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Mark Cox
Networks - Distribution
Office of Gas and Electricity Markets
9 Millbank
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Dear Mr Cox,

STRUCTURE OF ELECTRICITY DISTRIBUTION CHARGES – PROPOSED DNO CHARGING METHODOLOGY CONSULTATION DOCUMENT: OCTOBER 2004

The Carbon Trust welcomes the opportunity to comment on Ofgem's consultation document "Structure of electricity distribution charges" dated October 2004. We are a not for dividend company set up by Government with backing from the private sector to accelerate the transition to a low carbon economy by helping organisations reduce their carbon emissions and develop commercial low carbon technologies.

Our comments focus on the strategic considerations which underpin the incentivisation of investments in a liberalised energy market. We have not commented on matters of detail relating to specific elements of the charging methodologies from the various Distribution Network Operators (DNOs).

General

We consider that whatever charging methodology is adopted should reflect the importance of the UK distribution network infrastructure as a long term, long-life strategic national asset which has an important part to play not only in the delivery of electricity to end users today but also in helping the UK make the transition to a low carbon economy over the decades to come. The charging methodology should, therefore, incorporate provision for the sustainable development of the asset – e.g. to

incentivise construction, maintenance and operation in a cost-efficient and carbon-efficient way not just over the short term but over the long term life of the asset. Applying charging regimes in relatively small time periods of a few years at a time does not always provide sufficient time horizon and regulatory stability, relative to the life of the asset, for DNOs to plan their investment programme effectively and efficiently. We therefore welcome the move towards longer term charging models, and that Ofgem is thinking now about longer term arrangements for electricity distribution. The update in Chapter 7 on ongoing work on charging methods in the context of the longer term framework is to be welcomed and it is hoped that further updates will be issued as thinking develops.

The context in which this review is taking place was set out in the Ofgem document "Electricity Distribution Price Control Review" published in June this year. Our particular interest is in the development of new charging methods for DNOs and how these can be devised to reflect and incentivise the improvement of energy efficiency and the reduction of carbon intensity of power delivered to consumers. We have the following specific comments.

Specific comments

(i) Transparency. We welcome the DNOs' decisions to publish their charging methodologies and we support Ofgem's intentions to make charging generally a transparent process.

(ii) Consistency. There should be a single nationwide set of principles to underpin charging methodologies and DNOs should prepare charging statements and methods which demonstrate clearly how they meet these principles.

(iii) The nationwide principles should include a consideration of ways to incentivise DNOs to operate their networks as energy efficiently and in as low carbon way as possible – e.g. by enabling investment provision for power factor correction equipment throughout the distribution network.

(iv) The charging methods should reduce the commercial and technological barriers that low and zero carbon power generators face when seeking to connect to the distribution network. It is hoped that the move away from deep charging to charging through the introduction of generator distribution use of system (GDUoS) tariffs will be a positive step. However, recognising that this is a new approach, and new approaches sometimes contain unintended and unforeseen side effects, we recommend the approach be kept under review and that Ofgem reserves its position to react promptly as necessary to rectify any adverse impacts.

(v) On power factor correction, we support Ofgem's position at paragraphs 5.10 to 5.12 that connected parties should be encouraged to operate their connections near unity power factor to ensure efficient use of the system and maximise available capacity. (In this context, we interpret 'efficient' to include minimizing avoidable carbon emissions resulting from distribution and use of reactive power.) However, we think Ofgem should go further than just being in favour of "including charges for low power factors for large

consumers". Ofgem rightly point out that action can also be taken to improve power factor correction on the network. We think they should seek to reverse the post-deregulation trend which has seen a diminution of transparent penalties for reactive power consumption and a consequent reduced level of investment in low voltage reactive power compensation measures. Ofgem should require DNOs to account for all reactive power and allow DNOs to set differential tariffs so as to create a pricing framework that drives investment that alleviates the emissions from reactive power. We therefore consider that DNO investment in power factor correction equipment should be allowed in the charging methodology. All DNOs would thereby be encouraged to invest as necessary in power factor correction equipment.

(vi) On generation tariffs at EHV (paragraph 5.19), we agree with Ofgem that there needs to be transparency to prospective generators at the development stage. That should be one of the charging principles underpinning the new methodology and it should be left to individual DNOs to demonstrate that whatever method they choose to use meets Ofgem's transparency principles.

(vii) On tie in minimum generation capacity, 15 years does indeed seem long in the first instance especially for new, smaller entrants to the generation market. This may disincentivise renewable power developers in particular. A shorter period – eg, the five years referred to in paragraph 5.21 – sounds more reasonable.

(viii) We support Ofgem's view at paragraph 5.28 that any items that relate to how customers are charged and the options available regarding use of system capacity on the network should be included in the methodology statement.

(ix) Lastly, we recognise the steps being taken on the supply side to make the new charging approach work efficiently but we cannot see any evidence of consideration of the impact of energy efficiency policies in reducing demand, the impact that might have on volume and "location" of kWhs on the distribution network and hence the need for network reinforcement, capital expenditure in new distribution capacity etc. Historically, of course, economic growth has outstripped energy efficiency improvements but in view of the Government's commitment to energy efficiency as one of the planks in its Energy White Paper (and given that energy efficiency savings of "around 30%" are mentioned in the Energy Efficiency Action Plan), it may be that some parts of the network will see lower volumes of power demand. Has any consideration been given to this?

We hope our comments are useful. We would be happy to discuss if you would find that helpful.

Yours sincerely,

DAVID VINCENT
Technology Director