

RWE Innogy Comments on OFGEM Consultation Published October 2003

Transmission Investment and Renewable Generation

The following comments are made on behalf of RWE Innogy plc, Innogy Cogen Ltd., Innogy Cogen Trading Ltd., npower Ltd., npower Northern Supply Ltd., npower Yorkshire Supply Ltd, npower Northern Ltd, npower Yorkshire Ltd.

Appropriate principles and objectives for the recovery of costs associated with infrastructure investment to accommodate renewable capacity.

1. The principles and objectives for the recovery of costs associated with infrastructure investment to accommodate renewable capacity should generally be the same as those applied in England & Wales to the recovery of the costs associated with other generation. The costs of connecting renewable capacity to the system should be borne by the generator. The costs of the extending and reinforcing the infrastructure, above the already considerable sum spent since 1990, should be recovered from the general body of users in accordance with principles of the methodology applied in England & Wales.
2. Whilst there is a general move to shallow connection costs, the tendency to site renewable generation in relatively remote locations argues on grounds of economic efficiency for the assets needed to join the renewable generation to the system to be treated as connection assets. In this manner an appropriate siting signal is provided to ensure that the most economic sites are chosen. The TO should be permitted to recover the costs over the anticipated commercial life of the connection and earn a reasonable but virtually risk free rate of return, especially if the connection assets are secured by a letter of credit or guarantee.
3. The principles and objectives for the recovery of infrastructure costs should be to permit the recovery of the incremental costs of expanding the system and a rate of return that reflects the risk associated with the investment. In some circumstances it may be appropriate to contemplate differential rates of return depending upon the assessed risk. It should be an obligation for the TO to ensure the associated charging methodology encourages the efficient siting of renewable generation such that the capacity of the existing system is effectively utilised before any new investment is made. Making the recovery of infrastructure costs conditional upon the use of such a methodology could support this obligation.
4. The optimal solution to extending the infrastructure should also take into account the interaction between gas and electricity transportation. The increase in renewable capacity in Scotland may lead to an increase in flows

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over the gas transportation network. An interacting mechanism in the Transco price control may be desirable in order to provide an appropriate incentive to ensure the overall investment in the gas and electricity networks is optimised.

The TO's investment forecasts and the assumptions underpinning them

5. Para 3.12 states that from NGC's perspective, the Stage 1 case relates to the need to accommodate an additional 2 GW of export from Scotland to England & Wales. An assessment of the increase in export requirement should take account of the low load factor of the renewable capacity and the probability of all Scottish renewable capacity running simultaneously. To accommodate an additional 2 GW of renewable capacity is likely to require a significantly lesser increase in export than the 2 GW assumed. Moreover, provided the appropriate market signals are in place, this requirement would reduce even further.
6. The investment assumptions, which amount to a significant percentage of the anticipated cost of the proposed plant investment, also seem to ignore the extension of ICRP based transmission-charging methodology to Scotland as part of the BETTA implementation. We would expect this to precipitate a reduction in the baseline north to south flows of electricity as relatively low merit generation is exposed to the same economic rigour suffered by England & Wales generation. This should produce a significant reduction in the constraints in North – South flows that are currently apparent.
7. The forecast levels of transmission investment required to facilitate the Government's target to provide 10% of UK electricity supplies from renewable generation by 2010 are based on the final report of the Transmission Issues Working Group (TIWG). However, we believe the generation baseline used in the TIWG report to be wholly unrealistic. The assumption that up to 1320 MW would be imported by way of the Norway Interconnector has a very substantial impact on projected North - South flows. The Norway Interconnector project has now been abandoned since the publication of the TIWG report. The lack of any analysis based on this outcome casts significant doubt on the report's conclusions.
8. The cost benefit analysis contained within the report is also flawed. First, the costs are significantly overstated for the reasons noted above. Secondly, the benefit is calculated as the avoidance of constraints over a 40-year period. The volume that is assumed constrained is a fixed TWh volume per tranche, but there is absolutely no explanation concerning the basis of these amounts.

Potential approaches to adjusting the TO's allowed revenues during the current price controls

9. It is important that any investment is efficient as customers ultimately pay these costs. If the cost benefit is indeed negative then customers will see a

significant increase in electricity prices that will be falsely attributed to the advent of the renewable generation.

10. The provisions of the existing NGC price control already provide for a correction factor to adjust the maximum allowed revenue if the connected generation capacity is greater than the forecast capacity. If anything, this provision is likely to *over-reward* NGC for the connection of additional generating capacity. It also ignores the possibility that newly connected generating capacity may be displacing existing capacity and thus freeing up the associated transmission capacity. The £23/kW allowance included in the current price control is probably overly generous since it relates to both connection and infrastructure reinforcement. In the case of renewable capacity the cost of the former would largely be incurred outside NGC's Transmission Owner area.
11. There are no similar provisions to the £23/kW allowance in the existing price controls for the Scottish TOs. It would thus seem appropriate to contemplate a similar feature in the Scottish TO price control to match that in NGC's price control.
12. The impact of the England & Wales charging methodology in Scotland, and the general inertia in the renewable programmes may mean that the scale of investment required may be considerably lower than that forecast by the three TOs. We would therefore suggest that OFGEM might reconsider relying on the existing price controls until their expiry, albeit subject to the modifications noted above. Reassessment of the necessary investment at the time of the next price control may show a significantly lower requirement.