance and where possible know their costs ahead of time. Similarly, suppliers also want to manage their costs and know their charges in

advance so these can be priced into contracts accordingly. The extensive risk placed upon suppliers through CfD payments is likely to mean that the type of products many customers want will be limited. The additional risk and complexity being added to the market through the variable CfD payments cannot be positive for a competitive supply market.

In addition, as suppliers will struggle to forecast CfD FITs costs accurately we are concerned that even over relatively short time periods, potentially large backbills/reconciliations may be required to account for these variable payments outside of a supplier's control. This is something that both suppliers and customers wish to avoid. While situations such as this will increase costs to serve, in addition to suppliers needing to allocate more time and resource to forecast and manage CfD payment costs.

4. Is there a hedge that suppliers can utilise that may mitigate any risks?

At the current time we do not believe there is a simple hedge available in the market.

5. Overall what are your views on the proposed variable rate obligation and are there any other issues we should be considering?

We believe that the proposed variable rate obligation will place a significant risk on suppliers, with the effect magnified on smaller suppliers. As discussed in this response, the drawbacks of the variable rate scheme far outweigh the efficiency benefits highlighted in *paragraph 276 of Annex A: Feed-in Tariff with Contracts for Difference: Operational Framework*. We believe it would be detrimental to competition and a major barrier to entry in the supply market. This is undesirable not just for smaller suppliers but also to consumers who will see less choice and be confronted by more risk. As the payments to be made by suppliers will be so variable, it will be incredibly difficult to forecast and price into contracts. Consequently, we believe it is crucial that alternatives are reconsidered such as a fixed rate obligation, which while not perfect, would be more manageable.

This could potentially work with the Government (supported by technical experts) forecasting the expected costs for a single year, in good time ahead of that year. This would give suppliers a figure to base expected costs on. A reconciliation could then occur, at the end of the year, once final volumes and costs are known which would then be corrected in the following year. If one of the main Government concerns with this approach is about under-recovery during the year and the cost sitting with the Government, then it would be preferable for the forecast to 'err on the side of caution' and be slightly above the expected outturn to minimise this risk. This over-collection and subsequent reconciliation would be far more preferable and far less risky than the variable rate obligation for both suppliers and consumers.

Another potential option to consider would be a deferral of supplier payments until six months after the billing period. E.g. for the generation month of October, suppliers would still find out their costs in November but payments wouldn't be made until April. This would allow suppliers more time to know expected costs and would ease cashflow difficulties as suppliers would have a longer time period in which to recover the cost from customers before paying out. This may also ease the risk on consumers as there is a good chance that the highest CfD payments will be made during the winter months when there is a lot of wind on the system. Under the current variable rate obligation proposed, consumers would be faced with paying these costs at the same time as their energy bills

are likely to be at their highest. A deferral of payments to six months later could spread these costs. In terms of the CfD FIT generators, it would see a sharing of the risk during the first 6 months in exchange for a regular, guaranteed revenue stream for up to twenty years as offered under the CfD FIT scheme.

In addition, under any option where CfD supplier payments are forecast/set by the Government, it would be crucial for it to be published as far in advance as possible, thereby allowing suppliers to factor in costs into a customer's contract price. This will aid suppliers cost recovery, easing potential cash flow concerns while reducing the risk of sudden price changes for consumers.

There is obviously a desire to encourage investors in low-carbon generation and as part of this incentive, it is clear that the Government is looking to remove some of the risk from generators but as a result the risk is being placed on suppliers who are not in a better position to deal with it. Therefore, in our opinion the variable rate appears to be creating bigger risks than those it is trying to remove.

6. What are the potential impacts on suppliers of implementing the supplier obligation, including:

- **cost effects of posting collateral both for the CfD obligation and alongside other requirements in the electricity market;**
- **method of data collection;**
- **changes to internal systems;**
- **and the proposed payment periods?**

There will be a number of additional costs on suppliers as a result of implementing the supplier obligation. There will be an increased onus on data and reconciliation costs. Suppliers will need to ensure meter reads are accurate as quickly as possible to ensure customer costs coming in and CfD payments going out are correct, and to limit the need for reconciliation and cashflow difficulties.

The increased collateral that suppliers will have to post will impact particularly on smaller suppliers. The costs and impacts of this will need to be priced into contracts and it has the potential to reduce barriers to entry and consequently competition in the market.

Investments will also need to be made in industry systems and to suppliers finance, pricing and billing systems.

7. Are there any factors to consider in order to mitigate risks or shorten the timescale for implementation?

One factor we would like to highlight is the growing risk from the number of different schemes in operation at the same time – the Renewables Obligation, sub-5MW Feed-in Tariff scheme, the Contract for Difference Feed-in Tariff scheme and potentially in the future, the capacity market. While in recent years, third party network costs have also been increasing unpredictable. All these costs involve different processes and are all variable costs which have to be managed, forecast, priced, explained to customers, billed and paid by suppliers. This is becoming increasingly onerous and is requiring more of supplier's time and resource.

As discussed in this response, we believe there are significant and substantial risks which are being placed on suppliers, with the effect magnified on smaller suppliers. Much of this risk will in turn be placed on consumers, which has the potential to cause increasingly volatile electricity bills. The risk to competition, particularly in the SME electricity market is also of particular concern under the current approach and would be of detriment to consumers both now and in the future.