Hitachi Submission to Ofgem

Ofgem Q1
Do respondents consider that the evaluation criteria have driven certain types of projects at the expense of other learning outcomes? If so, what are these learning outcomes and do they need to be specifically stimulated

Given the current portfolio line-up, we do not think that the evaluation criteria have unduly influenced project type. It is probable that the main influence on project type has been suppliers (and their existing product line-ups), network issues facing DNOs and the level of desire and ability (or capacity) within DNOs to launch projects.

T1 projects mostly have a clear focus, T2 projects have a heavy IT focus and Hitachi has gained the impression that in the case of T2 projects the IT-tail is trying to wag the power network dog. This could lead to poor/sub-optimal results (i.e. the IT industry supplying products it wants to sell rather than the DNOs deploying products that meet DNO needs).

Ofgem Q2
2. Do the evaluation criteria ensure that the LCN fund is compatible with future developments in smart grids

On a related note, the current evaluation criteria are not prescriptive i.e. they do not attempt to chart a "smart grid path" or define appropriate technologies. This may need to change given that an output of the LCNF should be a portfolio of technologies, systems and methodologies which have been shown to provide economically viable solutions to the "more-RES-in-the-network & more-low-carbon-loads-in-the-network" problems faced by DNOs now and in the future. To facilitate this, some sort of portfolio analysis using engineering and economic criteria could be undertaken (see box) to steer future T1 and T2 project proposals or indeed post-LCNF activity.

Ofgem Q3
We welcome your views and experiences on how we can enhance the requirements on learning dissemination for LCN Fund projects to ensure that industry gets the best value from them.

There might be some benefit from having a web site that allows DNOs to view the results (or progress) of different projects. There may also be a case for putting some structure to the results since it is likely that output from one project will mesh with/complement that from another. As an equipment supplier, Hitachi is keen to tell other DNOs about the results of the project(s) that it takes part in.

One market player that should also be informed of LCNF results are RES developers. Hitachi attended the recent round of meetings held between DNOs and RES developers. There is a case to be made to keep this latter community informed of project developments that could impact on their ability to connect RES to a given network. An overriding impression gained from attending the London meeting was of two groups that communicate very poorly with each other.

Ofgem Q4

We welcome respondents" views on the level of duplication across first and second tier LCN Fund projects and what changes, if any, we should make to the LCN Fund governance to address this duplication.

LCNF projects have a number of aspects which could be broadly classed as technical/engineering, business-related and application-related. From an engineering point of view (does this piece of kit work on the network – does it do what we think in simulations?) there appears to be a relatively low level of duplication, at the moment and in the case of T1 projects. In the case of applications Hitachi could see different applications that may use the same basic equipment (see box below for two examples). This is an aspect of the T1 (& T2 projects) which Ofgem may wish to bear in mind in the future.

In the case of T2s, the widespread use of consult-speak in project documents makes it difficult to understand what is going on (either technically or from a business point of view). Some of the T2 projects seem to be "all things to all men" i.e. they lack a focus. Set against that, the recent UKPN T2 addresses a clear issue (RES on 33kV and unit protection systems on overhead networks).

The Hitachi response to Ofgem's Q2 points to a portfolio analysis to address any issues with respect to duplication.

Ofgem Q5

We welcome views on whether there is merit in each DNO undertaking its own monitoring or whether this could be avoided if all monitoring data was held in a single place and accessible to all DNOs.

All DNOs want to get a better idea of what is happening on their own network. Furthermore, the assertion that in the UK "most power networks look the same" is as true as "all power networks are different" (see box confirming both views)

There is a case to be made to build up a database of networks types, the monitoring undertaken and the results obtained. As the database build up, the need to support yet more monitoring will decline. This leads on to the response to the second part of the question. Holding all monitoring data in one place has merit. It would be helpful if, subject to agreement it was also accessible to equipment suppliers and other interested parties.

Ofgem Q6

Given their wider scope, how can we best gain greater up front clarity in submissions on the learning outcomes of the larger, more complex projects?

There is too much "consult-speak" in project descriptions to the point that it is almost impossible to understand what is being proposed and what are the possible benefits for a given project (Thames Valley One is a case in point). Thus a first step for improved understanding would be rigourous editing of all documents. It would also save evaluators time.

With respect to "learning outcomes" – these could be more explicitly stated in project proposals. Expressed another way, the projects should explain clearly: "what results the project expects to generate and how will these be relevant for other DNOs".

Ofgem Q7
We would be interested to hear your views on your experiences of this website and other means of facilitating collaboration.

DNOs have been highly receptive to new ideas/new approaches. Hitachi found that the best way to contact DNOs was to pick up the phone and arrange a meeting. The ENA-organised mid-2011 LCNF conference was likewise very good (and should be continued).

Ofgem Q8
How should we design the form and content of guidance on carbon benefits so that they are comparable across projects?

Hitachi has yet to take part in a T2 and as such is not able to comment in detail on the issue of carbon benefits. However, with respect to extrapolating these out to 2050 (40 years away), this might work if it is applied to a whole system or approach. It is unlikely to work if applied to a technology particularly something with is largely IT-based (and which will be superseded in 10 if not 15 years).

Ofgem Q9
How can we improve the LCN fund first and second tier processes?

No comment on this question.

Ofgem Q10
10. How could we implement an additional stage to allow DNOs to amend submissions in response to comments from the Expert Panel or technical consultants without undermining the competitive nature of the process?

No comment on this question.

Ofgem Q11
We welcome your views on the suggested timings and whether or not the delay between project submissions and potential discretionary funding dampens the incentive.

No comment on this question.

Ofgem Q12
We would appreciate views on the easiest way to ensure a smooth transition from the LCN Fund to the new price control, whilst fulfilling the commitments we made on the LCN Fund in DPCR5 Final Proposals.

No comments apart from the observation that RES growth will be on-going over decades and a suitable R&D environment needs to be in place for DNOs to test new products and systems to accommodate this growth.