

TRANSMISSION ACCESS REVIEW INTERIM REPORT

NATIONAL GRID RESPONSE

28th February 2008

1 Introduction

- 1.1 We welcome the opportunity to respond to the joint Ofgem/BERR Transmission Access Review (TAR) Interim Report.
- 1.2 National Grid, through our subsidiary National Grid Electricity Transmission plc (NGET), owns and operates the electricity transmission system in England & Wales, and is the electricity transmission System Operator across Great Britain (GBSO). In our role as GBSO, we have a licence obligation to offer terms for connection to, and use of, the GB transmission system, and as such, any reform of transmission access will have a direct impact on the contractual arrangements between National Grid and users of the GB transmission system.
- 1.3 Our other businesses include National Grid Gas plc (NGG), the owner and operator of the gas National Transmission System (NTS). Transmission access arrangements for the NTS differ from those for electricity transmission, and include auctions for entry capacity. This experience may prove relevant in developing arrangements for electricity transmission access.
- 1.4 As you are aware, we have contributed to TAR by responding to the Call for Evidence document and through presenting at the public seminars. We also previously facilitated industry discussion by re-establishing the Transmission Access Standing Group (TASG). Building on the work of TASG, we have developed a package of proposals for reforming access arrangements, and were pleased to see these described in chapter 3 of the Interim Report.
- 1.5 The remainder of this response has been structured as follows:
 - Section 2 provides some general views on the progress of TAR to date;
 - Sections 3-5 consist of specific comments relating to issues raised in chapters 3-7 of the Interim Report (section 5 corresponds to chapters 5-7); and
 - Appendix 1 provides some feedback on the qualitative assessment work described in Appendix 1 of the Interim Report.

2 General views

- 2.1 We agree with Ofgem/BERR that there is a need to review the existing arrangements for access to the electricity transmission system in order to ensure that they remain fit for purpose as the proportion of renewable generation on the system grows. The European Union's recent agreement that by 2020 one-fifth of Europe's energy should come from renewable

sources is likely to result in a target for the UK considerably in excess of the Government's previously announced aspiration that the amount of electricity supplied by renewables in the UK should rise to 20% by 2020. In order to respond to such an unprecedented challenge it will be vital that the planning regime permits the delivery of significant additional transmission capacity, but clearly it is also important that access arrangements facilitate the most efficient use of both new and existing transmission infrastructure. We are fully supportive of the Government's policy aims, and are committed to working with Ofgem/BERR to facilitate achievement of these targets.

- 2.2 While TAR has been extremely useful in stimulating industry thought, we consider that the debate now needs to move on to the development of concrete, implementable proposals and, given the critical importance of transmission access arrangements to our business, we are prepared to play a lead role in this process. We have considered ways of facilitating this, including coming forward immediately with code amendment proposals. We plan to hold a round of industry discussion on the potential form of these modifications before embarking on a set which we intend will cover all the options considered so far in the TAR process.
- 2.3 As identified in the Interim Report, reforms to the access arrangements aimed at achieving the Government's targets could be implemented either through legislation or through industry governance processes. However, we believe that the progression of reforms through industry governance would best engage the industry as described above, and would, in any event, represent a sensible step that would allow the industry the opportunity to deliver reform. The option to introduce legislation would remain open to the Government.
- 2.4 Specific comments relating to the two workstreams discussed in the Interim Report, Access Reform and Operating and Delivering Infrastructure, are provided in the next two sections of this response. However, the Call for Evidence document contained a third workstream, Incentivising Efficient Use of Transmission Capacity, and it is not clear to us whether this workstream has been formally abandoned or should be considered to have been subsumed into the Access Reform workstream.

3 Specific comments relating to Access Reform

- 3.1 We have previously submitted comments on the three illustrative models, Incremental Change, Connect and Manage, and Capacity Auctions, set out in the Call for Evidence in our response to that document.
- 3.2 We note that paragraph 3.9 of the Interim Report states that "the change to allow overrun against access rights held with potential cost-reflective charges was discussed as a feature that could apply to all three models". We do not believe that an Overrun product would be particularly meaningful in a Connect and Manage regime, as, under Connect and Manage (as we understand Ofgem/BERR to envisage it), generators would have the ability to increase their long-term access rights to the limit of their local connection, and be charged the investment related cost (with constraint costs being socialised). Given the very significant constraints that would likely be experienced under this form of Connect and Manage, it is probable that this charge would be significantly less than a cost reflective Overrun charge based on operational costs.

- 3.3 We were pleased to note that the package of proposals we have advocated were included as paragraphs 3.14-3.18, and agree that, although they build on an incremental approach, they would be quite far-reaching. Incentivising the GBSO to release short-term capacity priced on ex-ante basis, as well as introducing a cost reflectively priced Overrun product, would allow generation with low load factors to use these products, thereby releasing long-term capacity for new renewables. They would also allow intermittent generators to book long-term rights more closely aligned to their general level of output (the peak at the upper end of the load duration curve could be accommodated by short-term products).
- 3.4 In addition to the GBSO releasing capacity, renewable generators would also have the option of obtaining capacity from other generators, through un-facilitated trades at a 1:1 ratio within defined zones. This would give considerable flexibility, and while such a change could result in an increase in constraint costs, it is important to note that such an increase would be contained (unlike a Connect and Manage regime including the socialisation of constraint costs).
- 3.5 We largely agree with the building blocks identified in paragraphs 3.22-3.31. With regards to the publication of exchange rates, as discussed in paragraph 3.31, we believe that it would be infeasible to publish, and keep updated, a matrix of nodal exchange rates. However, a potential benefit of moving to a zonal approach, in addition to un-facilitated intra-zonal trades on a 1:1 basis, is that it may become more feasible to publish exchange rates for inter-zonal trades.
- 3.6 Comments on the initial report provided by Pöyry Energy Consulting are attached in Appendix 1 of this response.
- 3.7 We note the statement in paragraph 3.35 that TAR “is not an exercise in designing a fully developed set of trading and transmission arrangements”. Our understanding was that the rationale for TAR was to consider transmission access arrangements in a holistic manner, and to reform them in a co-ordinated fashion. However, we agree that the detailed development of reform may best be undertaken by the industry through the implementation of such revised arrangements, rather than through TAR itself.
- 3.8 We were pleased that detailed assumptions to be used by the Centre for Distributed Generation and Sustainable Energy were included in the report for the industry to review. However, it was not clear to us from reading the report exactly what modelling the Centre will be undertaking, and we therefore look forward to reading the spring 2008 analytical paper.
- 3.9 With regard to the assumptions listed, we note with interest the scenarios identified for wind penetration. In particular, the high scenario of 21GW of installed wind capacity would be approximately consistent with achievement of the Government’s target that 20% of electricity supplied in the UK should come from renewables by 2020. However, even this high scenario would fall very significantly short of the likely contribution that will be required from the UK in order to meet the European Union’s target that, by 2020, one-fifth of all Europe’s energy should come from renewable resources. We therefore suggest that consideration should be given to studying additional scenarios.

- 3.10 We share Ofgem/BERR's vision that renewable generators having achieved planning consent should be confident of well defined and bankable transmission rights without undue delay. However, it must also be recognised that, in practice, while the provision of additional transmission capacity is constrained (for instance, as a result of the current planning regime), in order to provide such rights it would be necessary to remove or constrain the rights of existing generators (including renewables). The question that then has to be addressed is whether such generators should be compensated for the diminution of their rights, and, if so, by how much and by whom.
- 3.11 Although we generally support the qualitative and quantitative analysis of key access building blocks, we consider that this should not preclude the industry progressing code changes, and that such analysis could be best undertaken as part of the process for evaluating such modifications. It would be possible to propose a range of potentially complementary code modifications, covering a wide range of building blocks that, in combination, could be used to implement the various access regimes. We think that industry engagement in parallel with the wider TAR process, facilitated by the proposing of code modifications, is a "no regret" step that should be progressed regardless of the eventual implementation route chosen.

4 Specific comments relating to Delivering and Operating Infrastructure

- 4.1 We have previously submitted comments relating to this workstream in our responses to the Call for Evidence document and the Short Term Access Governance (STAG) report, and as part of the preparation of the Transmission System Operation Review Group (TSORG) report.
- 4.2 As noted, we have also contributed to the GB Security and Quality of Supply Standard (SQSS) consultation on the "Review for Onshore Intermittent Generation", although it would be more accurate to say that this was published by the GB SQSS Review Group on the National Grid website. This represents a very major piece of work, and subsequent discussions between the Review Group and Ofgem have identified that further consultation may be warranted. Therefore, it is unlikely that a final report will be submitted to Ofgem by the end of March 2008, although the Review Group will seek to provide such a report as soon as is feasible.
- 4.3 The GB SQSS Review Group maintains a Review Register, and neither the transmission licensees nor any other interested party had formally suggested reviewing a potential move to a N-1 regime until Ofgem's letters of 20 December 2007 to each of the three licensees. We believe that such a change would lead to a significant reduction in the overall reliability of the system (including a much increased risk of blackouts and other catastrophic failures), and would increase operational costs very significantly. While in theory, additional generation could be connected, in practice this would not be the case in Scotland, because of the existing over-allocation of capacity (i.e. the surplus contracted generation in Scotland dealt with through a derogation against the SQSS exceeds any additional capacity that would be released through a move to N-1).
- 4.4 A move to N-1, therefore, would only release very limited benefits, at a very substantial cost. Given Ofgem's request, the GB SQSS Review Group is of course prepared to undertake further analysis in this area, but it should be

noted that any such study would represent a very significant piece of work (taking perhaps 12-18 months), and that the resource allocated to this project would be unavailable to progress other proposals. In summary, we believe that it is important to be realistic about the costs and benefits involved. Given this resource issue, we would welcome further discussions with Ofgem/BERR on the effectiveness of a move to N-1 as a potential solution.

- 4.5 We agree with Ofgem/BERR that it is important to highlight that, at present, there is no real commitment required from generators to use the system until their transmission construction works begin. We aimed to address this defect in the commercial framework by proposing CUSC Amendment Proposal (CAP) 131, which seeks to introduce a generic methodology for obtaining user commitment, including some commitment prior to the start of construction. Having submitted the final CAP131 Amendment Report to Ofgem in July 2007, we look forward to the further progression of this proposal.
- 4.6 We were pleased to note Ofgem/BERR's support for our queue management initiatives, and we believe that these, in combination with CAP131, could help mitigate the current situation relating to access, particularly in Scotland. However, these initiatives are mainly designed not to address any deficiencies in the transmission access arrangements but rather as a specific result of the transitional arrangements associated with the introduction of the British Electricity Trading and Transmission Arrangements (BETTA).
- 4.7 These arrangements, for a limited time, allowed generators to apply for connection in Scotland not contingent on, or requiring the provision of any financial security for, upgrades to the network in England and Wales, or in relation to the circuits connecting Scotland to England. This, perhaps unsurprisingly, led to a flood of, often premature and speculative, applications before the cut-off date, and the queue management initiatives are therefore largely a response to this distortion of the transmission access arrangements.
- 4.8 We agree with Ofgem/BERR that a major challenge faced by the transmission licensees is uncertainty, both in terms of new projects and signals from existing generators exiting the system. Any proposals brought forward under the Access Reform workstream should ideally address this issue.
- 4.9 We also agree that the sheer volume of the potential build programme on the GB transmission network and the requirement to fit it into constrained outage windows, in addition to the current consents regime, presents a huge challenge. We are already reviewing our outage planning process, and it is not clear to us what further additional preparatory work we could undertake, but we would of course welcome further engagement with Ofgem/BERR in this area.
- 4.10 We note the suggestion of strategic investment, including the potential benefits in terms of reducing the lead times associated with connecting renewables, and agree that this concept warrants further consideration.
- 4.11 We generally welcome incentive schemes, and agree that there may be potential to incentivise transmission licensees to deliver additional infrastructure in a timely manner. However, the exact form of any scheme will be important, particularly given the current consents regime – it is unlikely that completion of either the second Yorkshire line or Beaulieu – Denny would have

been significantly impacted by the existence of such a scheme. However, a mechanism that incentivised delivery post-consent may prove beneficial in some cases. Changes to the consents regime delivered by the Planning Reform Bill may increase the potential scope of any such incentivisation, although some experience of the new arrangements would first be required. In addition, there may be issues in that Scotland, which is particularly significant in terms of the connection of new renewable generation, is not covered by the Bill.

- 4.12 We acknowledge receipt of Ofgem's letter of 20 December 2007 requesting that we undertake additional actions further to the TSORG initiative (as detailed in paragraph 4.22 of the Interim Report), and these will be progressed in due course.

5 Initial recommendations, implementation and way forward

- 5.1 Our comments in these areas are structured broadly in line with those in the Interim Report, in that we respond to the initial recommendations relating to each of the Access Reform and Delivering and Operating Infrastructure workstreams, and then additionally to Ofgem/BERR's views on implementation and governance. Our comments relating to the way forward are included with implementation and governance.

Access Reform

- 5.2 With regards to the initial conclusions set out in paragraph 5.6 of the Interim Report:

- We agree that there are problems preventing transmission licensees from making necessary investments quickly. Most notable is the consents regime, but uncertainty, both in terms of new connectees (particularly those required to make little or no commitment) and the closure of existing generators, is also clearly a significant factor. The Planning Reform Bill, CAP131 and queue management initiatives may address many of these issues, but others, such as the commitment required from existing generators, could be usefully addressed by further reform to the access arrangements.
- Work is currently underway to implement a mechanism to offer any gaps that arise in the queue to generators based on their forecast of when they will be ready to connect. Such generators would clearly factor in their views of their likely status in relation to consents and financing. We consider that, to go any further than this, perhaps reordering the queue by consents and financing status as the Interim Report seems to suggest, would not be consistent with our licence condition not to discriminate. We would be pleased to discuss with Ofgem/BERR any changes to our licence that might be required, but we believe that full consideration should be given to any potential alteration to such a fundamental tenet of the current regime.
- We agree that sharing of transmission capacity could become more important, although it should be noted that, under the current GB SQSS, capacity is already shared to some extent. We also note the GB SQSS

Review Group's current consultation on the appropriate level of transmission infrastructure for intermittent generation.

- We further agree that the sharing of access rights, as opposed to simply the sharing of physical capacity, could be an important feature of any package of measures to implement a new and enduring access regime (and that such sharing could perhaps be implemented within certain defined zones). Moreover, a market based sharing mechanism should be more efficient than an administered regime. However, we think it is important to be realistic about timescales for the implementation of such measures (and we return to this subject below).
- We have already outlined our views relating to any stronger commercial incentives on transmission licensees to connect renewable generators in line with their preferred development plan, in that such a scheme may have some benefits, but that these could be significantly constrained by the current consents regime. However, we look forward to giving due consideration to any more detailed proposals that emerge in this area.

Delivering and Operating Infrastructure

5.3 With regards to the initial conclusions set out in paragraph 5.10 of the Interim Report:

- We have acknowledged receipt of Ofgem's letter of 20 December 2007, and will provide the appropriate responses in due course. We have also noted above the potential for reviewing more fundamental aspects of the SQSS. In both these areas, it is important to be realistic about the likely benefits.
- We are pleased that the current work of the GB SQSS Review Group in relation to intermittent generation has been recognised. As described above, subsequent discussions between the Review Group and Ofgem have identified that further consultation may be warranted, such that it is unlikely that a final report will be submitted to Ofgem by the end of March 2008. However, the Review Group will seek to provide such a report as soon as is feasible.
- We note the proposal that "a user commitment approach with firm delivery dates could provide appropriate incentives and better information for transmission companies to undertake pre-planning work in a timely manner", although we are not clear exactly what pre-planning work is being referred to or how such a scheme would be different to the "stronger commercial incentives" proposed to be placed on transmission licensees under the Access Reform workstream (and to which we respond above). We therefore look forward to further detail in the spring 2008 document.

Implementation and Governance

5.4 We believe the most appropriate way forward is that a package of measures that could, in combination, deliver a range of overall access regimes, should be progressed through existing industry governance processes. This would allow reform to be implemented in the most timely manner, and would

facilitate the most robust analysis of the proposals by the industry through the working group process.

- 5.5 We are not convinced that Ofgem/BERR's criticism of the existing industry governance regime in general, and of the CUSC in specific, is warranted. We believe the track record of the CUSC amendment processes in evaluating and implementing significant change proposals is very good. We would highlight that CAP131, which proposes to change the user commitment provided by both new and existing generators, and which would address many of the issues referred to in the Interim Report, was submitted to Ofgem for determination 10 months after being proposed, and CAP148, which would give renewable generators access to the system in a manner very similar to Connect and Manage, was submitted 8 months after being proposed. We contend that such timescales compare very favourably with other industry codes, and particularly with primary legislation.
- 5.6 We accept that certain amendment proposals containing a particularly high number of alternative amendments can make the process unnecessarily complex, although in practice this has not led to significant delays in the progression of such proposals. For instance, CAP131 included 32 alternatives and CAP089/90/91, which included 56 alternatives, was submitted for determination less than 6 months after being proposed. During this time all the alternatives were evaluated and ranked, and legal text for each was produced. However, we do recognise that such high numbers of alternatives many present problems for Ofgem in determining the outcome of the amendment proposal.
- 5.7 Sections 6.6-6.24 of the Interim Report largely describe Ofgem's review of industry code governance arrangements. We have responded separately to the open letter consultation in this area¹, and will fully participate in the review to seek better ways of implementing major industry changes such as access reform.
- 5.8 We look forward to playing a full role in the remainder of the TAR process, including any forthcoming workshops and seminars. However, as discussed above, we believe that it is now also appropriate that the industry consider the options for access reform in the form of draft, and subsequently formal, code amendment proposals, and confirm that we would be prepared to take a lead role in such a process.

¹ This response is available via the following link:
<http://www.ofgem.gov.uk/LICENSING/INDCODES/CGR/Documents1/National%20Grid.pdf>

Appendix 1 – Supporting qualitative assessment work

- 1.1 This section contains comments on the preliminary qualitative assessment work undertaken by Pöyry Energy Consulting contained in Appendix 1 of the Interim Report.
- 1.2 We broadly agree with the building blocks identified and the assessment criteria applied. However, we have a number of specific comments regarding the high level assessment undertaken:
- We are unsure why symmetric rights for a defined period (D2b) would have a negative impact on Security of Supply;
 - We also question why fully firm access products (D3a) would have a negative cost to consumers;
 - We are unsure why a non-firm access right priced ex-ante (D3b) would not be positive for competition;
 - We believe that the release of a “requirements-driven” quantity of access rights (A1b) could have a very negative cost to consumers;
 - We also believe that the release of rights without the prioritisation of incumbents (A2b) would have a beneficial impact on competition; and
 - We are unsure why prices based on Short Run Marginal Costs (P1b) are deemed to have negative costs to consumers.

For most of the above, we believe a relatively narrow analysis has been performed. For example, whilst high prices may be generally negative for consumers, prices that are higher for short periods (P1b) to a few generators (those without firm rights) overall will result in the least cost solution for consumers.

- 1.3 In terms of the collective options identified:
- We question why “connect and pay” (C1c) would not have a positive effect on competition, given that the release of rights would be based on the valuation of such rights rather than incumbency (and therefore could facilitate new entry);
 - We are unsure why “connect and pay” (C1c) is deemed to have a negative impact on Security of Supply; and
 - We are also unsure why the introduction of “non-firm access” would have a negative cost to consumers.
- 1.4 We look forward to reading, and providing feedback on, the further analysis that will form the next steps to the TAR process.