

Harpal Bansal  
Smarter Markets  
Ofgem  
9 Millbank  
London  
SW1P 3GE

7 March 2012

Dear Mr Bansal,

### Promoting smarter energy markets

I am writing to you on behalf of Northern Powergrid Holdings Company and its wholly owned electricity distribution licensees Northern Powergrid (Northeast) Limited and Northern Powergrid (Yorkshire) plc. This letter provides our response to your consultation on promoting smarter energy markets.

Northern Powergrid is the electricity distribution business for the north east, Yorkshire and parts of northern Lincolnshire, operating through its two licensed subsidiaries. We welcome the opportunity to take part in this consultation.

We agree that changes to current market arrangements will be required in order to benefit consumers and protect their interests through smart meter roll-out and beyond. It is important to identify and, where necessary, implement these changes in order to help realise significant opportunities for consumers from smart meters and to ensure that risks are recognised and managed appropriately.

We provide responses to each of the propositions in the consultation below. In summary, on market development, the consultation focuses predominantly on supply market issues, but we consider that there are issues relating to distribution that are equally relevant, particularly given the potential for smart grid and demand response once smart meters are widespread.

On market processes, we consider that there are some systems and processes that currently hinder efficiency and competition in metering provision. A further area of importance to be considered is ensuring efficient commercial arrangements for the provision of meters, particularly on change of supplier. Although meter provision is a responsibility of suppliers, in the current market there is an absence of commercial drivers or incentives to make commercial interoperability in this particular aspect of the market a priority issue for suppliers.

Yours faithfully



Jon Bird  
Head of Sustainability

## **ANSWERS TO CONSULTATION QUESTIONS**

### **CHAPTER THREE: Market development**

**Question 1: Do you agree with the propositions set out in this chapter?**

The propositions cover the key areas of market development. However, for the smarter market to be wholly effective, it will need to take account of all areas of interaction between the customer and the electricity industry that can effect a response from customers, including those with network operators, such as conditional connection agreements and contracts for ancillary services.

**Question 2: For each proposition, have we identified the elements of current market arrangements that could help or constrain the realisation of benefits for consumers?**

**Question 3: For each proposition, have we identified the key issues, such as the timescales for any changes to market arrangements?**

**Question 4: Are there additional opportunities for development in retail energy markets that we should include in the scope of our work?**

**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.**

In principle, time-of-use (TOU) tariffs can be an important driver to influence customer behaviour and assist in reducing costs, but only for customers who have the ability and the willingness to respond to them. In such cases, in order to encourage overall resource efficiency, TOU tariffs should be as cost-reflective as possible. This means that network charges should reflect time-of-use and should be charged on to the customer on a time-of-use basis.

It is important to establish the extent to which customers are able and willing to respond to TOU signals. This is one of the intended learning outcomes of several of the smart grid projects supported under the Low Carbon Networks Fund, including Northern Powergrid's Customer-Led Network Revolution, as well as Sustainability First's Smart Demand Forum. Previous studies have shown that customers do not just respond to financial incentives and that behavioural factors are important. A greater understanding is needed of these issues.

We agree with Ofgem that it is important to reconcile the development of innovative tariff designs with the need for simplicity. One approach would be to adopt common time periods for all TOU tariffs. Although, in principle, the existence of different market players and different customer demand profiles might suggest a range of different time periods might be economically optimal, common time periods would provide the customer with a much simpler means of comparing tariffs and engraining behaviour change. Since peak loads at the national and local level are at broadly similar times of day, such an approach would deliver the majority of the benefit to all players. It may be that if such TOU tariffs prove effective then a move to a more locational charge at lower voltages might be considered in order to fine-tune the cost signals, but this should not be considered without first establishing the efficacy and acceptance of the TOU tariff.

**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.**

Demand-side response involves the totality of the interactions that a customer has with the electricity industry, including connection agreements and costs, and ancillary services provided to the transmission system operator. There will be an increasing need to ensure that

commercial arrangements are put in place to co-ordinate these interactions and ensure that any conflicts are effectively resolved. Several initiatives are currently taking place to gain a greater understanding of the key issues, including the Smart Demand Forum mentioned above and joint work being carried out by the Energy Networks Association and the Energy Retail Association.

Arrangements that can reconcile all potential conflicts would be complex and could be expensive. Better information is required on where the major costs and benefits lie. Commercial arrangements can then be devised accordingly. This is another area where Low Carbon Networks Fund projects will bring greater clarity.

Effective demand-side response requires cost-reflective pricing. In the domestic sector, a trade-off will be required between cost reflectivity on the one hand, and simplicity and equity issues on the other. This is essentially a political decision and not one the industry can make in isolation.

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

Innovation in energy services is already happening, as can be seen with the developing role of the commercial aggregator. DNOs, including Northern Powergrid, have already entered into exploratory contracts with aggregators for the provision of demand-side services. For the immediate future, there may be no need to change the regulatory framework, but as such arrangements become more widespread, there will be a need for arrangements to reconcile potential conflicts. There may then be a need for regulatory intervention, either to police a commercial market or to regulate an effective monopoly.

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

We have no comments to make as the distribution network operator performs no role in the billing of consumers.

## **CHAPTER FOUR: Market processes**

**Question 5: Do you agree with the propositions set out in this chapter?**

Each of the propositions is important, but a further area of importance is ensuring efficient commercial arrangements for the provision of meters, particularly on change of supplier. Although meter provision is a responsibility of suppliers, in the current market there is an absence of commercial drivers or incentives to make commercial interoperability in this particular aspect of the market a priority issue for suppliers.

**Question 6: For each proposition, have we identified the right sources of costs and benefits associated with achieving them?**

**Question 7: For each proposition, have we identified the key issues, such as the timescales for any changes to market arrangements?**

**Question 8: Are there additional opportunities to reform market processes that we should**

**Proposition 5: Settlement arrangements should use actual daily (gas) and half-hourly (electricity) meter reading data in order to improve their accuracy and efficiency.**

DNOs' financial wellbeing depends on reliable and accurate settlement data. Settlement data provide the basis both for income determination and the losses incentive. The current reliance on estimated data creates unpredictability in pricing and the need for subsequent adjustment. Settlement data based on actual smart meter data will significantly improve the situation. However, the transition from the status quo to this improved position will involve the need to reconcile the two approaches and may result in further unforeseen adjustments and disruption in the interim period.

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

The change of supplier process is an important area in relation to improving consistency and removing constraints. The smarter energy markets project creates the opportunity to address matters that affect the change of supplier process that may have been missed by Ofgem's review of metering arrangements (ROMA).

We recognise that some aspects of commercial interoperability for smart meters have already been addressed. However some current failings in the market for conventional metering risk remaining unaddressed and therefore carried forward in to the smart meter market. These issues can create unnecessary risks, lead to additional costs and drive unnecessary meter changes. There are two key issues in the existing meter provision market that need addressing to ensure maximum benefit for consumers from smart meters: meter asset tracking data and churn contracts (contracts under which the new supplier takes over the MAP rental).

#### *Meter asset tracking data*

Owners of meters need to be able to track their assets from installation, through change of supplier, to removal for reuse or proper disposal. Current arrangements in existing industry code governance and data systems continue to present significant data access failings. These failings translate into increased metering costs in two ways:

- Inefficiency costs from needing to manually intervene in obtaining routine meter tracking data, including staff costs, are translated into higher rentals; and
- The costs and loss of income from meters that cannot be traced are recovered across other meters in the owner's portfolio via risk premiums that again translate in to higher rentals.

While meter asset providers (MAPs) charge meter rentals to energy suppliers the costs ultimately fall to consumers.

The party arrangements in gas and electricity are very different. While improvements are required in both electricity and gas industry systems, the current facilities in gas are particularly unsupportive of efficient asset tracking.

MAPs will continue to press for changes in industry systems, via code governance bodies, to secure direct access to the reasonable tracking data they need in respect of the physical assets they own. However, we would urge Ofgem to provide its support to MAPs should they face obstacles in achieving fair outcomes.

### *Churn contracts*

Churn contracts, and specifically the absence of efficient arrangements to secure them, create risks for MAPs due to breaks in the flow of rental income. These risks can create higher costs for consumers, but perhaps worse they are likely to create unnecessary smart meter changes. We agree with Ofgem and DECC that smart meters that are technically suitable should stay on the wall through a change of supplier and that industry arrangements should support this. However the absence of efficient arrangements for churn contracts between suppliers and MAPs presents three issues:

- Breaks in meter rental flow through change of supplier affect financial returns and create the need for potentially unnecessary risk premiums that drive up overall meter rental charges (ultimately funded by consumers);
- Where the incoming supplier fails to pay MAP rental charges, or fails to agree terms with the MAP, the MAP would rightly seek removal of the meter for use elsewhere. This would result in unnecessary meter changes that would be detrimental to the customer experience on change of supplier; and
- Unnecessary meter changes not only lead to inconvenience for consumers, but also unnecessary site visits and the associated costs that will detract from the site visit saving intended from smart meters.

The Smart Energy Code should contain basic provisions to ensure that on change of supplier the incoming supplier pays the MAP its reasonable rental charges. Basic provisions could also be easily established to ensure that suppliers and MAPs agree terms promptly, including a disputes procedure. Such arrangements would not necessarily replace bilateral contracts between MAPs and suppliers, but would reduce costs, reduce risks and create clarity.

**Proposition 7: Electricity data processing and aggregation services should be procured centrally in order to reduce costs and support fast customer switching.**

DNOs' need for data for smart grids will eventually require a centralised, cost-effective and fast processing and aggregation service. But the cost-effectiveness of the smart grid itself will depend crucially of the adequacy and cost of procuring this data. Some improvements may not take place if the cost of acquiring data is too high.

**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.**

This seems sensible rationalisation.