

Transmission investment and renewable generation (October 2003)

Response by SP Transmission Ltd.

Introduction

SP Transmission Limited (SPTL) welcomes this consultation on transmission investment and renewable generation. The level of interest in renewable generation within the SPTL area has been increasing steadily for some time, to the point where there is now in excess of 4500MW of potential renewable generation at various stages in the process between initial inquiry and final connection. These enquiries have come from a large number of developers across a wide geographical area.

Background to this consultation

The last Scottish transmission price control was carried out during a period of increasing interest in environmental issues affecting transmission activities. There was considerable international pressure from Kyoto and a drive from the Government of the day to drive the economy forward within a sustainable framework. ScottishPower predicted that these factors would have a dramatic effect on the Energy Sector, with the promotion of CHP and renewables having a significant impact on the network.

At that time we saw the Anglo-Scottish interconnector as being the main barrier to connection of renewable generation in Scotland. We saw the existence of unsatisfied demand for export capacity and anticipated that further new generation developments in Scotland were likely to add to the demand for more export capacity. As a result, ScottishPower instigated discussions with NGC and Scottish Hydro-Electric to establish the feasibility of a further interconnector capacity upgrade, by 300MW to a total of 2500MW.

The intention was to make this new capacity available through access arrangements which would open up opportunities for new users and which would sit on an equitable basis alongside existing access arrangements. This investment was included within our business plan submission at the review but did not form part of the final price control settlement. Since then the interest in renewable generation has exceeded all our expectations.

Transmission's role in meeting UK targets

We recognise that SPTL has a part to play in the achievement of Government targets for renewable energy. Transmission licensees do not control the amount of renewable generation seeking to connect to the electricity network, however, the ability of the network to carry the associated energy to users will clearly have a bearing on the amount of renewable generation that we can ultimately connect. Certain parts of the SPTL network have already reached the point where no more new generation can be accommodated.

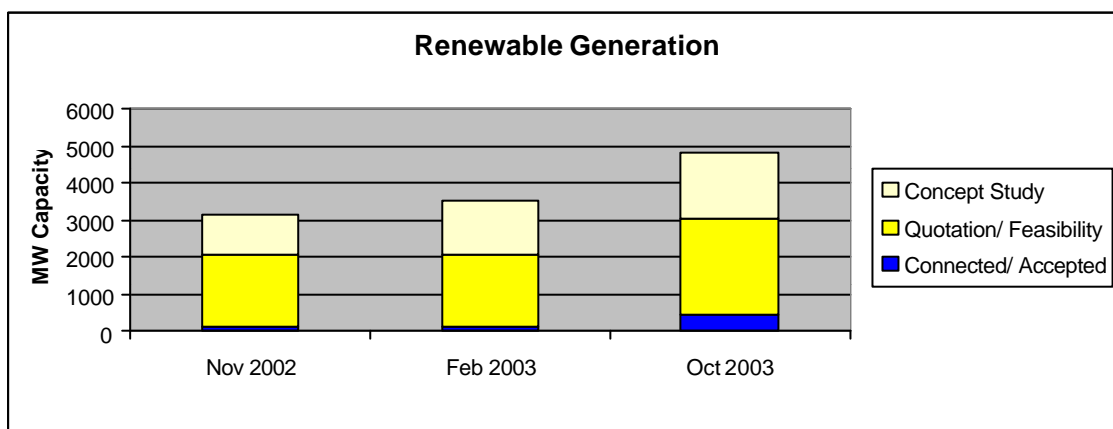
In seeking to facilitate competition in the supply and generation of electricity we do not want the SPTL network to constrain the amount of renewable generation that can be accommodated in Scotland. However, we must also develop the network in an efficient and optimal manner such that the impact on prices paid by users is justified

and the overall environmental impact of the network is acceptable. Clearly there is a balance to be struck between competing factors.

SPTL has proposed network solutions to deal with the pressures it currently faces but we recognise that the final outcome will be determined by external factors. First, the planning regime will be important in terms of how it deals with the question of “need” for transmission line upgrades. Second, and equally important will be the extent to which the regulatory regime provides adequate funding arrangements for transmission owners with acceptable levels of risk. We are pleased that the latter is being progressed towards conclusion via this consultation.

Developments in the SPTL area

In addition to the high level of activity in the SHETL area SPTL is experiencing levels of connection activity similar in magnitude. The chart below shows that the total capacity of new connections at the various stages in the new connection process is now in excess of 4500MW and that the rate at which this figure is growing is high. In view of this, and the high levels of activity in SHETL's area, We are actively progressing analysis and design work.



The analysis and design work has concentrated upon providing sufficient infrastructure to cope with the Stage 1 case as identified in the Renewable Energy Transmission Study (RETS). It has also been necessary to consider upgrades required in the South West of Scotland, which formed part of the RETS Stage 2 (4 GW) case. The reason for addressing part of the Stage 2 work now is that the current infrastructure in South West Scotland cannot accommodate any new generation connections. Infrastructure investment is therefore required simply to connect new generation. Ultimately this infrastructure will form part of the RETS Stage 2 network, i.e. forming part of the upgraded interconnection to England & Wales.

Funding principles

There are a number of factors that need to be taken into account when determining the appropriate funding framework for this investment. These include:

- urgency of need for investment;
- economic efficiency;
- the need for certainty amongst prospective users; and
- scale of investment.

If the 2010 Government targets are to be met then the associated network infrastructure needs to be in place well before that date. Given the typically lengthy timescales associated with transmission line construction it is clear that the urgency to start the work is high. It is, therefore, important that clarity on funding is achieved very soon.

The consultation refers to the Transco NTS entry capacity incentive as a possible model for future investment in the electricity transmission network. Such a scheme may help to improve economic efficiency by linking investment in the network to price signals from users. However, there are downsides of this complex scheme and these should not be ignored.

We are concerned that while the theoretical arguments associated with the Transco NTS entry capacity incentive may be correct, in practice the introduction of such a mechanism may :

- (a) create uncertainty leading to difficulties for renewable developers in obtaining project funding; and
- (b) act as a barrier to transmission licensees because it carries a downside risk of earning below normal rates of return which, when associated with a single large investment may present unacceptable levels of risk.

Options for adjusting TO's allowed revenues

It is clear that no single approach to funding can fully satisfy all of the above considerations. We believe that there may be a case for innovative incentive mechanisms to be used to some extent. However, these are most likely to be successful when applied to smaller individual investments. Large investments ideally should be assessed and funded through the price control review mechanism. Alternatively, when the need for a significant, unanticipated investment arises mid-way through a price control period, a regulatory assessment of the proposal should be conducted, followed by a price control formula adjustment.

It is also important to consider the length of the period to which the adjustment relates. Ofgem's proposal is for a simple adjustment to apply only to investment up to the next price review. A downside of this approach is that it would result in an unnecessary discontinuity in funding. A much better solution would be to treat the RETS investment as a distinct project with clear, ringfenced funding arrangements in place designed to cover the whole project from start to finish. This would require a comprehensive assessment of the proposals now but would mean that a price control adjustment could be put in place for several years. It would then be possible to carry out the review of the underlying price control without necessarily modifying the component of the formula for RETS investment.

Conclusions

Of the three options presented in the consultation paper we concur that the best approach is to adopt a simple solution for the next two years. Based on agreed investment profiles, depreciation lives and rates of return it will be relatively straightforward to calculate an adjustment to the price control formula.

However, Ofgem should also recognise the fact that this is a single package of investment which when started needs to continue through to completion. Therefore, changing the funding mechanism mid-way through the project will serve no useful purpose. It should be possible to take a longer term view of these investment proposals. Given proper consideration now, a price control adjustment lasting several years could be put in place that would give TOs the clarity they require. Furthermore, it would not need to be revisited at the next transmission price review.