

Our Ref: (S)950/hf

31 January 2013

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Dear Ms Guzeleva,

LOW CARBON NETWORKS FUND – ELECTRICITY DEMAND

Thank you for consulting on Ofgem's proposal to amend the Low Carbon Networks (LCN) Fund governance to allow DNOs to trial measures to shift or reduce electricity demand through LCN Fund projects.

The IET supports Ofgem's view that shifting or reducing electricity demand will provide DNOs with new options for managing network constraints in ways that are likely to be cost-effective and enable more timely responses to changing consumer requirements. We are of the view that there is considerable potential for developments in this area and our detailed comments offer suggestions for further refinement of the proposals to ensure that innovative approaches are not unnecessarily restricted.

In response to Ofgem's specific questions we would offer the following observations:

QUESTIONS

1. Do you agree that trialling electricity demand reduction or shifting through the LCN Fund could provide DNOs with valuable learning on their role in supporting the development of a low carbon economy?

Yes, this is a helpful refinement to the LCN Fund governance rules.

The IET would comment that such facilities may offer new solutions to voltage constraints as well as thermal/loading constraints.

We would expect learning in this area to not only encompass technical matters, but also consumer engagement and commercial aspects; it would be helpful to clarify this point as the non-technical elements will often be equally important for achieving outcomes that benefit consumers.

We would invite Ofgem to consider widening the proposed definition to include increasing as well as decreasing demand; from a network perspective a demand increase may, for example, be used to alleviate an export constraint in an adjacent part of the network.

Similarly we would invite Ofgem to consider widening the proposed definition to include shifting/varying generation as well as demand; from a network perspective this is likely to assist network management for both power flows and voltage constraints.

We would also propose that the wording of the proposals should be sufficiently flexible to ensure that storage device control is not excluded, whether acting as a power demand or source; we note that the optimisation of storage management may benefit from decreasing or increasing both demand and distributed generation sources.

We would also propose that where consumer demand/generation/storage is interfaced by power electronics (e.g. a DC/AC interface) that control of reactive power import/export should not be excluded as this is likely to be a technical possibility; furthermore there may be opportunities for waveform improvement through access to services from power electronic interfaces on the consumer side.

We note that there is considerable potential for benefits to consumers from electricity demand reduction or time shifting but have concerns that it is likely to be particularly challenging for the DNOs (as is being demonstrated through present LCNF projects) and may therefore be a low priority for their engagement. In view of this it would be helpful to consider developing enhanced visibility of good practices and lessons being learned, and targeted incentives.

Measurement of services delivered from the consumer side is likely to be problematic. National Grid has experience of this in the larger scale Ancillary Services market but auditable measurement devices may be impractical and uneconomic at the scale of residential properties. We would encourage exploration of this aspect at an early stage as it underpins the ability to reward customers for the services they provide.

2. Does the drafting proposed in annex 1 facilitate the trialling of electricity demand reduction or shifting through the LCN Fund?

The wording as proposed for Tier 1 is appropriate to address the basic requirement to permit '...shifting or reducing electricity demand...' as outlined in Ofgem's proposal. However we would encourage Ofgem to revisit the wording to encompass generation as well as demand, reactive power as well as real power, to facilitate increases as well as decreases, and to ensure that storage devices are not excluded.

We are of the view that this expansion of permitted actions is simple to incorporate and adds no risks or conflicts to the proposals. It can be expected to provide additional flexibility for the medium and longer term, so encouraging innovative approaches to the DNOs interacting with the 'demand side'. 'Demand side' would be better described in the future as the 'customer side'.

We note in Ofgem's consultation document that revised wording is proposed for Tier 1 of the LCN Fund; we would suggest that similar wording should be included for Tier 2 projects.

This response has been developed by the IET's Energy Policy Panel and takes into account feedback received from the wider IET membership.

If the IET can be of any further assistance on these issues, please let me know.

Yours sincerely



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