

10 June 2008

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Dear Erik

Long-Term Electricity Network Scenarios (LENS) – interim report and consultation

Thank you for the opportunity to comment on the continued development of the LENS project and the interim report.

We continue to be supportive of the LENS project and welcome Ofgem's efforts to co-ordinate a coherent approach to long-term projections specific to the network industry.

With regard to the specific questions raised in your letter of 14th May, I would comment as follows;

1. Do you have any comments on the energy and network scenarios for 2050 set out in the interim report, or on the method used to derive them? In particular:

1a) Do you agree that all of the network scenarios are plausible? If not, please explain why you think that one or more of the scenarios are not plausible.

We think that the overall approach to scenario development is logical and well laid out in the initial report. The development of themes is well-trodden ground through previous reports and workshops and the resulting three LENS themes appear an appropriate basis for scenario development. It is of interest to note that these themes are not discrete and have significant interplay on each other. The process by which the eight possibilities outlined in the report become four scenarios is broadly sensible however the discarding of option 7 seems inappropriate. In all cases, the level of environmental concern is considered to be the key driver of consumer participation and the level of government intervention. However the energy security issues that the report briefly mentions (p.41) may well be at least as significant in the 2050 timeframe. We suggest that it would be appropriate to include a scenario along these lines in the analysis.

The introduction of the fifth scenario in the report is interesting, but leads to some confusion. In many respects, the possibility that the path to 2050 will be made up of a variety of approaches, policy changes, dead-ends, cyclicity and inconsistency, rather than a relatively linear 42-year path is by far the most realistic scenario, but typifies a composite outcome rather than a distinct scenario in its own right. As such, it is difficult to see how this can be modelled without a more detailed projection.

Each scenario appears individually plausible, particularly when considered over a 40+ year timeframe. As noted above however, the process by which the scenario may be ultimately derived is likely to be a non-linear path. It will also be interesting to review the process of combining the energy and network scenarios together, such that network outcomes can be better linked in with a view of the energy future/s that drives it. The key test will be whether the resultant combined narrative passes the plausibility test.

1 b) Do you agree that the interim report demonstrates that the network scenarios, between them, span a suitably wide range of plausible outcomes for GB electricity networks in 2050? If not, what essential features do you think are missing and could these potentially be accommodated within the existing scenarios.

The proposed scenarios do seem to span a wide range of plausible outcomes and we are pleased to see that some of our previous concerns (eg regarding the potential impact of transport changes) have been addressed. There is a danger in developing too many scenarios to accommodate further possibilities, however we note that the scenarios generally consider the middle ground of the identified themes, and do not allow for the possibility of an extreme being reached on any one theme. We also note that there is no consideration of a fall in environmental concern from its current level (this being represented in scenario 8), which some commentators observe may still be ill-informed and alarmist. It may be imprudent to assume that the environmental theme only increases from today's level.

2. What are your initial views on transitional issues and 'way-markers' for 2025, in light of the scenarios for 2050 set out in the interim report?

The development of the 2025 way-markers is, in many respects, the most interesting aspect of the LENS work as it embodies the critical issue as to whether the long-term will be reached by incremental changes to the legacy position, or whether a revolution in current infrastructure provision will be required, along the lines currently being suggested by the IEA. It is always tempting to 'postpone the revolution' in an environment of five-year price controls but the assets being installed now are likely to have to endure the market, consumer and physical environment of the 2050s and beyond. As such, a view on the level of 'future-proofing' that it is viable to undertake now (as opposed to future retrofit or stranding costs) would be appropriate.

Regarding DNOs, we note that all the scenarios forecast a significant and enduring role for a local distributor (in contrast to the Transmission function) but vary in the pace at which a network operator changes into an active system operator. A number of the scenarios discuss the rise in function of energy service companies (ESCOs), which leads to the issue of the respective future role of the ESCO, supplier and DNO/DSO, and indeed if having such multiple agents is desirous and efficient from an industry framework perspective.

As discussed elsewhere in this response, even scenarios that appear more conservative projections from current position (eg Big T&D, Multi-purpose networks) will require a sustained and ongoing investment in innovation and new technology. A key role for the regulatory framework will be act as a facilitator of this rather than an obstacle.

3. What are your initial views on the most important issues for networks and for the regulation of networks that arise in light of the scenarios for 2050 set out in the interim report?

This is difficult to answer as there is no probability or quantification ascribed to any of the scenarios outlined in the report and in many respects is better answered following the publication of the draft report later this month. Some of the scenarios envisage DNOs operating outside of their current remit and effectively becoming players in the generation market as well as system operators. There seems to be a spectrum of decentralisation which sees the role of the DNO grow from its present position as it becomes more active in local system management and demand balancing, through to a

decline as the more extreme self-sufficient variants of microgrids are reached, whereby even an intra-regional distribution infrastructure becomes largely redundant. Determining an appropriate approach to the network regulation issues that this poses will require some long-term probabilities to determine the most appropriate near-term steps.

In all cases, there will be a role for network companies to facilitate or carry out new technology trials and innovation, and the regulatory framework will need to suitably accommodate this. Network development will also be contingent on other extraneous factors such as planning legislation which may determine the extent to which continuing large infrastructure investment is feasible.

4. Do you see benefit in a fourth (and final) stakeholder event for the LENS project, following publication of the June draft scenarios report?

In many ways, the draft report is more important than the interim, which is essentially an unquantified discourse on the modelling approach taken. It will be particularly important to understand the modelling undertaken that leads to quantitative results in the report and, as such, more detailed elaboration from KCL on the MARKAL modelling results & sensitivities would be welcome at a workshop. In terms of LENS actually informing any practical changes in the industry, it will also be important to debate the 2025 way-marks and the process by which these have been derived, in order that a sensible input can be made into 'RPI at 20', such that the resultant regulatory framework is fit for a further 20 years service.

As discussed above, it will also be important to review how the academic partners have merged energy and network scenarios to form overall narratives.

5. Do you have any other comments or views about the LENS project that you wish to raise at this stage of the scenario development process?

You will be aware from our previous responses that we have voiced disquiet about the lack of direct linkage between the output of this project and the DPCR5 process. We note your response to these points in the consultation and also the subsequent emergence of the 'RPI at 20' review, into which the LENS output is now being linked. To our mind, this seems a sensible outcome – the review of regulatory framework must take into account the potential changes to networks over the next few decades and potential energy futures that may emerge. Regulation over the next twenty years is likely to have to incorporate significantly more flexibility and uncertainty than the essentially cost-cutting paradigm that RPI-X effectively represented, and the output of LENS should be a key input to this.

Yours sincerely

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