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Monday, July 24, 2006

Dear Sir/Madam,

Please find attached some comments relating to the proposed Transmission Price Control Review. These comments are sent on behalf of Professor D Kirschen, Dr S Rowland and myself (Dr I Cotton) from the University of Manchester.

Our first comment relates to the proposed innovation funding for electricity. Question 10.3 asks 'Is our proposed approach to funding for innovation appropriate and necessary?'

In the discussion of the innovation funding, a key phrase in the text is: "... concluded that additional measures were needed to protect the interests of consumers". We agree that It is clear that there is a need to show that innovation will protect the interests of consumers. This also means that if there is no innovation the interests of the consumers might be hurt. This would mean that prices might go up in the long run or that reliability might go down. The transmission system is likely to undergo a period of significant and rapid change due to the likely change in the patterns of generation and load. The assets of the transmission companies are also ageing and will need to be replaced at an increasing rate. Research is thus essential to:

-Gain a better understanding of these issues
-Develop the methodologies, techniques and tools to plan and implement the changes that will be required
-Be able to better quantify the costs and benefits of possible solutions and hence judge whether they are in the best long term interests of the consumers.

We also believe that essential research is not being carried out by commercial organisations such as manufacturers, consultancy firms and system integrators because the payoff for this research is too remote and uncertain to be justifiable within their business model. It also appears that these organisations often do not have the highly qualified and specialised staff that is required to perform the type of research that is required. While manufacturers are able to design very advanced products, they usually do not have the expertise to consider the system or network aspects of the implementation of these products.

It should also be stressed that some of the "solutions" that are or will be developed by manufacturers and research organisations based in other countries may not be directly applicable to the UK situation. It is therefore important for the transmission companies to gain the fundamental understanding of the issues that will allow them to judge what is most appropriate for their own situation. Gaining such an understanding requires an active involvement in the analysis of the issues and the development of solutions. It cannot be achieved through passive monitoring of work done elsewhere in a different context.

We therefore believe that the type of research that would be conducted under the IFI scheme that is being considered is essential to protecting the long term interests of the consumers. Failure to innovate in response to the major changes that the UK transmission network faces is likely to result in higher costs to consumers, a decrease in reliability and an inability to make efficient use of environmentally-friendly and other resources.

In terms of the mechanism of the proposed IFI scheme, we believe that the scheme should be structured in such a way that it will deliver high quality innovations that benefit the consumers. Since these consumers are ultimately paying for this research, we believe that they should have open access to all its results. It would seem desirable that some of this funding be coordinated with EPSRC to be able to take advantage of the expertise of this organisation in commissioning high quality research. The scheme must also ensure that the transmission system operator has the staff to be able to coordinate, support and implement the research. Without this, the research would be in danger of losing focus and ultimately not being of benefit to the consumer.

In question 11.4 you question the need for an innovation mechanism for gas. National Grid have (as Transco) previously funded Advantica. You have argued that this relationship has delivered more research and development in a commercial setting. This statement is probably true but only really serves to underline the need for good coordination of research and development. Advantica previously took on this role while there has not been an equivalent for electricity.

Delivery of research by a single commercial organisation does not necessarily deliver good value for the consumer. In addition, there is no reason why such an organisation could not receive funding via the transmission system operator via an innovation approach. Innovation funding should be subject to the same primary scrutiny as that delivered to the electricity sector, namely that it should be to protect the interests of the consumer.

We therefore feel that an innovation mechanism for gas is appropriate. This could still allow for funding to be channelled to a single organisation should that organisation deliver the best value for money but would also allow it to be moved to other organisations that may have more appropriate skill sets or deliver better value. The funding would, as in the case of the electricity innovation funding, require support to be given for personnel to manage the research.

Our final comment relates to your question 12.3 that asks whether environmental benefits should be promoted through separate innovation incentives.

We do not feel that there is a case for rewarding environmental benefits as a separate measure. Any work being carried out under the proposed electricity innovation measures (or gas innovation measures if introduced) should only be carried out should it be shown to be environmental beneficial (or at least not detrimental). The transmission system operators currently show a responsible attitude to the environment and fund research work that has environmental benefits. It is therefore our view that the environment is not the focus of a separate innovation scheme but should be an integral consideration in innovation measures for electricity / gas. In essence, a life-cycle costing approach taking into account environmental costs would be used to determine if research / development was in the interest of the consumer.

Yours sincerely,

Dr Ian Cotton