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Default Tariff Cap: Policy Consultation Overview document

EDF Energy is one of the UK's largest energy companies with activities throughout the energy chain. Our interests include nuclear, coal and gas-fired electricity generation, renewables, storage, and energy supply to end users. We have over five million electricity and gas customer accounts in the UK, including residential and business users.

EDF Energy recognises that setting the cap is a difficult task. We welcome the level of engagement we have had, particularly through the publication of working papers and the consultation.

Process

EDF Energy supports a thriving, competitive energy market, which provides good value and service to customers. We have ourselves made significant improvements in our operating efficiency, continually encouraging our customers to engage and switch from default tariffs and delivering an upper quartile level of service. We are concerned that if the cap is priced at an unsustainable level it will restrict the ability of suppliers to invest in service, innovation and smart systems, to the detriment of energy customers.

While the Policy Overview Consultation does contain some numerical information, this is generally for illustration only. In addition to commenting on Ofgem's policy proposals for setting the cap, it is essential that we are able to see and comment on the resulting numbers and calculations used to set the initial level of the cap in order that we can assess their appropriateness.

This is particularly true in respect of Ofgem's assessment of efficient cost and their adjustments/allowances for smart metering. Given the confidential nature of the information Ofgem is likely to be drawing on (such as detailed cost information from our competitors not in the public domain) we understand why direct access to some data would be problematic. The CMA's approach to this question was to allow the parties' advisors access to a data room. We believe it is essential for Ofgem to adopt this (or a substantially similar) approach.

Ofgem make various references to the Bill not allowing it sufficient time to carry out the depth of analysis that it might have otherwise done given more time. However, the Bill requires the cap to be in place "as soon as practicable", meaning that while Ofgem should not unduly delay its implementation, it should undertake a timely process that

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achieves a robust outcome, for example by following its normal approach to setting price restraints. Taking a broad brush approach increases the risk that Ofgem will not be able to take full account of the data and evidence it has collected, or could collect if it allowed itself more time. This uncertainty should be factored into the level of headroom incorporated into the cap. We also propose that Ofgem keeps under review, throughout the duration of the cap, its adopted approach and look to refine its calculations where detrimental impacts are observed.

A particular concern is whether Ofgem will properly take account of the drivers of efficient costs across companies. Subject to the companies selected, there is likely to be a need to make adjustments to the benchmark in order to reflect the efficient costs of different companies, including large companies with inherited legacy costs. To do otherwise would result in such differing costs not being properly funded. We describe in our response to the detailed questions set out in the appendices how Ofgem should treat such legacy costs. Key examples of such cost drivers are:

- Bad debt and associated administration costs (mostly arising from deemed contract customers) of which the incumbent suppliers have significantly more
- Amortised IT expenditure relating to regulatory initiatives some of which do not apply to small/new companies and therefore they have avoided such costs
- Unavoidable pension costs relating to the Protected Persons Regulations not faced by new suppliers
- Providing services for vulnerable customers although a requirement on all suppliers, incumbent suppliers have a much greater share of such customers within their portfolio
- Relatively high proportion of single fuel customers new/small suppliers have business models that tend to target duel fuel
- Handling customers with restricted meters a significant proportion of which reside with incumbent suppliers

Ofgem proposes to publish draft numbers for the "respective components" of the cap in August alongside the statutory consultation of licence changes. It is not clear from the consultation, but we understand this will include the proposed level of the cap. It is important for Ofgem to consult on the cost data is has used to construct the cap, and the draft level of the cap so that stakeholders can examine its calculation and the impact it may have on their ability to finance their activities. We note that it is the norm in network price control reviews for Ofgem to publish initial and final proposals.

Financeability

Financeability of efficient suppliers is a matter Ofgem must have regard to in setting the cap. Financeability is also a requirement for suppliers to compete effectively and is essential for the longer-term health of competition in the energy market, which needs



substantial investments from suppliers to support developments such as faster switching and smart meters. Crucially, any assessment of the financeability of efficient costs needs to reflect the differing size, business models or customer base of suppliers.

It is helpful that Ofgem recognises that some suppliers may face higher efficient costs (than allowed for in the benchmark) due to factors beyond their control, and that Ofgem intends to examine the impact of these and whether headroom can be used to reduce the risk that such suppliers are unable to finance their efficient costs.

However, differences in customer base (fixed/SVT/deemed shares) can have a bigger impact than relative costs on financeability, which is why Ofgem must take into account the market conditions for non SVT customers, i.e. assess financeability at the licensee level. An assessment based purely on costs for SVT customers would result in the perverse outcome of a price cap set at a level which allows only suppliers with the most disengaged customers (i.e. the greatest proportion on SVT) to finance their activities. Such an approach would prevent a supplier with a greater proportion of fixed (as opposed to SVT) customers from recovering its average costs, on the basis that fixed price contracts generally recover less than average costs (potentially only marginal costs). This is the result of the current structure of the market, whereby it is necessary to price fixed contracts at less than average cost in order to win and maintain customers.

We acknowledge the challenge Ofgem has to undertake this assessment in what is a dynamic situation where the gap between fixed price contracts and default tariffs will change as a result of the cap and other factors (and possibly because of supplier exit also).

We recommend Ofgem:

- Sets the cap with regard to initial financeability requirements (in relation to the portfolio of contracts and prices that exist at the time)
- Establishes a headroom glide-path (possibly over three years) that gives time for suppliers to rebalance their portfolios

The adoption of glide paths is already an established practice within Ofgem's network price control processes where judgements on the achievement of efficiency savings are sculpted over the course of the price control period in order to ensure companies remain financeable. We strongly believe that such an approach to financeability under the default cap should be adopted to allow efficiencies to be delivered over time, and for the market to rebalance, in terms of prices.

We believe that Ofgem recognises that suppliers like EDF Energy have legacy costs, but that such costs are offset by scale economies. Ofgem should therefore be well placed to understand why EDF Energy has competed to retain its scale despite market prices only allowing for the recovery of a proportion of indirect costs (i.e. at prices well below average efficient costs).



Efficiency of suppliers

Ofgem notes in Appendix 8 large differences in operating costs across suppliers and its view that much of the variation is likely to reflect differences in efficiency.

We are concerned that Ofgem could reach this view before having made adjustments for the different cost drivers suppliers face, particularly those resulting from inherited (or legacy) customer bases. It would be wrong for Ofgem to conduct its analysis on the basis of foregone conclusions.

In our own work, we see large differences in cost explained by the debt and related costs imposed by customers paying in arrears on cash/cheque, particularly if those customers are on a deemed contract. Ofgem's view on efficiency also seems at odds with its recognition elsewhere in the consultation documents that suppliers are likely to face different drivers of efficient costs.

In determining an efficient cost benchmark and setting the level of the cap there is a need for Ofgem to reflect the need for investment in customer service, facilitating the ability of suppliers to differentiate themselves by going above and beyond competitors and the 'standard' service expectations. For example, we were pleased to see Ofgem's recent paper on the treatment of vulnerable customers recognising the value of the dedicated team that we have looking after vulnerable customers – we would be concerned if expenditure of this kind was not accommodated within an assessment of efficient costs. We have made significant gains in this area to the extent that we are now in the lowest quartile for cost and the upper quartile for service. It is important therefore that Ofgem recognises the potential effects of a cap on non-pricing offerings and that the level of the cap does not lead to a lowest common denominator approach.

We question the exclusion of exceptional costs (such as restructuring costs) on the basis that such costs, while occasional, can be efficient. Excluding these costs is effectively asserting that exceptional costs are always inefficient, which would be wrong. A better approach is to include an average view of exceptional costs over a period of time.

Setting the initial level of the cap

We are pleased to see Ofgem rule out using a market basket of competitive tariffs. This approach had little or no prospect of providing information of the efficient level of costs faced by a financeable supplier as prices are mostly driven by acquisition strategies

While we understand Ofgem's logic for looking at suppliers mainly operating in the fixed tariff segment of the market as benchmarks for efficient costs, the logic is flawed. Such companies are not exposed to the range of costs (including legacy costs) an incumbent firm is exposed to.

If EDF Energy was now entering the market and was attracting on-line customers with the expectation that they must predominantly manage their accounts online and through app



based services, we would be able to operate with very different systems with different costs.

We also see risks with reliance on a bottom-up approach, particularly regarding the comparability of accounting data and the limited time Ofgem has available to understand the differences and make adjustments. For this reason, we believe it is sensible for Ofgem to continue to explore the remaining three methods (methods 2, 3 and 4). We provide further commentary on each of the remaining methods in the attachment to this letter.

Status of the existing safeguard tariff

We understand that Ofgem has not yet decided on whether to incorporate the existing safeguard tariff (and any extension to this) into the government's tariff cap.

We remain of the view that having separate caps for vulnerable customers is not only helpful to protecting those customers but also gives Ofgem the flexibility to sets different levels of headroom across the caps. We envisage separate caps for:

- Prepayment meters
- Warm Homes discount recipients (Safeguard)
- Standard Credit
- Direct Debit

We believe that such an approach will help meet stakeholder concerns arising from the large gap between fixed and default prices in the context of energy being a non-discretionary purchase and a proportionate high cost to vulnerable customers (i.e. as a percentage of income).

Treatment of bad debt and debt administration costs

As noted above, we strongly support Ofgem's proposal for separate caps for standard credit and direct debit customers reflecting the differential cost to serve.

Irrespective of how bad debt costs are allocated across the caps, they are primarily driven by standard credit deemed contract customers.

In reallocating debt costs across payment types (direct debit and standard credit) Ofgem assumes a 65/35 split, and notes that a supplier with a higher proportion of standard credit customers will make a loss. On this basis the cap would systematically deny the recovery of our efficient costs given our portfolio of around 40% standard credit customers, despite our best efforts to incentivise customers, through a number of initiatives, to take up DD payment and thereby reducing our costs associated with debt.

Consequently, we believe Ofgem should reconsider its assumed split and base it on the maximum, not the average, or alternatively take account of the mismatch between suppliers' debt cost drivers when setting a level of headroom.



Headroom

We are pleased to see that Ofgem is considering a wider headroom range than that used by the CMA for the PPM cap. Ofgem is correct to say that the context is different. Clearly the risks arising from capping default tariffs is large both in scale and in scope. Tariff cap risks are also in addition the risks imposed by the simplification underpinning the PPM and safeguard caps (i.e. the potential for the non-recovery of efficient costs through the PPM cap).

In assessing whether headroom is needed to provide incentives for customers to seek competitive deals (a requirement of the Bill) Ofgem needs to consider:

- The level of savings needed; and
- Whether the market will deliver those savings

With regard to the latter, we note the current market (floor) prices are around (sometimes below) marginal costs and so recover only a proportion of supplier indirect costs. In our view such prices are not sustainable and should not be relied on to set the level of the cap. Recent press comments on the weak financial health of some suppliers add weight to our view that current market prices are not sustainable.

Headroom can address any uncertainty regarding a supplier's ability to recover its efficient costs under the cap and make a reasonable return. The nature of the judgements the Bill asks Ofgem to make together with Ofgem's need to make estimates of costs "in the round" suggests a considerable level of uncertainty exists. We therefore expect to see a material level of headroom used.

Where reference prices are used to set the cap level (as in model 3) there is a risk that where market prices may not relate to costs, the margins achieved on each fuel may be different (typical margins on gas have increased in recent years). There is therefore a need for Ofgem to ensure its modelling of each fuel is on an equal footing prior to any adjustment in prices to reflect a reasonable rate of return. To do otherwise risks fixing a margin distortion between fuels from the outset.

Error correction

In some instances, Ofgem's proposed approach to updating the cap will not coincide with changes to the relevant costs. For example, there are timing risks associated with the proposed 6-2-6 semi-annual approach to wholesale costs. DCC update their costs quarterly and so such cost movements do not align well with the proposed February and October cap updates. These issues may be addressed in the design of the update mechanisms. But if they are not it may be appropriate to have an error correction mechanism, or to reflect the uncertainty caused in the margin (or headroom allowance).



Smart Metering costs

We agree that the smart metering costs should be tracked separately. Smart metering costs are large and have changed substantially between 2017 and 2018. The level of the initial year of the cap needs to reflect as accurately as possible the current costs. Furthermore, 2018 is a crucial year in the national deployment and a lot of uncertainty remains on the transition from SMETS1 to SMETS2 which impacts key cost areas such as asset costs and installation costs.

We agree with the general principle of including pass-through charges such as SEGB charges and DCC charges. However we disagree with some detailed aspects of the pass-through approach and ask for clarification on several points (set out in our detailed responses to Ofgem's questions below).

The BEIS SMIP CBA model is not fit for the purpose of this policy. The BEIS SMIP CBA model was designed to quantify the long-term costs and benefits of smart meter deployment from an NPV perspective. As such a number of assumptions on the phasing of costs and benefits would have a marginal impact in the original model. However this aspect of the model becomes crucial for the short-term horizon of the default tariff cap.

In particular, the cap is based on 6-month periods and extends over the mass deployment period where installations are expected to ramp up. It will be particularly challenging to reach satisfactory modelling accuracy without a monthly or quarterly granularity. The BEIS SMIP CBA model only has an annual granularity and as such is not suited for the purpose of the default tariff cap.

We recommend that Ofgem should develop its own model. As Ofgem points out, suppliers have already provided both BEIS and Ofgem with a wide range of data points on multiple occasions. Therefore Ofgem may not need to issue a new RFI to energy suppliers to develop their own model. Any model used should be reconciled with the bottom-up information Ofgem has collected to ensure it is robust, and should be fully published and consulted on.

Tariff Exemptions

We agree that it is not appropriate to have a defined cap exemption regime for standard variable renewable tariffs given the challenges of identifying relevant renewable tariffs and the risk of gaming. Providing the ability for suppliers to seek individual derogations for tariffs that meet specified criteria would appear to be a proportionate approach.

Updating the cap

Given the significant scope for the cap to have unintended consequences, we believe that Ofgem should carry our regular reviews. Such review would look at the impact on consumers, the markets (wholesale and retail) and on the financeability of suppliers.



Our detailed responses are set out in the attachment to this letter. Should you wish to discuss any of the issues raised in our response or have any queries, please contact Toby Allen on 07875 114310, or myself.

I confirm that this letter and the attachment may be published on Ofgem's website. Yours sincerely,

Paul Delamare

Head of Customers Policy and Regulation

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Attachment

Default Tariff Cap: Policy Consultation Overview document EDF Energy's response to your questions

Chapter 2 – setting the cap

Question 1: Which approach for setting a benchmark for efficient costs do you think would be most appropriate?

We agree that method 1 is unsuitable and should be dropped. The critical issue for us is not the choice of method, but the choice of benchmark suppliers. Each supplier (new or incumbent) is exposed to a unique set/mix of drivers of efficient costs. In addition, Ofgem will not have had the time to make accounting data comparable across suppliers.

We understand why Ofgem wants to look at suppliers mostly operating in the more competitive part of the market to ascertain efficient levels of costs. However, a supplier facing a mostly engaged and credit worthy customer base will have different costs to an incumbent with a high number of poor credit quality deemed customers.

Ofgem will need to triangulate across the three approaches to set the cap, and then should add headroom to cover the risk of error and uncertainty in its method. Ofgem should also continue to refine its analysis in 2019, to ensure any misjudgements are dealt with.

We understand that Ofgem will look at the impact of the cap on financeability by undertaking financial modelling. It is critical that Ofgem map the cap on to real data such as the 2017 performance, in order to understand the extent to which the cap impact is credible and achievable.

Question 2: What are you views on the issues we should consider when setting the overall level of the cap, including the level of headroom?

Ofgem should strike a balance between the objectives provided to it by the Bill. While the overall objective set by government is customer protection, this does not mean lower prices despite the matters Ofgem has to have regard to (incentives on customers, ability to compete, financeability). These "have regard to" matters are strongly related to the evolution of the more active parts of the market, which itself will be impacted by the cap (as Ofgem recognises). I.e. fixed prices will evolve partly as a result of the cap – and in a way that is very hard to foresee.

Ofgem should take a dynamic approach and deliver sustainable savings over time giving time for the market and participants space to rebalance their customer portfolios and balance sheets.

We see a robust allowance for headroom being needed, at least initially because of:



- Uncertainty in Ofgem benchmarking and other judgements
- The time needed for the legacy costs of some suppliers incur to decline, as the behaviour of existing customers changes
- The time needed for the market to rebalance cost recovery across fixed and default customers
- The potential for the current level of fixed prices to be unsustainable (being currently at of sometimes below our view of marginal cost)

Given that some of these evolve over time, setting a glide-path over time (say three years) seems appropriate.

Question 3: Do you agree with our approach to accounting for different costs, in particular additional costs of serving consumers paying by standard credit?

Broadly yes.

Ofgem's proposal for smearing debt costs across both standard credit and direct debit will penalise suppliers with higher than average numbers of standard credit customers/levels of bad debt. Nevertheless, we recognise that the proposal helps reduce prices for some less well-off customers. EDF Energy continues to believe that separate caps should be in place for vulnerable customers so that a higher headroom can be applied to better off customers (who are more likely to be able to engage with the competitive part of the market).

Smart Metering costs are a critical issue for setting the cap. The large suppliers in particular are making very sizeable investments in programmes to roll out smart meters that need to be funded. Ofgem's proposed method for including these costs in the cap Raise many concerns that we describe below. However, irrespective of the approach taken, we need transparency of the assumptions, model and parameters in order to be able to judge whether success has been achieved.

Chapter 3 – updating the cap

Question 4: Do you agree with our proposals for how we will use cost data to update the cap?

Broadly Yes. In our detailed response we comments on areas of improvement, e.g. relating to wholesale costs, DCC costs and other categories.

Chapter 4 – potential exemptions from the cap

Question 5: Do you agree with our assessments of whether an exemption for tariffs that appear to support renewable energy is necessary and workable?

Potentially yes. Irrespective as to whether the exemption is set out in a licence condition or is achieved through derogation, it is important that the rules are known to suppliers in advance and that certainty can be achieved in a reasonable amount of time.



Chapter 5 – conditions for effective competition

Question 6: Do you have any views on what information we should use to assess the conditions for competition?

Given that customer disengagement in retail energy markets is likely to be a persistent problem, we think that the key matters relevant to lifting the cap will be:

- Continued price protection for vulnerable customers
- Customers maintain the current high levels, and preferably increase, the habit of engaging with the energy market
- Elimination of ECO and WHD exemptions (that artificially increases retail price dispersion)
- Customer costs of participation are minimised, e.g. through faster and more reliable switching
- The development of alternative value propositions, e.g. through use of smart metering data (making energy purchase less of a commodity for customers, and more of a service)

While some of these matters relate to the development of the regulatory and policy framework applicable to energy retailers, others are about consumer attitudes to engagement. Ofgem should seek to foster engagement while the cap is in place, and be mindful when setting headroom that should the cap only provide limited savings opportunities for customers, the resulting damage to the developing engagement habit could severely undermine the development of conditions under which the cap could be lifted.



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Supplementary Appendix 1 – Market basket

Chapter 1 – Overview

Question A1.1: Do you agree that we should not further consider the use of a market basket to set the initial level of the cap? We set out our reasoning in Chapter 3.

We agree with Ofgem's minded to decision to not further consider the use of a market basket approach to setting the initial level of the cap. This approach had little or no prospect of providing information of the efficient level of costs faced by a financeable supplier as prices are mostly driven by acquisition strategies. We consider that Ofgem has rightly identified (as set out in Chapter 3) the significant limitations of using such an approach and why the most competitive tariffs may not reflect the long-run costs of an efficient supplier.

Question A1.2: Do you agree that we should not further consider the use of a market basket to update the cap over time? We set out our reasoning in Chapter 4.

Using a basket approach to update the cap level would involve similar challenges and risks to that of setting the initial cap level. We therefore agree that Ofgem should not further consider this approach for updating the cap over time and support Ofgem's reasoning set out in Chapter 4.

Supplementary Appendix 2 – Adjusted version of the existing safeguard tariff Chapter 3 - Our proposed approach for setting the cap

Question A2.1: Do you agree with, or have views on, our approach to adjusting the CMA's methodology to make its benchmark appropriate for the default tariff cap? In particular, how we propose to address: additional standard credit costs, existing overheads and customer acquisition adjustments, and other potential adjustments to operating costs.

- Overhead costs we agree that Ofgem should, given it has access to the relevant information, review both Ovo Energy's and First Utility's indirect costs since 2015.
 The CMA used First Utility's indirect cost level, partly due to Ovo Energy expecting its indirect costs to reduce in the short term. Ofgem should review if this reduction materialised.
- Smart Meter costs we agree with Ofgem that an adjustment should be made to the level of the price cap to allow recovery of Smart meter costs and discuss this in our response to Appendix 10.



- Customer acquisition costs We encourage Ofgem to examine average 'customer lives' which we believe will have fallen materially since the CMA undertook their analysis. The acquisition cost should not be set on an industry average level, as this effectively penalises suppliers with more engaged customer bases and shorter lives and rewards suppliers for keeping customers disengaged. The acquisition costs should be set at a level that allows suppliers with more engaged customer bases to recover their efficient costs.
- Standard Credit costs we agree with Ofgem that uplift for customers paying by Cash/Cheque are appropriate and discuss this in our response to appendix 12.

Chapter 4 - Our proposed approach for setting the cap at nil consumption Question A2.2: Do you agree with how we propose to adjust the benchmark at nil consumption?

EDF Energy agrees with Ofgem's proposed method for calculating the price cap at nil consumption for customers paying by direct debit.

Chapter 5 – Updating the cap

Question A2.3: Do you agree with our proposed approach for updating the level of the adjusted safeguard tariff cap?

Our views are set out in in the response to Appendix 5.

Supplementary Appendix 3 – Updated competitive reference price

Chapter 2 - Our proposed approach for setting the cap

Question A3.1 Do you agree with our proposed approach for an updated price reference approach? In particular, how we select price data and exclude suppliers or adjust data.

The appropriateness of either reference price approaches in setting a cap that allows suppliers to recover their efficient costs is highly dependent on the decisions made in respect of which suppliers to exclude (and on what grounds) and on any adjustments to benchmark costs.

In the event that this approach is to be adopted, we agree that the criteria (set out in para 2.3) for selecting suppliers to use in the benchmark would be reasonable. In particular, identifying benchmark suppliers that are relevant as a market-wide comparator would avoid selecting 'outlier' suppliers who have atypical business models.

In terms of the proposed exclusion grounds, we have previously expressed concerns with the rationale for excluding the costs of suppliers with cohorts of less active customers (the customer engagement ground) as this increases the risks of inappropriate cost comparisons. If proxies regarding number of customers on SVT for more than three years



and number of customers on fixed are to be used, Ofgem should avoid the extremes i.e. suppliers with practically no SVT customers.

With regards to the potential adjustments, we believe that:

- when prices are adjusted to reflect a reasonable rate of return (assuming this will be necessary), this should be done separately for gas and electricity to reduce the risk of 'baking' into the cap short term pricing distortions between the fuels.
- Uplift for WHD and ECO costs is necessary to reflect a fully obligated suppliers' costs.
- In setting the initial level of the cap, it is important that it reflects the starting position in terms of wholesale cost exposure and is reflective of the notional hedging position at the time.
- Any EBIT margin comparisons appropriately account for differences in company structures and portfolios etc.
- It is right to apply network charges regionally at cost.

Chapter 3 - Key judgements

Question A3.2 Do you agree with the judgements we set out regarding consumer engagement, policy and wholesale costs, and constructing the benchmark?

- Customer engagement; of the options presented, we agree that Option 4 would be the most appropriate, subject to the concerns raised above.
- Policy costs; we would support the use of option 3 whereby an uplift is applied for WHD and ECO costs where the sample supplier does not incur the full costs of these schemes.
- Wholesale costs; we remain of the view that Ofgem will need to assess the extent
 to which the suppliers forming the benchmark are representative of a sensible
 hedging approach. For instance, a longer hedging period could potentially reduce
 the volatility of the cap for consumers.
- Number of suppliers; the larger the number of suppliers selected for the benchmark increases the confidence that the benchmark is robust and representative. It would also reduce the impact of any decisions regarding supplier specific adjustments. We agree that as a minimum the benchmark should include at least two suppliers.
- Weighting of suppliers; using a simple average to weight the suppliers would appear appropriate.



Chapter 4 – Approach at nil consumption

Question A3.3 Do you agree that, under an updated competitive reference price approach, we should set the benchmark at nil consumption using the adjusted standing charges from the same suppliers included in the benchmark at typical consumption?

We agree that adopting Option 1 and using the same suppliers included in the benchmark is appropriate. This would reduce the impact of differing supplier approaches to pricing standing charge and unit rates.

Chapter 5 - Approach for updating the cap

Question A3.4 Do you agree with our approach to weighting the benchmark at TDCV and nil consumption?

We agree with the proposed approach.

Supplementary Appendix 4 – Bottom-up cost assessment

Chapter 1 – Overview of the approach

Question A4.1: Do you agree with our assessment of the advantages and disadvantages of a bottom-up approach to estimating an efficient level of costs?

Broadly we agree with the advantages and disadvantages of a bottom,-up approach, as set out in appendix 4. In particular, we acknowledge the challenge that Ofgem would face (given time/data issues) in robustly identifying the relevant costs drivers and then normalising this data in order to ensure it is comparable.

However, we believe some of the disadvantages could be mitigated by including a mechanism to allow Ofgem to update the cap methodology if it found the cap was being set at an unintended level.

Chapter 2 – Categories of costs

Question A4.2 Do you agree with our proposed approach to categorising different costs under a bottom-up cost assessment approach to setting the default tariff cap?

Yes, we agree with Ofgem's proposed approach to categorising costs under a bottom-up approach.



Supplementary Appendix 5 – Updating the cap over time

Chapter 1 – Approaches to updating the cap

Question A5.1: Do you agree with our proposal to update the cap in line with trends in exogenous cost drivers?

We agree with Ofgem's proposals to update the cap in line with trends in exogenous cost drivers. We believe this is the most appropriate update method of the three options proposed by Ofgem.

Chapter 2 – Our proposal

Question A5.2: Do you agree with our proposed choice of cap and baseline periods?

We agree with Ofgem's proposals to update the price cap every six months, in line with the existing prepayment price cap, and also agree that 2017 is an appropriate baseline to use if a bottom up approach is used.

Chapter 3 – Dealing with uncertainty

Question A5.3: Do you consider that further provision is required for us to reopen aspects of the design of the cap, beyond our licence modification powers – and if so, why?

We believe Ofgem should have the power to change the design of the price cap if necessary. This would allow Ofgem to ensure that any changes in the energy market is reflected in the price cap methodology, and doesn't have any unintended consequences, which could include distorting market competition.

Supplementary Appendix 6 – Wholesale costs

Chapter 3 - Setting the initial wholesale allowance

Question A6.1: Do you agree with our approach to setting the wholesale allowance? In particular, using 2015 for the base period of the adjusted existing safeguard tariff approach.

Of the options presented, on balance, we believe that using the 2015 reference price is the best approach to setting the wholesale cost allowance. We do recognise that the electricity system will change over the coming years and so would suggest that you keep the wholesale methodology under close review.



Chapter 4 - Updating the allowance

Question A6.2: Do you agree with our approach to updating the wholesale allowance?

At high level, we agree with the approach to updating the wholesale cost allowance. It has the advantage of being understood by the industry through its use in the prepayment cap. We have some specific concerns which we address in the questions that follow.

Chapter 5 - Adjusting the CMA's model and setting allowances - Bottom up and update approaches

Question A6.3: Do you agree with our proposed approach to use a semi-annual cap period, compared with a 6-2-12 annual model, or shorter observation period? Please explain how the alternatives would affect you, if we were to choose those options instead.

We agree with your assessment to use a semi-annual cap period. As you say, using an annual update cycle would expose suppliers to much greater forecast risk as there is the potential for wholesale costs (and hence the price) in the cap to diverge significantly from the prevailing wholesale price, on which fixed tariff pricing is likely to be based.

However, we strongly support a switch to a 6-2-6 semi-annual model. As you note, the current 6-2-12 semi-annual approach involves prices in a period being based on wholesale costs for both that period and the following period. This mismatch between the financial calculation of the cap and the physical energy requirements for the customer exposes suppliers to risk. This can be removed by using 6-2-6 semi-annual.

We acknowledge your two concerns with 6-2-6 semi-annual but do not believe they are as material.

Firstly, on the point of seasonal price variation, the typical summer/winter spread in wholesale costs is £5/MWh in electricity and 5p/th in gas. On an annualised basis, this would lead to a seasonality effect of ~£35/dual fuel customer. We would expect this to be outweighed by volatility in other costs and the expected sustained increases in policy costs for electricity. Alternatively, this could be managed by applying a constant factor to uplift summer prices and lower winter prices in the cap.

Secondly, you raise concerns about the impact on the wholesale market. Our expectation is that the use of a 12 month forward view instead of a 6 month does not create much genuine liquidity in the second 6 month period. This is due to the point above that the physical exposure of suppliers is ultimately only in the 6 month period of the cap.

If you continue to use a 6-2-12 semi-annual model, we would expect to see the risk this poses to suppliers reflected in the headroom. We have performed analysis on this risk which we would be happy to share.



Question A6.4: Do you agree with our approach to modelling forward contracts? In particular: that initial shaping should be based on a 70-30 spilt between baseload and peakload, and the cap will be semi-annual. If not, please provide evidence to support alternative approaches.

We agree with the imperfections highlighted by you and other stakeholders in this approach to capturing shaping costs. However, we recognise that there will be no single perfect approach and would suggest continuing with the 70-30 split, but recognising the shaping risk as part of the headroom.

Question A6.5: What are your views on the necessity and size of an additional allowance for shaping and imbalance costs? Please provide evidence to support this.

If using a bottom up calculation, we believe it is necessary to include an additional allowance for shaping and imbalance costs.

The cost of shaping is partially addressed using quarterly products in gas and the peak/baseload seasonal products in electricity, but there remains a cost of shape which is not accounted for. This extra cost could be estimated by combining standard customer load profiles with the shape of prices, calibrated for example using outturn day-ahead prices.

Imbalance is a further important factor, particularly as volume deviations tend to be correlated with price. In the recent cold snap in February, suppliers had to manage increasing gas forecasts against within-day and day-ahead prices in the region of £2/therm. In electricity, there is publicly available settlement data on the imbalance cost incurred by suppliers, which could be used to estimate the level and variability in imbalance costs.

Your focus in forecast error has been on imbalance costs, which we believe is not the most important forecast risk. Under the cap, to follow the observation window of prices, suppliers must estimate how many customers they will have over one year in the future (e.g. wholesale price observations made in February apply for delivery to customers from the following October to March the next year).

This is difficult to forecast because suppliers are exposed to a 'two-way' risk. If wholesale prices fall during the period of the cap, fixed tariffs will likely also fall and customers have a greater incentive to leave the cap, leaving suppliers with energy they must sell back at lower prices. Conversely, if prices rise, fixed tariffs are likely to rise, which will dampen the incentive to leave the cap (or, potentially, make it the best price tariff). Thus suppliers will need to serve greater demand, but at higher wholesale cost.

This forecast risk exists whether the cap is based on a bottom-up or reference price basis. We strongly believe that it should be reflected as an allowance in either case.



Question A6.6: What are your views on the necessity and size of an additional allowance for transaction costs relating to brokers and collateral?

Again, if using a bottom up calculation, we believe it is necessary to include an additional allowance for transaction costs relating to brokers and collateral. We can provide (in confidence) data in relation to our own costs in this regard and have high-level market insight into the approach taken by others and likely cost they may incur.

Question A6.7: Do you agree that our approach to updating the benchmark for the first cap period is appropriate?

We acknowledge the challenges in how to update the benchmark for the first cap period. No method will be perfect. However, it is imperative that you now follow your proposed method, as it has provided a signal to suppliers on which they are likely to act; any subsequent change will expose them to unnecessary market price risk, to the ultimate detriment of consumers.

Supplementary Appendix 7 – Policy and network costs

Chapter 3 - Estimating the costs of environmental and social obligations in 2017/18

Question A7.1 Do you agree with the way we propose to estimate the costs of each of the schemes for setting the baseline level of the cap?

We generally support Ofgem's proposal to set baseline policy costs as a £/MWh figure, as this will better reflect the costs faced by suppliers. However we note the following points;

- FiT costs for 2017/18 have been estimated based on the "lower" rather than "higher" FiT rate, which will likely understate the costs faced by suppliers, as the benefit gained from excess energy going onto the grid is unclear and allocated across all suppliers.
- CfD costs Ofgem propose to use the Interim Levy Rate for CfD costs in 2017/18, even though actual data exists. We would recommend using actual data where this is available, rather than forecasts.
- We note that the £638m cost of the ECO scheme noted by Ofgem is the NPV of the scheme, not the cost of the scheme in 2017/18. We believe the cost of the scheme in 2017/18 should be £640m per the BEIS impact assessment. The impact of this change is likely immaterial, however if Ofgem use the corresponding NPV figures in future periods it could lead to significant variations in the price cap.



Chapter 4 - Estimating trends in the costs of environmental and social obligations Question A7.2 Do you agree with our proposed approach to forecasting the costs of each scheme?

We generally agree with Ofgem's approach to updating the policy costs included in the price cap. However we note the following points;

- Ofgem propose to use forecast costs when updating the price cap, these should be reviewed against actual costs once these are known and where significant differences are found a mechanism should be allowed to allow for a review of the methodology
- Ofgem plans to use the BEIS OBR forecast to update FiT costs in each period. It should ensure that the OBR costs for 2017/18 are consistent with the figure it calculates in table A7.3.
- Ofgem to propose to update the price cap based on cost movement between 2017/18 and each period. We agree with this approach if Ofgem chooses an updated competitive reference price bottom up methodology, however if Ofgem choose an adjusted version of the existing tariff it should use cost movement since 2015/16.

Question A7.3 Do you agree with the data sources that we propose to use to forecast the expected demand base for each scheme? Do you have any alternative suggestions which would more accurately track trends in eligible demand?

In general we agree that the data sources suggested by Ofgem appear reasonable, however we have concerns that using forecast costs could lead to material differences between costs allowed in the price cap and the outturn of costs. We suggest that forecast costs are compared against actual costs once these are known and where significant differences are found a mechanism should be allowed to allow for a review of the methodology.

Chapter 5 - Network charges

Question A7.4 Do you agree with our proposal to use the existing model to estimate the network costs that suppliers incur?

Yes, we agree with this proposal.

Question A7.5 Do you have any views on the impact of using information on the average share of consumption that takes place in peak periods to estimate electricity transmission charges?

Ofgem should examine the peak energy usage of SVT customers to set appropriate splits between peak and off-peak. Our analysis indicates that EDF Energy customers have a



different split to that used in the safeguard tariff. Our E7 customers use 48% of usage during the night, and 52% during the day. The ppm cap assumes 58% day usage and 42% night usage.

Supplementary Appendix 8 – Operating costs

Chapter 2 – Estimating an efficient level of operating costs

Question A8.1 Do you agree with our proposed approach to estimating suppliers' operating costs (including our focus on total historical costs per customer, and estimating separate values for gas and electricity)?

We agree in principal with Ofgem's proposed methodology to use historical costs of suppliers when setting the efficient level of indirect costs to include in the price cap.

Note, this is subject to the smart meter uplift including the increased ongoing running costs of smart meters. If it does not include this then the 2017 baseline is not appropriate as costs would be expected to increase as legacy meters cost less to run than smart meters.

Question A8.2 Should a variable component of this allowance be split out to reflect differences in bad debt costs between customers with higher and lower consumption?

Yes, we believe bad debt does vary with consumption and the cap should reflect this.

Question A8.3 Do you consider 2017 to be an appropriate period on which to base our benchmark, or are there reasons to think a longer period would be more representative?

We agree with Ofgem that 2017 is a reasonable period on which to base the benchmark. Subject to comment in point 1 above.

Question A8.4 Do you consider that default tariff customers have higher or lower operating costs than other types of customers?

Customers on default tariffs incur significantly higher bad debt charges than customers on non-default tariffs. In 2017 customers on deemed tariffs had on average c£50/DF higher bad debt charges than customers on our standard variable tariff.

Incumbent suppliers would be reasonably expected to have greater proportions of deemed customers than newer suppliers, and so if the benchmark is based on a newer supplier the additional costs of serving default tariff customers should be reflected in the price cap.

This is discussed in more detail, along with other costs faced by incumbent suppliers in our response to question A8.8.



Question A8.5 Do you agree with our proposal of where to exclude suppliers from our benchmarking analysis?

We agree with Ofgem's proposals to exclude suppliers with fewer than 250k customers, niche business models, do not have reliable data or are non-compliant.

Question A8.6 Do you agree with our proposal of what to include in our definition of operating costs?

We broadly agree with Ofgem's proposal of which costs to include in operating costs. However we believe there are some exceptional cost items that should be allowed within the price cap as all suppliers would be expected to face these at some point. If Ofgem were to base the level of the price cap on the lowest suppliers operating costs there is a risk that exceptional costs would never be recovered.

Question A8.7 Do you agree with our proposed approach to benchmarking operating costs under a bottom-up cost assessment?

EDF Energy believes that any benchmark used for operating costs under a bottom-up assessment should reflect the full costs incurred by suppliers that are outside of their control, such as legacy costs. If the benchmark used by Ofgem would not incur costs that incumbent suppliers would be reasonably expected to face an adjustment should be made to reflect this.

Question A8.8 Which if any of the factors listed in Table A8.2 do you think we should take into account when choosing our benchmark? Do you have any suggestions for how we could estimate the materiality of the impact of any of these factors on costs?

EDF Energy believes the following should be taken into account when choosing the benchmark;

- Legacy pension obligations this is a significant cost incurred by the relevant incumbent suppliers, which they cannot control.
- Payment method breakdown customers paying by standard credit are more costly to serve than direct debit customers and the cap should reflect this.
- Proportion of vulnerable customers again these customers are more costly to serve and are not evenly distributed between suppliers
- Proportion of customers serviced online customers serviced online cost less to serve than those who do not use this method. Standard variable customers who have not engaged in the market in several years are much less likely to choose online services than other customers. The price cap should reflect this.



- Proportion of dual fuel and electricity only customers dual fuel customers cost less to serve than single fuel customers
- Legacy bad debt costs Suppliers with higher proportions of deemed customers are likely to face higher levels of bad debt costs.
- Past investment in regulation driven changes (e.g. to IT systems)

We understand it would be difficult for Ofgem to accurately assess the impact of each of these costs. A simple way to ensure these costs are considered in the price cap would be to ensure at least one large supplier, who would face the costs above, is included in the benchmark.

Chapter 3 – Updating the cap to reflect trends in operating costs

Question A8.9 Do you agree with our proposal to use CPIH to index the allowance for operating costs within the default tariff cap?

Yes, we agree with Ofgem's proposal to use the CPIH to index the allowance for operating costs within the default tariff cap.

Question A8.10 Should the default tariff cap be reduced over time to reflect an expectation of general productivity improvements – and if so – at what level should this efficiency factor be set?

It is not possible to answer this question without understanding the starting point. Uncertainties in the comparability of supply cost data may create an unachievable efficiency target which would be compounded by the addition of general productivity improvements. On the other hand, an initial cap set at average costs (or at lower quartile costs if robust) would reduce such uncertainty, and permits an efficiency glide-path.

Supplementary Appendix 9 – EBIT

Chapter 2 - Our proposed approach for setting the cap

Question A9.1: Do you agree with our proposed approach to setting the EBIT margin?

We agree with Ofgem that the requirement to have regard to supplier financeability when setting the cap requires that an efficient supplier is able to earn a rate of return (though we dispute whether this should be set a "normal" levels – see below). We note elsewhere in this response that this also requires Ofgem to consider a supplier's carried-forward portfolio of fixed price contracts, its ability to earn efficient costs from new fixed priced contracts, as well as the recovery of efficient costs relating to default tariff customers.

In response to Ofgem's Working Paper #5 we noted that an average rate of return is inconsistent which use of a lower than average cost base (i.e. frontier but also lower



quartile cost levels). Ofgem's response to this concern is set out in Appendix 3 (p2.9). In particular, Ofgem says

• "We do not consider that this is the case – while a supplier may be able to earn a higher rate of return temporarily through being more efficient than other suppliers, we would expect an efficient supplier to earn a normal rate of return over time, as any advantages would be competed away".

We do not find this response convincing. While in a competitive market we would expect a cost advantage to be competed away over time, at the beginning of the cap this will not yet be the case. All components of the cap should be internally consistent at that time.

The imposition and setting of the price cap exposes suppliers, particularly those with relatively large cohorts of default tariff customers, to increased, possibly unprecedented, levels of regulatory risk. Indeed, Ofgem notes throughout its consultation document, that there are risks that the cap will deny suppliers the recovery of efficient costs. This can happen either because of the "judgement in the round" approach Ofgem is forced to take because of time constraints/data restrictions (e.g. not allowing for all the drivers of efficient costs) or the result of applying a single cap to diverse suppliers (e.g. denying recovery of bad debt costs for suppliers with a higher than average ratio for standard credit to direct debit customers – per Ofgem's proposed smearing of debt costs across these groups).

Ofgem's proposed approach for dealing with these risks is to take account of them in setting an allowance for headroom. But, it could equally be an input to the WACC. We cannot therefore say whether an increase to the WACC is justified until we have seen the proposed level of headroom.

Chapter 3 – Key judgements

Question A9.2: Do you agree that it is acceptable to retain the WACC figure used by the CMA? If not, do you have views on the factors we would need to consider if we were updating the WACC?

We have strong concerns with the use of the CMA's EBIT figure. In particular, we are aware of, and share, concerns that the EBIT returns set by the CMA are low compared to the returns set by a competitive market.

These concerns are concisely set out in a written submission¹ from five former regulators (Professor Stephen Littlechild, Sir Callum McCarthy, Dr Eileen Marshall CBE, Stephen Smith, Clare Spottiswoode) to the Economic Affairs Committee in January 2017.

¹ https://www.eprg.group.cam.ac.uk/wp-content/uploads/2017/01/S.-Littlechild_Submission-to-H-of-L-official-version-46083.pdf



The former regulators point out (accepting the ROCE is the right approach) that a 10% benchmark would imply there was

"excess profit in the market for I&C customers, averaging £44m per year. The
CMA said that the I&C market was omitted from Ofgem's reference because of
"lower" or "limited" competition concerns. In fact, the I&C market is widely seen
as very competitive, and we are not aware that Ofgem has expressed concerns
about it. The CMA also indicated that the I&C market would be the most relevant
comparator for the reference markets."

The former regulators calculated using CMA data and assumptions that the achieved return on capital in the domestic market averaged about 14.9 per cent over the period 2009-2014, compared to 12.3 per cent in the I&C market – consistent with the CMA's findings the domestic market was more risky than the I&C market.

We are not aware that the CMA has addressed these concerns. But, given the materiality of the tariff cap compared with the CMA's PPM cap, we think it essential that Ofgem does so if it continues to rely on the CMA's EBIT calculations.

Question A9.3: Do you agree that we should maintain the CMA's estimates of the capital employed by energy suppliers? If not, please specify which element you think we would need to revalue.

In the CMA's market investigation, suppliers questioned whether the CMA had taken account of the full amount of capital needed for a standalone large supplier to support its collateral requirements across a range of wholesale trading conditions, at the same time expressing doubts at the scalability of the intermediary model (which remains relatively small scale). We also note that the CMA's capital employed analysis covered a period of relatively benign trading conditions and that more recent wholesale market volatility appears to be threatening the financeability of small suppliers (who may lack access to a wider pool of credit support).

Chapter 4 – Updating the cap

Question A9.4: Do you agree with our proposed approach to updating the EBIT margin?

Provided that the EBIT margin is set to remunerate a range of wholesale market trading conditions (and not just a period of relatively low volatility) we agree that it can be updated from movements in CPIH. However, to fulfil the financeability test, Ofgem needs to assess EBIT at the licensee level, as was the case when the CMA adjusted the PPM benchmark to allow an overall profit of 1.25% for FU/OVo.



Supplementary Appendix 10 – Smart metering costs

Chapter 1 – Our proposed approach for setting the cap

Question A10.1: Do you agree with our minded-to position to include a separate smart metering index to reflect the changes in costs from the baseline (2017) to the initial year of the cap (2018)?

We agree that the smart metering costs should be tracked separately

We agree that the smart metering costs have changed substantially between 2017 and 2018 and the level of the initial year of the cap needs to reflect as accurately as possible the current costs. 2018 is a crucial year in the national deployment and a lot of uncertainty remains on the transition from SMETS1 to SMETS2 which impacts key cost areas such as asset costs and installation costs.

Question A10.2: Do you agree with our minded-to position to include an adjustment to the Reference Price (SMRPA) in the event a material difference is identified between the smart metering net costs of the suppliers making up the reference price and the model?

Our preferred approach would be a bottom-up approach. Should the reference price cost assessment option be considered and a material difference between the smart metering net costs of the suppliers is identified, we agree with the principle that the smart metering net costs making up the Reference Price and the model should be adjusted for.

It would be helpful if Ofgem could share a dummy model to support the discussion on the details of this possible adjustment.

Question A10.3: Do you agree with our initial assessment for the Smart Metering Net Cost Change, including our inclusion and assessment of the costs of SEGB, SMICOP and DCC charges?

Summary of our position:

- We agree that smart metering costs should be specifically adjusted for.
- We do not object to the general principle of a modelling approach to estimate the change of smart metering net costs. However we have reservations regarding the chosen model, the data and multiple points of the approach.
- We agree with the general principle of including pass-through charges such as SEGB charges and DCC charges. However we disagree with some aspects of the pass-through approach and ask for clarification on several points.
- We ask Ofgem to provide a finer breakdown of provisional estimates for SMNCC against 2017 baseline
- We ask Ofgem to provide dummy models to illustrate the proposed approaches



Choice of model and data

As detailed in our QA10.4 answer, we do not believe that the BEIS SMIP CBA model is the right model to use. Whatever the choice of model and data, the modelled costs need to be as accurate as possible. We do not believe that model can be accurate without regular validation against actual costs. This is likely to require data collection and RFIs from suppliers.

Provisional estimates for SMNCC

As detailed in our QA10.4 answer, we believe that the BEIS SMIP CBA model is not fit for the purpose of this policy. We believe that some cost areas may be understated and some benefit areas overstated and as such with disagree with Ofgem's initial assessment for the SMNCC.

We suggest that Ofgem should provide a finer breakdown of the provisional estimates, for example split by cost and benefit area. We would welcome any relevant details explaining why the SMNCC only increases by £2/customer between Dec 2018 and Sep 2020, when it increased by £9/customer between 2017 and 2018.

As we explain in or QA10.4 and QA10.5, the scale of mass deployment is going to incur a large increase in costs to 2020 both in absolute terms and on a per-customer basis. Because a large proportion of our costs are fixed, benefits can only materialise when legacy metering becomes a marginal part of our activities. As a result we believe that most smart benefits will remain minimal until 2020 and the net costs of deployment will keep increasing to 2020 in absolute terms as well as on a per-customer basis. Ofgem's provisional estimates for the SMNCC up to 2020 clearly do not reflect this rationale.

Pass-through costs methodology

It would be helpful if Ofgem was able to provide dummy models to illustrate the passthrough approaches in the bottom-up and in the reference price approaches.

SEGB costs. We agree that SEGB costs should be passed through but we don't agree with the suggested approach. As Ofgem points out, large suppliers' contribution is greater than their average market share. We believe that the pass-through allowance per customer should be set based on the basis of large suppliers' market share rather than the total market share.

DCC costs. We agree that DCC costs should be passed through and split by fuel type however we have reservation regarding the suggested approach.

- The source for the number of electricity and gas metering points is unclear
- The DCC only provide numbers for the whole regulatory year. It is unclear how the number of comms hubs and ESMS installed will be phased by cap period.



- It is unclear how Ofgem will ensure consistency between the DCC view of comms hubs and ESMS on the one hand, and its own rollout profile based on supplier submissions on the other hand.
- It is unclear how Ofgem intends to translate the calculations from £/meter to £/customer.
- Explicit Charges are made for ad-hoc services provided by the DCC to suppliers and as such may show great potential variations between each supplier. It is unclear how Ofgem intends to define the level of Explicit Charges for an efficient supplier.
- We are generally concerned about the level of volatility in DCC numbers and the lack of mitigation or corrections in Ofgem's approach. Please refer to our QA10.7 answer

Other pass-through costs. We agree that SMICoP and SECAS costs should be passed through and don't have particular comments on the suggested approach.

Chapter 2 - Key judgements

Question A10.4 Do you agree with the judgements we have set out regarding smart costs; in particular our choice of data and model, identification of relevant costs and benefits, and approach to variation?

Summary of our position:

- We disagree with Ofgem's choice of data and model (Judgement 1)
 - o We don't think that the BEIS SMIP CBA is fit for the purpose of this particular policy, especially in terms of time granularity and time horizon
 - o We recommend that Ofgem should build their own model using suppliers data already submitted to BEIS and Ofgem
- We disagree with Ofgem's selection of relevant costs and benefits (Judgement 2)
 - o We believe that several cost areas are either missing or understated in the proposed approach.
 - o Having reviewed each of the four main categories of benefits from the BEIS SMIP CBA model, we believe that the model and data sources are in need of revision and the benefits may be overstated.
- We disagree with Ofgem's conclusions on non-efficiency cost variations (Judgement 3)
 - o We invite Ofgem to continue investigating the impact of the maturity of the roll-out profile and the scale of the roll-out profile.



o In addition, we invite Ofgem to consider other factors such as the characteristics of the customer portfolio.

Choice of data and model (Judgement 1)

The BEIS SMIP CBA model was designed to quantify the long-term costs and benefits of smart meter deployment from an NPV perspective. As such a number of assumptions on the phasing of costs and benefits would have a marginal impact in the original model. However this aspect of the model becomes crucial for the short-term horizon of the default tariff cap. The cap is based on 6-month periods and extends over the mass deployment period where installations are expected to ramp up. It will be particularly challenging to reach satisfactory modelling accuracy without a monthly or quarterly granularity. The BEIS SMIP CBA model only has an annual granularity and as such not suited for the purpose of the default tariff cap.

The 2016 BEIS IA and its technical annex do not provide sufficient details to prove the robustness of this model or the reliability of its assumptions. Our review of key cost and benefit areas (see Judgement 2) suggests that costs might be understated and benefits overstated.

We recommend that Ofgem should develop its own model. As Ofgem points out, suppliers have already provided both BEIS and Ofgem with a wide range of data points on multiple occasions. Therefore Ofgem may not need to issue a new RFI to energy suppliers to develop their own model.

Relevant costs (Judgement 2)

As Ofgem has already been made aware, the model seems to present a few gaps in the cost categories:

Customer queries. The model doesn't recognise the increased number of queries from customers before and after their smart installation. The volume of these queries will keep increasing with mass deployment as installation volumes ramp up.

PRCs. Premature removal charges related to dumb meters are missing from the BEIS SMIP CBA model. It is unclear where the charges due to the upgrade of legacy meters by smart meters are taken into account in the model. These charges are particularly high for some categories of meters e.g. IGT meters.

Pre-DCC comms costs. It is not clear how the communication costs of SMETS0 and SMETS1 meters are included in the BEIS SMIP CBA model. Pre-DCC communication costs are significantly higher on a per-meter basis than the rental costs of single band comms hubs. Even when the volume of SMETS1 meters stabilises after the SMETS2 transition, firmware upgrades and migration to DCC systems will incur further costs.

IT CAPEX & OPEX. The BEIS SMIP CBA model assumption on IT CAPEX and OPEX should be refreshed to reflect developments such as SMETS1 enrolment (costs incurred by suppliers to develop interfaces between their own systems and the DCC) and other DCC



releases and stabilisation. Further spend such as smart analytics are also required to deliver smart benefits.

SMETS2 ancillaries. There is no mention of SMETS2 ancillaries in the description of asset or communications equipment costs (e.g. antennas, flying leads, hot shoes). The proportion of installations requiring ancillaries will need to be confirmed as mass deployment unfolds.

Relevant benefits (Judgement 2)

The expected smart benefits describe efficiencies compared to legacy metering – either because smart meters allow more efficient operations, or because legacy activities can be stopped all together. However legacy activities have substantial fixed costs components which will continue to add to smart costs for as long as legacy and smart activities run in parallel. As such, rather than allowing the delivery of net benefits, smart metering has primarily introduced a number of additional costs and is likely to continue to do so until smart meters represent a significant proportion of our customers portfolio. As we documented in our rollout profile submission to Ofgem, we do not expect this to happen before at least 2020. Assuming that smart meters allow per-meter or per-customer benefits for every upgraded legacy meter inevitably results in overstating the benefits on the short-term horizon.

Counterfactual costs assessment

- In the BEIS SMIP CBA model, smart benefits are described by the variance between smart costs and counterfactual costs. Unfortunately the assumptions feeding into the assessment of counterfactuals costs are not sufficiently detailed.
- In particular, it is unclear how other efficiency initiatives than smart metering (e.g. digitalisation of activities) are taken into account in the counterfactual costs calculations.

Switching benefits

- The reality of switching benefits before SMETS2 is highly disputable (e.g. SMETS1 interoperability issues).
- Switching benefits with SMETS2 (via the DCC) may not take place over the horizon of the default tariff cap policy and remain to be demonstrated.
- The churn assumptions in the model are unclear, particularly any assumptions on a possible facilitation of switching and the impact on costs.
- The timeline, the extent of DCC developments and the costs for the DCC to offer registration and data aggregation services need to be confirmed.
- The calculation of per-meter switching benefits in 2016 BEIS IA is unclear and based on outdated assumptions (2010 RFI).



Avoided site visits

- The assumption of exactly two meter reads per credit meter and per year sounds like a theoretical assumptions which needs to be validated by actuals (e.g. through a RFI).
- The model assumes that meter reading collection is a purely variable cost. This assumption is simplistic and can only overstate the calculated benefit.

Reduction in inbound enquiries and customer services overheads

- We note that Ofgem may consider introducing adjustments for "increased customer enquiries in the period immediately after smart meter installation" (section 1.12). This is indeed a source of additional cost which is likely to incur increasing costs as mass deployment intensifies.
- The source for the original BEIS SMIP CBA model dates back from 2008; the assumptions on long-term operational efficiency and FTE savings in the BEIS IA Part 2 are hypothetical and should be refreshed using recent actual supplier data.
- Multiple overlapping initiatives will address the efficiency of customer services. It is unclear how smart benefits can be separated out from other initiatives.

Debt management benefits

- The rollouts of credit and prepayment meters don't follow the same profile. It is unclear if the model takes this into account in the calculation of debt management benefits.
- Even where an efficient supplier might have the right processes in place to deliver debt management benefits as soon as prepayment smart meters rollout commences, it will take some more months for customers at risk to be identified and reactive measures to be agreed. Particularly on the short-term horizon of the default tariff cap modelling, the model needs to include a lag between the rollout of prepayment smart meters and the delivery of debt management benefits.
- The source for the original BEIS SMIP CBA model dates back from 2008 and should be refreshed or validated against recent actual supplier data.
- Multiple overlapping initiatives will address debt management. It is unclear how smart benefits can be separated out from other initiatives.

Non-efficiency costs variations (Judgement 3)

Ofgem looked into two main factors: the scale and the maturity of the roll-out profile.

Scale of the roll-out profile. Ofgem indicates that they do not have data on small suppliers, and asks whether large suppliers may benefit from more favourable asset financing arrangements or achieve more efficient installation costs. Ofgem doesn't seem



to have reached a position on these questions and doesn't confirm whether it intends to continue investigating these points. In our view the scale of the roll-out profile has a clear impact on some of the cost areas e.g. asset costs as greater deployment volumes allow placing larger orders with manufacturers thus enabling lower unit prices.

Maturity of the roll-out profile. Ofgem recognises that data is lacking to reach conclusive results and indicates that based on the available data, one cannot reject the possibility that the maturity of the roll-out profile <u>may not impact</u> the asset costs or installation costs. As a result Ofgem suggests considering that the maturity of the roll-out profile <u>does not impact</u> the asset costs or installation costs and therefore no adjustment is required.

We strongly disagree with this conclusion. Smart metering requires high setup costs (e.g. IT CAPEX, business readiness, training, etc.) and the timing of these investments will depend on the maturity of the roll-out profile. The experience of the field force is also a determining factor impacting their productivity and the quality of the installations. We recommend that Ofgem should continue to investigate the question (e.g. through RFI) until more conclusive outcome is reached and any adjustments can be quantified.

Other drivers. Ofgem acknowledges in Judgement 4 section 2.48 that there are variances in cost reporting across suppliers. Having dismissed the scale and the maturity of the rollout profile, Ofgem still doesn't suggest other drivers to explain these variances. We recommend that Ofgem should continue to investigate these variances to identify and possibly adjust the level of the cap for other drivers.

In addition to the scale and maturity of the roll-out profile, we recommend that Ofgem should consider adjusting the level of the cap based on the following factors:

Geographical distribution of customers across Britain. EDF Energy has a strong historical implementation in London, the South East and the South West ("In Area"). The deployment strategy and costs vary significantly between this area of historical implementation and the rest of the country (Ofgem typically recognises regional cost variations in its network price control reviews including the higher costs of operating in London). Other suppliers have a different distribution across the country and this may have impacted their deployment strategy such as the choice of their field force.

Local density of customers. Installations are more cost-efficient when customers density in local areas is high.

Customer portfolio split by type of housing. The type of housing will impact the installation and asset costs. Dual Band Comms Hubs and Alt HAN Comms Hubs will be required more frequently in high-rise and low rise buildings and are significantly more expensive than single band comms hubs.

Customer portfolio split by fuel type and particularly single fuel vs dual fuel and elec only vs gas only (asset costs, installation costs). This is already suggested by Ofgem as



possible driver of variation in operating costs (Appendix 8) but not for the specific application of Appendix 10 Judgement 3.

Question A10.5 Do you consider that there will be any significant change in the costs or benefits of smart metering from 2017 onwards? For example, installation costs or asset costs. Please provide evidence to support your view.

Summary of our position:

- Industry costs (e.g. DCC, SEGB) have increased since 2017 and will continue to increase over the horizon of the default tariff cap
- Operational costs have increased between 2017 and 2018. On the basis of installed meters (£/meter), we expect that most costs will stabilise after 2018.
 SMETS2 mass deployment may even reduce some of the unit costs.
- However the ramp-up in smart meter deployment will inevitably incur larger costs until at least 2020 both in absolute terms (£) and on a per-customer basis (£/account).
- Because of the level of fixed costs, smart benefits will only materialise when legacy metering becomes a marginal activity. Smart benefits will remain small compared to smart costs until 2020.

Detail by cost area

Scale of deployment. While we expect that the mass deployment of SMETS2 meters will stabilise and possibly reduce operational costs 2019 onwards on a per-meter basis, the expected ramp-up in installation volumes will incur substantial rise in costs on a per-customer basis. Industry costs (DCC, SEGB...) will continue to rise.

SEGB costs. We expect SEGB costs to peak in 2019. SEGB will have to accompany the national mass deployment there we expect SEGB costs to keep increasing against 2017 view if the transition to SMETS2 and the national deployment of meters continue to face delays.

DCC costs will increase substantially each year until at least RY 2020/21. Historically, the costs for a given regulatory year have increased substantially over time as well. For example from January 2017 to January 2018, the DCC charging statements show that the UK-wide Fixed Charges (excluding comms hubs rental and including Alt HAN pass-through costs), have increased in average by £30m every quarter for RY 2018/19, 2019/20 and 2020/21.



Fixed DCC Charges excl. CH rental (£m/year)	2018/19	2019/20	2020/21
January 2017	308.5	335.6	363.3
January 2018	408.6	446.4	460.6
Average movement per quarter	+29.8	+31.5	+29.7

Meters and IHDs. SMETS2 unit costs are expected to reduce compared to SMETS1. This is due to differences in technical specifications and the possibility for suppliers to place larger orders of assets. As we documented in our 2017 BEIS annual return, we expect substantial cost reduction with SMETS2 assets compared to SMETS1.

However asset costs are also subject to external threats such as foreign exchange rates which could have a material impact in the coming years, depending on the stability of the political and economic context. For example in the months following the Brexit referendum in 2016, we had to increase our SMETS2 IHD pricing assumptions after the value of the British pound dropped on the foreign exchange market.

Comms hubs. The rental costs of single band comms hubs (SBCH) have been stable however the costs of other types of comms hubs are substantially higher and there is some uncertainty about the proportions of installations which will require other types of comms hubs than single band. In June 2018, the DCC provided indicative costs for dual band comms where DBCH will be between 51% and 68% more expensive than SBCH. The volumes and unit costs of ancillaries which will be required with SMETS2 (antennas, flying leads, hot shoes...) is also uncertain and may currently be underestimated.

Asset stock management and logistics. SMETS2 readiness is an ongoing concern largely outside of suppliers' control and is likely to introduce unavoidable inefficiency in SMETS1 asset management. Suppliers are facing the risk of writing SMETS1 assets off. The main option to mitigate this risk is to place smaller orders of SMETS1 assets at shorter notice which inevitably results in higher unit prices. Due to the multitude of asset types and ancillaries in SMETS2, asset stock management and logistics will become considerably more complex from the end of 2018 onwards. We do not currently have sufficient evidence to quantify the impact of this threat of additional costs.

SMETS1 communications costs and premature removal charges (PRCs). We expect that addressing the challenge posed by the large volumes of uncompliant smart meters will incur a substantial amount of additional communications costs (over-the-air firmware upgrades) and PRCs, particularly in 2018 and 2019. This is largely due to factors outside of suppliers' control (e.g. licence obligations to ramp up installation volumes despite delays in DCC readiness). EDF Energy has consistently argued in favour of getting it right first time and waiting for DCC stabilisation to start mass deployment with SMETS2.



Customer services costs. While our customer services costs have reduced since 2017, the benefits from smart metering have been marginal. On the contrary, smart rollout has incurred an increase in customer services both pre and post installation and we expect this to intensify with mass deployment.

Installation costs. Installation costs have increased substantially since 2017. We expect Field Force Service Provider job rates to stabilise from 2018 onwards and installation costs could reduce 2019 onwards through productivity gains delivered by SMETS2.

Legacy metering costs. As smart meters are being deployed, legacy operations will be undertaken less efficiently..

Operational benefits. As we discussed previously (see QA10.4 - Judgement 2), legacy metering costs have large fixed components which will only reduce when legacy metering becomes a marginal activity.

Question A10.6 Please comment on the proposed methodology for calculating the efficient cost of rolling out a smart meter, indicating a preference with supporting rationale, on the efficiency option (average cost approach, pure frontier cost approach, lower quartile approach).

Chapter 3 - Updating the cap

Methodology to set the efficient cost of rollout out a smart meter:

Ofgem suggests to select the most efficient supplier(s) based on the level of their gross costs (section 2.44 step 3), then estimate the counterfactual costs in step 4 and net the gross costs against counterfactual costs (incremental costs) and benefits (net incremental costs) in step 5.

The model doesn't differentiate the counterfactual costs or the benefits by supplier. However efficient suppliers are likely to have both low counterfactual and low smart costs, hence lower potential smart benefits. At the opposite, inefficient suppliers would present larger potential benefits with smart metering due to high counterfactual costs. The consistency between costs, counterfactual costs and benefits by supplier needs to be preserved as well as the consistency across cost areas and benefit areas. Selecting the most efficient suppliers should be done on a net incremental costs basis in the final step of the approach.

Suppliers selection based on available data:

We accept Ofgem's point on the volatility of smaller suppliers' responses on per household costs (section 2.48). However we recommend that at least all large suppliers should be considered in order to preserve the largest possible statistical sample in the analysis. Some validation and correction could be introduced to include smaller suppliers as well, at least in some of the cost or benefit areas.



The volatility in costs between the suppliers is a vital aspect which needs to be taken into account and Ofgem does acknowledge that there are "variations in cost reporting across suppliers, particularly large suppliers outside of the six largest suppliers". We believe that this aspect cannot be dismissed and further investigations are required.

Approaches to considering efficient cost for smart metering:

The efficiency option should depend on the reliability of the analysis and particularly the size of the sample: if the sample needs to be restricted to the six largest suppliers only then we believe that a more prudent average cost approach should be followed to mitigate the various sources of uncertainty on cost variations. A lower quartile approach can only be followed if the statistical representativeness of the sample is improved i.e. includes other large suppliers and smaller suppliers. In our perspective a pure frontier cost approach is too restrictive, particularly given the numerous flaws in the current modelling and analysis detailed in previous answers.

Question A10.7: Do you agree with our approach to updating smart costs? In particular, our intention to specifically index smart cost changes, based on net cost analysis (option 3), and whether any other approaches would be preferable to option 3.

Net cost analysis approach

While we do not object to the principle of a net cost analysis approach, we believe that the net cost analysis should be done using a robust model reflecting suppliers' costs as accurately as possible over the horizon considered for the default tariff cap. As documented in our QA10.4 answer, we do not believe that the BEIS SMIP CBA model is the right model for this or that the current data quality is sufficient.

Updating the model assumptions and approach

The model used for the net cost analysis needs to remain reflective of the suppliers' true costs. As such periodic data collection from the industry will still be required (suppliers, DCC etc.) to ensure that the assumptions remain up-to-date and to perform regular validation against actual costs.

Frequency and timing of SMNCC updates

Appendix 5 suggests that the level of the cap would be updated every 6 months at least 8 weeks before the start of a new period (Appendix 5 section 2.4). We are concerned that this would not address the specific volatility in DCC charges and fail to reflect suppliers' charges despite the suggested pass-through approach.

DCC charges are being updated every three months. Throughout 2017, the UK-wide charges (excluding comms hubs charges) for each regulatory year from 2018/19 and 2020/21 increased by c£30m every quarter in average. It is vital to ensure that the DCC cost assumptions feeding into the level of the default cap are in line with the cost charged



to suppliers by the DCC in any given period. From our perspective this requirement leaves four options:

- 1. Realistically, the default cap cannot be updated whenever the DCC charges are being updated.
- 2. Ofgem could prevent the DCC from updating their charges in a cap period that Ofgem is no longer able to update. Currently, DCC Licence Condition 19.9 gives the DCC the possibility to update the charges giving three months' notice which leaves a possibility for a change to take place within the ongoing six-month period of the cap.
- 3. A correction mechanism could be introduced to account for any discrepancies in the outturn of previous periods. Ofgem is currently opposed to this option (Overview document section 3.25)
- 4. Ofgem could consider higher level of headroom in the default cap design

Supplementary Appendix 11 – Headroom

Chapter 2 - Our proposed approach

Question A11.1: What are your views on headroom being a percentage? Do you think it should be applied to all cost components except for network cost? Alternatively, do you think headroom should be applied as a percentage to only controllable costs?

We see no reason to depart from the approach adopted by the CMA in the PPM cap. In particular, it is appropriate that headroom scales in line with movement in the indexed costs (since the degree of uncertainty will broadly scale to the absolute value of the relevant costs.

Question A11.2: What are your views on whether we should change the level of headroom over time?

An allowance for headroom meets a number of purposes:

- Addressing cost uncertainty and volatility
- Mitigating a mismatch between a company's cost drivers and those included in the cap
- Uncertainty about the timing and deliverability of efficiency savings
- Contributing to supplier financeability

Whether or not headroom changes over time, should relate to whether the need for headroom changes. In this regard, we note elsewhere in this response the link between capped prices, a suppliers cohort of fixed price contracts and its ability to finance its



activities. Given the likelihood of fixed prices moving in response to the cap (and to other movements in the market, it may be necessary for Ofgem to adjust the headroom. Headroom should be given a glide path (to allow efficiencies to be delivered, and for the market to rebalance, in terms of prices etc), covering three years.

Chapter 4 – Headroom scenarios

Question A11.3: Bearing in mind the analysis and scenarios presented, what are your views on the appropriate level of headroom to include in the default tariff cap?

We think that Ofgem discussion of the matters relevant to setting the headroom describes the potentially complex responses and interactions which may be seen in practice.

We remain sceptical as to whether lessons can be learned from the PPM market. This market is characterised by a few niche players and particular non-price benefits from smart meters.

We cannot give a level of headroom in percentage of monetary terms because it depends on the starting point (assessment of efficient costs). However, we think Ofgem should set headroom at a level:

- Consistent with a significant level of switching
- Constrains price dispersion to levels that a reasonable person would not see as unacceptable (which may be different between vulnerable and non-vulnerable customers)
- Allows for efficient suppliers to recover their efficient costs (taking account of revenues from fixed price products) and earn a reasonable return

We note the Bill's primary focus is on customer protection. However, we do not believe that customers are protected by denying the ability of efficient suppliers to recover their costs. The resulting supplier failure could well increase customer bills through the recovery of costs via the SoLR and Energy Administration arrangements and undermines competition in the longer term. We note that while occasional suppler failure has little systematic impact, widespread failure could have material detrimental impact on consumers. Such asymmetric risks are normal in utility price caps.

Our modelling suggests that a level of headroom needed to meet these requirements would exceed the £70 used by Ofgem, at least initially.



Supplementary Appendix 12 – Payment method uplift

Question A12.1: Do you agree with our proposed methodology for allocating additional costs between standard credit and direct debit customers?

We agree with Ofgem's proposal to socialise costs historically associated with customers paying by standard credit. However we have concerns over Ofgem's proposed methodology for allocating these costs. Ofgem calculated the payment uplift by using industry average direct debit and standard credit proportions. Incumbent suppliers have significantly higher proportion of standard credit customers than average, as smaller suppliers have often offered direct debit only tariffs, and so would under recover costs. Ofgem should use a direct debit to standard credit proportion more typical of larger suppliers.

Question A12.2: Do you agree with our proposed methodology for calculating the additional costs to serve and the socialisation level?

Yes, we agree with Ofgem's proposal.

Supplementary Appendix 13 – Renewable tariff exemption

Question A13.1: Do you agree with our minded-to positions not to provide exemptions for renewable electricity or gas tariffs?

We agree that it is not appropriate to have a defined cap exemption regime for standard variable renewable tariffs given the challenges of identifying relevant renewable tariffs and the risk of gaming. Providing the ability for suppliers to apply for individual derogations for tariffs that meet specified criteria would appear to be a proportionate approach.

However, it is important that the rules are known to suppliers in advance and that certainty can be achieved in a reasonable amount of time. Ofgem should publish clear guidance so that the application and decision processes (including indicative timescales) are transparent.

Question A13.2: What are your views on whether to provide a derogation for renewable electricity tariffs?

See above.



Supplementary Appendix 14 – Impact assessment

Chapter 1 - Introduction

Question A14.1: What is your view on the overarching approach that is proposed for conducting the impact assessment? In particular, on the scope of the assessment, and material issues that we have not referred to. Please provide details of any relevant sources of data and evidence that you think should be considered.

Overall we are supportive of an approach that is consistent with the Government's Better Regulation principles, such that Ofgem's assessment is proportionate, concise, transparent, consistent and robust.

However, we are concerned that Ofgem is planning to publish its assessment relatively late in the process; and this will therefore significantly constrain the ability of parties who will be impacted by the price cap from effectively commenting on the assessment and the achievement of the objectives set out above. We have already in this response expressed some concerns about the process being adopted by Ofgem and in particular the need for Ofgem to consult on the draft level of the cap so that stakeholders can examine its calculation and the impact it may have on their ability to finance their activities.

Furthermore, we believe, consistent with the requirements of the Bill, that Ofgem should continue to assess the impact of the cap throughout its duration, with a view to not only periodically consider changes to the cap level to reflect changes in supplier costs, but also to look at market impacts e.g. consumer engagement.

On the basis of the information presented in Appendix 14, it would appear that the intended scope of Ofgem's impact assessment in terms of the design of the default tariff cap is appropriate. However, many of the impacts will to a large degree depend on the actual level of the cap set.

In terms of specific comments on the scope, we would add the assessment of the financial impact on suppliers needs to be at the licensee level and not simply on the supply to the portfolio of customers subject to the cap. This is particularly relevant when assessing the financeability test.

Chapter 4 - Initial views on the impact of the default tariff cap

Question A14.2: Do you consider that suppliers will incur a change in administration costs as a result of the default tariff cap? If so, please provide estimates with supporting evidence. Please specify whether any administration costs are fixed or variable. If variable, on what basis do these costs vary? For example, on a per customer basis.

It is likely that the implementation of the default tariff cap will lead to a change in administration costs, some of which are hard to predict and thereby quantify e.g. increase call centre activity. However, given the cap level will be reviewed twice a year, an increase



cost in notifying customers of price changes can be expected. We currently experience costs of around £1-2M for each price change.

Question A14.3: Are you aware of any unintended consequences, in the form of detrimental impacts on customers that were observed as a result of the existing safeguard tariffs? If so, please provide details of these unintended consequences.

We are not aware of any material detrimental impacts on consumers that arose as a result of the existing safeguards. As noted above, customers under such tariffs are likely to be experiencing price changes more frequently than as was the case prior to their introduction and as such customer experience and perception of their treatment may be detrimentally impacted.

Question A14.4: Do you have reason to believe the default tariff cap could disproportionately impact any of the nine protected characteristics under the Equality Act 2010? Please provide any supporting evidence.

We have no reason to believe at this stage that the default tariff cap will disproportionately impact any of the nine protected characteristics under the Equality Act 2010.

Question A14.5: Do you have any additional information or data on the impact of the implementation of the existing safeguard tariffs on switching rates that would inform this analysis?

Switching is often is used a proxy for competition in the energy market, and as such we accept that switching figures are likely to be used as part of Ofgem's impact assessment. As Ofgem recognises in its consultation, switching rates are likely to be depressed somewhat by the imposition of the cap, and to some extent this has been witnessed in the PPM market following the introduction of the CMA Cap.

However, it is important to determine the extent to which the market covered by the existing safeguard tariffs is a good benchmark for the impact of a much wider default price cap. For instance, the prepay market differs from the rest of the market in a number of ways that mean that it is much less sensitive to pricing.

EDF Energy June 2018