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Ref: Sub835/hf

RPI-X@20 consultation – Networks
Ofgem
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9 Millbank
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The Knowledge Network

9 January 2009

Dear Ms Nixon,

Regulating Energy Networks for the Future: RPI-X@20: Principles, Process and Issues

The Institution of Engineering and Technology offers these comments in response to the consultation document issued on 27 February 2009. We have undertaken a high level review of the consultation document and are pleased that Ofgem is opening the debate widely for RPI-X@20.

We are also pleased that OFGEM officials are taking the opportunity to give a presentation on RPI-X@20 at the IET event “Building Sustainable Networks” in Birmingham on 15 June. Networks will be the enabler of the low carbon energy revolution and it is critical that Ofgem gives serious and open minded consideration to how this can be delivered. Of particular importance is consideration of how innovation can be introduced into a conservative industry in response to the changing role of the network in the low carbon economy.

In the attached annex we offer observations on the questions relating to Chapter 5, on the role of networks in delivering security of supply, environmental targets and social objectives.

As one of the world’s leading professional bodies for the engineering and technology community, the IET is technically informed but independent of network company, equipment supplier and service provider interests. As such it is well placed to provide an unbiased view.

This submission has been prepared on behalf of the Board of Trustees by the IET’s Energy Sector Panel, who are keen to meet with Ofgem to explore these issues further.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Paul Davies'.

Paul Davies
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Regulating Energy Networks for the Future: RPI-X@20: Principles, Process and Issues

ANSWERS TO QUESTIONS IN CHAPTER 5

Question 1: Do you have any views on our description of the sustainability challenges facing networks? Are these new challenges? Are the challenges different for electricity and gas, and for transmission and distribution?

The description is well considered, it might however be helpful to add the importance of:

- flexibility (in view of the many uncertainties ahead as demonstrated by the LENS scenarios);
- enabling market solutions (for example open systems)
- encouraging market responses (for example that the parties in the value chain are correctly allocated the costs and benefits of new services such as demand response)
- the need for fast and simple access (for example plug and play systems, with end users shielded from unnecessary complexity, as is done so effectively by the GSM phones sector).

Question 2: We present issues that we think we should consider when assessing how decisions about what needs to be done by the networks are incorporated in the regulatory regime. Have you any views on the list of issues? Are there others that we should consider?

We would reinforce the references to electric vehicles which are likely to be a far more fundamental issue than simply a new demand; for example

- each vehicle is likely to be a very significant charging load (perhaps 20kW or more)
- they are mobile so present demanding issues for modelling and forecasting
- the impact of them on the networks will be related to their location, to the state of charge of the battery, and the owner's preferences as governed by a range of factors from cost to risk aversion.

On the other hand they present perhaps the ideal interruptible demand if they can be aggregated and their value for system balancing correctly harnessed and rewarded. A further factor is that vehicle owners are likely to be highly sensitive to any 'service shortfall' from the network company as regards battery charging.

Question 3: We present issues that we think we should consider when assessing how the regulatory framework can ensure that any capital investment is efficient and is financed. Have you any views on the list of issues? Are there others that we should consider?

Not answered.

Question 4: We present issues that we think we should consider when assessing how the regulatory framework balances risk and rewards. Have you any views on the list of issues? Are there others that we should consider?

We would add in response to this issue that some degree of stranding is almost inevitable; in fact it is the very nature of innovation (in any sector) that there will be unsuccessful initiatives; the corollary is that if there are no failed projects there is probably insufficient innovation activity. It is therefore crucial that the regulatory framework rewards well managed innovation risk, and distinguishes between stranding due to poor project management and stranding due to 'legitimate innovation out-turn'; arguably some form of socialisation of standing costs should be provided for the latter as the costs arise in the interests of consumers (in that effective innovation must carry a proportion of failures in any portfolio).

Question 5: We present issues that we think we should consider when assessing how the regulatory framework can encourage innovation by the networks. Have you any views on the list of issues? Are there others that we should consider?

The IET notes many favourable outcomes from the IFI innovation incentive; we would encourage the strengthening of this incentive mechanism for the companies that demonstrate effective innovation capability and we note that some companies are spending to their IFI cap. It is also to be hoped that those who are spending far below their cap will not be rewarded with 'free-rider' rewards by the regulatory framework. If changes are made to IFI we would encourage Ofgem to hone the incentive rather than make major structural changes if this can be avoided; the sector has a long 'lead time' for adapting its processes and in some companies these are now appearing to be becoming well refined and professional. Regulatory stability will be likely to bring the best outcomes here.

Question 6: Are we addressing the right issues and questions in the 'Delivering a sustainable energy sector' theme? Are there any issues missing from this theme?

We compliment Ofgem on the comprehensive range of issues identified; the focus understandably is on what needs to be done and we would offer a view that it is important to not leave it late to consider how the changes will be implemented. The lead times in the area of technology innovation on networks run into years (for example new standards, proving of new technologies, and access to the networks all contribute to time-lines of many years to make material progress).

Question 7: Are there issues that need to be covered in RPI-X@20 that are not adequately captured by our two themes? Please specify what these issues are.

The inertia of the sector is very high (as is also experienced internationally) and change can be slow to be taken up and implemented on a scale that makes any material difference. There are many barriers that can be identified and some are referenced in your consultation document. One that can appear in any organisation or sector, is the risk of new initiatives failing because they are 'not invented here'. In this regard we would advise caution about developing "Ofgem's vision" and "Ofgem's thinking" (however well this is consulted upon) if this is not clearly in alignment with parallel thinking and vision in the network companies themselves. We suggest that both are needed and that Ofgem will be wise to encourage an effective parallel stream of action in the companies. There may be a role that is helpful to your goals through co-operation with bodies such as trade associations and the professional institutions.

You are addressing a highly important set of issues that lie on the critical path for meeting the sustainability objectives and we would be pleased to explore this matter further with you if you felt that the IET could be of assistance.

IET
24 April 2009