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Dear Adhir

Promoting Smarter Markets

Thanks for the opportunity to respond.

We are very supportive of the setting up of the smarter markets team in Ofgem and believe that this team has been effective in outreach and in getting to grips with the key issues of smarter markets.

We expect smart to play a substantial part in the low carbon transition and in the management of consumer bills in the situation of rising fossil fuel and environmental costs. We believe that the regulatory, institutional, and market changes needed to enable this will be substantial.

We therefore encourage Ofgem, and the smarter markets team in particular, to develop a roadmap towards smart (meters, grids, consumption, etc.) that recognises in particular the starting point of the Retail Market Review.

Our detailed comments are enclosed

Yours sincerely

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Chapter 3

Chapter 3 Proposition 1:
Time-of-use tariffs should help many consumers lower their energy costs, but improved engagement will be needed to help all consumers make informed choices.

Questions:

Q1. Do you agree with the proposition?

Yes

We support the use of 'time of use tariffs' in principle whilst recognising that the tariff simplification in the Retail Market Review must run its course. We hope that the smarter markets team at Ofgem will contribute to a regulatory road map of when and how the restrictions in RMR can be removed so that consumers can benefit from ToU tariffs within a reasonable time.

Q2. Have OFGEM identified the elements of current market arrangements that could help or constrain the realisation of benefits for consumers?

Yes, broadly

The main benefits and purposes that the time-of-use tariff will bring will be network investment efficiency and generation carbon benefits. These points have not been recognised within the consultation document but are fundamental when considering the requisite market arrangements. These are much more robust benefits than purely consumer savings.

It is worth noting that use of TOU by some consumers benefits other consumers by reducing the cost of a peaky a consumption profile. Since suppliers can access the forward market for hedging, they can either provide exposure for consumers to live prices, or can hedge for price stability.

By its nature, a TOU tariff would normally be more expensive than a standard tariff if the consumer makes no consumption change, and cheaper if they do. It is therefore necessary that consumer education and ability to do demand response keeps up with the development and use of these tariffs.

Please also refer to 3.26, in the demand-side section, which recognises that even if settlements were half hourly, suppliers' unit cost could vary little over the course of the day. Evidence available on TOU internationally and through trials in the UK suggest that price differences between time bands needs to be significant enough to provide a strong enough incentive to consumers to change usage patterns.

The current methodologies of shaping within the Licence Conditions are not designed to handle TOU and Dynamic Billing. This would require extensive change and would necessitate an overhaul to the supplier hub principle. We believe that this subject in particular deserves attention greater and soon.

Q3. Have OFGEM identified the key issues, such as the timescales for any changes to market arrangements?

Yes, broadly

We believe that to introduce such changes to the market arrangements would need to be timed to be reflective of the position that the industry is in to ensure that all the other changes to the industry are not affected. We envisage that the industry would have the DCC in place and dealing with significant volumes of smart metering. We would advocate a mechanism that assesses and specifies measures of stability and market condition rather than purely timescale.

The regulatory environment should only provide the frameworks to make such propositions possible; we do not believe it is appropriate for Government to centrally control commercial propositions in a competitive retail market.

Also, to be able to successfully, and on a large scale, introduce these kinds of tariffs we would require visibility of half-hourly electricity consumption data before the product is available to be able to accurately design an appropriate and cost reflective tariff.

To provide data, for all consumption points, at a granularity that can facilitate TOU tariffs, and with all required controls for privacy and security, is a substantial and necessary undertaking that should be planned into the DCC, and industry institutions and institutional arrangements. The whole process takes many years.

Q4. Are there additional opportunities for development in retail energy markets that we should include in the scope of our work?

Yes

The regulatory model is to attenuate price signals at all points in the value chain, from wholesale prices through to transportation and thence retail prices. For TOU tariffs to be effective in enabling a demand response to an increasingly variable and non responsive generation mix, the price signals should be restored.

Chapter 3 Proposition 2:
More efficient use of demand-side response can lower overall energy costs, but this will need coordinated changes to regulatory and commercial arrangements.

Questions:
Q1. Do you agree with the proposition?

Yes

The ability to manage load changes and the ability to engage with demand side management are quite different in the residential and micro-business sectors, and each larger business segment (industrial, commercial, multi-site, etc).

Correspondingly the solutions are somewhat different. For example, consumer protection regarding TOU tariffs will need to be significant, whereas for industrial businesses, little institutional change is needed but regulatory attention should be given to the current attenuation price signals throughout the value chain, including transportation.

Q2. Have OFGEM identified the elements of current market arrangements that could help or constrain the realisation of benefits for consumers?

The engagement of consumers, individually or in aggregate with the short term markets (transportation, balancing, reserve, ancillary services) deserves more attention

Demand response in “post gate closure” timeframes has the potential to act as cheaper balancing actions or to match demand to more efficient generation sources.

Low consumers individually do not have an impact but collectively could have. Therefore, the potential for aggregators or automated device responses needs to be explored further.

By optimising the supply and demand, suppliers would need all the half-hourly data for use within industry and supplier systems to understand the level of responses to short-term stimuli.

This would require extensive system changes as well as industry change that would need centrally co-ordinating for small consumers, e.g. creation of aggregator roles and balancing party roles.

Q3. Have OFGEM identified the key issues, such as the timescales for any changes to market arrangements?

Billing systems is an additional issue

There will be significant change to supplier billing systems; this will require co-ordinated change that would need to be linked to reflect the industry change.
The keys issues we have stated in proposition 1 all apply here i.e. access to data and timing of the change.

We see that the main beneficiary being the network operator. To fully realise these benefits the network operators need to be readied prior to this change. OFGEM can deliver this via the network price control mechanism. It could build on the low carbon network fund initiatives and incentivise the build of dynamic networks while recognising the need for data under a supplier hub model.

This proposition requires a density and mass of consumers able to respond. The benefits will be measured when a critical mass of smart metering is in the market.

Q4. Are there additional opportunities for development in retail energy markets that we should include in the scope of our work?

It is essential both that consumers and new types of market entrants have access both to necessary data and the ability to contract. At the same time, it is essential that the system maintains integrity, for example in demand forecasting for system balance, and the resolution of network constraints.

We therefore encourage Ofgem to give serious consideration to the pressures on the Supplier Hub model (in which the supplier is the sole contracting party with the consumer and the only party that uses actual meter data for balancing), and how the model may develop.

Chapter 3 Proposition 3:
Innovation in energy services would increase the consumer benefits of smart metering and can happen without major change to the regulatory framework.

Questions:

Q1. Do you agree with the proposition?

Yes, in the short term. Over the next decade, changes to the regulatory framework will need to have been implemented.

Regarding pay-as-you-save, in the form of the Green Deal, we support the principle of overcoming the barrier of up front investment. However, it is important to note that the Green Deal is currently designed for measures that primarily reduce total demand for heat, as distinct from shifting demand in time. The concept needs proving for the simpler measures first.

Q2. Have OFGEM identified the elements of current market arrangements that could help or constrain the realisation of benefits for consumers?

Partly

The current arrangements need further thinking. The supplier would not necessarily have details of changes within the home or premise, which could have an effect on the individual demand profile. This is particularly the case with the idea of unregulated third party energy services, analysis and advice, Suppliers need the ability to manage the changes in demand risk to continue operating within the parameters of their licence and public expectation. However, this can be done if we have the low level data to recognise and adapt to changes in energy demand shape; this however opens into the wider policy considerations around privacy which has the potential to severely restrict the quantity of data available to identify such changes.

Q3. Have OFGEM identified the key issues, such as the timescales for any changes to market arrangements?

Yes

Impact on roll out – section 3.37 describes customers accessing their own data; to do this the customer would have to obtain a capable and secure device; this is not part of the smart mandate and is likely to be at the consumer's expense. The likelihood of this is very small as it seems difficult enough trying to get the general populace to accept new equipment without an upfront cost.

Section 3.37 states that the customer will be able to access data via the WAN. This is incorrect; the customer will have the ability to access data via the HAN. WAN access to data will only be via the DCC, the supplier, or the communications service provider in the case of non-domestic customers where the WAN service is not via the DCC.

In terms of timing, the regulatory framework should not preclude the development of such markets, but it should also maintain a level playing field and not promote one party over another. Therefore, we believe that with proportional frameworks, the market will be able to develop according to demand for the services.

Q4. Are there additional opportunities for development in retail energy markets that we should include in the scope of our work?

Over time, consumers will increasingly engage in energy services and energy tariffs in a coordinated way. As the regulatory arrangements stand, there is a gap in consumer protection on the energy services side. For example a service sold to enable a more sophisticated response to a tariff could be ineffective or even mis-sold. Whilst we recognise that this lives beyond the vires of the regulator, there are some routes, there are certain elements, such as control of data by signature to the Smart Energy Code, that can be governed by the energy regulator.

Chapter 3 Proposition 4:
Consumers will have more payment options, without changes to regulatory arrangements beyond those envisaged as part of the smart metering roll-out.

Questions:
Q1. Do you agree with the proposition?

Yes

In this context the term 'Payment Channels' may more accurately describe the difference between payment routes and technology that underpin the options made available to customers.

Q2. Have OFGEM identified the elements of current market arrangements that could help or constrain the realisation of benefits for consumers?

Section 3.49 – The cost of prepayment should be recognised within DECC's Impact assessment.

Section 3.58 – There are many issues regarding Prepayment Meter Infrastructure Provision (PPMIP) for legacy traditional meters and also going forward in terms of mandatory offering of PPMIP services to other suppliers by suppliers who have PPMIP. This issue will increase as the number of smart meters using prepay rise and the number of traditional PPMs reduce.

Q3. Have OFGEM identified the key issues, such as the timescales for any changes to market arrangements?

Yes

Section 3.58 - Although we agree with Ofgem's assumptions, the constraints that these would have on our roll-out is unacceptable; suppliers will be rolling out in the most cost effective manner for all customers, which may not mean by payment method. DECC proposals for monitoring supplier roll out, linked to the establishment of the DCC communications networks are likely to drive a more geographic approach to roll out.

Q4. Are there additional opportunities for development in retail energy markets that we should include in the scope of our work?

New forms of payment method will continue to be innovated. There will as minimum be required regulatory oversight. The regulator already oversees certain things such as direct debit, fuel direct, PPMIP, through supply licences, and could conceivably do the same for innovative payment. A more difficult question is the mandation of provision of certain payment methods (e.g. as there is for PPM , and for PPMIP if the supplier has one)

Chapter 4 - Proposition 5:

Settlement arrangements should use actual daily (gas) and half-hourly (electricity) meter reading data in order to improve their accuracy and efficiency.

Questions:

Q5. Do you agree with the proposition?

Yes

We also believe that regular actual readings alone would naturally lead to greatly improved accuracy and efficiency. We believe that the solution to settlements should be appropriate to the requirements and not to just assume that half-hourly and daily settlements is the answer. This can only be achieved after an appropriate cost benefit analysis of all options based on significant quantities of actual data and after a significant volume of smart meters have been installed.

Q6. Have OFGEM identified the right sources of costs and benefits associated with achieving them?

There is a natural incentive for suppliers to use actual reading data for billing; however any move to use more granular data is likely to involve rigorous customer consent mechanisms. If there is an intention to use more granular data in a consistent manner, this would need to be underpinned by regulatory obligations if decisions in this area are not to be based on customer biased data.

Settlements can be tightened, and costs saved, using a far simpler method i.e. sharing the data with suppliers and allowing use of profiles linked to behaviour rather than metering configuration. In gas, we support xoserve's work on Project Nexus where mechanisms such as using billing actual reads to input into a rolling AQ process rather than an annual review process which will generate a greater accuracy in settlement without moving to an entirely daily settled regime.

At the moment the profile methodology currently works for large populations of customers whose behaviour is generally habitual and stable. However, profiles are linked to metering configuration and do not make any reference to the consumer. It should not be assumed that HH / daily settlements would cure all ills; problems still exist in the existing HH / DM world. In addition, we would advocate any development in this area to take a strategic design approach rather than fitting current mechanisms (designed for I&C sites) to domestic and SME markets. We don't support any move towards changing settlements arrangements until after a critical mass of smart meters has been fitted.

This requires a full cost benefit assessment to actually justify such a radical overhaul and gain support off all the impacted parties. We would not accept a sample analysis.

Q7. Have OFGEM identified the key issues, such as the timescales for any changes to market arrangements?

We would press the need not to pin point a date instead rely on dependencies i.e. the completion of the DC, DA centralisation. Smart settlement is an evolutionary process not a revolutionary; the requisite changes represent significant change on top of a transformational programme. We would advocate defining measures of suitable market stability rather than committing to any particular date.

Q8. Are there additional opportunities to reform market processes that we should include in the scope of our work?

The development of high resolution settlement arrangements has significant consequences for the optimal institutional structure and thence the market arrangements/processes. For example, if the data for Supplier Volume Allocation were eventually to managed within the DCC, this has implications for the networks and the Balancing and Settlement Code.

Chapter 4 -Proposition 6:
The change of supplier process should be reliable and fast, so that customers can confidently switch supplier on a next day basis.

Questions:

Q5. Do you agree with the proposition?

Reliability is paramount
Benefits of decreasing the switching time below three weeks becoming increasingly marginal and more prone to reliability issues

In principle yes it is desirable, BUT the current period (3 weeks) parameter of switching is there for good reason:

I. To allow a cooling off period to prevent Erroneous Transfers (ETs) and so protects the customer.

II. Agent appointments take time where there is no interoperability, so under current industry process is not achievable.

III. Current industry systems and processes are designed to work in an overnight batch that would not support same day switching therefore considerable industry re-design would be needed. It may be that the move of registrations to the DCC would provide the opportunity for the necessary re-design work.

Q6. Have OFGEM identified the right sources of costs and benefits associated with achieving them?

To improve the current process of 'CoS switching' to achieve 'next day switching', the Supplier hub principle would need to be re-designed to accommodate the necessary appointments and confirmations / rejections. There will also be a profound impact on the internal billing systems of the supplier. A full cost benefit assessment needs to be undertaken.

Customer number forecasts are key components in the demand forecast projections and therefore part of the core energy demand risk management process. At the moment, suppliers have weeks to track registrations in their various stages so that they can adjust forecasts accordingly. For example, if retailers change tariff values, there can be a flood of customers shopping around. There could be a step change in customer numbers, which would result in a step change to the volume position. Suppliers know about it in advance so have a small opportunity to hedge the change in demand if necessary. Next day switching would remove this ability so the step change would need to be traded on the spot market - at significant risk and potential cost to all customers. Ofgem would need to consider this consequence, as well as how these arrangements would sit with other issues such as cross-subsidisation, cost reflectivity and the expectation that suppliers manage risk on behalf of customers.

Q7. Have OFGEM identified the key issues, such as the timescales for any changes to market arrangements?

It needs to be noted that Smart won't stop ETs. The second bullet in 4.31 states that Smart will minimise the risk of ETs, this simply is not true. It will however help to resolve disputes with greater speed and accuracy. With this in mind to achieve next day switching we believe the following will be required:

I. The supplier hub principle would require re-designing therefore new obligations, for both suppliers and networks and possibly the DCC, would be needed.

II. To be able to successfully introduce 'next day switching' the DCC would need to be responsible for registrations.

III. We believe that such a project would need to be delivered and project managed by industry experts, namely OFGEM as they are best placed.

It needs to be recognised that while smart will reduce estimated bills, it will not eradicate them, as there will always be scope for failure e.g. meter, WAN, HAN failure, which cannot be quantified at this point in time. If an estimate is created it should be very accurate due to the rich history we would have to use to create it. Section 4.33 addresses the opportunity to address the differences in the CoS process between Gas and Electricity. Our stance has and remains to be that this is an excellent opportunity to combine the fuels by taking the simplicity of the Gas arrangements and combining them with the rigor of Electricity to produce the 'ideal scenario'.

We agree and welcome the recognition that these areas need investigation and are key issues.

4.42 – this section looks at the potential 2-tier Change of Supplier (CoS) process. We disagree with this. Using Independent Gas Transporters (IGTs) as an example, this will only complicate the industry and serves no benefit whatsoever. In particular the customer may experience an inconsistent journey and so needs to be unilateral.

Q8. Are there additional opportunities to reform market processes that we should include in the scope of our work?

We would welcome Ofgem's active involvement in the consideration of the future role of the meter operators and meter asset providers, in comparison with the current roles.

Chapter 4 - Proposition 7:

Electricity data processing and aggregation services should be procured centrally in order to reduce costs and support fast customer switching.

Questions:

Q5. Do you agree with the proposition?

Yes

We expressed in our response to the Smart Metering Prospectus. We agree with the DECC decision statement that this would seem to be a desirable option but it would need to be subject to a cost benefit analysis and in a suitable timescale that is not in the current roadmap (i.e. it would not be within the initial DCC contracts)

Q6. Have OFGEM identified the right sources of costs and benefits associated with achieving them?

The objectives as to why this would be a required change would need to be clear. This may well be the most effective route to facilitating HH / Daily settlement as discussed in proposition 5, particularly to facilitate the likely privacy policy. However, this in itself should be subject to a robust cost benefit analysis.

There would be an expectation that:

I. A cost benefit assessment existed

II. There was a significant volume of smart meters in the market

III. The DCC had responsibility of the DC/DA

IV. The fuels had been aligned to simplify the industry leading to lower costs

Ofgem should also provide an in-depth market assessment of the removal of Agent competition and the implications of consequential regulatory requirements, such as the need for regulated charge mechanisms for Agent duties.

Q7. Have OFGEM identified the key issues, such as the timescales for any changes to market arrangements?

Whilst we agree that the rationalisation of market arrangements makes sense:

I. There is a concern is around the timing. Again we should stress the decision points of delivering this should be based upon the state of the industry at that point in time and should not be dictated just by a chosen date.

II. Also the DCC will need to be stable and working effectively within the industry for the mass market prior to this change.

III. There is a concern that the centralisation of the DC's will restrict agent competition and introduce a monopoly that may lead to a degraded service.

Q8. Are there additional opportunities to reform market processes that we should include in the scope of our work?

There is still much soul searching and technology consideration on how suppliers can manage their energy inventory at the meter point whilst at the same time ensuring that the use of these data does not compromise consumer privacy. One of the various possibilities is for some consumption data to be seen on an aggregated basis, thereby causing a de facto anonymisation.

In addition to this, data aggregation at meter points has potential uses in smart grid, as the sum of flows through consumption meters is, after losses, equal to the flow through substations. For these data to be effectively usable by the networks needs consideration of processes, and this in turn may suggest changes to the regulatory model, for example in the charging of constraint and reinforcement.

Chapter 4 Proposition 8:

The Smart Energy Code should be used as a vehicle to consolidate existing industry codes dealing with retail issues in gas and electricity to facilitate market development and reduce administrative burdens.

Questions:

Q5. Do you agree with the proposition?

Yes

Q6. Have OFGEM identified the right sources of costs and benefits associated with achieving them?

Yes

Q7. Have OFGEM identified the key issues, such as the timescales for any changes to market arrangements?

We would add the data transfer systems in electricity and gas

The electricity Data Transfer Service and the gas UKLINK would need to be taken into account

OFGEM would be required to project manage the consolidation as the industry experts. We believe that during the foundation phase of SMIP, in advance of DCC go-live, would be a good time to consolidate the codes.

Q8. Are there additional opportunities to reform market processes that we should include in the scope of our work?

The regulatory model binds suppliers, transporters, generators and wholesale participants. Other actors such as Energy Service Companies and aggregators do not currently form part of this formal model. It is essential that consumer protection applies to all aspects of energy, and that system balance and security is not compromised by the behaviours (which may be quite proper) of actors invisible to the system operators and regulator.