RPA response to Ofgem consultation on

Transmission Investment for Renewable Generation

14th June 2004

The Renewable Power Association is a trade association open to all companies supportive of the UK renewable energy industry. As well as biomass, biogas, tidal, wave, solar, marine technology, wind, hydro and energy from waste generators, there are members who specialise in the production of fuels and heat from renewable sources. Members also include equipment and service providers to the renewable energy industry, such as law firms, consultants, financiers, equipment manufacturers and supply agents.

The perspective of the RPA is that of the producer, regardless of fuel source and technology. We concentrate upon generic issues and common barriers whilst advocating a diverse range of Renewable Power development.

Introduction

The Renewable Power Association (RPA) agrees that it is necessary to ensure that Transmission Operators (TOs) to invest prior to the next price control review, to facilitate connection of Renewable Generation. The RPA also agrees that as investment would be required across all three Transmission networks in Great Britain then any adjustment mechanism must apply to all three Transmission Operators.

General observations

At present new connections in the North of Scotland are being limited by the Transmission Operators, due to the number of applications contracted in relation to the capacity "available". Where these connections are allocated to projects that do not have other consents in place, it has the unfortunate effect of tying up capacity and preventing the immediate development of renewable energy schemes with a result of pushing up the price and the cost to consumers. The RPA is concerned that in April 2005 under BETTA this situation could apply to more areas of GB that just the North of Scotland.

The RPA believes that a mechanism should be found whereby new applicants could be connected. The current "de facto" moratorium does not help get a true picture of possible demands on the system.

The RPA believes it is important to avoid unnecessary investment in the first place. Whilst we recognise that "central planning" approaches are not seen as the way forward there are undoubtedly benefits from, for example running the older thermal capacity in Scotland in conjunction with wind power. For

example the thermal plant could run when wind output is low. This way older plant provides a back up for wind on cold/still days and new transmission capacity is not required.

The RPA recommends that such approaches are at least considered.

In the RPA response to "Transmission losses in a GB electricity market" we argued for cost reflective pricing and that this should tend to ensure that developments in remote areas where transmission infrastructure costs are high are not subsidised by projects closer to demand.

The RPA recognises that there is a tremendous onshore wind resource in Scotland, but also suggests that the current level of interest has been partly driven by the demonstrably more favourable planning climate that has prevailed in Scotland since the publication of the NPPG 6 in November 2000.

There are other areas in the UK, for example the South West, where there is an abundance of capacity on the grid.

The main driver for the anticipated transmission investment is onshore wind development in Scotland. The RPA believes that we should be striving for a diverse portfolio of renewable generation, both in terms of geographical location and resources developed.

Were the RPA's recommendations for the 2005-6 review of the Renewables Obligation to be implemented, we believe that the potential for biomass would be increased significantly.

Ilex's SCAR report[1] showed that the lowest system costs would be obtained if the additional renewable generation "required to meet higher targets came from an equal mix of predictable baseload plant, such as the biomass technologies located thought Great Britain and the closer-to-market interruptible generators, such as wind, dispersed around England and Wales".[2]

The RPA is hopeful that the implementation of PPS22 will result in a more positive planning climate in England, which will hopefully encourage more development activity south of the border.

The responses below correspond to the issues identified in sections 7.7 and 7.8 of the consultation document.

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[1] Systems Costs of Additional Renewables, Report to DTI, October 2002. Ilex in association with UMIST.

[2] The study looked at the costs of taking renewables beyond the 10% target, to a 20% level. The cost was roughly 2/3 lower under the scenario in quotes.

Should the revenue deriving from the adjustment mechanism be based on the funding costs of projections of investment over the period 2004/05 to 2006/07?

The RPA believes the adjustment mechanism should only apply until the next price control period comes into force in 2007/08. Reasons for this include: -

- Concern that the expenditure identified in each year may be delayed due to planning issues, and hence any mechanism should be flexible enough to adjust to the real costs as incurred rather than future predictions. A mechanism that only applied for a short period would allow this.
- Because the most certain costs incurred during this period will be the smaller costs of the planning phase of the reinforcements. The construction costs incurred during this period will be less certain. Therefore it is probable that the majority of the construction costs will be encompassed within the main price control review timetable.
- To allow time to determine the impact of BETTA and the separation of the Transmission Owner and System Operator functions in Scotland on the constraint management and price control of the GB system.
- If the de facto moratorium is lifted, and the system is allowed to evolve unfettered, there will be time to assess the actual costs of constraints that arise. This will allow constraint costs to be considered with more certainty in the next price control review, and reduce the risk of investment in stranded assets.
- To allow time to assess the impact of the Energy Bill proposals for offshore network assets to be transmission licensed.

Whether outputs should be identified to assist in establishing whether licensees have delivered investment that is fit for purpose, and any suggestions as to what sort of outputs would be most appropriate.

The RPA believes that the adjustment should be a hybrid mechanism. Comprising: -

- a lump sum element which would give the TOs a guarantee that at least a proportion of their investments would be recouped, and which is consistent with the current price control CAPEX arrangements.
- as well as a revenue driver based on additional generation capacity connected to the network. This would incentivise the TOs to target their reinforcements in areas that would facilitate the greatest number of new connections as well as encourage innovative solutions to connect new generation without incurring the expense of actual network reinforcement.

For this mechanism to work however the capacity connected incentive would need to be carried forward into the price control review to allow TOs to

recoup their incentives once the network upgrades are commissioned (likely to be beyond 2006/2007).

Whether there is a mechanism that could be adopted that would deal with the uncertainties created by the requirements on licensees to obtain planning consents for new investment.

The RPA agrees that some method of claw back should be put in place to recover any lump sums that are allocated as part of the mechanism but not invested, due to delays in the planning process, for example.

Whether the cost of capital should be consistent with that used in setting the main price controls.

The RPA believes that the cost of capital allowed in the current price controls should be sufficient to incentivise the TOs to invest in network upgrades, and that any further incentive would only unfairly penalise consumers.

What are the best approaches and sources of information on the likely level and pattern of renewable generation in Scotland.

The RPA agrees with the sources of information listed in Section 5.7 of the consultation for the likely level of renewable generation, however we recommend including the number of projects receiving planning consent, and the number of projects who secure finance as very important indicators.

What assumptions should be made about the operation of existing conventional plant in Scotland.

The RPA agrees that there is considerable uncertainty over how the conventional and nuclear plant in Scotland will operate as more renewable base load generation comes online, the GB market is introduced, and the EU emissions trading scheme comes into force. Allowing the system to evolve, rather than imposing any form of moratorium on new applications would allow real experience to be gained as to the possible generation mix prior to the next price control review.

Assessing whether transmission upgrades are economic on the basis of assessing the expected difference in the annual costs of constraints that are likely to occur with and without the network upgrade (assuming broadly cost reflective

transmission charging) against the annual cost of financing and maintaining the transmission system upgrades.

As in points 2.1 and 2.6, a lifting of the current moratorium on new connections in Scotland would highlight the extent of the actual constraints on the system, and allow a more informed analysis of the economic benefit resulting from the network upgrades.

The best approach to assessing the expected costs of reinforcement schemes.

The RPA believes the best method for assessing the expected costs of the reinforcement schemes is by benchmarking the forecast costs against similar schemes across the European Union.

What changes if any might be appropriate to NGC's charging methods to take account of the increasing levels of renewable generation?

The RPA believes there is a case for more intelligent TNUoS charging principles which would help to reduce the risk of unnecessary network investment.

A hypothetical example being for say Longannet and an equivalent capacity of wind generation to effectively share the same network capacity with Longannet being used to generate electricity only when the wind is light. It would also therefore only pay a proportion of the full TNUoS charges based on its actual use of system. Such a scenario could remove the need for expensive upgrades required to meet 'peak' network usage i.e. simultaneous peak generation by new renewable generation and existing nuclear and thermal plant.

Whether generators that trigger significant investment in the transmission system should be required to commit to longer-term access arrangements to reduce the chance of assets being stranded.

The RPA believes that the security bonds required by Section 2 part III of the Connection Use of System Code provide the initial commitment to access the network, and remove the risk of stranded assets in the short term, while the substantial investment required to build and connect renewable generation shows a long-term commitment to utilise the network assets. Therefore to impose a financial requirement on new generators to commit to long-term access would be both unnecessary and unfair, unless it is also applied to conventional and nuclear plant, and would therefore constitute a disincentive for renewables to connect to the system. Indeed it may be argued that as most renewable projects are relatively small compared to conventional and

nuclear generation sites, then the risk of stranded assets is substantially reduced.

Should access rights be allocated on a first come first served basis or whether all generators should be treated consistently.

The RPA does not support the introduction of transmission access rights or a 'transmission access auction' as this would increase uncertainty within the industry and again prove a disincentive for investment in new generation, and hence the connection of renewables.

How to ensure that distribution connected generators exporting energy and/or increasing flows on transmission networks make an appropriate contribution toward the cost of transmission networks.

The RPA agrees that the transparent and equitable charging for both distribution and transmission use of system is a complex issue, which due to the timeline required for the implementation of the adjustment mechanism and the requirement to keep such a mechanism relatively simple, should not be addressed as part of this consultation.

Summary

The RPA endorses Ofgem's desire to encourage investment in the transmission network ahead of the next price control review, and that an appropriate mechanism should be put in place to incentivise transmission operators to continue the planning phase of the reinforcements, but, due to planning delays, would expect the bulk of the reinforcement costs to be covered by enduring incentives within the next price control review period.

The RPA also believes that there should be no disincentive to new applications for connection. Allowing the system to evolve as described above, will enable the industry to make a truly informed decision at that price control review about the real demand for generation capacity and therefore the extent of network upgrades and reinforcements required to facilitate the enduring GB market and the Government's renewables obligation.