National Grid Transco

Response to the Ofgem/DTI Consultation Document: 'GB Grid Code Operating Codes 1,2,6,7,9,10,12 – An Ofgem /DTI mini-drafting consultation document 132/03' October 2003

Introduction

- We welcome the opportunity to comment on 'GB Grid Code Operating Codes 1,2,3,6,7,9,10,12 – An Ofgem/DTI mini-drafting consultation document 132/03 – October 2003' (the consultation).
- 2. In this response we have concentrated on the specific drafting issues raised by Ofgem / DTI. The views in this response build on those that we have recently submitted in our response to "The Grid Code under BETTA – Ofgem/DTI conclusions and consultation on the text of a GB Grid Code and consultation on change co-ordination between the STC and user-facing industry codes – September 2003'.

Background

- 3. This consultation builds on the September 2003 GB Grid Code consultations, adding a further layer of detail on the technical differences between the existing Grid Codes and to consult on further regional differences that should be incorporated in the GB Grid Code, to be designated under BETTA.
- 4. We understand that it was not intended for the mini-drafting consultation to consider further the issues raised in the September 2003 GB Grid Code consultation, where views have already been invited. Therefore, we have mainly limited our response to the specific technical issues raised in the mini-drafting consultation and to the consideration of proposed regional differences.
- 5. As Ofgem/ DTI highlighted in the second GB Grid Code consultation, we, on behalf of Ofgem/ DTI and under their direction, prepared the draft legal text for the GB Grid Code. Therefore the legal text does not necessarily represent our own views, and should be read in this context. However, clearly, our response to this consultation has been written independently of Ofgem/ DTI and reflects the views of National Grid.
- 6. Ofgem / DTI have recently issued a consultation document on small generators. Many of the issues in that document have some relevance to the drafting of the GB Grid Code. In this response we have avoided directly addressing the specific issues discussed in the small generators consultation. However, we will be responding to the small generator consultation separately and this will include comments that could have an impact on the drafting of a GB Grid Code and enabling documentation.

<u>Overview</u>

7. We welcome the process that Ofgem / DTI have set up through the Grid Code Experts Group, GCEG, and support the work that this group is progressing in comparing the two existing Grid Codes and reviewing the draft legal text of the

GB Grid Code. We thank Ofgem / DTI for the opportunity to be involved in that process. In addition to our response here we will continue to provide our support through the GCEG and subsequent consultation documents.

- 8. This response follows the structure of consultation document. In each section we address any high level issues raised by Ofgem / DTI and confirm our position in respect of each of the individual regional differences that have been proposed. We have also provided additional comments on particular areas that we believe require further consideration.
- 9. All of the views expressed in this response assume that the previously proposed definitions in the September GB Grid Code consultation document are accepted. In particular, the definition of Large, Medium and Small Power Stations and that of Genset. These definitions contain regional differences that we agree are required.
- 10. This is such a fundamental assumption that were they not incorporated, as defined in the September 2003 consultation, our comments on the actual drafting, issues and proposed regional differences in this response or our response to the main September GB Grid Code consultation would be significantly different. Therefore, were these definitions not to be adopted, due to the overwhelming impact on the applicability of the GB Grid Code, we would suggest significant redrafting would be required logically leading to the need for additional consultations.
- 11. In this response we do not explicitly address the issues of Licence exempt generation. Although it is worth noting that in order for the System Operator to 'have in force' the GB Grid Code the framework of agreements need to address how obligations are applied to unlicensed generators. We will be responding in more detail on this issue in the small generators consultation.
- 12. Under the proposed operational switching and contingency arrangements the Transmission Owners will be require to communicate directly with Users (to be detailed in the STC and STCPs). We believe that the Grid Code, which details the interface arrangements with Users should in some way reflect this in order to avoid confusion. We do not believe it is appropriate for the Users to have to refer to the STC. We suggest this is either contained in the General Condition or in the particular codes that are affected (e.g. OC7, OC8, OC9 etc).

OC1 Demand Forecasts

- 13. We agree that a regional difference in the proposed definition of 'Demand Control Notification level' is required. The level proposed for Scotland in this draft of 5MW (0MW in the original draft) reasonably reflects the regional impact. We also agree that a regional difference in the definition of 'Customer Demand Management Notification Level' is also required and that the level proposed is appropriate. There is also a regional issue, which needs to be address on the subject of Load Management Blocks (see later paragraph 38 of this response) which is relevant to a GB OC1.
- 14.On the issue of the SO's right to request information on Medium Power Stations, we believe, that based on the regional definition of Medium and Small Power Stations, the proposed arrangements are sufficient for embedded Power Stations. In respect of Small or Medium directly connected Power Stations there

needs to be a greater level of information exchanged between the SO and a generator in order to operate the system efficiently and securely. This issue covers the definition of Genset and the scope of OC1 and OC2.

- 15. The current England and Wales Grid Code has developed on the basis that Small and Medium Power Stations do not connect to the Transmission System. As such the requirements for information on plant within these categories is minimal and detailed in OC1- Demand Forecasting i.e. generally treated as negative demand for the purposes of operation.
- 16.OC2 has historically dealt with Power Stations that were directly connected to the Transmission System (or embedded yet of such a size as to have significant impact on the operation of the Transmission System). As a result, much more detailed information is exchanged between Generators and the System Operator under OC2 than OC1. This includes information related to Transmission System outages. Clearly, these assumptions change with the introduction of BETTA
- 17. Therefore, we suggest that additional consideration of the treatment of directly connected Generators in OC1 and OC2 is required to ensure that the appropriate level of information is exchanged between Generators and the System Operator. The current drafting may be more appropriate were OC1 to be limited to apply to all embedded Small and Medium Power stations, and OC2 apply to all generators at directly connected Power Stations and Large embedded Power Stations.
- 18. The Current E+W Grid Code OC1 does not cover the collection of demand forecasting information from Interconnector Users. This has not been required historically due to NGCs relationship with the Interconnector Asset Owners and Users. This does not exist with the introduction of BETTA and the Moyle Interconnector. Under the existing arrangements in England and Wales information is received through other routes as NGC shares the role of Asset Owner on both Interconnectors (e.g. BGSA, Anglo-French Interconnector Protocol Agreement). Therefore further consideration is required as to the need for a regional difference in relation to the Moyle Interconnector. One solution would be to treat Interconnector Owners in the same manner as the current Scottish Grid Code, which could then be included in the scope of relevant OCs and other codes within the new GB Grid Code (such as the CCs, PC, DRC etc). This approach may also be more appropriate in England and Wales in the near future as a consequence of the separate Licensing for Interconnectors proposed under the Energy Bill.

OC2 Operational Planning and Data Provision

19. Ofgem/DTI note, and we agree, that the definition of Genset should include directly connected Power Stations. In various parts of the Grid Code this ensures that sufficient information is exchanged between Generators and the System Operator. OC2, in parts, limits the exchange of information to Gensets at Large Powers Stations, reflecting the fact that there are no Medium or Small Power Stations currently directly connected to the Transmission System in England and Wales. We understand this particular wording was introduced when the England and Wales Grid Code was amended for NETA, which at the time had no consequence.

- 20. This assumption, that no Medium or Small Power Stations would be directly connected to the Transmission System, may no longer hold firm under BETTA. Therefore, we believe that the BETTA version of OC2 should be drafted to apply to all directly connected generators, irrespective of their size. This will not change the requirements on any existing England and Wales Generators nor should this present any change to existing Scottish Generators considering the requirements of Scottish Grid Code OC2 4.1 (a) (ii).
- 21. As mentioned above in our comment on OC1, the England and Wales Grid Code does not cover the exchange of information between the System Operator and Interconnector Users or Asset Owner (due to NGCs involvement in the existing England and Wales Interconnectors). Under BETTA the System Operator appears to have no rights to information on the availability or use of the Moyle Interconnector.
- 22. The current Scottish Grid Code in OC2 does provide for information exchange relating to the Moyle Interconnector. Therefore we believe that the BETTA version of OC2 should be extended to cover availability and use of Interconnectors in a similar manner to the existing Scottish Grid Code. Of relevant operational concern is not just the Moyle bi-poles availability but also the availability of reactive filter banks that have an effect on the Transmission System. Our position is further supported by the fact that the current Scottish Grid Code does not require information on the Anglo-Scottish Interconnector.
- 23.We do not entirely agree with the proposal in 5.11 for a regional difference in OC2.1.8

'In Scotland it may be possible to reduce the administrative burden for Users in producing planning information where either the output or demand is small, or the information provided at any stage confirms previously supplied data'

We would agree it may be appropriate to relax the requirements of OC2 on the System Operator and Users where the output or demand is small, but only following agreement to do so. The System Operator is the only party who can fully assess the effects of a particular generator on any part of the Transmission System. In certain locations a relatively small User may have a significant affect. This is particularly true in the case of system stability, which we believe is a particular issue in Scotland.

- 24. We do not believe it is appropriate to relax the requirement for repetitive submissions. Were this approach to be adopted any submission of repetitive data by any size of User in Scotland would be eligible. In operating the system the quality of data is a significant factor and in order to provide confidence in the validity of the data held we believe it should be periodically submitted.
- 25. We would suggest more appropriate wording for OC2.1.8 similar to:

'In Scotland it may be possible, with the agreement of the System Operator, to reduce the administrative burden for Users in producing planning information where the output or demand is small.'

26. We agree with the revised drafting of OC2.4.1.3.5 (c) (v), which removed a drafting error in version used in the September 2003 consultation document.

- 27. As mentioned previously, there are historical reasons, mainly associated with ownership, that Interconnectors are treated differently in OC1 and 2 between the current Grid Codes. We believe it would be appropriate, indeed required, to retain the provisions that exist in the current Scottish Grid Code as regional differences in the GB Grid Code.
- 28. We note the regional difference between the existing Grid Codes for providing details of automatic and manual load transfers. Considering the ownership and relationship between the Transmission and Distribution companies in Scotland we believe that the transfer of information is not carried out as in England and Wales. We believe, when considering the relative impact on the network, the size that is appropriate for Scotland is significantly less than 10MW. 12MW in England and Wales would generally represent less than 5 percent of the load at a Grid Supply Point, 10 MW in Scotland probably represents an average in the order of 30 percent. We would suggest that as a minimum the regional difference should use 5MW for Scotland.
- 29. Therefore, we agree that there should be a regional difference in the requirements for providing details of automatic and manual load transfers, but believe that the level that applies in Scotland requires further consideration.

OC6 Demand Control

- 30.We agree with each of Ofgem / DTIs proposal in 6.13 to 6.15 for OC6. The differences in the existing Grid Codes in relation to the volume of demand that can be disconnected in different timescales depending on the timing of warnings would be inappropriate to carry forward as a regional difference in the GB Grid Code.
- 31. As Ofgem /DTI noted in 6.16 NGC recently carried out an extensive review of Low Frequency Demand Disconnection requirements. If any changes are to be made to the current requirements in Scotland these should only be as a result of similar detailed work. Therefore, we agree that the existing requirements in the Scottish Grid Code should be retained as a regional difference for Scotland.
- 32.A recent modification proposal in England and Wales highlighted the issue of transparency of low frequency demand settings that are currently only available through the BGSA. In response to that particular amendment, CC6.3.3, we expect to be proposing to the Authority shortly that the first trigger point, 48.8Hz, be included in the England and Wales Grid Code. Although we have no objection to appending the general trigger points, the actual values applicable to any Network Operator are detailed in the Bilateral Connection Agreement and confirmed each year as part of the week 24 data submissions. We believe that the main setting of interest to users is the first trigger point.
- 33.On the particular issue raised in 6.18, of the practicality of providing 20% demand reduction on a GSP basis in Scotland, we accept that considering the normal manner for implementing demand disconnection it would be more appropriate to specify this on a wider basis for Scotland. We would look to the GCEG and existing licensees to suggest a more appropriate resolution for implementing Demand Control.

OC7 Operational Liaison

- 34.OC7 deals with the exchange of operational information in relation to Operations and/or events on the Total System. As such we believe that some information exchanged under OC7 will need to be passed onto the Transmission Owners. The exact information that may be exchanged is difficult to codify. Therefore, we believe that an express but general statement that certain information can be exchanged with Transmission Owners is required. The same issue exists in OC10, which is effectively the post control phase exchange of information relating to Operation and/or Events. Such a statement could be in each of the relevant codes or in the General Conditions.
- 35.It may be more appropriate to put such a statement in the CUSC, under section 6.15, where the general provisions for exchange of information and confidentiality of data currently exists. Likewise, the STC should consider data exchange and confidentiality.

OC9 Contingency Planning

36.As noted by Ofgem / DTI the GB Grid Code requires Local Joint Restoration Plans and 'OC9 De-Synchronised Island Procedures'. We believe that these should be established before go-live and note that each is a considerable volume of work. As yet we do not believe it is clear which forum (STEG, GCEG or other) is responsible for producing these documents. Each will require significant Transmission Owner, System Operator and User input. We believe that STEG / DG1 is best placed to initiate this work.

OC10 Event Information Supply

- 37.Our comments on OC7 in relation to exchange of information with the Transmission Owners relate equally to OC10.
- 38. We understand that Load Management Blocks have a significant role in the operation of the Transmission System in Scotland and therefore believe provisions relating to the exchange of information on them should be made in the GB Grid Code. Considering the nature of Load Management Blocks, control of demand by Suppliers, it may be more appropriate to place provisions in OC1 Demand Forecasting. We look forward to hearing Ofgem/DTIs further thoughts on this subject.

OC12 System tests

39. We have no comment on the drafting at this stage, save to note that any System test is likely to require significant involvement of the Transmission Owners. Therefore similar provisions will need to be in place in the STC and it may be appropriate to highlight this relationship in OC12.

Conclusion

45. We welcome the opportunity to comment on "GB Grid Code Operating Codes 1,2,3,6,7,9,10,12 – An Ofgem/DTI min-drafting consultation document 132/03 – October 2003'. Whilst we are undertaking the drafting of the GB Grid Code under the policy direction of Ofgem, and as such the legal text can not be said to reflect our views, the issues we have highlighted above are in part informed by our role as drafters of the GB Grid Code.

- 46. In terms of substance, we broadly agree with the Ofgem/ DTI propositions, and have set out our detailed thoughts in this Consultation response. However, we are concerned here is still a considerable amount of further detailed work to be carried out. For example, the production of Local Joint Restoration Plans, OC9 De-Synchronised Island Procedures and the actual exchange of data required by the GB Grid Code (including that required from the Moyle Interconnector owner and Scottish Suppliers in relation to Load Management Blocks).
- 47.We look forward to continuing to work constructively with Ofgem/ DTI in helping Ofgem/ DTI to develop the appropriate GB Grid Code. More generally, we will of course be continuing to input constructively into the BETTA Consultation process going forward.