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Dear Gareth

Innovation and Registered Power Zones: Discussion Paper

We have read with interest your discussion paper, and are pleased to see that Ofgem are giving careful consideration to the encouragement of work to support the connection of distributed generation. Your paper provided much food for thought, and I will address your specific questions below.

However it is also worth making some general observations which reflect the views expressed in our reply to the Price Control consultation papers. We can see two potential models for the encouragement of research and development work to support a more innovative approach to distributed generation. One would see individual companies striving for competitive advantage in order to maximise performance improvements against regulatory targets. In this world, no specific R&D rewards are needed as the benefit comes from the broader price control mechanism and the efficiency incentives that exist within it.

The second alternative acknowledges that R&D is more effectively undertaken in a more collaborative way. Companies would combine together to promote projects, which would inform the DNO community more generally. In this model, intellectual property is shared and research risk is not borne by any individual licence holder.

As we understand your proposals, you favour the second model as the vehicle for achieving expansion of the 'development' phase in the innovation process, and the first model as the most appropriate for the 'demonstration' phase, although an adjustment is needed to reflect the commercial risks that would be taken.

Whilst we generally favour the price control regime providing strong signals to change behaviour, we are inclined to support your view that more direct intervention will be needed to stimulate immediate change. We also believe that R&D is often now conducted on a global level, and what is therefore needed is a national forum, able to access global research and to provide a meaningful contribution to major projects. This suggests that industry collaboration is essential. Your proposals may therefore be insufficiently explicit and fail to make clear that companies would be

expected to participate in a resource pooling exercise. Otherwise it will be possible for some to free ride on the research contributions of others.

Having a stronger base of GB funded research should also assist in the identification of demonstration opportunities that could qualify as Registered Power Zones. This would be an area where individual company action was essential, and the rewards should be sufficient to outweigh the commercial risks that would be taken. As with your proposals on DG investment incentives, the attractiveness will all come down to the price. It is important that pump-priming activities are made sufficiently attractive to accelerate development and that innovation is not deterred by an overly cautious approach from Ofgem.

From the above observations you will deduce that we see merit in your proposals for both IFI and RPZ, but we have comments on the details, which will emerge, in our responses to your specific questions below.

Specific Questions

Intellectual Property Question

- 1. Do you have any specific views on the management of intellectual property that may be created through the IFI and RPZ initiatives?*

As the proposals are set out, individual companies would commit a substantial proportion of the funding for IFI projects. If this did not bring with it ownership rights to the intellectual property it is difficult to see why they would invest. An alternative model would be for companies to collaborate through a Trade Association, which could hold IPR on behalf of its members. This would require some compulsion to participate or an acceptance that research results were only shared among participants.

We see similar issues with the IPR arising from RPZs, although in these cases it is more likely that single companies, (plus perhaps their partners in any zone) would retain the intellectual property.

Innovation Funding Incentive Questions

- 2. Do you support Ofgem's rationale for introducing the IFI? Do you consider the IFI to be aligned with consumers' interests?*

In principle we support the IFI and believe that Ofgem's rationale is reasonable. If an increase in research leads to the development of new technologies which in turn provide more efficient and effective ways of connecting DG, and providing that long term savings (be they financial or environmental) outweigh costs, then clearly IFI will have been in consumers' interests.

Although we accept Ofgem's view that the new schemes should not necessarily encourage development of in-house R&D expertise, it is inevitable that, in order to select and evaluate appropriate projects and manage the relationship with research

partners, a certain level of expertise will be required amongst DNO staff. Where this does not already exist it will need to be developed.

- 3. What are your views about the use of the DTI's R&D Scoreboard as a yardstick in this context? It would be useful if DNOs could quantify their company's current R&D Intensity and offer their views on an appropriate level for the next DPCR period.*

We have very limited understanding of the DTI's R&D scoreboard and we are unsure of the value of comparing R&D spend as a percentage of turnover. Traditionally DNOs have not tended to lead research but have been more active in implementation trials. It will prove difficult to identify any 'broadly comparable' companies from other sectors of the economy. Distributors contribute ideas and practical experience to the development of products as well as providing the network for trials of equipment. Therefore we believe that an appropriate level of intensity would incorporate some factor for internal resources in addition to directly attributed research spend.

Nevertheless we concur with the basic tenet of Ofgem's paper that the industry could commit more resources to development and demonstration of new technologies.

- 4. Do you think the three-category approach (A, B and C) and treatment of allowed funding is a reasonable balance in the interests of all parties? What should the value be of the proposed F1 and F2 factors?*

We are concerned that Ofgem's proposals may be becoming too complex, especially if all projects are envisaged as being managed through a central body. In that model we would prefer to see a simple initial mechanism that allows additional income to be raised to fund research projects. If alternatively, companies are to work separately and retain intellectual property rights, rewards need to be greatest where risks are greatest (for example because work is undertaken to consider an alternative to some existing practice, where there is no certainty that the new approach will prove to be more effective).

- 5. What are your views on establishing good practice for the management of innovation and could such a framework be adopted commonly across the industry?*

We agree with Ofgem that there needs to be clarity over the criteria to be used for funding the effectiveness of 'management of innovation'. A process that follows the pattern of the Asset Risk Management survey would be an appropriate way to develop such criteria.

- 6. Should the IFI percentage cap be varied between companies according to performance or some other criteria?*

We believe that all companies should be subject to the same percentage cap in the initial stages of the scheme. In future, once it becomes clear that the mechanism is working successfully, then it may become more appropriate (to the extent that companies initiate projects individually, rather than through a Trade Association) to

reward those with more successful R&D programs with either an increased cap or enhanced funding percentages.

Registered Power Zone Questions

7. Do you share Ofgem's view that DG is likely to be connected more efficiently if innovation and new solutions/technologies are employed?

Undoubtedly new technologies and solutions will improve DG connections but it is not easy to quantify the effect. However this is more likely to be important where DG projects interact. This will be less of an issue in the period to 2010, especially for larger renewable distributed generators. As CHP, and particularly micro-CHP, becomes more commonplace, the 'fit and forget' approach will become less appropriate. Innovation will be needed to find efficient solutions.

8. Do you have a view regarding the annual RPZ MW capacity and numbers of projects that might be appropriate per DNO licensee per year, and whether the number should be allocated by the suggested gold, silver and bronze categories?

The specification of RPZ is still unclear. We note that the proposed capacity limits seem to rule out their use in respect of any substantial renewable generator. We had envisaged that an RPZ could be defined on a wider basis, where this allowed the interaction of a number of sizable generators to be considered. It seems to us that the RPZ concept has been developed with CHP rather than renewables in mind. If this is the case, there may be merit in allowing a larger number of small projects in any one year. We do not see why projects should be limited by the (arbitrary) split between gold, silver and bronze, that you propose.

9. Should the premium return be common for all RPZs or should it be related to the innovative content of the project? If the latter is considered appropriate, is the gold, silver, and bronze approach helpful, or can you suggest a better alternative?

Relating the premium return to the innovative content of a project would involve a subjective decision. As in our comments on IFI, we would prefer a link to the risks involved. This would also be subjective and it would probably be more appropriate for the premium return to be common to all RPZs. However, if, following consultation, Ofgem maintain that a variable return is worthwhile we feel that the proposed silver and bronze rewards are too low to incentivise DNOs.

10. Is it practical to base financial rewards on a project meeting or failing to meet performance objectives?

We agree that rewards should be higher for projects that meet performance objectives. However, innovative solutions may be more costly than conventional approaches and DNOs may feel that the risk of using innovation is too great if there is no guaranteed reward. It is our view that there should be some, albeit lower, reward for DNOs who demonstrate that they are using innovation to develop solutions, even though this does not fully meet performance objectives.

11. Do you think a mechanism relying on an enhanced £/MW driver to provide a premium return is appropriate, and if not what alternative could be considered?

The idea of boosting the rewards from the normal DG incentive is attractive because of its simplicity. However it is worth considering what is the intention behind the RPZ. Is it to allow more connections or to make better use of what connections are made? This may influence the choice between £/MW and p/kWh drivers.

12. What lifespan do you consider should be assigned to an RPZ and to the premium return?

We believe an RPZ should have a sufficient life to meet both its research goals and satisfy the needs of any partners. This is likely to imply a life related to the assets involved, either generation or distribution. Ideally the premium return should last as long, but, if not, the life should be clearly known so that proper NPV calculations can be done from the outset.

13. What premium do you consider to be appropriate to encourage innovation in DG connections and how could this be justified?

There can be no simple answer to this question. However the fact that Ofgem recognises the need for additional stimulation of innovation is a sign that a substantial enhancement of rewards is needed. In our view, pump priming the market need not be expensive even if the initial rewards for specific jobs are very high. An overly cautious approach will just result in delays in DG development.

14. Do you have a view on how, in principle, the boundaries of RPZs might be defined? Should they, for example, encompass a physical area, rather than simply an electrical node? Do you see potential, in design or operation, for outsourced specialist services?

We can see opportunities to define RPZ in terms of either technical or geographical features, depending on the nature of the project. Initially it may be easiest to define projects around particular electrical installations (like a single generator or discrete network) but this should not rule out wider boundaries for projects that might have a larger commercial content

15. In your view, how should the RPZ initiative be funded?

We think the RPZ should be funded from the general customer base. This should include contributions from both demand and generation connections. It would not be appropriate to recover any 'reward' due to an innovative DNO only from the customers within an RPZ. In line with our previous arguments, we would prefer to find a mechanism for spreading costs across all GB customers.

General Questions

16. Can you suggest alternative regulatory mechanisms that might better deliver the stated objectives of the IFI and RPZs?

This is discussed in our opening remarks. An alternative would be for more powerful and certain incentives rewarding the delivery of desired outcomes. In such an environment, companies would be more encouraged to develop their own innovative initiatives.

We have previously suggested to Ofgem a scheme to share the costs of DG connection equitably across consumers UK wide. This could be a refinement on the funding options in Q15 above.

17. Would it be helpful to consider whether IFI and RPZ arrangements could be introduced on an interim basis, ahead of commencement of the next price control period in 2005?

We agree this would be a useful stimulus to innovative thinking. Some means of logging up the benefits due to companies would have to be identified.

I hope that you find our comments helpful. We are anxious to help Ofgem in its work in this area and would be happy to have a discussion with you before your proposed workshop later this year. Please contact me if you would like to take forward this idea.

Yours sincerely

Mike Boxall
Head of Electricity Regulation