Innovation and Registered Power Zones
Comments from the Renewable Power Association

Introduction

The Renewable Power Association welcomes the proposals for both the Innovation Funding Incentive and Registered Power Zones. Our comments fall into four parts.

1. The key issue of how any costs of these proposals are recovered.
2. Specific remarks about the Innovation Funding Incentive.
3. Comments on the Registered Power Zones proposal.
4. Answers to the list of questions at the end of the document.

Recovery of costs

In the long term both the IFI and RPZs should reduce costs or lead to a better service for customers. However, not all investments in innovation will lead to direct savings and there may, at least initially, be a requirement for additional funding, so a key issue is how this is raised. Registered Power Zones have three properties that may lead to additional costs.

1. Connections in a RPZ could be more risky for the generator in terms of quality of supply and timescales – so that it will either want a lower price and/or other compensatory arrangements, such as liquidated damages which are contemplated in the consultation, which may be an additional cost for the DNO.

2. The technology used in RPZs may initially be more expensive than conventional solutions.

3. The DNOs will be allowed a higher rate of return than normal if the outcome is successful.

Given that DNOs will be allowed a higher than normal rate of return on successful RPZs (because they have higher than normal business level of risk) it is reasonable for them to meet any additional costs arising from category 1. We support the concept of the DNO taking the risk for this (and getting a higher rate of return as compensation).

As regards cost categories 2 and 3 these should reduce over time as the technology becomes cheaper and innovative solutions lead to improved efficiency of connection and operation. Although a higher rate of return is being allowed it may be on a lower cost than would have been the case for conventional reinforcement measures.

However, given that there may be excess costs in the short term (i.e. costs in excess of those that might be incurred for connecting a generator using conventional techniques and earning a normal rate of return) there are two questions that need to be addressed.

1. How should the costs be split between demand and generation?
2. Should there be a national or DNO-based spreading of costs?

We believe that any "excess" costs should be recovered directly from consumers. The reasons for this are:

1. The objective is to encourage more distributed generation to connect. Charging the excess costs to generators will clearly frustrate this objective.

2. If the costs chargeable to the connecting generator are (initially) higher than those of a conventional solution the generator would opt for the conventional solution.

3. Spreading the cost amongst existing generators (who receive no benefit from it) would be unreasonable as they would have no route for recovering the excess cost and have already paid the full cost of connection. Charging new and potential generators (even assuming that there is a method by which this could be done) would not be consistent with encouraging distributed generation.

4. Ultimately, customers benefit from the increasing the amount of clean/green energy arising from Government policy. As the cost would, generally, cascade down so that the end customers pay anyway, it seems sensible and efficient to recover the cost from them directly.

In respect of the second question as, ultimately, all consumers will benefit through lower costs in the longer term then, to the extent that the excess costs vary between distribution operator regions, we believe these excess costs should be recovered on a national basis. Not to do this would be unfair to customers in areas where there may be greater scope for innovation because it is attractive to distributed generation (through, for example, close proximity to a renewable fuel source such as wind). Although perhaps not a matter directly for Ofgem it is very important that customers in these areas are not disadvantaged given the need to promote public acceptance of generation in their locality.

It is appropriate at this point to respond the points made in paragraph 5.46 of the current Distribution Price Control Review consultation. It is clear that the long term

benefits of both the Innovation Funding Incentive and Registered Power Zones will be for the consumer as consumers will be the ultimate winners from enabling distributed generators to connect more easily. It is also both inappropriate (for the reasons mentioned above) and unworkable for prospective distributed generators to fund innovation by DNOs.

The Innovation Funding Incentive

It is worth considering the reasons why DNOs seem to spend such a small proportion of their turnover on innovation. It is important to establish whether it is a "failure" of the current regulatory regime or it is because innovation is genuinely not worthwhile and the levels of innovation would be no higher if the businesses were working (hypothetically) in a free market competitive environment. If the latter is the case then additional sums spent on innovation will not be to the benefit of either customers or generators. Having said that the sums proposed are modest and it is not unreasonable to assume that it is because the current regulatory regime puts so much pressure on operating expenditure that expenditure on innovation is so low and that a reasonable level of such expenditure is in fact higher. As such we support the proposals.

Our general feeling is that the process described is highly prescriptive and could become overly bureaucratic. This is not likely to create an atmosphere in which innovation will thrive.

It is noteworthy that you consider category C type projects (fundamental research) least deserving of funding. Normally it is this type of work with least obvious immediate commercial potential that requires most support if it is to take place. However, we agree with Ofgem that this type of work should not receive specific funding, but this is because we consider that this type of work is more appropriately funded by manufacturers or through the research councils and similar organisations.

Registered Power Zones

The RPA supports the concept of Registered Power Zones. We believe that although their emphasis is on the use of new technology the importance of including (within the bronze category) schemes that may use no new technology but nevertheless facilitate the connection of distributed generation should not be underestimated.

The third business driver in the introduction "To signal to potential generators and other interested parties a DNO's development intentions or network capabilities at a particular location" makes it clear that developing a part of the network, possibly ahead of "need", and signalling this to generators is an important part of the RPZ concept. Paragraph 3.5 (ii) also envisages RPZs with little or no technical innovation.

We disagree with the suggestion that Registered Power Zones do not address the issue of forward investment. Although this is addressed briefly in the main price

control consultation there is nothing there about how to identify this and therefore apply the suggested hybrid regulatory treatment to it. One way to flag up to potential connectees the opportunities, and also to get "sign off" from Ofgem that such an area is getting forward investment, would be by designating it a bronze Registered Power Zone. Such a designation appears to be an ideal use for the bronze zone concept and also saves developing another mechanism under the main price control for identifying areas for regulatory treatment that would, in effect, be identical to that of a bronze zone.

This leads to the question of how to identify Registered Power Zones. In terms of process we feel that the initiative should come from the DNO, which should approach Ofgem with a proposal. It should generally be backed up by some sort of statement of intent from one or more generator. In some cases this may be as firm as a connection agreement conditional on a certain RPZ status being granted. It will then be up to Ofgem to confirm registration or not. Clearly the degree of firm commitment from generators as well as the degree of technical innovation should be factors that determine the risk and hence the type of zone registration that is granted. We consider that the same process (leading to a bronze zone registration) should be used for schemes with little or no technical innovation but that will, through forward investment, enable a significant amount of distributed generation to be connected.

With respect to the RPZ factors applied to the £/MW driver for silver and bronze schemes, clearly these depend on the value of the basic £/MW driver. As we have suggested a relatively low basic £/MW figure in our response to the price control consultation, it may be appropriate to have relatively high factor for gold, and to a lesser extent silver schemes, to reward the risk adequately. This is predicated on the assumption that this premium is not passed on to either the connecting generator or smeared across any other category of distributed generation. We would also note that it should be made clear that for bronze schemes the RPZ factor is 1 (i.e. they do get the basic £/MW revenue as well as the below WACC return on investment).

Because the basic return allowed is below the DNO cost of capital it is not thought to be a serious risk for DNOs to start a proliferation of schemes that are unlikely to result in significant new generation connection. We therefore do not see the need to limit the number of schemes that a DNO can register each year or the capacity that can be connected under them. If there were limits it would certainly be inappropriate for these to be the same for all DNOs. Equally restricting the number of schemes in each category would seem to be overly restrictive. Instead we suggest that adequate protection should be afforded by Ofgem's approval procedure, combined with the disincentive expounded above for DNOs to put forward schemes that are unlikely to have a successful outcome.

Questions in section 4

1. Intellectual Property that arises from the IFI and RPZ initiatives should be vested in some way in all DNOs in the United Kingdom. It may be necessary to set up a special purpose company for this purpose.

2. We support the introduction of the IFI initiative but are concerned that the degree of bureaucracy involved may become too great and could stifle innovation.

3. We have no comment on the use of the DTI's R&D Scoreboard.

4. We agree that equal funding proportions of about two thirds for category A and B innovation, with none for category C are appropriate.

5. Clearly innovation needs to be well managed but we repeat our concern that an over proscribed process will stifle innovation.

6. It may be worth increasing the amount of innovation funding for companies that have demonstrated success in managing successful innovation.

7. In some cases, but not all, generators are likely to be connected more efficiently if new solutions are used.

8. As stated earlier, we do not believe that a cap on RPZ schemes and generation connected is needed or appropriate. A common cap between companies also seems inappropriate as is splitting any cap between categories of scheme because we consider that it is impossible to predict in advance how many RPZ schemes may be justified.

9. We agree that the gold silver and bronze concept is useful. Categorisation should be related to the level of risk on future connections as well as the technology employed.

10. Provided the performance objectives of a project are clear, transparent and reflect an equitable risk for the premium being proposed, then we consider that it is appropriate to base financial rewards on meeting those objectives.

11. We agree that an enhanced £/MW driver is appropriate to reward additional risk.

12. A lifespan of between five and ten years should be assigned to a premium return from a successful RPZ.

13. Clearly the premium justified relates to the risk of the project. The basic £/MW figure is also crucial to the appropriate premium on it. As we have advocated a relatively low basic £/MW figure a relatively high premium for projects with higher risk would be necessary to get a satisfactory return if the project was successful. This is predicated on the assumption that any premium is not passed on to either the connecting or any other generator.

14. The boundaries of Registered Power Zones should be based on a defined part of an electrical network but be able to accommodate new connections that were physically close enough to be able to connect to that network.

15. As discussed, the excess costs of an RPZ (these are only the additional costs over what a generator would pay to connect without a scheme and assuming a normal rate of return) should be spread over the customer base, preferably on a national basis if there is any significant variation between DNOs.

16. We support the concept of IFI and RPZs and have no better alternative to suggest.

Our view on interim arrangements before April 2005 is that it would be too complex to set up the schemes before then. We would, however, strongly support arrangements being put in place now to ensure that the schemes can “go-live” as soon as the new price control comes into effect. As stated in February, we support DNOs being able to recover costs associated with the connection of generation to their networks that were not envisaged at the time of the last price control review. With the current “deep connection charging” methodology, even if annualised payments are allowed for the last two years of the present price control, there may not in general be significant additional costs that are not charged directly to the generators concerned, irrespective of how much additional generation is connected.

If it is possible to recover some costs from sources other than generator connection charges then we believe it could be allowed as additional revenue for the DNO, given that it was not envisaged when the current price control was set. An example may be where accommodating the generator precipitates an optimum reinforcement that is also of benefit to demand or can not be attributed to a single generator.

It is also possible that investment in facilities to allow for more active network management, for example, are initiated before the new price control period starts. We would regard it as entirely reasonable that DNOs be allowed additional revenue for this type of additional general enabling investment.