

# **A framework for considering reforms to how generators gain access to the GB electricity transmission system**

A report by the Access Reforms Options Development Group  
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Comments by Charles Davies

1. I write these comments as someone who, when employed by National Grid in the period from the initial inception of the access arrangements in 1990 up to my retirement in 2004, was closely involved in the development and implementation of the current approach to transmission access. During the latter part of this period, I also chaired the Connection and Use of System Code Amendment Panel, which considered potential changes to the code, including those related to the transmission access. I was also a member of the Transmission Access Standing Group convened on a number of occasions under the auspices of the CUSC Panel to consider wider proposals for changes to transmission access. I was also responsible in the period from 2002 to 2004 for National Grid's part of the BETTA Programme.
2. As a consequence, I am familiar with the issues raised in the report. In general I welcome the report, which in my view presents a comprehensive review of the subject and puts forward some interesting, potentially constructive and practical ways forward. Indeed, it represents a much more useful report than those previously produced under the auspices of the CUSC/TASG. One reason for this can be seen in the Terms of Reference of the ARODG which have allowed the Group to consider the transmission access issue in a relatively open minded way. This can be contrasted with earlier efforts, which were largely restricted to consideration of Ofgem's concept of traded transmission access rights. This latter approach only receives passing reference in the current report. In my view this limited consideration is appropriate, given the approach's complexity not to say its impracticability and its potentially anti-competitive aspects. The report also reflects a thorough understanding of the principles involved in the current approach, something that was missing in previous considerations. For example, the report recognises that existing transmission access rights are "financially firm rights" (paragraph 4.18) and that they are "open ended" (paragraph 4.11). Both these points were disputed in previous discussions, particularly by Ofgem and debates on the meaning of these and other points of fact hampered previous discussions to the detriment of making progress on the fundamental issues.
3. In terms of the high level issues raised in the current report the most fundamental is that of ensuring an appropriate balance between facilitating competition in generation and ensuring economic and efficient investment in the transmission system. Associated with this is the question of allocation of the risk associated with investment in the transmission system between the generator undertaking the development, the transmission owners (National

Grid and the two Scottish companies), the system operator (National Grid), payers of transmission charges and consumers in general.

4. National Grid has under the Electricity Act 1989, which do not appear to have been amended by subsequent legislation (the Utilities Act and the Energy Act) the statutory duties to<sup>1</sup>: -
  - a. “To develop and maintain an efficient, co-ordinated and economical system of electricity transmission; and
  - b. Subject to subsection (3) below, to facilitate competition in the supply and generation of electricity.”

In effect paragraph (a) requires transmission licensees, inter alia, to invest efficiently and paragraph (b) to provide access for new generators to the system in a pro-competitive manner. The legal requirement under the Act is to fulfil both duties simultaneously. The option does not exist to fulfil one of these duties in preference to the other. It is therefore necessary to put in place access arrangements that satisfy both duties simultaneously. In part, therefore, the issues considered in the current report reflect the extent to which current or proposed revised processes reflect the fulfilment of these joint duties. It is not possible to assess the options on the basis that one of these duties should take precedence over the other or should be given more emphasis than the other.

5. Nevertheless, it remains the position that that the options put forward reflect different balances between those that place, on the one hand, the greater proportion of risk on the new generator and those which, on the other, place the greater proportion on transmission owners, the system operator, payers of transmission charges and consumers of electricity. The allocation of the risk will affect the ability of the transmission licensees to fulfil these statutory obligations. Approaches that allocate little or no risk to the generator and also require the transmission owners to invest to meet the requirements of the generators could run counter to the statutory duty on the transmission owner to invest efficiently as in paragraph 3(a) above. Generators would be encouraged to enter into agreements with the transmission company on the basis of speculative generation projects, knowing that if they proved abortive, they would not have any liability for the transmission company’s costs. The transmission company would have no ability to recover the abortive costs from the generators but they would have a requirement to invest and develop their system to meet the generator’s needs.
6. Similarly, a requirement to allow access to the system to a new generator before the required system reinforcements are completed, leading to the potential for increases in constraint costs and, in the extreme, to reduced security of supply, could also be considered as being in breach of the duty to “develop and maintain an efficient, co-ordinated and economical system of electricity transmission”. Requirements to connect generators with no financial liabilities for transmission works placed on the generator and prior to

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<sup>1</sup> Clause 9 Part 1 the Electricity Act 1989

system reinforcements being put in place has been the position in some countries within the European Community for some time and have led to inefficient investment in transmission, increases in constraint costs and reduced security of supply.

7. On the other hand approaches that place so much of the risk involved in transmission developments on the generator so that new developers are unable to enter the market would equally contravene the statutory duties of the transmission owners, in this case paragraph 3(b) above. It is certainly the case that over the period since 1990 many new generation developments have been undertaken in England and Wales implying, perhaps, that an appropriate balance had been achieved. However, with changing market circumstances and changes in the size and type of potential new generation developments as well as the integration of the England and Wales market with that in Scotland, it is appropriate that the position should be reviewed. Nevertheless, it remains important that any decision taken, whether it is to retain the present arrangements or to implement some of the options, can be considered as fulfilling both statutory duties.
8. On this basis it would seem to me that some of the more extreme options (in terms of moving towards option 4 in the table on pages 41 and 42 of the report) reflect a shift in balance of risk away from the generator towards the other industry parties to an extent that would question the fulfilment of the statutory duty on the transmission companies to develop an efficient system. Specifically, those options which either set the liabilities to the generator at a fixed sum e.g. five years charges or at “local” investment costs only would appear to me to place too high a burden of risk on other players than the generator and could encourage speculative signing of connection agreements by generators, and equally speculative and potentially abortive investment in the transmission system.. Conversely, options that fix the generator’s liabilities at the time of signing the contract with the transmission company and precludes the ability of the transmission owner to increase the liabilities after this date would seem reasonable. It is of course possible that this could be to the disadvantage of the generators, if further developments led to a reduction in liability. This, however, could be dealt with through a one-way option i.e. the generators could see his liabilities reduced subsequent to signing the agreement but not increased.
9. Overall, the more radical options in the report could give rise to substantial risk of unnecessary investment through limiting the financial commitments needed from generators to levels well below the costs that the transmission owner will be incurring to meet the needs of the generator and in giving rights to generators in respect of financial compensation when transmission access is not available. This would not reflect the statutory duty on transmission companies to develop and operate an economic system.
10. This is not to say that no changes should be made but that changes that are made should ensure that there continues to be a degree of financial risk for the costs of the transmission developments associated with their generation projects carried by the generator to an extent that these costs are an important

aspect of the generator's financial appraisal but not an extent that precludes competitive and soundly based generation projects from going forward..

11. It is necessary not only to ensure that statutory duties are complied with but also (as many of the transmission investments may lead to transmission consent issues being considered by public inquiries to ensure that the transmission owner can present a convincing need case at such an inquiry. To do so will require a degree of commitment to the project by the generator which are most convincingly reflected through their financial commitments. Furthermore, it is arguable that as the size of the generator's commitments reflect investment costs the size of the commitment required from the generator provides a useful early adjunct to future TNUOS for the generator to seek the lowest cost and therefore most efficient site for its generation development. In part but not wholly such an argument can be answered by reference to the proposal that generators should have to commit to paying TNUOS for a number of years, as suggested in some of the proposals put forward by the Group.
12. As identified in paragraph 3 above the associated issue to that of whether developers of new generating projects should see the level of risk that they carry reduced is the question of which industry party should the risk be transferred to and what mechanisms could be employed to do this.
13. To the extent that risks currently carried by generators are to be transferred to the transmission owners, for example through fixing the expenditure to be secured at the outset or limiting the sums to only a proportion of the potential capital expenditure, one of two approaches could be adopted. The simplest way would be for Ofgem to accept that if the Transmission Owner as a consequence of following this process incurs abortive expenditure, the expenditure will be deemed by the regulator to have been efficiently incurred by the transmission owner and included in the regulatory asset base for price control purposes. This would have the effect of allowing the costs to be recovered from transmission users through their charges and ultimately from the consumer. An alternative approach, which could also be considered to have the advantage of incentivising the transmission owners, would be to adjust the rate of return allowed to be earned by transmission owners on their regulatory assets to reflect the increased risk of its activities. As above, this would result in higher charges to transmission system users and hence to final consumers.
14. This latter approach is not necessarily consistent with the approaches adopted by the regulator to assess the cost of capital applicable to transmission companies but could be preferable to the lack of incentive implicit in the former approach.
15. Other risks could be transferred from the generator undertaking the development to the system operator (National Grid). In particular the granting of fixed term TECs regardless whether the investment in the transmission system has been completed could lead to increased risk to the system operator in terms of "constrained off" payments. Such issues could be particularly

difficult to deal with in cases where the transmission owner undertaking the investment that has not been completed during the window is one of the Scottish Companies and it is National Grid that is liable for the compensation.

16. As well as these high level comments, there are two more detailed aspects on which I would like to comment.
  - a. While I expect that it is well recognised by the Group, it must be stressed that generator liabilities must be securitised either through letters of credit or based on the credit rating of the company. Such securitisation would have to be extended to include liabilities related to future TNUOS charges, if such an approach were to be adopted.
  - b. In respect of commitments to pay TNUOS charges, it is unclear what the situation would be in negative charging zones. At first sight it might appear counter-intuitive for investment to be required in negative charging zones other than very local reinforcements and therefore there should be no wider investment to underwrite. However, this is not always the case and where investment is required the risks associated with it would not be covered by the generator.

## **Conclusion**

17. In summary, the report puts forward a good analysis of the issues and substantially better than those produced previously. The options provide some positive ways of moving forward and of developing the processes and procedures. The more radical changes put forward give rise to questions relating to statutory duties of the transmission companies. More clarity is also required as to how the risks transferred to the transmission companies are to be remunerated and issues related to activities of the transmission owners that result in increased the risks faced by the system operator need to be considered, particularly when the transmission owner is not the same company as the system operator.

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