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Dear Ben,

Consultation on creating the right environment for demand-side response

Thank you for the opportunity to provide comment on the above consultation. As you are aware Good Energy is a licensed electricity and gas supplier supplying over 32,000 electricity customers and 7,000 gas customers. We are a mission based company with the aim to develop the UK energy market to be 100% renewable by 2050, which we believe will require an active demand side element to match supply with demand.

Executive Summary

The energy market is shifting away from the traditional centralised generation where energy users simply consume gas and power, to one where those consumers have a more involved relationship with the market place. To date, this has primarily been through the relatively recent growth of embedded generation, but as the structure of the market begins to accommodate more Demand-Side Response and new energy technologies are introduced, it is highly likely that this trend will accelerate.

This change will either disrupt the market model to the point of failure, or the market must change to embrace it.

Good Energy therefore welcomes this important piece of work by Ofgem in identifying the conditions required to make DSR work in the UK market. However, we are concerned that it's thinking does not fully recognise the size and scale of change that effective, consumer-led DSR will bring to the marketplace. It's tone is about accommodating DSR in the current market environment rather than an embrace of the future market, which may result in DSR being curtailed to a model that maintains the status quo.

We believe that three key points must be recognised to address this:

1. That new energy technologies (Smart Meters, automated electrical product controls and decentralised generation) will lead to an increase in fluid and variable consumer demand for electricity. This presents opportunities for the Government's decarbonisation objectives but also challenges for the current market structure.
2. That if those variations are inherently decentralised and more granular in their nature, then there is a need for an enhanced role for Distribution Network Operators and market aggregators to manage those variations.
3. That the energy retail market has a key role to play in bridging the gap between new energy technologies and the wider market place, through time of use and dynamic tariff offerings, facilitated by smart meters.

We have answered your specific questions below, expanding where necessary.

Q1. Are there any additional key challenges associated with revealing the value of demand side response across the system? If so, please identify and explain these challenges.

Whilst recognising the industry centric challenges, it is important that the challenge of engaging energy customers in demand side response is not underestimated, nor the potential benefits available to them. This will help create a more flexible approach to balancing supply and demand, as the amount of inflexible generation connected to the grid increases.

One key challenge will be to ensure that new energy technologies (decentralised generation, smart metering and automated electrical product controls) are utilised to address the fact that the existing market, as the intermediary between the consumer and the generator, is simply not flexible enough to deal with large amounts of inflexible plant without corresponding forms of fossil-fuel back up plant.

Engaging with product manufacturers who will allow automated responses by consumers is also another barrier that has to be considered as consumers are unlikely to want to engage in physically adjusting demand manually as requested by the industry parties.

Although covered more in question 3, it is important to recognise the potential cost of demand side on parties, when other parties are utilising the process. This is includes suppliers' imbalance when DNOs request DSR from consumers, or DNOs having to request additional DSR to accommodate a DSR action by a supplier.

Finally, we believe that a key stakeholder in demand side, if the environment is correctly designed, will be new electricity storage technologies. At the moment storage sits uneasily in the market place, and we believe that more needs to be done to address this. One example of this would be whether DNOs are able to directly utilise storage technology or whether the existing rules banning them from owning generation assets prevents them from doing so.

Q2. Can current regulatory and commercial arrangements provide the means to secure demand-side response being delivered? If not, what will regulatory and commercial arrangements need to deliver in future?

The current arrangements are designed around active participation by large generators to meet the demand of passive consumers. This model is already being challenged with the rapid take-up of decentralised generation. If wide spread DSR is captured then the current model needs a radical rethink.

Consumers are assumed to be passive in the current arrangements, but if they become active through generation or demand side response then their interaction with the marketplace will remain unregulated. Future arrangements need to deliver for a greater proportion of electricity coming from decentralised sources, with consumers playing a more active role in deciding when they use power based on its availability. It will also need to understand the impact of DSR in overshooting the problem and creating problems elsewhere.

Aggregators of DSR are not recognised in the trading arrangements and are assume to operate on behalf of a licensed market participant. In reality they may provide services to several parties with concurring requirements, or aggregate conflicting requirements.

To date, the TSO has managed grid security via its control of centralised generation based on historical trends. In the future, active DSR may mean the TSO's assumptions, and thus actions are not matched in reality. (For example, on a high wind day, an aggregator may increase demand from consumers to heat water, as it has forecasted that wind speeds are due to drop later. This may cause unexpected system constraints.)

Finally we believe that there needs to be a process where other parties are not adversely impacted by the actions of others, such as suppliers being out of balance by network initiated DSR and vive versa.

Q3. Is the current work on improving clarity around interactions between industry parties sufficient? If not what further work is needed to provide this clarity?

No. Whilst the work of the Smart Grid forum is important it is simply looking at DSR with a DNO perspective based on a smart grid. It is not fully engaged with market developments such as EMR, RMR or the wider future of electricity trading project. There are wider interactions between parties, which will impact DSR decisions and the above developments are changing that interaction in a yet unspecified manner. DSR interaction between parties needs to be lifted out of the Smart Grid work stream, and placed into the wider smarter markets arena.

Q4. Are there any additional key challenges associated with effectively signalling the value of demand-side response to consumers? If so, please identify and explain these challenges.

An additional key challenge is creating sufficient incentive and clear guidance for manufacturers to develop products that can respond to DSR signals. For mass scale DSR in the domestic and SME market then automated solutions will be required if dynamic Demand-Side Response is to be enabled.

This will ensure that the opportunity of consumer-led DSR is fully exploited in a way which interacts as smoothly as possible with the wider market. Customers will not engage with DSR if it creates a hassle factor, unless the rewards are significantly greater. However, if DSR signals could deliver automated responses in the property through how they control air conditioning etc then consumer participation in DSR could be higher at lower cost.

Q5. Do you agree that signals to customers need to improve in order for customers to realise full value of demand-side response? Does improving these signals require incremental adaptation of current arrangements, or a new set of arrangements?

Yes. We agree that signals to customers need to be improved, but this must be complimented with ways in which customers can react to signals in an appropriate manner. For example, consumers would be unable to react well to price signals that are not clear prior to the event (as exampled by the Triad process used by NGC.) Equally, signals as to when would be the opportune time to use energy (for example at the times of day when inflexible plant is generating) must be included rather than just when to curtail demand.

We believe that a fundamental redesign of the current system is required to put DSR on a sustainable footing. Incremental adaptations are unlikely to deliver, just as they have failed to deliver substantial support for decentralised generation over the years. Decentralised energy, whether embedded generation or DSR needs to be put on an equal footing in the market and not just “accommodated” within the centralised market structure.

Q6. To what extent can current or new arrangements better accommodate cross-party impact resulting from the use of demand-side response?

We believe that there are two elements to consider here. One is capturing the cross-party benefit of any demand response to ensure maximum value is extracted for the participant. The other is to find a way of preventing the benefits accrued by one industry participant from a DSR action causing excessive cost on other industry parties which are greater than the benefit accrued by the first.

The efficient use of aggregators and for DNO’s to act as a visible portal of all DSR actions would assist. The joint ENA/ERA document proposed a hierarchy in which DSR to resolve physical delivery issues (network constraints or lack of capacity) would take precedence over the financial (e.g. supplier’s imbalance position).

However, changes should still ensure DNOs should not be allowed to use DSR to avoid investing in their networks where there is a demonstrable requirement from consumers or generators. Any use of DSR by DNO’s or the TSO

should be a short term solution until networks can be upgraded; otherwise the solution is not delivering to all parties equitably.

Q7. Are there additional key challenges associated with customer awareness and access to opportunities around demand-side response? If so please identify these challenges.

There are two key challenges to gaining customer engagement with DSR. As an innovative energy supplier with a high degree of engaged customers, we are in the early stage of designing several DSR style tariffs for customers matching particular profiles (for example, those with heat pumps installed or who are owners of electric vehicles).

The constraints around the recent imposition of four core tariff cap as part of RMR and cheapest tariff signposting make implementing these tariffs more difficult. Whilst we recognise that Ofgem has allowed some flexibility around trialling innovative tariffs, the fact that we may not be able to make them enduring because of the core tariff cap deters us from trialling products. Whilst we recognise the need for simplicity in the main stream market we feel a solution must be found to allow those customers wishing to engage the right to do so as early as possible.

We recognise that there are also challenges around customer protection. By nature a DSR tariff requires customers to make behavioural changes, even if that behavioural change is automated. This logically follows that customers who switch to these tariffs or agree a DSR contract and do not make the required changes could be worse off. Whilst industry needs to ensure that consumers are not put on inappropriate tariffs, there must be an acceptance of a degree of "let the buyer beware".

Q8. Is any additional work needed to explore the role of third parties in helping customers to access and assess demand-side response offerings?

Yes, but this should not be restricted to traditional 3rd party intermediaries. A key role in establishing DSR will be equipment providers who will engage customers into facilitating DSR, but may do so in a non-independent manner, for example by linking the equipment to work with a particular supplier or DSR aggregation service provider. We feel it is important that the market is not restrained to traditional market players so that a wide variety of DSR offerings, to suit different customers are available.

Q9. Are there additional preconditions for delivering the right environment for demand-side response? If so, please explain what these are and why they are important, as well as attaching a priority relative to those challenges we have already identified.

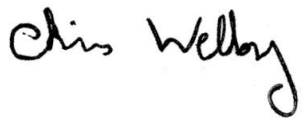
The biggest precondition is for the industry to recognise that we are moving away from a centralised energy market, and once passive customers are likely to engage in the market either through on-site generation or DSR. If the industry continues to design key functionality around a market which delivers from centralised generators to passive end customers, then the only way physical security can be maintained is through constraining the growth of DSR just as network companies are currently constraining embedded generation. This precondition is of higher priority than the three listed.

Q10. Do you agree with the priority and timing we have attached to addressing each of the key challenges identified above?

We broadly agree. However we feel that consumers need to be made aware of the benefits of DSR as soon as possible as this could help them engage with the smart meter rollout in a more positive fashion. We accept that the constraints imposed by RMR means that the range of DSR tariffs that engaged consumers will be able to access will be small, if any, but there does seem a convergent point where both the benefits of smart metering and DSR can be tied together as an attractive package for consumers.

I hope you find this response useful. If you wish to discuss any of the above further, please do not hesitate to contact me.

Kind regards,



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