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

Volume 1

September 2003

Summary

This document is the second in a series of three consultations to develop a Grid Code to support British Electricity Trading and Transmission Arrangements (BETTA) which are planned to be introduced in April 2005[1]. It is proposed that there will be a single grid code for Great Britain ('a GB Grid Code') to apply to all users of the GB transmission system in place of the two separate grid codes that currently apply in England and Wales and in Scotland. This document:

- concludes on the issues raised in the first consultation on a GB Grid Code
- considers change co-ordination between the GB Grid Code and the SO-TO Code (STC) and invites views on this and change co-ordination between the STC and other industry codes
- sets out the timetable and process for the further development of the GB Grid Code
- lists the modifications that have been introduced to either of the existing grid codes since issuing the previous consultation paper, and requests views on their adoption in the GB Grid Code, and
- sets out the first draft of the GB Grid Code and invites views on this text.

The first draft of the GB Grid Code included in this consultation paper does not include drafting for OC8 (Safety Co-ordination (equivalent operating code in Scotland is OC6)) or OC11 (Numbering and Nomenclature of HV Apparatus at Certain Sites (equivalent operating code in Scotland is OC9)), nor does it include all additional drafting required to incorporate those aspects of the existing Scottish Grid Code that need to be included in the GB Grid Code. As the drafting on these matters is progressed, Ofgem/DTI consider that it may be appropriate to share interim updated drafts of sections of the GB Grid Code as they become available. This will be done in the form of 'mini-drafting consultations' which will be available on the BETTA area of the Ofgem website. Ofgem/DTI plan to publish an interim conclusions paper on the matters consulted upon in this document in December 2003. Ofgem/DTI anticipate that following receipt of

[1] Which is subject to the Electricity (Trading and Transmission) Bill being introduced in the next Parliamentary session and Royal Assent to the E(TT) Bill by July 2004.

views on the draft text and publication of the interim conclusions document and following comments received on any mini-drafting consultations, that a second complete draft of the text of a GB Grid Code will be produced for final comment in February 2004.

This document comprises two volumes. Volume 1 summarises the issues that were consulted upon in the first GB Grid Code consultation paper, provides an overview of responses received and sets out Ofgem/DTI's conclusions. It identifies those modifications to the grid codes which have been approved by the Authority since the first GB Grid Code consultation and sets out Ofgem/DTI's proposals for whether or not these modifications should be included in the GB Grid Code. It also provides a commentary on the draft legal text which is provided in volume 2. The draft text has been produced on the basis of the conclusions set out in volume 1. Ofgem/DTI propose that this draft text forms the basis of the GB Grid Code and invite views on the drafting.

The key conclusions from the first consultation paper on a Grid Code under BETTA are that:

- there should be a single GB Grid Code under the governance of a single Grid Code Review Panel and that the GB system operator should have a licence obligation to have in force the GB Grid Code
- the GB Grid Code should be based on the existing England and Wales Grid Code, with some specific exceptions where it is proposed that regional differences between the two existing Grid Codes are retained. Work is ongoing to determine which of these differences need to be maintained
- transmission owners do not need a licence obligation to comply with the GB Grid Code. Transmission owners will be obliged through their licence to be party to the STC which will include obligations on the transmission owners to undertake activities necessary for the GB system operator to deliver a service to users under the GB CUSC and GB Grid Code. Equally the STC will contain obligations on the GB system operator to undertake activities necessary for a transmission owner to discharge the obligations under its licence or the STC
- the generator representation at the Grid Code Review Panel should be revised to better reflect the industry participants across GB

- obligations on users in the GB Grid Code should be generally as specified in the England and Wales Grid Code and that the size of plant to which they apply (Small, Medium and Large) should, in Scotland, reflect the central despatch limits in the existing Scottish Grid Code.

The matter of the application of the Grid Code to small, transmission connected generators will be given further consideration in a separate consultation on the impact of BETTA on small generators.

Views are invited on proposals for change management between the STC and other industry codes under BETTA, the handling of modifications to the existing Grid Codes and the first draft of the GB Grid Code.

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1. Rationale

1.1. The rationale for the British Electricity Trading and Transmission Arrangements (BETTA) reforms is set out in a consultation paper of December 2001[2] ('the December 2001 consultation paper') and a report of May 2002[3] ('the May 2002 report').

1.2. On 30 January 2003 the DTI published a draft of the Electricity (Trading and Transmission) Bill (the E(TT) Bill) together with a Regulatory Impact Assessment (RIA), which explains the purpose and impact as well as the expected costs and benefits of the proposed primary legislation to enable the BETTA reforms.

1.3. The December 2001 consultation considered the implementation of a single grid code under BETTA noting that reform of the existing Grid Codes would be needed in order for them to support the trading arrangements to apply under BETTA. The consultation sought views on whether under BETTA it was appropriate to adopt a single GB Grid Code.

1.4. The May 2002 report noted that there was wide support for a single GB Grid Code, with perhaps some sections retaining regional differences. Several respondents thought that the GB Grid Code should be developed by selecting the best text from each existing Grid Code.

1.5. In December 2002, Ofgem/DTI published a consultation document[4] on the arrangements that should be embodied in a grid code to apply across GB. That consultation is referred to in this document as 'the first GB Grid Code consultation'.

1.6. The rationale for this document is to consider the responses received to the first consultation and to reach conclusions on the issues raised. Volume 1 also considers modifications that have been approved to the existing grid codes since

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[2] 'The Development of British Electricity Trading and Transmission Arrangements (BETTA): A consultation paper', Ofgem, December 2001. Ofgem #74/01.
[3] 'The Development of British Electricity Trading and Transmission Arrangements (BETTA): Report on consultation and next steps' Ofgem/DTI, May 2002. Ofgem #38/02.
[4] 'The Grid Code under BETTA, Ofgem/DTI consultation on a grid code to apply throughout GB' Ofgem/DTI, December 2002. Ofgem #78/02.

the first GB Grid Code consultation was published. These are examined in chapter 5, proposals are made on whether they should be included in the GB Grid Code and views are invited on these proposals. Volume 1 also includes a commentary on the proposed text of a GB Grid Code and invites views on the draft text which is provided in volume 2.

1.7. The first consultation was based upon the England and Wales Grid Code, Issue 2 - Revision 8 - effective date 30th September 2002. The Authority has approved two changes to the England and Wales Grid Code and the current version is now Issue 2 – Revision 10 – 1st May 2003, available on NGC's website at www.nationalgrid.com/uk/indinfo/grid_code/index.html. The first consultation was also based upon the Scottish Grid Code Version 8a, effective date November 2002, available on Scottish Power's website at gso.scottishpower.com/publicdocs/default.asp or Scottish and Southern's website at www.scottish-southern.co.uk/ssegroup/powersystems_p2.asp#, by selecting Power Systems Key Documents. There have been no changes to the Scottish Grid Code since the first GB Grid Code consultation. The basis for the drafting of the legal text in volume 2 is discussed in chapter 6.

2. Timetable

2.1. As described in the first GB Grid Code consultation, this document is the second in a set of three consultation papers intended to develop a GB Grid Code.

2.2. The proposed timetable and process for the development of a GB Grid Code is as follows:

- this paper is the second GB Grid Code consultation paper and includes the first draft legal text of the GB Grid Code
- responses to this consultation document should be sent by Tuesday 25 November 2003 to Bridget Morgan (details below)
- subject to the responses received, an interim conclusions paper addressing the matters being consulted upon in this document will be published in December 2003
- it is anticipated that a third GB Grid Code consultation paper including the second draft legal text will be published in February 2004 with responses requested in March 2004. This will take into account comments received on the first draft text. This consultation will also consider any further changes that have been approved to the existing grid codes since publication of this consultation and will consult upon their suitability for inclusion in the GB Grid Code
- it is planned that conclusions and final legal text for the GB Grid Code will be published in May 2004. It is anticipated that the GB Grid Code will be given legal force through powers provided in the E(TT) Act. The legal transition to a GB Grid Code will be addressed and consulted upon in the context of a consultation paper on implementation and transitional issues, and
- further changes to the GB Grid Code that will apply under BETTA may be required during the period between production of the final legal text and BETTA go-live. Should such changes arise, their inclusion in the GB Grid Code will be consulted upon at that time.

2.3. Some early discussions have been held with the transmission licensees[5] and latterly some users concerning the development of a Grid Code under BETTA and there has been some initial discussion of BETTA at grid code and distribution code review panel meetings. Regular updates of progress in developing a GB Grid Code will be made at future grid code and distribution code review panel meetings.

2.4. In December 2002, the Minister made an announcement concerning the GB system operator[6] ('the proposed GB system operator'). Ofgem/DTI have requested the assistance of the proposed GB system operator (the National Grid Company plc ('NGC')) in preparing the draft text for volume 2 of this consultation paper. This work has been done on behalf of Ofgem/DTI and is subject to the oversight of Ofgem/DTI.

2.5. The first GB Grid Code consultation suggested that the drafting could be progressed by the existing grid code review panels setting up a joint working group to progress the development of the GB Grid Code. Two respondents were in favour of pursuing this approach, however Ofgem/DTI consider that there is insufficient time for this approach to be adopted in time to produce a code for recommendation by Ofgem/DTI to the Secretary of State for designation. No other respondents mentioned this matter, but at a subsequent meeting of the Scottish Grid Code Review Panel, users also supported user participation in the development of a GB Grid Code. The expert group referred to in section 2.3 was established prior to the first GB Grid Code consultation to provide technical expertise to Ofgem/DTI in writing the first consultation. The terms of reference of this group, for this next phase of work have been established such that Ofgem/DTI can invite representatives, other than the transmission licensees, to meetings. Ofgem/DTI welcome the participation of grid code review panel members in assisting Ofgem/DTI with technical expertise to support the development process and will consider any further approaches to participate in the GCEG.

[5] The GB grid code expert group (GCEG). Notes of the meetings of this group are published on the BETTA area of the Ofgem website 'www.ofgem.gov.uk'.
[6] See Hansard, 17 December 2002, Official Report. Column 45WS.

2.6. At recent meetings the GCEG have been reviewing the differences between the existing Grid Codes to assist Ofgem/DTI in drafting the GB Grid Code. It has not been possible to consider all the differences in time for this draft but most are identified in the commentary provided in chapter 6 and this work is expected to continue. It is proposed that, in progressing drafting of the GB Grid Code such that a final version can be published in May 2004, it may be helpful, following the GCEG consideration of a particular section of the code, for a 'mini-drafting consultation' on each section of the code to be undertaken. Prior to the next consultation on the second complete draft of a GB Grid Code (planned for February 2004), Ofgem/DTI will therefore publish sections of the GB Grid Code on the Ofgem website and views on their content will be invited. Whilst comments received will be considered in the further development of the GB Grid Code, it would not be the intent to issue formal responses to each of the issues raised or to separately conclude on the matters raised in these mini-drafting consultations, unless Ofgem/DTI believed that this was necessary in order to expedite the BETTA development process.

Views invited

2.7. Parties are free to raise comments on any of the matters covered in this paper and in particular on those matters where views have been requested. Although transitional issues will be dealt with at a later date separately from the consideration here of the enduring arrangements, respondents should feel free to raise any such matters that arise in consideration of these issues. All responses, except those marked confidential will be published on the Ofgem website and held electronically in the Ofgem Research and Information Centre. Respondents should try to confine any confidential material in their responses to appendices. Ofgem prefers to receive responses in an electronic form so they can easily be placed on the Ofgem website.

2.8. Responses marked 'Response to second GB Grid Code consultation' should be sent by Tuesday 25 November 2003 to:

Bridget Morgan
Technical Directorate
Office of Gas and Electricity Markets (Ofgem)

9 Millbank
London
SW1P 3GE
Tel: 020 7901 7080
Fax: 020 7901 7075
Email: Bridget.Morgan@ofgem.gov.uk

2.9. Please e-mail responses to BETTA.Consultationresponse@ofgem.gov.uk marked 'Response to second GB Grid Code consultation'. All responses will be forwarded to the DTI.

2.10. If you wish to discuss any aspect of this document, please contact Bridget Morgan at Ofgem or Renata Williams at the DTI (e-mail: renata.williams@dti.gsi.gov.uk, telephone: 020 7215 0442).

3. Background

3.1. In the December 2001 consultation Ofgem set out its vision of a model that would enable all consumers in Great Britain to benefit from more competitive wholesale markets. The set of proposed reforms outlined in that paper is termed BETTA.

3.2. On 15 April 2002, the Government announced its intention to bring forward legislation to implement BETTA when Parliamentary time allows[7]. Such legislation is referred to in this document as the Electricity (Trading and Transmission) Bill ('the E(TT) Bill') or, based on an assumption of Royal Assent to such a Bill, as 'the E(TT) Act'.

3.3. The requirement for a GB Grid Code to support BETTA was discussed in the December 2001 consultation paper and May 2002 report. Respondents to the May 2002 report supported the development of a GB Grid Code. In December 2002, the first consultation on a GB Grid Code was published which made proposals for the development of a GB Grid Code.

3.4. Also in December 2002, Ofgem/DTI published consultation documents on the regulatory framework for transmission licensees[8], on a Balancing and Settlement Code (BSC) to apply throughout GB[9], on the Connection and Use of System Code under BETTA[10] and on the Settlement Agreement for Scotland (SAS) under BETTA[11].

3.5. On 30 January 2003, the DTI published the draft Electricity (Trading and Transmission) Bill[12] together with the Regulatory Impact Assessment, which has been the subject of pre-legislative scrutiny by the Trade and Industry Select

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[7] See Hansard, 15 April 2002 Official Report Column 748W.
[8] 'Regulatory framework for transmission licensees under BETTA, an Ofgem/DTI consultation, December 2002. Ofgem #88/02.
[9] 'The Balancing and Settlement Code under BETTA, Ofgem/DTI consultation on a BSC to apply throughout GB', December 2002. Ofgem #80/02.
[10] 'The Connection and Use of System Code under BETTA, Ofgem/DTI consultation on a CUSC to apply throughout GB', December 2002. Ofgem #79/02.
[11] 'The Impact of BETTA on the Settlement Agreement for Scotland (SAS), an Ofgem/DTI Consultation', December 2002. Ofgem #81/02.
[12] See DTI press notice P/2003/60 published 30 January 2003 on www.dti.gov.uk follow 'Press Notices'.

Committee (TIC). This process is complete and the TIC published a report[13] on 8 April 2003.

3.6. Work is ongoing in other areas of the BETTA project, such as the changes required to transmission licences, the allocation of roles between the system operator and transmission owners and the drafting of a code (the 'SO-TO Code' or 'STC') to support this, which may affect aspects of the GB Grid Code. A first set of consultations on these matters have been published as referred to in section 3.4 and a second series of consultation papers on the BSC, CUSC, transmission licence conditions and STC was issued in June 2003. Any consequential effects on the development of a GB Grid Code emerging from these work areas will be considered in the third GB Grid Code consultation.

3.7. This document does not consider the arrangements necessary to effect the legal transition to a GB Grid Code. This document makes proposals only in respect of the enduring arrangements. The legal transition to a GB Grid Code and other transitional issues will be consulted upon at a later date. If interested parties wish to refer to any such matters in their responses they should feel free to do so.

[13] 'The British Electricity Trading and Transmission Arrangements: Pre-legislative scrutiny of the draft Electricity (Trading and Transmission) Bill. Fifth report of session 2002-3. Volumes 1and 2.' See www.parliament.uk/parliamentary_committees/trade_and_industry.cfm.

4. Summary of responses and Ofgem/DTI views

Background information

4.1. In the first GB Grid Code consultation, Ofgem/DTI sought views on a number of issues associated with the development of a GB Grid Code relating to the legal framework for the GB Grid Code, the role of the GB Grid Code and the composition of the GB Grid Code Review Panel (GB GCRP). In that consultation paper, Ofgem/DTI set out details of other BETTA consultation papers that had been issued that contained information that was relevant when considering issues associated with the development of the GB Grid Code, in particular those that set out proposals for the role of the GB system operator and transmission owners under BETTA[14].

4.2. Since the issue of the first GB Grid Code consultation, further details on the role of the GB system operator and transmission owners under BETTA have been set out in June 2003, most notably in further consultation papers on the regulatory framework for transmission licensees[15], the STC[16] and the GB CUSC[17].

4.3. Ofgem/DTI's thinking on GB Grid Code matters has therefore been informed by the responses to the first GB Grid Code consultation and the proposals set out in November and December 2002 on the proposed role of the GB system operator and transmission owners under BETTA (with further detail supporting these proposals contained in papers issued in June 2003). A summary of these proposals to date that is pertinent to the consideration of GB Grid Code matters is set out here to set the background to Ofgem/DTI's views on specific issues that are being consulted upon in the development of the GB Grid Code.

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[14] See footnotes 8 and 10.
[15] 'Regulatory framework for transmission licensees under BETTA, an Ofgem/DTI consultation', 30/06/03. Ofgem #59/03.
[16] 'The SO-TO Code under BETTA, an Ofgem/DTI consultation', 09/06/03. Ofgem#41/03.
[17] 'Connection and Use of System Code under BETTA, an Ofgem/DTI consultation', 13/06/03. Ofgem #46/03.

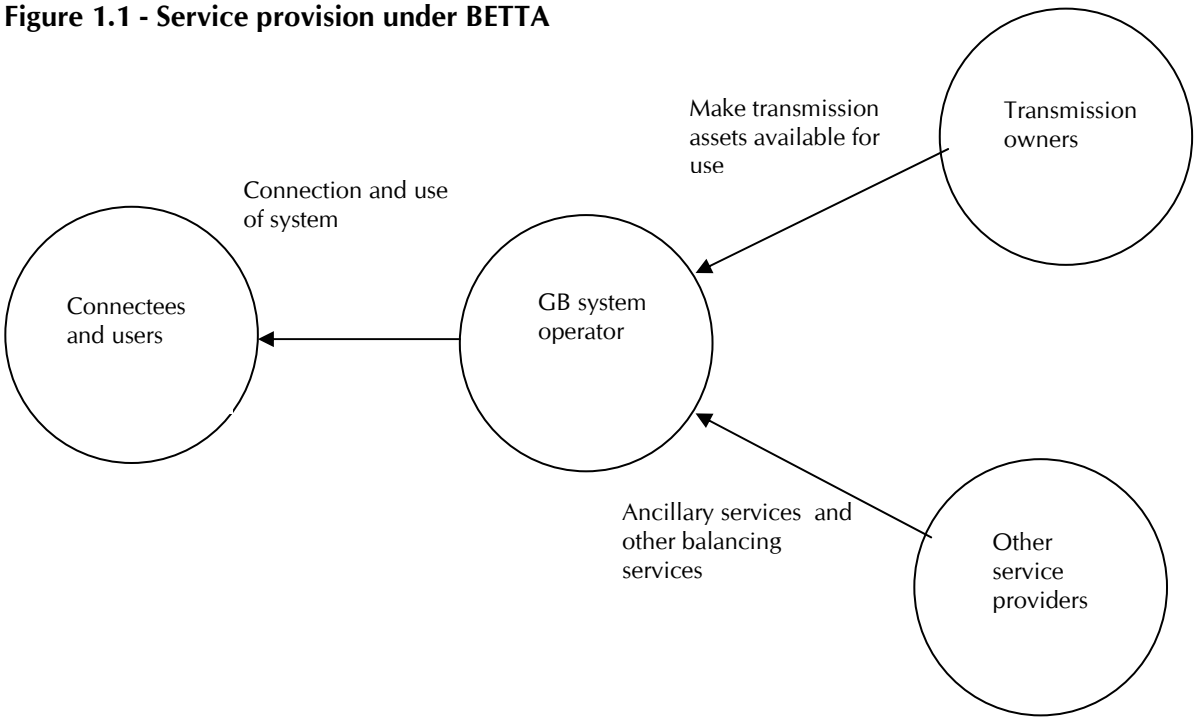
The role of the GB system operator and transmission owners under BETTA

4.4. Under BETTA the principal role of a transmission owner will include planning, developing and making available its assets to the GB system operator and the principal role of the GB system operator will include operating the transmission system and offering terms for connection and use of the transmission system to those seeking it. It is noted however that the GB system operator will have a role in relation to planning and developing transmission assets that it does not own and that transmission owners will have a role in the operation of the transmission system in the areas in which they own transmission assets. The GB system operator will be the single contractual provider of services to users seeking connection to and use of the GB transmission system.

4.5. The GB system operator will rely on the transmission owners to provide the necessary transmission infrastructure and certain associated services that it requires such that it can deliver its service of connection to and use of the transmission system to users. The main documents that, taken together, set out the detail of the service provided to users by the GB system operator are the transmission licence, the GB BSC, the GB Grid Code and the GB CUSC. It is expected that the GB system operator will find it necessary to procure some services (eg balancing services) in order to meet its overall obligations under the GB BSC, GB CUSC, its transmission licence and elsewhere[18]. In addition the GB system operator will undertake certain activities itself. It will therefore be a combination of externally procured services and activities undertaken 'in-house' that will enable the GB system operator to provide a connection and use of system service to users of the GB transmission system. Figure 1.1 below depicts at a high level this service provision:

[18] It is recognised that the scope of the services that the GB system operator will provide is greater than simply the services of connection to and use of system to users under the CUSC, and that furthermore, the services provided by transmission owners to the GB system operator will require them to undertake, amongst other things, maintenance and construction of transmission assets. It is not intended that figure 1.1 provides an exhaustive description of the services provided between the entities shown above, instead, it is intended to give an overview of the proposed flow of service provision in relation to connection and use of system under the BETTA model.

Figure 1.1 - Service provision under BETTA



4.6. The role of the transmission owners may therefore be characterised as providing a number of the services required by the GB system operator in order that the GB system operator can deliver connection and use of system services to users. The transmission owners' service would comprise making transmission assets available for use by the GB system operator. The transmission owners will also be responsible for planning and developing the transmission network in their respective geographic areas.

4.7. In general, it is anticipated that the GB system operator will need to procure a variety of services from the transmission owners so that it is able to discharge its obligations under licence and its contractual obligations under a variety of industry documents including for example, the GB CUSC and the GB BSC. It is also anticipated that the transmission owners themselves will, amongst other things, need information from the GB system operator so that they can discharge their licence obligations and contractual obligations to the GB system operator (set out in the STC) under BETTA.

4.8. Ofgem/DTI have proposed that the relationship between the GB system operator and the transmission owners will be set out in the STC. It is envisaged that the STC will define the services required by the GB system operator from the transmission owners and vice versa. The STC will be a contract, as well as a regulated code. In addition transmission owners will be subject to licence

obligations requiring them to plan and develop their transmission assets and make assets available for use by the system operator. Equally the GB system operator will be subject to licence obligations that relate to the operation of the transmission system and the provision of various transmission services to users of the transmission system.

The role of the GB Grid Code

4.9. Of particular relevance to the development of a GB Grid Code is the conclusion that the GB system operator will be the party responsible for the contractual provision of connection and use of system services to users of the transmission system. The GB Grid Code will support the GB CUSC in setting out the detailed technical requirements and operating procedures that support the provision of a connection and use of system service to users of the transmission system. For example, the GB Grid Code will detail the technical requirements to support the design, planning and construction of both the transmission system and individual user connections. It will also detail the technical requirements to support operation of the GB transmission system. As is the case currently in England and Wales, parties to the GB CUSC will be required to comply with the provisions of the GB Grid Code. The GB Grid Code will therefore be contractually binding, through the provisions in the GB CUSC.

4.10. Given that the GB BSC and GB CUSC set down detailed contractual provisions that support the provision of a connection and use of system service to users of the transmission system and that the GB system operator will be responsible for providing this service to users, it follows that the GB system operator should be subject to any of the rights or obligations in those documents that relate to the party responsible for providing these services to users (referred to as the 'Transmission Company' in the existing BSC and 'NGC' in the existing CUSC and referred to as the 'System Operator' in the current drafts of the GB BSC and GB CUSC). Equally, as the GB Grid Code sets out contractual technical requirements supporting the provision of the connection and use of system service to users of the transmission system, it is therefore also considered appropriate that the GB system operator is subject to any of the rights or obligations in the GB Grid Code that relate to the party responsible for providing the connection and use of system service to users (currently referred to as 'NGC'

in the England and Wales Grid Code and 'the Company' in the Scottish Grid Code).

4.11. Ofgem/DTI consider that an alternative model, where rights and obligations as they relate to users of the transmission system are placed on transmission owners in the GB Grid Code (and the provision of the associated governance arrangements to support this), would not only be unnecessarily complex from the perspective of the user, it would also undermine one of the key elements of the BETTA proposals. One of the principal changes underpinning the BETTA reforms is the introduction of arrangements whereby access to the transmission system is provided by a party which does not have affiliates with interests in generation or supply. This results in the creation of a role for an independent GB system operator, with other transmission activities remaining with transmission owners who will not be prevented from having affiliate interests in generation and supply. To the extent that transmission owners were subject to rights and obligations as they relate to users in the user-facing codes (eg the GB Grid Code, the GB CUSC or the GB BSC), then, in the absence of specific preventative steps, this may re-introduce some unnecessary transmission owner influence over the provision of services to all users of the transmission system. For example, were obligations to apply directly between transmission owners and users, decisions on whether to enforce non-compliance of an obligation by a user would be at the discretion of the transmission owner. In certain instances the user concerned could be an affiliate of the transmission owner. In order to avoid such complications and potential conflicts of interest, it is considered that the contractual matters involving the provision of the transmission service to users should be undertaken by the GB system operator and should not be undertaken by transmission owners.

4.12. Aside from potential conflicts of interest, placing user-facing obligations directly on the transmission owners in the GB Grid Code would result in a complex set of arrangements whereby users of the transmission system in Scotland would need to be concerned with which element of transmission service was being provided by the GB system operator and which by the transmission owner. Establishing a single party responsible under contract for providing services to users should provide greater clarity from the user's perspective and help to

further clarify the respective roles of the GB system operator and transmission owners under BETTA.

4.13. Accordingly, Ofgem/DTI conclude that it is neither necessary, nor appropriate, to require transmission licensees, who are not the GB system operator, to comply with the GB Grid Code, as it is not proposed to place any rights or obligations on transmission owners in the GB Grid Code. Transmission owners will be obliged through their licence to be party to the SO-TO Code which will include obligations on the transmission owners to undertake the activities necessary for the GB system operator to deliver a service to users under the GB CUSC and GB Grid Code.

The relationship between the GB Grid Code and the STC

4.14. Although some of the activities of the GB system operator referred to in the GB Grid Code may physically be undertaken by transmission owners, they will be conducting those activities under contract with the GB system operator (i.e. via the STC) and will not be providing a contractual service to users. To the extent that the GB system operator will be reliant upon the actions of transmission owners to discharge some of its obligations under the GB Grid Code, it is proposed that the obligations on transmission owners to provide specified necessary services to the GB system operator will be set out in the STC. Where the GB system operator cannot discharge a GB Grid Code obligation without actions being taken by a transmission owner, it will be necessary for the GB system operator to ensure that similar or supporting obligations on transmission owners exist in the STC (for example the obligation to prepare Operation Diagrams[19] for Connection Sites). There will be other matters where transmission owners will be performing an activity or involved in an activity which is referred to in the GB Grid Code. For example, the Grid Code currently provides an obligation that the transmission licensee shall apply the Licence Standards in planning the system[20] and sets out procedures relating to various site related matters in the Connection Conditions. In drafting the GB Grid Code, obligations with respect to these matters have been placed on the GB system operator and as part of the STC development process, complementary or

[19] Note capitalised terms are defined in the GB Grid Code.

supporting obligations to carry out such activities will need to be placed on transmission owners in the STC.

4.15. Equally it is proposed that any requirements that the transmission owners have of the GB system operator will be set out in the STC. In order for the transmission owners to be capable of discharging their licence obligations or their obligations to the GB system operator under the STC, it will be necessary, in certain circumstances, to place obligations on the GB system operator in the STC. For example, to procure that users undertake certain actions or to provide certain data to transmission owners relating to users. The way in which the GB system operator would discharge such obligations would be by placing corresponding obligations on users, in some cases through the GB Grid Code. Further discussion of such arrangements is contained in the consultation paper on the STC[21].

4.16. Ofgem/DTI recognise that as a consequence of these arrangements, changes to the GB Grid Code could result in the need for changes to the STC (and vice-versa), and that it will be important that the impact of a modification on transmission owners (and users) can be taken account of when considering modifications to the GB Grid Code (and the STC). In the case of services provided to users by the GB system operator which are carried out, either wholly or partially by transmission owners in accordance with the STC, the question arises should the transmission owners have any direct influence or rights in relation to changes to these aspects of the GB Grid Code. Equally the question arises as to whether users should have any direct influence or rights in relation to changes to corresponding matters contained in the STC. These cross-code matters, which exist today between the BSC, CUSC and the Grid Code, are discussed further below.

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[20] E&W PC.6.1, Scotland PC 4.1.

[21] 'The SO-TO Code under BETTA, Summary of responses and conclusions on vols 3 and 4 of the December 2002 consultation on the regulatory framework for transmission licensees under BETTA, and further consultation on the SO-TO Code'. Ofgem #41/03. 09/06/2003.

Change management between the STC and the GB Grid Code (and between the STC and user-facing industry codes)

4.17. As set out earlier, where the GB system operator is reliant upon actions being taken by a transmission owner in order that the GB system operator can discharge its obligations to users under the GB Grid Code, the STC will need to place an obligation on the transmission owner to undertake that action. Equally where a transmission owner is not capable of discharging an obligation under its licence or the STC without action being taken by the GB system operator (including the provision of certain information that the GB system operator may have acquired under a user facing code), the STC will place an obligation on the GB system operator to take that action which could require, for example, the GB system operator to place a corresponding obligation on users in the GB Grid Code.

4.18. As a consequence, changes to obligations on the system operator in the GB Grid Code could require changes to the STC and equally changes to the STC could require changes to obligations in the GB Grid Code. In December 2002, Ofgem/DTI recognised that where potential changes to the STC arise as a consequence of proposed changes to user-facing codes, that it was important to find an effective mechanism to ensure that transmission owners can adequately represent their views on the (indirect) effect of the proposed change to the user-facing code upon them. Equally, mechanisms need to be found to enable users' views to be adequately represented when changes to the STC have the potential to impact upon changes to user-facing codes such as the GB Grid Code, GB CUSC or GB BSC. Ofgem/DTI continue to believe that change processes set out in user-facing codes and change processes set out in the STC should contain measures such that adequate cross-code impact assessment and change co-ordination takes place.

4.19. Currently cross-code impact assessment and change-coordination takes place between each of the BSC[22] and CUSC[23] and 'core industry documents'. The

[22] BSC provisions are: F1.6.1The Panel shall establish (and, where appropriate, revise from time to time) joint working arrangements, consistent with any IS Policies relating to change co-ordination, with each Core Industry Document Owner to facilitate the identification, co-ordination, making and implementation of change to Core Industry Documents consequent on a Code Modification in a full and timely manner.

bodies responsible for progressing modifications to the BSC and CUSC are charged with having in place mechanisms designed to identify the impacts on core industry documents of a proposed change to either the BSC or CUSC, as the case may be. Currently the BSC and CUSC licence conditions require NGC to secure any necessary changes to core industry documents to which it is a party where such changes are necessary to give effect to a modification to the CUSC or BSC, as the case may be. In addition the CUSC and BSC modification procedures set out in NGC's licence contain requirements for:

- a modification proposal to be brought to the attention of any person that may have an appropriate interest in it
- to include any views/representations received on that modification in the report (any person is free to submit their views on a proposed modification), and
- any modification report to set out the impact of a proposed modification on core industry documents.

4.20. It is proposed that these requirements will continue in relation to the GB CUSC and GB BSC under BETTA. Furthermore it is proposed that the definition of core industry documents is amended under BETTA to include the STC. This means that the existing processes for managing change-coordination for changes arising under the BSC and CUSC would continue to apply to core industry documents, which would include the STC.

F1.6.2 The working arrangements referred to in paragraph 1.6.1 shall be such as enable the consideration, development and evaluation of Modification Proposals, and the implementation of Approved Modifications, to proceed in a full and timely manner and enable changes to Core Industry Documents consequent on a Code Modification to be made and given effect wherever possible (subject to any necessary consent of the Authority) at the same time as such Code Modification is made and given effect.

[23]CUSC provisions are: 8.14.1 The **System Operator** shall establish (and, where appropriate, revise from time to time) joint working arrangements for change co-ordination with each **Core Industry Document Owner** to facilitate the identification, co-ordination, making and implementation of change to **Core Industry Documents** consequent on an **Amendment** in a full and timely manner.
8.14.2 The working arrangements referred to in Paragraph 8.14.1 shall be such as enable the consideration, development and evaluation of **Amendment Proposals**, and the implementation of **Approved Amendments**, to proceed in a full and timely manner and enable changes to **Core Industry Documents** consequent on an amendment to be made and given effect wherever possible (subject to any necessary consent of the **Authority**) at the same time as such **Amendment** is made and given effect.

4.21. The Grid Code licence conditions currently require that any report proposing to change the Grid Code submitted to the Authority should be accompanied by the sustained written representations or objections received from any authorised electricity operators liable to be materially affected by it. It is proposed that this will also be a requirement in the GB Grid Code licence condition under BETTA (see Appendix 1). As authorised electricity operators, transmission owners would be able to submit written representations on proposed changes to the Grid Code to the extent that such a change is likely to materially affect the transmission owner (through a consequential requirement to amend the STC to give effect to the change to the Grid Code).

4.22. It is also proposed that there will be a requirement in the GB Grid Code licence condition requiring the GB system operator to progress any changes to the STC necessary to give effect to an approved change to the GB Grid Code. It is worth noting that currently NGC's Grid Code licence condition does not have any requirements in relation to change coordination between it and other industry documents. It is therefore considered that the only changes that can be introduced under BETTA are those that are necessary as a result of the creation of the STC (as any change coordination issues that arise between the GB Grid Code and other industry documents will be no different to those that arise today).

4.23. In relation to the STC, the proposed STC licence condition includes a requirement that as part of the STC amendment process any proposed amendment should be brought to the attention of any person that might have an appropriate interest in it. This could include users that are likely to be impacted by the STC amendment were it to be implemented, through a requirement to give effect to a consequential amendment/modification in the GB Grid Code, GB CUSC or GB BSC. Any person would be free to make representations on the proposed STC amendment and the STC licence condition requires that such representations are properly considered and that the likely effect of the proposed amendment (if any) on the GB CUSC, GB Grid Code or GB BSC is also properly considered.

4.24. As set out in the June 2003 consultation on the STC, Ofgem/DTI propose that the STC committee should be required to establish joint working arrangements with the 'owner' of each of the relevant industry documents to facilitate the

identification, co-ordination, making and implementation of change to such documents consequent to a STC amendment. The relevant industry documents would include the GB Grid Code, the GB CUSC and GB BSC. These working arrangements will be required to enable consideration, development and evaluation of amendment proposals, and the implementation of approved amendments, to proceed in a full and timely manner.

4.25. Ofgem/DTI have given further consideration to additional measures that might be required to establish appropriate change management arrangements between the STC and user facing codes, including the GB Grid Code. In the discussion that follows, the issues considered are examined in the context of the STC and the GB Grid Code. However it is recognised that effective change management needs to be applied not just between the STC and the GB Grid Code, but also between the STC and other user facing codes where the GB system operator is subject to rights and obligations. Any proposals in relation to the STC and GB Grid Code, could therefore apply equally between the STC and other user facing codes, including the GB CUSC and GB BSC. Were such proposals to be taken forward, further consideration will be required of any changes needed to the GB BSC and GB CUSC to give effect to them. This would be undertaken as part of each of the ongoing consultations on the development of a GB BSC and GB CUSC.

4.26. Additional change co-ordination measures have been considered in the context of the following issues:

- **Identification of a cross-code matter**: For each matter raised for review in the GB Grid Code there should be an assessment of whether this matter may have an impact on other user facing codes or the STC. Any impact should be advised to the GCRP and users or to the STC committee as appropriate. This may trigger consideration of the consequential changes that would be required, monitoring of the progress of the changes being considered in the other forum, or coordination of the development of change proposals. There are a variety of bodies who could conduct such activities: these could be the GB system operator, the party who raised the change or either one or both of the GCRP or the STC committee.

- **Discussion of cross-code matters:** There may be a need to facilitate combined discussions between the Grid Code Review Panel and the STC Committee to enable exploration of the associated implications of a change to both codes, and to facilitate the maintenance of consistency across both codes and the development of consequential change proposals in a manner that provides for efficient use of resources. This could be facilitated in an informal manner by enabling such cross code discussions in the governance arrangements for each document (i.e. the ability for the STC committee to invite GCRP members to their meetings to discuss linked issues and vice-versa) or in a more formal manner defining explicitly in the governance arrangements for each code for example cross panel/committee representatives either invited on an ad hoc basis, a standing basis or as members of the other panel/committee.

- **Development of cross-code change proposals:** Development of change proposals which affect both the STC and the GB Grid Code could either be effected in a separate manner or could be progressed jointly by a combined group. Again, these arrangements could either be facilitated or mandated by the governance arrangements.

- **Consultation on cross-code matters**: Where a matter requires change to both the STC and the GB Grid Code, it would seem efficient to co-ordinate the consultation on such matters. This could either be done by having separate consultations which cross-refer to each other or having a joint consultation.

- **Preparation of reports to the Authority**: Similarly, it may be desirable to either enable a joint report on some matters or to co-ordinate the submission of the reports to the Authority. However it would probably be cumbersome to develop processes that provided for a joint report, as currently panels (or NGC or the Company as the case may be) have a duty to report on the impact of a proposed change to the document that they have oversight of on meeting the objectives for that document.

4.27. In determining whether additional change coordination measures are required, it is worth considering whether the creation of the STC gives rise to new cross-code change management issues that have not been provided for in existing

cross-code change management arrangements (for example in relation to the BSC and core industry documents). If so, additional measures between the STC and user facing codes might be warranted. The proposed model whereby the user and the transmission owner enter into an Interface Agreement under the GB CUSC and the STC respectively is an example of where such coordination may be required in future. Another example could be user data required under the Planning Code of the GB Grid Code to enable a transmission owner to fulfil a licence obligation to plan its transmission assets.

4.28. Compared with other codes, Grid Code developments typically take place over a longer time scale and occur less frequently. This may be a function of the technical nature of the codes, or that changes to these codes can require significant change to operational processes and associated system development. There is no reason to anticipate that the creation of the STC will of itself increase the number of changes to the GB Grid Code. If so, it may be adequate to mirror existing BSC, CUSC and Grid Code requirements to co-ordinate changes between the GB Grid Code and the STC. Equally, unless the creation of the STC introduces more significant cross-code change issues between it and the GB BSC, GB CUSC and other core industry documents that are not currently experienced in the context of the existing industry codes, then it is not clear why the introduction of BETTA would justify the creation of additional measures on cross-code change management matters over and above those which already exist.

4.29. Alternatively, it may be considered that further co-ordination is required between the STC and the GB Grid Code, GB CUSC and GB BSC over and above that which is required currently. One of the reasons why this might be justified could be due to reliance that the GB system operator will have on the need for complementary or aligned obligations between the STC and, for example, the GB Grid Code. If so, additional means of co-ordinating change between user facing codes, and in particular the GB Grid Code and the STC, might be appropriate. Ofgem/DTI invite views on whether additional measures are appropriate and if so, what they should be.

The legal framework for the GB Grid Code and the GB Grid Code licence condition

4.30. In the first GB Grid Code consultation, Ofgem/DTI proposed that, as the Grid Code is considered to be a technical document that supports the provision of a connection and use of system service to users of the transmission system, and as it is proposed that the GB system operator will be the party responsible for providing a connection and use of system service to users of the transmission system, the licence obligation to have in place the GB Grid Code should be contained in the licence of the GB system operator. It was also proposed that the GB Grid Code should be under the governance of a single panel.

4.31. In the first consultation it was also noted that an alternative model for the legal framework that had been suggested was one where the sub codes of the GB Grid Code were separately managed with separate review panels. Proponents of this alternative model favoured it because they believed that some sub codes would be of prime interest to the GB system operator and others would be of prime interest to the transmission owners. Under this alternative model the GB Grid Code would be split into separate codes with the licence requirement for some parts as an obligation on the GB system operator and for others as a joint obligation on the transmission owners. Separate panels would then maintain the separate codes. Ofgem/DTI did not support this model for a number of reasons, including the reason that it was considered inconsistent with the BETTA objective of introducing a single set of arrangements for access to the transmission system in GB administered by an independent GB system operator.

Requirement to have in place the GB Grid Code

4.32. Twelve respondents commented on this matter, with ten agreeing with the proposal for a single GB Grid Code as a licence condition on the GB system operator and two disagreeing.

4.33. One who disagreed stated that: 'the existing Grid Codes provide for technical requirements on the design of the system which will impact on design, planning and construction of both the system and user connections by the transmission owners. They stated that 'the GB system operator will not necessarily have the

full set of skills associated with the planning of the network that the transmission owners have.' They also believed that 'the contractual interface for connections should be with the transmission owner who will be responsible for the design and build of the transmission system.' Further they stated that 'the proposals that the code panels take on governance of (electrical) standards, including potentially the transmission licence planning standards, further reinforces the point that the role of the Grid Code and the panel are wider than the technical interface between the customer and the GB system operator.'

4.34. Ofgem/DTI recognise that some of the technical requirements in the GB Grid Code will ultimately support the design, planning and construction of the transmission assets and user connection by transmission owners. However it is not clear why this, in itself, means that it is necessary for the GB Grid Code to establish a relationship between transmission owners and users. It is intended that to the extent that transmission owners require certain data in order to discharge their contractual or licence obligations, then an obligation will be placed on the GB system operator to provide this data (including in certain circumstances user data submitted under the GB Grid Code or other user-facing codes) to the relevant transmission owner. It is therefore proposed that the technical requirements supporting the GB system operator's service provision to users will therefore continue to be set out in the GB Grid Code. The technical requirements supporting the transmission owners' service provision to the GB system operator will be set out in the STC.

4.35. In relation to the comments raised about the need for the contractual interface for connection resting with the transmission owner, this is a matter which has been consulted upon in the context of the development of the GB CUSC and Ofgem/DTI have previously concluded on this matter, and continue to be of the view that this contractual interface should be provided by the GB system operator.

4.36. Ofgem/DTI note the comments in relation to the possible role of the GB GCRP in governance of electrical standards. This matter is considered in paragraph 4.59.

4.37. The second respondent who disagreed stated that: 'the lack of transmission owner involvement would be of particular concern in relation to the Connection

Conditions of the Code, that determine connection to the transmission owner's network and the involvement of the GB system operator, through the Planning Codes in the transmission owner's investment in the network'. They stated that 'equivalent treatment of the three transmission owners is a necessity of an enduring BETTA arrangement, there should be no opportunities for the GB system operator to favour its own transmission owner, and that this should equally apply to the transmission owner's rights and obligations under the GB Grid Code.'

4.38. Ofgem/DTI consider that the appropriate way in which transmission owners need to be involved in matters associated with connections is through the relevant provisions of the STC that set down the GB system operator's requirements of transmission owners in the connection process and set down the requirements that transmission owners have of the GB system operator when the GB system operator offers terms to users for connection to transmission owner' transmission assets. Ofgem/DTI do not consider that the issue of equivalent treatment of non-affiliated transmission owners by the GB system operator (when compared to the manner in which the GB system operator undertakes its own transmission ownership activities, if the GB system operator is NGC) would in any way be affected by whether or not the licence obligation to have in place the GB Grid Code rests with the GB system operator or transmission owners, whether the GB system operator is subject to all rights and obligations under the GB Grid Code or whether the GB Grid Code is a single code or multiple codes under BETTA. The June 2003 licences consultation paper[24] considers the potential for new areas of discriminatory behaviour to arise under BETTA and consults upon appropriate remedial measures.

4.39. As the party responsible for providing a connection and use of system service to users of the transmission system, Ofgem/DTI consider that the GB system operator should be the party required to have in place the GB Grid Code and therefore be subject to the GB Grid Code licence condition. The detail of the licence obligation to have in place a GB Grid Code was consulted on in the December 2002 consultation on transmission licences[25]. Responses to this

[24] See footnote 15.
[25] See footnote 8.

consultation and conclusions on the detail of the draft licence condition and associated commentary are included in Appendix 1.

Single or multiple codes

4.40. The two respondents who disagreed with the proposals in the first Grid Code consultation both thought that there should either be multiple codes (with operating and balancing codes owned by the GB system operator and planning code and connection conditions owned by the transmission owners) or a joint obligation on all transmission licensees to have in place a GB Grid Code. One of these respondents proposed that the secretariat for the Grid Code Review Panel (if there were to be a single panel) could be with the GB system operator but that the chair should rotate between the three transmission licensees. The other respondent stated that as a minimum transmission owners should be represented on the panel.

4.41. The majority of respondents to the first GB Grid code consultation did not support the creation of multiple grid codes (i.e. a system operator grid code and transmission owner grid codes). They thought that the creation of multiple codes would, for example, 'be inefficient and unwarranted'.

4.42. For the reasons set out in 4.11 and 4.12, Ofgem/DTI do not agree that it would be either necessary or appropriate to have certain aspects of the GB Grid Code (for example the planning code and connection conditions) as the responsibility of the transmission owners. For the reasons set out previously, Ofgem/DTI consider that it should be the GB system operator that is contractually responsible for providing all aspects of connection and use of system service to users of the transmission system. This includes responsibility for the technical requirements supporting the provision of those services. Ofgem/DTI therefore agree with the views expressed by the majority of respondents and conclude that there should be a single GB Grid Code. Furthermore, Ofgem/DTI remain of the view that issues associated with the interface between the GB system operator and transmission owners should be dealt with in a separate document (the STC), hence, there is no need for transmission owners to become directly involved with the GB Grid Code.

Data provision under the GB Grid Code

4.43. It is recognised that transmission owners will not be able to properly discharge their licence obligations or their contractual obligations to the GB system operator without access to certain technical information that users will submit under the GB Grid Code. It is intended that the GB system operator would be required to pass on certain user information to transmission owners under the terms of the STC and similarly, that the GB system operator will pass on data submitted by the transmission owners to users.

4.44. In the first GB Grid Code consultation, Ofgem/DTI sought views in two areas concerning data provided by users that will be used by the GB system operator in operating the transmission system and by transmission owners in their planning processes. Firstly, on whether it would be helpful to identify data that is provided to the GB system operator by users which needs to be passed onto the relevant transmission owner (to allow it to fulfil its obligations defined in the STC) and secondly, on the handling of confidential data between the system operator and the user.

4.45. Several respondents considered that data which was to be passed on to transmission owners should be identified in the GB Grid Code and the majority considered that appropriate confidentiality provisions should be in place.

4.46. Ofgem/DTI consider that for reasons of transparency, it may be desirable to identify in the GB Grid Code user data that is to be passed on to one or more transmission owners under the provisions of the STC. Further consideration of this matter will be undertaken by STEG[26] and GCEG to identify the data items.

4.47. One respondent noted that the data currently received under the Grid Code, where confidential, is confidential to 'the transmission system operator who undertakes both the transmission owner and the system operator roles' and that the three existing transmission licensees have operated with strict data confidentiality clauses stated in licences and subsidiary codes. The respondent

[26] The SO-TO Expert Group. An expert group established to provide assistance to Ofgem/DTI in developing issues associated with the detail of the allocation of functions between the system operator and the transmission owners under BETTA.

further proposed that users should be capable of sending appropriate data directly to both the transmission owners and the GB system operator and that this would eliminate the GB system operator from having to act as an unnecessary post box between the customer and the transmission owners.

4.48. Ofgem/DTI consider that appropriate confidentiality provisions must be in place using the same mechanisms as now, the licence conditions and the general provisions in the CUSC. The matter of routing information between the User, the GB system operator and transmission owners will be subject to further discussions at the GCEG and STEG.

The basis of a GB Grid Code

4.49. The first GB Grid Code consultation proposed that the basis for development of the GB Grid Code should be the existing England and Wales Grid Code together with consideration of separate regional technical requirements to reflect the existing differences between the England and Wales and Scottish Grid Codes. The majority of respondents supported the use of the England and Wales Grid Code in that: it was clearly consistent with the electricity trading arrangements; would result in minimum change for the majority of users and that there was greater clarity in its requirements.

4.50. Several respondents mentioned the issue of differing regional requirements between England and Wales, the South of Scotland and the North of Scotland. Respondents generally considered it preferable that there be common or consistent arrangements, except where regional differences could be rigorously justified, but noted that in the short term it might not be possible to conform all requirements. One respondent asked that the route and timetable for subsequent review be set down.

4.51. Ofgem/DTI have considered the scope for conforming the requirements in an initial GB Grid Code. Ofgem/DTI conclude that the GB Grid Code should comprise in general the requirements as specified in the England and Wales Grid Code but that, in Scotland, they should apply to the same general categories of plant (i.e. Small, Medium or Large) to which the equivalent requirements (currently specified in the Scottish Grid Code) apply. An example of the application of this principle is discussed in section 4.90. This approach is

considered to be technically prudent and consistent with the approach adopted when a single Scottish Grid Code was developed. Ofgem/DTI recognise that some respondents have asserted that to have regional differences in technical requirements will amount to discrimination in the treatment of plant between one network and another and produce barriers to trading. However, the differing treatment has been developed to accommodate the differing technical requirements of the transmission system in the three areas. It is considered to be a robust starting position from which to conduct further reviews of the situation when more operational experience has been gained. Ofgem/DTI consider that this approach will cause the minimum necessary disturbance to current technical arrangements while providing a common platform on which further developments can be introduced when experience of operating under the new arrangements is gained. Ofgem/DTI also conclude that introducing an objective to minimise regional differences where appropriate will be helpful in bringing together requirements over time in future reviews of the GB Grid Code (see section 4.68).

4.52. Specific exceptions to the need for common requirements have been considered in the area of safety and numbering and nomenclature and these are considered in the section on Operating Codes later in this chapter. Further exceptions arise in specifying user or system performance requirements which are a direct consequence of differences in regional planning standards which are not expected to be significantly changed for the introduction of BETTA[27]. Ofgem/DTI consider these to be areas where further work is required to identify where regional differences should be incorporated which reflect differing technical requirements (see 6.5). This work is underway in the Grid Code Expert Group and detailed information is available from the GCEG notes on the Ofgem website.

4.53. Two respondents made particular reference to the good work which had been undertaken on renewable generation requirements in developing the Scottish Grid Code and the fact that this should not be lost. One respondent noted that both Grid Code Review Panels were considering provisions for the connection

[27] 'Planning and operating standards under BETTA: An Ofgem/DTI conclusions document'. Ofgem #61/03. 30/06/03.

of wind farms and other renewable generation and that it would be helpful to the implementation of BETTA if these programmes could be merged as soon as possible.

4.54. Ofgem/DTI support this view and understand that significant co-operation has been forthcoming between the two panels on the renewables work in particular. Modifications to the two existing Grid Codes will continue during the development of the GB Grid Code. Clearly it is within the means of the two existing panels to liaise on any changes that they are considering with the intent of bringing together proposed modifications. Change proposals for the Scottish Grid Code related to windfarms have been submitted by the transmission licensees and are currently being considered by Ofgem. Renewables proposals continue in development for the England and Wales Grid Code and Scottish representatives have assisted in this work. Ofgem/DTI do not see any restrictions on the Review Panels' ability to work together on such matters and would encourage such an approach. If and when modifications are approved to either (or both) of the existing codes Ofgem/DTI will consult upon their inclusion in the GB Grid Code.

4.55. Given the decision above to use the England and Wales Grid Code as the starting point for the drafting of the GB Grid Code, the question arises as to whether the GB Grid Code should be designated as a change to the England and Wales Grid Code or designated as a new code. As discussed in consultation papers on the BSC and the CUSC, it is proposed with these documents to designate the changes to the England and Wales document, in these cases primarily to avoid the requirement for existing England and Wales participants to accede to a new framework agreement and secondly to avoid the need for run-off arrangements for the existing England and Wales codes. The Grid Code does not have a framework agreement. However there may be similar considerations for the GB Grid Code in respect of run-off or cross-over (data migration) arrangements if the code was to be designated as a new code. In addition further changes may be required to the CUSC and BSC to refer to the new GB Grid Code and remove references to the existing Grid Code, were a new GB Grid Code to be introduced under BETTA as opposed to designating changes to the England and Wales Grid Code to achieve a GB Grid Code. Ofgem/DTI therefore propose that the GB Grid Code should be designated as changes to the England

and Wales Grid Code to conform with the approach to the CUSC and BSC. It should be noted that whichever drafting approach is taken, the content of the GB Grid Code would be the same.

Composition of the Grid Code review panel

4.56. The current composition of the two grid code review panels is given below:

User Community	England and Wales Panel	Scottish Panel
Generators	5	6
Distribution Network Operators	3	1
Transmission licensees[28]	5	6
Others	5	5
Total	18	18

4.57. In the first GB Grid Code consultation Ofgem/DTI considered that the representation of transmission licensees at the panel would depend on the extent to which the GB Grid Code placed obligations on them and the benefit of securing appropriate technical input into the consideration of change to the GB Grid Code. Generally, respondents considered that transmission owners would have appropriate technical expertise and should be represented on the GB GCRP. However respondents also noted the need for balance on the Panel, given that historically it could be demonstrated that the predominant concern of the panel was system operator to generator issues, and were concerned that increasing the size of the panel would be detrimental to its efficiency.

4.58. As set out previously, it is not proposed that transmission owners will be subject to rights and obligations under the GB Grid Code. Ofgem/DTI consider that the legitimate interest and expertise of transmission owners in relation to GB Grid Code matters occurs where, were the matter under review in the GB Grid Code to be changed, it would give rise to the need for amendments to transmission owner rights and obligations in the STC. Ofgem/DTI consider that appropriate technical input from transmission owners on proposed GB Grid Code changes therefore arises when the matter being considered is likely to impact upon the content of the STC. In sections 4.25 to 4.29 Ofgem/DTI invite views on how

[28] Note this includes the Chairman.

such input from transmission owners on GB Grid Code changes could be sought, where the GB Grid Code change is likely to ultimately affect the service that transmission owners are required to provide to the GB system operator, or where it might affect obligations placed upon the GB system operator that are there for the benefit of transmission owners in the STC. Some of the ways in which such input from transmission owners could be sought includes through their attendance at GB GCRP meetings where such matters are discussed. However, as outlined in sections 4.25 to 4.29 there are also other options for how such input could be sought. Ofgem/DTI therefore consider that whether or not transmission owners need to be represented at the GB GCRP can only be finally concluded upon when conclusions have been reached on the most effective mechanism to ensure change coordination between the GB Grid Code and the STC.

4.59. Ofgem/DTI recognise that work is ongoing in the industry relating to the governance of electrical standards. Whilst formal proposals relating to the governance of electrical standards have not yet been fully developed or submitted for approval, it seems likely that the scope of the governance arrangements would extend to electrical standards that are relevant to both the planning and operation of the transmission system. One of the documents where such standards may be governed could include the GB Grid Code. There may, therefore, be a role for transmission owners in participating in governance arrangements relating to electrical standards. Should such proposals be forthcoming, Ofgem/DTI will consider the role of transmission owners in relation to the governance of electrical standards and, if appropriate, would intend to provide for the involvement of transmission owners in such arrangements.

4.60. Ofgem/DTI consider that as the GB system operator will be responsible for having in place a GB Grid Code that the Chair of the GB GCRP most appropriately rests with the GB system operator, as does the secretariat role. In addition, it is appropriate that the GB system operator has a sufficient level of representation to be able to adequately cover all aspects of the Grid Code at the Panel. Ofgem/DTI therefore conclude that the GB system operator in addition to the seat of chair (and secretary) should have up to 4 representatives on the GB GCRP.

4.61. In the first GB Grid Code consultation, Ofgem/DTI proposed that the number of Distribution Network Operator (DNO) representatives, using the England and Wales panel as a basis should be increased by one (to four), with the additional representative being from a distribution company which is connected to a transmission system that was defined to extend to 132kV (essentially a Scottish DNO). Ofgem/DTI note that there are currently three representatives on NGC's GCRP and one representative on the Scottish GCRP. Three respondents commented specifically on this proposal. Two supported both the increase in number of DNO representatives and the fact that the extra seat should essentially be reserved for a Scottish DNO. The third thought that regardless of whether the number of seats were increased it would be sensible to allocate one DNO seat to a DNO that is connected to a transmission network that operates at 132kV as this would ensure that the full range of issues associated with DNOs is represented. Other points were made which Ofgem/DTI consider pertinent to this issue, namely: the size of the Panel, the need for balance on the Panel and the main business of the panel being system operator to generator issues. In light of these considerations, Ofgem/DTI conclude that it is not appropriate to increase the number of DNO representative places from three to four but consider that to make sure that all issues are covered with respect to DNOs that it would be appropriate for one of the DNO representatives to be representative of a DNO that connects to a transmission system that operates at 132kV.

4.62. The first GB Grid Code consultation proposed that the number of generator representatives, based on the England and Wales GCRP, would be increased by two (to seven). Ofgem/DTI note that there are five generator representatives on the England and Wales GCRP and six representatives on the Scottish GCRP, that the registered capacity for representation of large generators is 1GW in Scotland and 5GW in England and Wales and that the Scottish Grid Code provides for one generator representative of renewable generators. It was proposed that one of these additional representatives would represent generators connected at 132kV transmission voltages, and the second would represent renewable generators.

4.63. Several respondents commented on the generator representative proposals. All generators thought that it was appropriate to increase the number of generator representatives; whereas one other respondent did not agree that an increase

was necessary. Several respondents considered that the criteria for the England and Wales GCRP were no longer appropriate given the restructuring that had occurred in England and Wales and that the inclusion of Scottish generators reinforced the need for a change in the criteria as two out of the three large generators in Scotland would be ineligible for the 'large' category, currently reserved for three representatives in England and Wales. Several respondents considered that the Scottish GCRP representation of a renewable generator was sensible due to the special requirements associated with several renewable technologies. One respondent considered that in view of the importance of transmission system connection to nuclear station safety cases one of the seats on the new GB GCRP should be reserved for a nuclear generator.

4.64. Considering the comments made on the representation of generators on the panel, Ofgem/DTI consider that it is appropriate to propose new generator representation for the GB GCRP. Ofgem/DTI conclude that the number of generator representatives should be increased by one to six, with one representative being from renewable generators and that the criteria for the other generator representatives should be revised to reflect more appropriately the market conditions under BETTA. Ofgem/DTI propose that three places should represent generators with in excess of 3GW of large power stations, one represent those with less than 3GW of large power stations, one represent generators with only small and medium power stations and one represent renewable generators. With regard to the proposal that one seat be reserved for nuclear generators, Ofgem/DTI do not consider this to be a change required for BETTA.

4.65. As no further issues were raised by respondents, Ofgem/DTI conclude that the remaining membership of the panel would be as for both England and Wales and Scotland, namely: one seat for each of the Authority, externally connected transmission system operators, suppliers, directly connected customers, and a settlements representative of the GB BSC Panel.

4.66. Ofgem/DTI note the comments of respondents with respect to the governance of electrical standards, namely that this modification should be treated like any other modification i.e. considered when firm proposals are approved and that it may be appropriate to consider the use of technical advisers rather than GCRP members for such issues. Ofgem/DTI agree that any modifications proposed by

either of the existing GCRPs will be considered in the usual manner but as discussed in section 4.59 would not wish for the GB Grid Code to preclude any options for the governance of electrical standards that are available under the existing grid codes.

4.67. Given the change in composition of the GB GCRP, consideration of the election of the new GB GCRP will need to be undertaken in time for BETTA go-live. This will be consulted upon in the context of BETTA implementation and transitional issues.

Panel functions

4.68. The first GB Grid Code consultation asked for views on the addition of a function of the GB GCRP to minimise unnecessary differences in the treatment of issues in Scotland from their treatment in England and Wales. One respondent explicitly noted their support for such an addition and others generally considered that where possible technical requirements should be consistent. Ofgem/DTI conclude that under BETTA it would be appropriate to provide an objective to minimise unnecessary differences in the treatment of issues in Scotland and in England and Wales for the purpose of future reviews of the GB Grid Code.

Document structure

4.69. The first GB Grid Code consultation described the structure of the two existing grid codes and asked for views on whether any changes were required to this structure. Respondents commented that the structure was familiar, 'tried and tested' and that there was no compelling reason to change from this common structure. The Introduction section included in the Scottish Grid Code was supported as helpful but not insofar as it would have any legal purpose. Ofgem/DTI therefore propose to go forward with the existing common structure but without the inclusion of an introduction, as it would not form part of the legal document. If the GB Grid Code Review Panel thought it helpful to include an Introduction section then they could consider this separately to the implementation of BETTA.

Defined terms

4.70. The first GB Grid Code consultation described the minimal differences in defined terms used by the two existing Grid Codes and described the particular example of demand forecasting where the obligation to provide data rests on a different body in Scotland (Suppliers) to England and Wales (DNOs). The majority of respondents thought it appropriate to adopt the terms and demand forecasting practice used in the England and Wales Grid Code as these are familiar to the majority of users. One respondent thought that selection of a defined term should be a matter for careful consideration on a case-by-case basis as to which term was required in a merged code. Ofgem/DTI consider that in general the England and Wales Grid Code requirements have been developed to support the operation of a competitive supply market, where there may be a large number of different suppliers with customers connected to any grid supply point. In these circumstances it is appropriate for demand forecasts to be submitted by the DNO. Ofgem/DTI conclude that the GB terminology will be based on that prevailing in the England and Wales code and that DNOs will be required to provide demand forecasts as currently is required in England and Wales, rather than Suppliers as is currently required in Scotland.

Balancing codes

4.71. The first GB Grid Code consultation proposed that the balancing codes in the England and Wales Grid Code should be adopted for the GB Grid Code. Respondents generally agreed with this proposal whilst expressing some concerns over the MW levels to which the requirements in the balancing codes would apply and the participation of cascade hydro plant in the balancing mechanism. The issue of MW levels is discussed later in this chapter (see 4.90) and the issue of cascade hydro is considered further here.

4.72. The first GB Grid Code consultation raised the issue of whether it was necessary to include special provisions pertaining to the 'group' despatch of cascade hydro stations suggesting that this would only be necessary if it was concluded in the BSC consultation that cascade hydro plant should be capable of being represented as a single BM Unit. Respondents did not provide any operational reasons for the need to provide such cascade hydro provisions but proposed that

cascade hydro should have equivalent treatment to plant connected at 132kV in England and Wales. NGC noted that for the purposes of managing the system securely, granting access and charging, each element of cascade hydro should be treated individually. The BSC currently provides for plant to apply to be a single BM Unit and it is considered that this facility is sufficient to enable the proper consideration of the representation of cascade hydro groups.

4.73. Ofgem/DTI therefore conclude that the existing balancing codes should be adopted in the GB Grid Code, noting that these will apply to different MW levels (see 4.90), and that no special provisions are required for cascade hydro stations.

Communication requirements

4.74. The first GB Grid Code consultation proposed that the communication requirements specified in NGC's Connection Conditions CC6.5.8 should be required for all BM (Balancing Mechanism) Participants on the basis that these are the current requirements for participants in England and Wales and there is no obvious reason to deviate from them when moving to a GB Grid Code.

4.75. Respondents agreed with this proposal. One respondent noted that the control point for some Scottish plant is remote from the plant itself and that this should be allowed to continue. The England and Wales Grid Code makes provision for such circumstances and it is proposed that such provisions will be incorporated into the GB Grid Code.

4.76. The first GB Grid Code consultation also proposed that for the enduring arrangements, the GB system operator, as the point of contact for those connecting to the system and having operational responsibility for the system, will arrange for the provision of the system control and data acquisition (SCADA) interface equipment in relation to users (although this did not pre-judge whether the equipment would ultimately be provided by the transmission owners, which is currently anticipated will be the case for initial operation under BETTA). The requirement for and consolidation of existing SCADA systems will be progressed as part of the STC development. Two respondents discussed the need for further work on the provision of SCADA equipment. One of these respondents was strongly of the opinion that both the system operator and the transmission owner

had an interest in this equipment and that the natural provider of such equipment would be the transmission owner.

4.77. Ofgem/DTI conclude that the existing England and Wales communication requirements are appropriate for application in the GB Grid Code and that the responsibility for the provision of SCADA equipment in the GB Grid Code will rest with the GB system operator. It is noted that further consideration will be given to any obligations on transmission owners in relation to the provision of SCADA equipment that are required in the STC.

Ancillary services

4.78. The first GB Grid Code consultation proposed that, as the provisions in Scotland and England and Wales were similar and there were no apparent reasons why the criteria should differ on a regional basis, the requirements relating to ancillary service provisions currently embodied in the England and Wales Grid Code should be adopted in the GB Grid Code.

4.79. Several respondents noted their preference for the development of market arrangements for the provision of all ancillary services. Ofgem/DTI note that such developments are ongoing through the existing England and Wales CUSC amendment process.

4.80. Several respondents expressed concern that existing Scottish plant might not meet the existing England and Wales requirements, in particular because the Scottish Grid Code allows the company and the user to agree to alternative plant performance requirements[29] other than those set out in the Scottish Grid Code and that also the Scottish Grid Code has a provision which seeks not to impose any retrospective change to requirements[30]. Respondents noted that such plant could be issued a derogation against the GB Grid Code. Ofgem/DTI will consider the position of existing plant in this respect (and any request for derogations) in the context of transition and implementation issues.

4.81. Three respondents specifically made reference to the size of plant to which these requirements should apply, suggesting that the MW limits to which they

[29] Scottish Grid Code CC 1.6.

currently apply should be changed to match the England and Wales limits. The issue of MW levels is discussed later in this chapter.

4.82. Ofgem/DTI conclude that the provisions relating to ancillary services as specified in the England and Wales Grid Code should be adopted in the GB Grid Code.

Planning codes and data

4.83. The main objective of the Planning Codes is to collect data from users that are required to enable the transmission licensees to plan, operate and develop the transmission system and enable production of a seven year statement which is designed to provide users and potential users with information to enable them to identify opportunities for connecting to and using the transmission system.

4.84. The first consultation asked for views on whether the initial GB Grid Code should retain geographical differences in relation to the Data Registration Codes i.e. whether there should be a single Planning Code with separate Data Registration Codes for the three transmission licensee areas or whether these should be conformed to a single Data Registration Code. It also proposed that the timescales for submission of data in the England and Wales Grid Code should be adopted in the GB Grid Code.

4.85. Respondents generally considered that the England and Wales Grid Code provided an appropriate base for planning data and that if possible the requirements should be conformed for BETTA go-live although this would not be essential if it were not considered practicable in the timescale. One respondent noted that a proposal was in progress to conform the two Scottish data registration codes.

4.86. The GCEG are considering detailed differences between the three existing Data Registration Codes (one in England and Wales and the two separate appendices in Scotland[31]). In consideration of the responses, Ofgem/DTI consider that it is appropriate to conform the data registration codes to a single code based on the

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[30] Scottish Grid Code CC 1.3.
[31] The Scottish transmission licensees have submitted a report to the Authority proposing changes to the Scottish Grid Code to align the two Data Registration Code schedules into a single set of schedules.

England and Wales code and that it is also appropriate to adopt the timescales for data submission specified in the England and Wales Planning Code in the GB Grid Code. However it is noted that STEG Development Groups are considering processes under BETTA (such as the preparation of the seven year statement), and the GCEG need to review in detail the differences between the existing data registration codes.

Interconnectors

4.87. The first GB Grid Code consultation proposed that there should not be any changes to the interconnector provisions in the GB Grid Code.

4.88. Generally respondents agreed with the adoption of the existing approach to interconnectors in the England and Wales Grid Code. Some respondents noted that there may be transitional issues with the use of the Moyle interconnector which were generally pertinent to the commercial arrangements for such use and not the Grid Code. Ofgem/DTI note that the parties involved in trading over interconnectors whose arrangements will change under BETTA need to be involved in discussions at an early stage to ensure that appropriate arrangements are in place for BETTA go-live.

4.89. Ofgem/DTI conclude that it is appropriate to base the interconnector rules in the GB Grid Code on those in the existing England and Wales Grid Code.

MW levels for data requirements

4.90. The first GB Grid Code consultation noted that requirements on generators vary between the three transmission licensee areas depending upon the size of the generating station and that the existing England and Wales Grid Code has been written with the implicit assumption that currently there are no small or medium power stations directly connected to the transmission system in England and Wales. It was noted that such stations, i.e. stations under 100MW, are directly connected to the transmission system in Scotland. It was further noted that many of the Scottish Grid Code obligations on generators applied to all generators irrespective of size and connection voltage, although some obligations, such as central despatch, applied to generators above 30MW in the South of Scotland and 5MW in the North of Scotland.

4.91. It was stated that these differing limits had developed for various reasons and supported operating requirements in the different transmission company areas. It was proposed that as these limits were not conformed in the creation of the single Scottish Grid Code and that as it was not considered necessary for them to be conformed to support common trading arrangements across GB, it would seem appropriate to initially maintain these limits for the different geographic areas in the GB Grid Code.

4.92. It was noted that a result of this would be that different MW limits would apply to the provision of physical notifications for BM Units. It was further noted that an 'information imbalance mechanism', exists in the BSC which enables charges to be applied to BM Units that operate above or below their Final Physical Notification, taking into account any accepted offers or bids, but that this mechanism, is not currently set to recover any such charges.

4.93. One respondent considered that asking 5MW generators to submit Physical Notifications was a far more onerous requirement than asking them to submit 'indicative generation schedules'.

4.94. Five respondents were opposed to having different MW levels for requirements in different transmission owner areas on the grounds that: this would be an additional and onerous administrative burden on small generators in Scotland; it was against the general BETTA principle of conforming requirements across GB; that information requirements should primarily be on the size of the generation, rather than the point of connection, and that distribution connected ('embedded') plant should pass data requirements via the DNO. One respondent considered it would be less confusing to have conformed MW levels.

4.95. Two respondents supported the retention of existing levels, and one of these proposed that the requirements should be kept under review with active review on certain trigger events, such as the introduction of a non-zero information imbalance charge in the BSC.

4.96. The preceding discussion relates to the rules that would be set out in the GB Grid Code placing requirements on generators. However not all generators would necessarily be required to comply with the GB Grid Code, and therefore meet these requirements. It is therefore pertinent in the consideration of this issue to understand which generators are currently required to comply with the

Grid Codes in England and Wales and in Scotland and then consider which generators would be required to comply with the GB Grid Code. In Scotland, all connection and use of system agreements, whether transmission or distribution, currently stipulate that the connectee must comply with the Scottish Grid Code, therefore all generators in Scotland must comply with the Scottish Grid Code. In England and Wales, parties must comply with the Grid Code either by licence (all licensed generators, through a licence condition which also applies to 'exemptable'[32] plant owned by a licensed generator); or by a condition of the Connection and Use of System Code and of bilateral agreements with NGC; or through the BSC, as balancing mechanism participants have to comply with the Balancing Codes. Therefore in England and Wales compliance with the Grid Code is a requirement on licensed generation, directly connected generation and embedded generators that participate in the balancing mechanism (the latter requiring compliance with the balancing codes only). If, as has been proposed, a similar legal framework to the one that applies in England and Wales, is to apply in Scotland, then those parties required to comply with the GB Grid Code will be similar to those required to comply with the Scottish Grid Code, other than licence exempt parties connected to the distribution network (i.e. connected at below 132kV. Noting the exception that where such licence exempt embedded parties participate in the balancing mechanism compliance with the balancing codes would be required)[33]. In relation to licence exempt parties connected to the distribution network in Scotland, it is noted that they are required to comply with the Scottish Grid Code currently.

4.97. Ofgem/DTI note that using the legal framework applying in England and Wales as the basis for the GB Grid Code, the following plant will submit physical notifications: all directly connected BM Units[34], all licensed embedded generators at Large and Medium Power Stations[35] and embedded generators that wish to participate in the balancing mechanism. It needs to be considered further

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[32] 'Exemptable' here means plant that if it were the only plant that the licensee owned it would not have a licence condition to comply with the Grid Code.

[33] A joint working group between the distribution code review panel and the grid code review panel has been established in England and Wales to consider an appropriate mechanism for placing technical requirements for medium embedded power stations that are included within NGC's Grid Code on licence exempt generators.

[34] Either by licence compliance or bilateral and assuming that the System Operator will wish small directly connected plant to submit physical notifications.

[35] By licence compliance.

whether licence exempt, embedded generators in Scotland need to comply with the GB Grid Code and if so how this would be achieved. Note, as discussed in 4.106, requirements on licence exempt, embedded generators at Medium Power Stations are under review in England and Wales.

4.98. Also of relevance to this matter is consideration of how the ability to not apply Grid Code requirements on parties differs currently between the England and Wales Grid Code and the Scottish Grid Code and the associated arrangements in relation to the GB Grid Code. Ofgem/DTI note that where plant does not meet the prescribed arrangements as set out in the Scottish Grid Code then alternative arrangements are agreed between the transmission company and the user. In England and Wales (usually[36]) both parties apply for a derogation against the requirements to Ofgem and if granted this matter is recorded and available on the public register. The England and Wales arrangements are proposed for the GB Grid Code.

4.99. Ofgem/DTI consider that over the longer term it would be simpler to have a single set of MW levels describing large, medium and small power stations, which would apply across the whole of GB. However, whether or not this is appropriate in practice depends upon the physical characteristics of the transmission system. It is considered that any conformance could only be achieved following a review of the England and Wales Grid Code to further identify those requirements, which currently apply only to directly connected large power stations (due to there not yet being any small or medium directly connected power stations in England and Wales) and those which would be required for directly connected small and medium generators. This would require a significant rewrite of the England and Wales Grid Code which Ofgem/DTI consider would be required if there was a trend of such generators seeking connection to the transmission system in England and Wales. For the GB Grid Code, Ofgem/DTI consider that such a review would be more properly conducted after the GB system operator has some experience of operating the GB transmission system under the BETTA arrangements. Ofgem/DTI further consider that it would be operationally prudent to impose requirements on a

[36] 'Usually' because only parties with a licence can apply as the Authority's derogation powers are in the licences and are limited to parties who hold one of the electricity licences.

similar basis to those which exist today, reflecting regional differences in the characteristics of the transmission system. Further, it is considered that where this results in insurmountable difficulties to any user, the user (provided that he is a licensed party) and/or the GB system operator could approach Ofgem with a derogation request on the specific matter.

4.100. Ofgem/DTI consider that basing requirements on existing, regionally varying MW levels, will limit any step change in requirements on users as a result of BETTA, minimise knock-on effects on other codes such as the Distribution Code and will continue to deliver a working and operational transmission system across GB. Ofgem/DTI therefore conclude that the definitions of Small, Medium and Large Power Stations in the GB Grid Code should differ according to the part of the transmission system to which the user is connected. Ofgem/DTI further consider that it is within the means of the GB system operator or any user to initiate a review on this matter at an appropriate time following the implementation of BETTA and, if appropriate, that this could be initiated at the same time as any proposal to introduce a non-zero information imbalance charge should such a modification be proposed to the BSC. Ofgem/DTI consider that it is a reasonable requirement for a transmission connected generator[37] to submit physical notifications to the GB system operator. Ofgem/DTI understand that specialist IT equipment is not necessary to submit Physical Notifications and therefore that this is not a practically difficult or costly task to undertake.

4.101. Some of the obligations in the England and Wales Grid Code are placed on 'Gensets' rather than specifically referring to some combination of Small, Medium or Large and Embedded Power Stations . A Genset is currently defined as 'a Generating Unit or CCGT Module at a Large Power Station'. The drafting of the England and Wales Grid Code is implicitly based on an assumption that there are no Small and Medium directly connected Power Stations[38]. Ofgem/DTI note that if the definition of genset were to remain unchanged that this would result in some small and medium directly connected plant in Scotland being

[37] Note that although this discussion deals with the requirement to submit physical notifications by generators it is also a requirement to submit physical notifications for BM Units with a Demand Capacity of greater than 50MW in England and Wales. A level of 5MW is proposed for demand in Scotland as a figure used in the Scottish Grid Code for other load notifications (see 6.64).

[38] See OC2.4.1.1(a).

outside the scope of certain obligations in the GB Grid Code[39] and consider that it is inappropriate that the GB system operator should have no means of operational control of plant directly connected to the transmission network. Ofgem/DTI recognise that this could be dealt with either through bilateral arrangements between the GB system operator and the connectee or through an amendment of the definition of Genset (to include directly connected generators) or Large Power Station (to include directly connected generators) and Ofgem/DTI would welcome views on this matter. For the purposes of this draft, Ofgem/DTI propose that 'Genset' be amended to include directly connected generators.

Operating codes

4.102. The first GB Grid Code consultation noted that there are 10 Operating Codes which differ to some extent between the two existing Grid Codes. Generally Ofgem/DTI considered that the England and Wales operating codes would form the basis of the GB Grid Code but noted that there were two areas that were considered as being possible exceptions to this rule; both were operating codes which currently differ for each transmission licensee. One area was in Safety Coordination (OC8 in England and Wales, OC6 in Scotland) and the second area was Numbering and Nomenclature (OC11 in England and Wales, OC9 in Scotland). Respondents noted that there was no requirement for the GB Grid Code to be common in all areas and that in particular in the areas of safety OC8 (Scottish Code – OC6) and numbering and nomenclature OC11 (Scottish Code OC9) that care should be taken in changing these areas. One respondent noted that such an approach, whilst having minimal impact on users, would need to be carefully managed by the GB system operator and transmission owners. Another respondent considered that it should be a long-term goal to minimise differences across GB, so as to simplify procedures for firms operating in the market.

4.103. Ofgem/DTI have carefully examined the wording of OC8 (Scottish Grid Code OC6) Safety Co-ordination and conclude that both sets of Safety Requirements would require some modification, at least to reflect the general changes throughout the rest of the GB Grid Code and also to reflect that the GB system

[39] For example OC2.2.1(a) harmonisation of genset outages.

operator is the party providing the contractual interface with the user. It is not yet clear whether the codes should be conformed at more than a presentational level. Ofgem/DTI propose that OC8 and OC11 should be reviewed by the STEG and/or GCEG as is most appropriate and also that Ofgem would consult the appropriate authorities on these matters. Ofgem/DTI conclude that the remainder of the Operating Codes will be based on the England and Wales Grid Code and that the GCEG will consider existing regional differences between the Grid Codes. Following this mini-drafting consultations will be conducted on the Operating Codes.

Other issues

4.104. In the first GB Grid Code consultation, Ofgem/DTI invited views on any other issues concerning the creation of a GB Grid Code. Matters were raised on the number of consultation papers to be issued regarding BETTA and the timetable under which they would be published.

4.105. Respondents also raised the treatment of small[40], directly connected generators. The first consultation raised the issue of small generators connected to the transmission system and stated that a separate consultation document would be published giving consideration to all of the issues, not just those in relation to the GB Grid Code, faced by this group under BETTA. Ofgem/DTI is grateful for all the comments provided on this topic, which have informed the drafting of that separate consultation paper. The outcome of that separate consultation process on GB Grid Code drafting will be considered in a future consultation on the GB Grid Code.

4.106. In 4.96, the treatment of licence exempt, embedded generators in Scotland under BETTA was discussed. In their response, NGC raised the issue that users connected to the distribution network which affected the transmission network did not necessarily have an obligation to comply with the Grid Code. Ofgem/DTI understand that the treatment of licence exempt, embedded generators in England and Wales is currently being considered by the England and Wales Grid Code Review Panel and the Distribution Code Review Panel

[40] Small generators in this context are those below the licence-exemption limit (see SI 3270, 2001).

and has arisen out of discussions relating to licence exemption applications to DTI that have been made by a number of medium power stations. If any change proposals are approved by the Authority in relation to this matter, then Ofgem/DTI will consider their inclusion in the GB arrangements.

5. Changes to the existing Grid Codes

5.1. The first consultation noted that there was development work currently in progress in both existing grid codes and that when such changes are approved they would be considered for inclusion in the GB Grid Code.

Approved Grid Code changes

5.2. The Authority has approved two changes to the England and Wales Grid Code since the first GB Grid Code consultation was issued, these are

- Changes to the Grid Code OC5 – Testing and Monitoring (D/02) which was implemented on 6 December 2002, and
- Changes to the Grid Code associated with the clarification of phase unbalance terms and change of company name (G/02), which was implemented on 1 May 2003.

5.3. The changes included in D/02 were the:

- clarification of the existing requirements for Testing and Monitoring in the Grid Code
- clarification of the reasons why NGC may wish to carry out a retest
- clarification of the control signals that NGC may request when site testing is witnessed
- clarification of the responsibility for safety when tests requested by NGC are carried out by a user
- introduction of full inclusion of generator connection conditions in OC5, and
- added provisions for NGC to request tests of Connection Conditions on user networks

It should be noted that there was no change to the technical obligations placed on users by the Connection Conditions as a consequence of this change to the Grid Code.

5.4. The changes included in G/02 were the:

- clarification of the Grid Code definition of phase unbalance and the associated requirement, and
- change to the definition of NGC (company name).

5.5. As neither of these changes is considered to present any issues when applied across GB which are different to their application in England and Wales, Ofgem/DTI propose that both of these changes should be incorporated into the GB Grid Code and they have been incorporated into the proposed legal text shown in volume 2 of this consultation document.

5.6. A third change has recently been approved to the England and Wales Grid Code: 'Changes to the Grid Code OC8 - Safety Co-ordination for work near to HV Apparatus in substations (E/02)'. This amends OC8 to include guidance relating to NGC working near to User's equipment and Users working near to NGC's equipment. This change has an implementation date of 24 November 2003 and will be considered for inclusion in the draft GB Grid Code by GCEG when they review OC8 (and Scottish OC6).

5.7. There have been no approved changes to the Scottish Grid Code since the first consultation was issued.

Future Grid Code changes

5.8. Ofgem/DTI propose that subsequent changes approved to the England and Wales Grid Code will be included in the next draft text of the GB Grid Code for consultation (planned for February 2004). Approved changes to the Scottish Grid Code will also be consulted on in the next draft text of the GB Grid Code.

Presentation of draft text

5.9. Ofgem/DTI have considered how best to present the next draft text of the GB Grid Code. Two options seem obvious: it could either be change marked against the draft text included in this consultation or it could be change marked against the then existing England and Wales Grid Code. As it is intended to amend the existing England and Wales Grid Code to create the GB Grid Code, Ofgem/DTI consider it important to maintain a record of the differences between the existing England and Wales code and the proposed GB code. Also, Ofgem/DTI anticipate that, given that the majority of changes to the draft text presented here are likely to be in the area of reflecting regional differences, they will be highlighted as differences against the England and Wales code. Ofgem/DTI consider it would neither be helpful nor justified to maintain a further version of the code which highlights changes from this draft to a future draft and therefore Ofgem/DTI propose that the next draft text will be change marked against the then existing England and Wales Grid Code in a similar manner to this consultation with separate identification in the commentary of any changes made to the proposed text between this consultation paper and the next. This will maintain a change marked version of the GB Grid Code against the existing England and Wales Grid Code.

Views invited

5.10. Views are invited on:

- the proposal to include the changes listed above in the GB Grid Code
- the proposed process for consultation on further changes approved prior to the third GB Grid Code consultation, and
- the proposals for highlighting the next draft of the text.

6. Proposed draft text for the GB Grid Code

6.1. The proposed draft text for the GB Grid Code is provided in volume 2 of this consultation document.

6.2. The drafting of the proposed GB Grid Code has been undertaken by NGC on behalf of Ofgem/DTI and under Ofgem/DTI's policy direction and in accordance with drafting assumptions provided by Ofgem/DTI. Ofgem/DTI will need to undertake a full review of the GB Grid Code when the implications of the detailed drafting for the licence conditions and the STC can also be taken into account.

6.3. In addition, particularly in relation to the STC but also potentially in relation to the GB BSC and the GB CUSC, there will be interactions between the detailed drafting of provisions in those documents and the detailed drafting of some provisions in the GB Grid Code. Ofgem/DTI intend to ensure that the drafting of documents is consistent where there are interactions arising as a result of BETTA and Ofgem/DTI will identify such interactions on an ongoing basis as the BETTA documents are further developed. Respondents are free to raise comments on any areas where they consider that such interactions need to be addressed.

6.4. In preparing the legal drafting for the GB Grid Code, Ofgem/DTI have identified a number of instances where the current England and Wales Grid Code drafting appears to have minor errors. Ofgem/DTI consider that to use legislative powers to introduce changes to the GB Grid Code that are not required for BETTA would be an inappropriate use of such powers, especially when other processes exist that enable the introduction of such changes. In the main therefore, Ofgem/DTI are not proposing to change any such provisions, except where they are judged likely to cause confusion in GB Grid Code drafting. Should a change proposal in respect of such changes to the England and Wales Grid Code be approved by the Authority, such changes will be consulted upon in terms of their inclusion in the GB Grid Code. Where identified, these errors have been highlighted in the commentary.

Drafting approach

6.5. A substantial amount of work has been undertaken to identify differences between the requirements in the two existing Grid Codes. This work is available on the Ofgem website under the GCEG area. As the resolution of these differences is ongoing at the GCEG, this draft does not reflect any regional differences that may be identified as necessary for the GB Grid Code, other than those such as the definition of Small, Medium and Large Power Stations that were identified in Chapter 4. The GCEG are in the process of reviewing such matters and as such matters are resolved, updated drafts of the particular codes will be issued on the website (as discussed in 2.6).

6.6. Ofgem/DTI have considered how best to facilitate an understanding of the GB Grid Code by Scottish parties who might be unfamiliar with the existing England and Wales Grid Code, and in some instances have provided a cross reference against the draft GB Grid Code of what is considered to be the equivalent Scottish Grid Code provision. It may be possible to produce further a cross-reference of the Scottish Grid Code to what is considered to be the equivalent GB Grid Code provision for those provisions that may be of particular interest to Scottish Parties. Other approaches have been considered such as a seminar or a GCEG 'surgery session' where people could ask questions about and discuss the draft in volume 2. Alternatively, individuals can contact Ofgem to discuss particular issues as invited in 2.10. Ofgem/DTI would welcome views on this matter.

6.7. The GB Grid Code has been drafted placing all transmission licensee rights and obligations in the existing England and Wales Grid Code on the GB system operator given that the GB system operator will be responsible for the contractual provision of the connection and use of system service to users and given that the GB Grid Code forms part of the contractual interface between the transmission sector and users. It is however recognised that in practice under BETTA, some of the activities that are the subject of GB Grid Code obligations will be undertaken in Scotland by transmission licensees other than the GB system operator. Where this is the case, corresponding obligations to undertake the activities will be placed on transmission owners in the STC. By procuring under the STC that transmission owners undertake these activities in Scotland,

the GB system operator is discharging its obligation to users under the GB Grid Code. Similarly some of the GB system operator's rights in the GB Grid Code (for example the right to require some forecast data from users) may in part exist to allow the GB system operator to discharge obligations that it has relating to the transmission owner under the STC (for example an obligation to provide certain Scottish user data such that transmission owners can undertake investment planning). The STC will therefore need to include obligations on transmission owners to undertake activities where the GB system operator is subject to obligations under the GB Grid Code to undertake such activities in Scotland but, under its licence, it is not permitted to undertake such activities in Scotland. Equally the STC will need to specify obligations on the GB system operator to procure that activities are undertaken by, or that data is provided by, users, where transmission owners in Scotland need such data or such activities in order to discharge other obligations that they face either under their transmission licence or under the STC. The GB system operator will discharge such obligations under the STC through the obligations on users in user-facing codes (including the GB Grid Code) to undertake such activities or provide such data.

6.8. One of the consequences of the drafting approach that has been adopted is that the GB Grid Code might refer to the user undertaking activities in conjunction with the GB system operator, but in practice users in Scotland will be undertaking certain activities in conjunction with transmission owners (for example site safety matters). Where the subject matter of the GB Grid Code relates to responsibilities in relation to health and safety matters, it is considered desirable to avoid any potential confusion as to who will actually be responsible in practice for such matters. To avoid any unnecessary confusion in such instances, reference is made to activities being undertaken between the user and the transmission owner (using the term 'Relevant Transmission Licensee'). However wherever this requires action to be taken by a transmission owner, it will be made clear that the obligation to ensure that the action is undertaken rests with the GB system operator and that the GB system operator will procure that the transmission owner undertakes that action (under the STC). Therefore the obligation under the GB Grid Code to ensure that the action is undertaken will be placed on the GB system operator. The obligation under the STC to ensure that the action is undertaken will be placed on the transmission owner.

However the GB Grid Code will refer to the Relevant Transmission Licensee undertaking the activity. An example of this approach can be found in the Connection Conditions (CC.7.2.2). This drafting approach has been adopted in parts of the connection conditions and will be adopted in parts of OC8 (Safety Co-ordination). Ofgem/DTI consider that the GB system operator should be obliged to inform the user of the name of the transmission licensee who will in practice be responsible for the transmission functions set out in the GB Grid Code and would expect such information to be set out in site specific schedules (e.g. Site Responsibility Schedules)[41].

6.9. In terms of rights for the GB system operator to receive and pass on user data that is received under the GB Grid Code, Ofgem/DTI notes user responses to the last consultation paper relating to information exchange between transmission licensees. For this reason data items that may be shared between the transmission licensees in accordance with the procedures defined in the STC are referenced in the draft text of the GB Grid Code.

6.10. For this draft of the GB Grid Code, the definition of the GB system operator is assumed to be the party with the system operator parts of the transmission licence switched on and Relevant Transmission Licensees to be SPT in the South of Scotland and SHETL in the North of Scotland. The term Transmission Licensees refers to all three of the existing transmission licensees i.e. NGC, SPT and SHETL.

Generic changes

6.11. The most frequent generic change that has been made to the draft GB Grid Code is to replace the references to the National Grid Company (NGC) with a reference to the GB system operator (the 'System Operator'). Various other existing definitions have NGC in the title and these have been amended as set out in the table below. A new definition 'Transmission' has been added to be used where 'NGC' is currently used for example to denote the high voltage side at a Connection Site.

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[41] This will reflect the detailed allocation of responsibilities in the STC.

NGC Control Engineer	System Operator Control Engineer
NGC Demand	GB Demand
NGC Financial Year	Financial Year
NGC Operational Strategy	System Operator Operational Strategy
NGC Site	Transmission Site
NGC System Warnings (various)	Transmission System Warnings (various)
NGC Transmission System	Transmission System
NGC Transmission System Losses	Transmission System Losses
NGC Transmission System Study Network Data File	Transmission System Study Network Data File

6.12. The definitions for External System, Generator, Non-Embedded Customer, Supplier and Total System have been amended to reflect the inclusion of Scotland.

Specific changes

6.13. In the remainder of this chapter sections of the draft GB Grid Code are considered in turn and the proposed changes explained. The main differences between the England and Wales and Scottish Codes are noted but those interested in the detailed differences should look at the website for more detailed information. The changes proposed are primarily those required to reflect the application of the England and Wales Grid Code across GB. Further detailed changes which will be required to reflect regional differences, as discussed in 6.5, will be included in the next consultation on the GB Grid Code and in mini-drafting consultations published on the website.

Glossary and definitions

6.14. Changes have not been proposed in this draft to definitions which relate to safety issues such as Area Manager, Local Safety Instructions, Responsible Manager, Safety Co-ordinator etc. It is proposed that these will be considered further and discussed at the GCEG.

6.15. The following specific changes to the glossary and definitions are proposed:

Authorised Electricity Operator	changed to reflect transmission licence changes
Black Start Capability	the England and Wales definition includes the requirement for a Black Start Station to synchronise within two hours. The Scottish Grid Code does not specify a time limit. Black start capability will

	be a service negotiated between the GB system operator and providers; it is anticipated that the GB system operator would require the ability to synchronise within two hours when contracting for this service, therefore the England and Wales definition can be used. STEG are considering in detail the black start procedures
Business Day	this definition has not been changed. The Scottish Grid Code does not include a definition of business days but notes some allowance for holidays with respect to operational data provision for one day or more ahead
Control Point	Physical notification limit for BM Unit with a Demand Capacity of 5MW or more in Scotland reflects the drafting in BC1.4.2(a)(i)
Earthing	changed to recognise that Local Safety Instructions can belong to the System Operator, a Relevant Transmission Licensee or the User
Embedded	the existing definition reflects that the NGC Transmission System is owned by NGC, the definition has been changed to reflect that the Transmission System is owned by Transmission Licensees in general
Existing AGR Plant	Hunterston and Torness have been added to the list
Existing Magnox Plant	Chapelcross has been added to the list
Genset	amended to include directly connected generators as discussed in 4.101
Interface Agreement	amended to show that the Interface Agreement may be between a transmission licensee and the user
Large Power Station	amended to reflect the conclusion in 4.99, that the definition should have different MW levels in the different transmission owner areas
Medium Power Station	amended to reflect the conclusion in section 4.99
NGC Site (Transmission Site)	amended to reflect that Transmission Sites are owned by Transmission Licensees in general
NGC Transmission System (Transmission System)	the definition will be considered further when the transmission licence definition of transmission system is confirmed
Operational Day	this definition has not been changed and remains as 05:00 to 05:00. There is no equivalent definition in Scotland but there are similar provisions for 06:00
Pumped Storage Plant	Cruachan and Foyers have been added to the list
Safety Rules	amended to reflect that Transmission Licensees have separate Safety Rules
Small Power Station	amended to reflect the conclusion in 4.99
Supergrid Voltage	amended to reflect that 132kV is transmission in Scotland
User Site	amended to reflect that Transmission Sites are owned by Transmission Licensees in general

6.16. Note existing definition of NGC Demand uses (NGC) Transmission Losses whereas the defined term is (NGC) Transmission System Losses.

6.17. The following new definitions are proposed: Customer Demand Management Notification Level, Demand Control Notification Level, Relevant Transmission Licensee, SHETL, SPT, System Operator, System Operator - Transmission Owner Code, Transmission and Transmission Licensee.

Planning Code (PC)

6.18. There are some detailed differences between the planning code of the England and Wales Grid Code (EWGC) and the planning code of the Scottish Grid Code (SGC)[42] mainly concerning terminology, timescales and data requirements. No problems have been identified with conforming the terminology and data requirements in the GB Grid Code to those currently set out in the EWGC. Both of the existing codes specify the technical and design criteria to be taken into account in the planning and development of the transmission system and user systems and provide for the supply of information to assist in this process. In addition, the SGC outlines procedures for users applying for connection. The appendices to the EWGC PC set out the data requirements in detail and these are then repeated in the Data Registration Code. The data requirements associated with the SGC PC are set out in the Data Registration Code. The detailed differences between the two PCs will be considered further at GCEG. Commentary is provided on changes which are not considered to be generic changes. A statement has been added in PC1.1 explaining that User data to be transferred by the System Operator to other transmission licensees will be identified in the Planning Code. This data is not yet identified. The means of identifying this data will be considered following further work at STEG on the STC provisions which will specify the requirement for the GB system operator to pass on this data to transmission owners.

6.19. A statement has been added in PC.5.4(e) (Committed Project Planning Data) and PC.5.6 (e) (Connected Planning Data) about the need for the System Operator to pass on data as specified in the STC.

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[42] Please see paper 'Queries on Planning Code', Ofgem website, BETTA, GCEG.

6.20. PC.6.1 (4.1 in the SGC) refer to the planning standards that are to apply. The SGC lists these in detail, whereas the EWGC refers to the relevant condition in the Transmission Licence. The appropriate drafting of this provision in the GB Grid Code will need to be considered further alongside the development of the drafting of the appropriate conditions in the transmission licence and in light of any changes that may be approved to the existing Grid codes with respect to governance of electrical standards.

6.21. In PC.A.1.10, reference to the STC has been included in addition to the existing references to the Transmission Licence and the Grid Code as documents which govern various System Operator processes.

6.22. In PC.A.2.2.6, 'Connection Site which is owned, operated or managed by NGC' has been replaced with 'Transmission Site'. Although the definition of Transmission Site does not exactly replicate the original wording, the new wording is considered to achieve the same outcome.

6.23. In PC.A.2.4.1, drafting has been changed from 'not owned by NGC' to 'not operated by the System Operator'.

Connection Conditions

6.24. In both existing Grid Codes the Connection Conditions (CCs) specify the technical design and operational criteria which must be complied with by a user connecting to the transmission system and the technical, design and operational criteria which the GB system operator will comply with in relation to the transmission system at the connection site. The CC include the requirement to prepare site responsibility schedules and the requirement for ancillary service capability to be provided by users. Site Responsibility Schedules exist under both Grid Codes[43] and are important documents which detail responsibility for safety, control etc of each item of plant and apparatus at each site. The GCEG will undertake further work to review the Scottish Site Responsibility schedules currently available under the SGC to consider if they meet the requirements under Appendix 1 of the CCs.

[43] EWGC CC.7.3 and SGC CC5.2.1.

6.25. As the EWGC CCs and the SGC CCs do not follow as similar a structure as most of the Grid Code sub-codes, cross-referencing to similar provisions in the SGC is provided in the draft text to assist Scottish users unfamiliar with the EWGC.

6.26. As outlined in 4.98, there is a provision in the SGC (CC 1.6) that allows the transmission company to agree non-compliance with the CCs with a generator who is unable to comply. It is not intended to replicate this provision in the GB Grid Code.

6.27. There are some detailed differences between the EWGC and the SGC[44] CCs, mainly reflecting different company processes and also the different planning standards. It is likely that this draft of the CCs will need to be amended to reflect the different technical requirements that currently and will need to continue to apply in Scotland. The detailed differences between the two CCs will be considered further at the GCEG.

6.28. No changes have currently been made to CC.6.2.1.2 which places different requirements for technical specifications on plant and apparatus depending upon whether the plant/apparatus was installed, owned or ordered prior to1st January 1999 and, for plant post 1st January 1999, depending upon whether the plant/apparatus is at an existing or new connection point. Whether or not these provisions should apply unamended to plant/apparatus in Scotland requires further consideration and respondents should feel free to submit views on such matters.

6.29. As outlined in paragraph 6.8 where the CCs refer to matters associated with responsibility for safety in relation to sites in Scotland, reference has been made to the Relevant Transmission Licensee, coupled, where necessary, with an obligation on the System Operator to procure that the Relevant Transmission Licensee complies with such provisions in the Grid Code (this obligation on the System Operator will be discharged through the STC). So, for example, in relation to CC.5.2, in Scotland, the Relevant Transmission Licensee will also have to indicate that Safety Rules in relation to procedures for Isolation and Earthing are satisfactory and in CC.6.2.2.4 and CC.6.2.3.5, 'Work on Protection

[44] Please see paper 'Queries on Connection Conditions', Ofgem website, BETTA, GCEG.

Equipment' it is likely that in Scotland, the 'representative' that must be present when work is undertaken would be a representative of SPT or SHETL (as appropriate) and the text has been amended to make this clear.

6.30. Commentary is provided here on changes which are not considered to be generic changes. CC.5.2(c), CC.6.2.2.4 and CC.6.2.3.5 have been amended as discussed in 6.29.

6.31. CC.7.1 sets out general responsibilities for 'construction, commissioning, control, operation and maintenance responsibilities'. It would be difficult to recreate CC.7.1 in a concise manner in the GB Grid Code as actual responsibilities for each of these activities in relation to transmission plant and apparatus will vary in Scotland between the System Operator or the Relevant Transmission Licensee (SPT or SHETL) or, in some circumstances, both parties will be responsible. As CC.7.1 is not considered to create any specific obligations or rights, it is therefore suggested that it should not be reproduced in the GB Grid Code. Comments are invited on whether anything would be lost with the exclusion of this statement from the GB Grid Code.

6.32. CC.7.2.1 has been amended to recognise that each Transmission Licensee has its own Safety Rules and that Users will use the Safety Rules of the transmission licensee's site (unless agreed otherwise under CC.7.2.3).

6.33. CC.7.2.3 and CC.7.2.4 allow a User to apply to NGC or NGC to apply to a User to use their own Safety Rules when working on the other's sites. This is currently drafted such that any agreement will apply to all of the User's or NGC's sites. Ofgem/DTI are advised that this is usually applied for only in respect of an individual site. If the arrangement was to apply across the Transmission System, permission would need to be sought from all the transmission licensees even where that User did not have sites in the transmission licensee's area. The provisions have therefore been redrafted to apply to a single site. It is noted that as drafted this will be a change to the provisions which currently apply in England and Wales.

6.34. CC.7.2.1 to CC.7.2.6 and CC.7.3.1 contain drafting that recognises in Scotland that the GB system operator and the transmission owner are not the same entity. As outlined in 6.8, this is distinguished here as these matters relate to safety. CC.7.6.1 is drafted to show that the Interface Agreement may be between either

the System Operator and the User or the Relevant Transmission Licensee and the User.

Operating Codes (OC)

OC1[45] Demand Forecasts

6.35. OC1 is concerned with demand forecasting in various timescales, taking account of forecasts provided by users. There are some differences between the EWGC OC1 and the SGC OC1, details of the differences between the EWGC and the SGC OC1 can be found on the website[46]. In particular, the SGC also has OC4 ('Demand Control') whereas in the EWGC, Demand Control is part of OC1 and OC4 is not used. In the SGC, Suppliers provide demand forecasts whereas in the EWGC, these are provided by Network Operators (see 4.70). Also, some of the data requested in the SGC (under SGC OC1.3.1) is similar to data requested in the EWGC under the Planning Code.

6.36. Commentary is provided here on changes which are not considered to be generic changes. In OC1.5.1(a) and throughout OC1, in the EWGC each Network Operator must notify intended use of Demand Control above a limit of 12MW. In the SGC (SGC OC1 4.2) Suppliers must provide intended use of demand control but no MW limit is specified. In the SGC (SGC OC4 4.1.6) Customer Demand Management has a notification limit of 5MW. The EWGC has a notification limit of 12MW for both Demand Control and Customer Demand Management. The GB Grid Code has been written with 'Notification Levels' for each of these items to assist in specifying the different MW levels in the different areas. The Demand Control Notification Level in Scotland has been set at 0MW to reflect the current drafting in the SGC but Ofgem/DTI invite views on whether this should be set at 5MW to match the Customer Demand Management limit.

[45] Titles here use the EWGC Operating Code numbering system. The SGC has different numbering for some Operating Codes. These are highlighted in the text.

OC2 Operational Planning and Data Provision

6.37. OC2 is concerned with the co-ordination of the release of outages of generators, the transmission system and network operators' systems and the provision of generator data for planning purposes. The format of the two existing codes is very different and reflects the difference between the despatch process in Scotland and the balancing mechanism in England and Wales. There will be significant changes in the outage planning process for generators and for network operators and non-embedded customers in Scotland under BETTA. Although generally, the two codes cover similar matters, the timing of the processes described and the terminology is different, details of the differences between the EWGC and the SGC OC2 can be found on the website[47]. This is also an area that STEG are considering.

6.38. Note that this operating code (OC2) is currently undergoing review in England and Wales and is expected to be the subject of a change proposal. The objective of that current review is to confirm that the intricate data collection processes match current practice.

6.39. OC2.2.4 describes the process whereby the System Operator establishes the boundaries of System Zones. System Zonal boundaries will need to be considered under BETTA. This will be consulted upon in the next paper on the GB BSC.

6.40. Commentary is provided here on changes which are not considered to be generic changes. In, OC2.4.1.3.4(c) Network Operators provide details of automatic and manual load transfer capability to the System Operator. The level for notification in the EWGC is 12MW, SGC OC2 6.10 specifies 10MW and so this level is proposed to be 10MW in Scotland.

OC3 and OC4 (not used)

6.41. In the EWGC OC3 and OC4 are not used. In the SGC OC3 ('Operating Margin') sets out the procedures for specifying the operating margin that must be

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[46] Please see paper 'Queries on Operating Codes', Ofgem website, BETTA, GCEG.
[47] Please see paper 'Queries on Operating Codes', Ofgem website, BETTA, GCEG.

provided to ensure that demand is met and specifies the data requirements for response capability. In the EWGC, system margin is covered in BC1 and the data requirements for response capability are in the DRC (schedule 4).

OC5 Testing and Monitoring

6.42. OC5 sets out the procedures for monitoring and testing of BM Units and the provision of ancillary services. The SGC does not have an equivalent to the EWGC OC5, although there are some provisions for testing in the SGC CCs. It is understood that most of these matters in Scotland are dealt with through bilateral service level or connection agreements.

6.43. There is a reference in the EWGC (OC5.5.1.2(d)) to 'Supplemental Agreement' which should say Bilateral Agreement, NGC may wish to raise this as a housekeeping change to the existing England and Wales code. OC5.7 deals with Black Start testing. The conditions for Black Start Tests would appear to be similar between the two existing Grid Codes, however it is understood that in practice there may be some procedural differences; these will be considered by STEG and the GCEG.

6.44. The EWGC OC5.5.3 repeats some of the requirements from the CCs. Any necessary technical regional variations in connection conditions in the GB Grid Code will need to be reflected here.

6.45. All changes to OC5 are generic changes.

OC6[48] Demand Control

6.46. OC6 (Demand Control) enables the System Operator to reduce demand in the event of operating problems on the transmission system. The EWGC and the SGC cover similar matters but there are a number of detailed differences including such matters as regional differences in the volume of demand control that needs to be made available. Details of the differences between the EWGC

[48] OC4 in the SGC.

OC6 and the SGC OC4 can be found on the website[49]. Such differences will be considered further by GCEG.

6.47. The SGC uses a series of colour coded warnings, similar to those used in the EWGC before the current risk messages were adopted. It would not seem sensible to have two different approaches to system warnings on the GB Transmission System and so the EWGC has been adopted as the basis for the GB Grid Code. Ofgem/DTI invite views on this approach.

6.48. In the EWGC, OC6.4.3 asks for notification of Demand Disconnection within 5 minutes in England and Wales and 10 minutes in Scotland, the England and Wales requirement has been retained as being generally appropriate. The references to OC6.4.1.2 & 3 in OC6.4.4 & 5 are incorrect in the existing EWGC, they should be OC6.4.2 and OC6.4.3 respectively. NGC may wish to raise this as a housekeeping change to the existing England and Wales code. The EWGC has a requirement in OC6.5.3(b) for DNOs to effect instructed demand reduction within 5 minutes, this time limit does not exist in the SGC but is retained as being generally applicable. Similarly, in OC6.5.7 there is a time limit of two minutes for responding to an instruction to restore demand; this is also retained.

6.49. Commentary is provided here on changes which are not considered to be generic changes. In OC6.4.1 to OC6.4.3 make reference to the Demand Notification Level (see 6.36).

OC7[50] Operational Liaison

6.50. OC7 (Operational Liaison) sets out the requirements for the exchange of information in relation to events on the Total System which have or may have an effect on the system and describes the system warnings to be used by the System Operator. It also includes procedures for Integral Equipment Testing which are not included in the SGC OC5. Details of the differences between the EWGC OC7 and the SGC OC5 can be found on the website[51].

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[49] Please see paper 'Queries on Operating Codes', Ofgem website, BETTA, GCEG.
[50] OC5 in the SGC.
[51] Please see paper 'Queries on Operating Codes', Ofgem website, BETTA, GCEG.

6.51. Commentary is provided here on changes which are not considered to be generic changes. In OC7.4.3 changes have been made to include the Transmission System in the scope of effect as the term 'System Operator Systems' is not considered to be sufficiently clear.

OC8[52] Safety Co-ordination

6.52. A draft of OC8 is not included in this draft of the GB Grid Code. It will be considered further as discussed in 4.103.

OC9[53] Contingency Planning

6.53. OC9 (Contingency Planning) covers recovery procedures following a system shutdown (black start), the resynchronisation of islands and the Joint System Incident Procedure to be used for such events. The procedures defined in the EWGC OC9 and SGC OC7 are broadly equivalent. The main differences are in the level of detail of black start procedures that are contained within the two Grid Codes and the EWGC provides for the establishment of Local Joint Restoration Plans (OC9.4.7.11). The establishment of these procedures will need to be considered in the implementation of BETTA. Details of the differences between the EWGC OC9 and the SGC OC7 can be found on the website[54]. The involvement of the Scottish transmission licensees in Joint System Incident Procedures needs to be considered further in the context of STC drafting.

6.54. All changes to OC9 are generic changes.

OC10[55] Event Information Supply

6.55. OC10 (Event Information Supply) covers the written reporting requirements following on from initial notifications of events under OC7 and the establishment of joint investigations into significant incidents. The EWGC OC10 and SGC OC8 are broadly equivalent. The main difference is in the establishment of joint investigations in the EWGC. Details of the differences

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[52] OC6 in the SGC.
[53] OC7 in the SGC.
[54] Please see paper 'Queries on Operating Codes', Ofgem website, BETTA, GCEG.
[55] OC8 in the SGC (Operational Event Reporting and Information Supply).

between the EWGC OC10 and the SGC OC8 can be found on the website[56]. The involvement of the Scottish transmission licensees in joint investigation of significant incidents needs to be considered further in the context of STC drafting.

6.56. All changes to OC10 are generic changes.

OC11[57] Numbering and Nomenclature of HV Apparatus at Certain Sites

6.57. A draft of OC11 is not included in this draft of the GB Grid Code. It will be considered further as discussed in 4.103.

OC12[58] System Tests

6.58. OC12 (System Tests) covers the procedure for the establishment of system tests. The EWGC OC12 and SGC OC10 are broadly equivalent. Details of the differences between the EWGC OC12 and the SGC OC10 can be found on the website[59].

6.59. All changes to OC12 are generic changes.

Balancing Codes

6.60. The current equivalent of the Balancing Codes in the EWGC are the Scheduling and Despatch Codes (SDC) in the SGC. As concluded in 4.73 the EWGC balancing codes have been adopted in the draft text of the GB Grid Code. It is noted that with the proposed definition of Large, Medium and Small Power Station that the provisions in the Balancing Codes will apply to different plant MW levels depending on their location.

6.61. BCs 1 and 2 apply to BM Participants, Externally Interconnected System Operators and Network Operators. BC3 applies to these and other providers of Ancillary Services.

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[56] Please see paper 'Queries on Operating Codes', Ofgem website, BETTA, GCEG.

[57] Equivalent of OC11 is OC9 in the SGC (Numbering and nomenclature of Electrical Apparatus at Certain Sites).

[58] OC10 in the SGC.

[59] Please see paper 'Queries on Operating Codes', Ofgem website, BETTA, GCEG.

BC1 Pre Gate Closure Process

6.62. Balancing Code No 1 (BC1) sets out the procedure for the submission of BM Unit Data by BM Participants, the submission of certain System data by Network Operators and the provision of data by the System Operator in the period leading up to Gate Closure. This enables the System Operator to assess which BM Units are expected to be operating. It details provisions for Negative Reserve Active Power Margin (NRAPM). It specifies reports on amongst other things, predefined constraint groups (BC1.5.1). SDC1 (System Scheduling) sets out procedures leading to the production of a system schedule.

6.63. The GCEG will need to investigate further such matters as Scottish procedures for load management (SDC1 7.1.5 Load Management Blocks) and load transfers between Grid Supply Points or arrangements for Demand reduction by manual or automatic means (BC1.7.1).

6.64. The EWGC BC1.4.2(a)(i), requires Physical Notifications for BM Units with a Demand Capacity greater than 50MW, the requirement to submit Physical Notifications is proposed to apply to those above 5MW of Demand Capacity in Scotland to reflect the similar requirements in SGC SDC1 7.1.5 relating to Load Management Blocks.

BC2 Post Gate Closure Process

6.65. Balancing Code No 2 (BC2) sets out the procedure for the physical operation of BM Units in the absence of any instructions from the System Operator, the acceptance by the System Operator of Balancing Mechanism Bids and Offers, the calling off by the System Operator of Ancillary Services, the issuing and implementation of Emergency Instructions and the issuing of other operational instructions and notifications. SDC2 (Control Scheduling and Despatch) sets out procedures for issuing despatch instructions.

6.66. In BC2.5.5.1 and BC2.5.5.2 a Demand Capacity of 5 MW in Scotland has been inserted (see 6.64).

BC3 Frequency Control Process

6.67. Balancing Code No 3 (BC3) sets out the procedures for the System Operator to use in respect of System Frequency control. SDC3 (Frequency Control) covers frequency control including frequency control under system split conditions.

Data Registration Code

6.68. The EWGC Data Registration Codes (DRC) collates all the specific data requirements from the other sub-codes. The EWGC DRC applies to generators, network operators, suppliers, non-embedded customers, Externally Interconnected System Operators, interconnector users and BM Participants. The SGC DRC lists the data required by other sub-codes. Generally, although the format and terminology is different, the data supplied under the two codes is similar. As proposed in 4.86 the EWGC DRC has been used as the basis of the GB Grid Code.

General Conditions

6.69. The General Conditions set out the objectives and the composition of the Grid Code Review Panel. The Panel has its own 'rules and procedures' which are documents produced pursuant to the Grid Code (GC.4.4) which are approved by the Authority. These rules and procedures reflect what is in the General Conditions and so will need to be updated as part of the transition to and implementation of BETTA. An amended set of 'constitution and rules' is provided with the drafting for completeness.

6.70. An obligation has been added to the draft GB Grid Code requiring that the Panel shall consider and identify changes to the GB Grid Code to minimize unnecessary differences in treatment of issues between Scotland and England and Wales (see 4.68).

6.71. GC.4.3 has been amended to reflect the panel representation proposals set out in 4.56 to 4.67.

6.72. There is currently no general clause in the EWGC GC about confidentiality. A clause has been inserted at GC.11 to draw attention to the confidentiality provisions in the CUSC.

Appendix 1 : GB Grid Code licence condition

1.1 Existing Standard Licence Condition (SLC) B7 (Licensee's Grid Code) obliges each of the transmission licensees to have in place and to comply with a Grid Code.

1.2 In the first consultation on the GB Grid Code under BETTA, Ofgem/DTI proposed the creation of a singe GB Grid Code that would be the responsibility of the GB system operator. On the basis of this proposal the December 2002 consultation proposed that the GB system operator would be subject to a licence condition to have in place and comply with a Grid Code.

1.3 Ofgem/DTI proposed that existing SLC C5 (Supplementary Grid Code Condition for England and Wales), which requires that NGC includes in its Grid Code procedures relating to the outage of generation sets and a balancing code specifying, among other things, information that is to be submitted by authorised electricity operators to the licensee for the purposes of making bids and offers in the balancing mechanism and the issuing by the licensee of instructions by reference to such offers and bids should be incorporated into this licence obligation to create a single licence condition applying to the Grid Code under BETTA.

1.4 Consideration was also given to whether or not it was necessary to make changes to the existing licence provisions to provide for consultation to take place with the transmission owners, for example, when the Authority is considering relieving the GB system operator of obligations it faces under the GB Grid Code. Ofgem/DTI's initial view was that it was not necessary to include such a reference as existing arrangements, which provide for consultation with parties who may be affected by any such derogation would be sufficient.

1.5 It was proposed that standard condition D5 (Supplementary Grid Code Condition for Scotland) would no longer be required under BETTA.

Respondents' views

1.6 Of the four respondents who commented on the allocation of responsibility for the Grid Code, three were of the view that it was appropriate to place this responsibility on the GB system operator. Each of these respondents also agreed

that the provisions contained in SLC C5 relating to England and Wales should be included in the single GB obligation.

1.7 One respondent was of the view that the transmission owners should also be parties to the GB Grid Code and should be represented in the governance arrangements for the Grid Code.

Discussion

1.8 Section 4.30 onwards considers the question of whether the GB system operator should be subject to an obligation to have in place and comply with a GB Grid Code. The draft licence condition on a GB Grid Code has been prepared on the basis of these conclusions. In view of the fact that Ofgem/DTI would expect this licence obligation to apply to any party that undertook system operation activities under BETTA it is considered that this licence condition should be included as an SLC.

1.9 As discussed above, it is intended that obligations will be placed on the transmission owners in the STC where such obligations are required to support the discharge of the GB system operator's duties under the GB Grid Code. Ofgem/DTI note that the proposed licence condition for the GB system operator to have in place a GB Grid Code includes provision for the Authority to, following appropriate consultation, relieve the GB system operator of obligations that it faces under the Grid Code. Ofgem/DTI consider that where the GB system operator is relieved of any such obligation it may be necessary also to relieve the transmission owner of any obligations it faces under the STC in order to support the GB system operator's discharge of its obligation. It is not yet clear whether express provision will need to be included in the STC to this effect or whether specific reference to such matters will be required in the STC licence condition. Further consideration will be given to this matter as the detail of the STC is further developed.

1.10 In relation to the need to make specific provision for consultation with the transmission owners Ofgem/DTI have concluded that it is not necessary to make specific reference to the transmission owners on the basis that the existing arrangements make sufficient provision for their involvement.

1.11 Ofgem/DTI consider that, in view of the intention to place a number of obligations on the transmission owners in the STC which are required to support the discharge of the GB system operator's obligations under the GB Grid Code, it is important to ensure that the obligations under the GB Grid Code and the corresponding obligations under the STC are consistent. In view of this Ofgem/DTI consider that it is appropriate to place a specific obligation on the GB system operator, through the GB Grid Code licence condition, to take all reasonable measures to secure and implement and to not take steps to unduly delay changes to the STC which are required as a consequence of any changes made to the GB Grid Code. This will complement the obligation on the GB system operator in the STC licence condition to take all reasonable measures to secure and implement and not to unduly delay changes to the GB Grid Code which are required in order to ensure consistency with the STC and one requiring transmission owners to progress change to the STC to be consistent with the Grid Code, which is discussed in chapter 7 of the June 2003 transmission licence consultation paper.

1.12 Ofgem/DTI conclude that standard condition D5 (Supplementary Grid Code Condition for Scotland) will no longer be required.

1.13 Proposed drafting of the licence obligation for a GB Grid Code is attached at Annex A. Commentary is also provided to explain what changes are made to the existing conditions in Annex B.

SLC B7A Compliance with Other Transmission Company Grid Codes

1.14 It should be noted that in view of the introduction of a single GB system operator under BETTA the draft licence conditions do not refer to 'the licensee's transmission system' and 'the licensee's Grid Code' on the basis that there will be only one 'transmission system' operated by the GB system operator and also as explained in chapter 4 there will be only one Grid Code. As work on the draft licence conditions progresses this and other assumptions will need to be confirmed.

1.15 Consequently the obligation to comply with other transmission company Grid Codes that currently appears in the transmission licence (Standard Licence Condition B7A Compliance with Other Transmission Company Grid Codes) is

unnecessary as they will no longer exist. Ofgem/DTI propose that these obligations will be removed under BETTA to avoid any potential confusion regarding Grid Code arrangements under BETTA.

Annex A: Draft of Grid Code Standard Licence Condition

Draft Condition ~~7. Licensee's~~X. Grid Code

1. The licensee shall in consultation with authorised electricity operators liable to be materially affected thereby prepare and at all times have in force and shall implement and comply (subject to paragraph ~~10~~11) with the ~~Grid Code to be known as the licensee's~~ Grid Code:

   (a) covering all material technical aspects relating to connections to and the operation and use of [the ~~licensee's~~ transmission system] or (in so far as relevant to the operation and use of [the ~~licensee's~~ transmission system]) the operation of electric lines and electrical plant connected to [the ~~licensee's~~ transmission system] or any distribution system of any authorised distributor and (without prejudice to the foregoing) making express provision as to the matters referred to in paragraph 5 below; and

   (b) which is designed so as:

      (i) to permit the development, maintenance and operation of an efficient, co-ordinated and economical system for the transmission of electricity;

      (ii) to facilitate competition in the generation and supply of electricity (and without limiting the foregoing, to facilitate [the ~~licensee's~~ transmission system] being made available to persons authorised to supply or generate electricity on terms which neither prevent nor restrict competition in the supply or generation of electricity); and

      (iii) subject to sub-paragraphs (i) and (ii), to promote the security and efficiency of the electricity generation, transmission and distribution systems in ~~England and Wales or Scotland~~Great Britain each taken as a whole.

2. The ~~licensee's~~ Grid Code in force at the date this condition comes into force shall be sent to the Authority for its approval. Thereafter, the licensee shall (in consultation with authorised electricity operators liable to be materially affected thereby) periodically review (including upon the request of the Authority) the ~~licensee's~~ Grid Code and its implementation. Following any such review, the licensee shall send to the Authority:

   (a) a report on the outcome of such review; and

   (b) any proposed revisions to the ~~licensee's~~ Grid Code from time to time as the licensee (having regard to the outcome of such review) reasonably thinks fit for the achievement of the objectives referred to in paragraph (b) of paragraph 1; and

(c) any written representations or objections from authorised electricity operators liable to be materially affected thereby (including any proposals by such operators for revisions to the ~~licensee's~~ Grid Code not accepted by the licensee in the course of the review) arising during the consultation process and subsequently maintained.

3. Revisions to the ~~licensee's~~ Grid Code proposed by the licensee and sent to the Authority pursuant to paragraph 2 shall require to be approved by the Authority.

4. Having regard to any written representations or objections referred to in sub-paragraph (c) of paragraph 2, and following such further consultation (if any) as the Authority may consider appropriate, the Authority may issue directions requiring the licensee to revise the ~~licensee's~~ Grid Code in such manner as may be specified in the directions, and the licensee shall forthwith comply with any such directions.

5. The ~~licensee's~~ Grid Code shall include codes relating to the technical operation of the ~~licensee's~~ transmission system, including:

(a) connection conditions specifying the technical, design and operational criteria to be complied with by the licensee and by any person connected or seeking connection with [the ~~licensee's~~ transmission system] or by any person authorised to generate who is connected with or seeks connection with [the ~~licensee's~~ transmission system] or any ~~transmission system or~~ distribution system of any third party which is located in Great Britain.

(b) an operating code specifying the conditions under which the licensee shall operate [the ~~licensee's~~ transmission system] and under which persons shall operate their plant and/or distribution systems in relation to [the ~~licensee's~~ transmission system], in so far as necessary to protect the security and quality of supply and safe operation of the ~~licensee's~~ transmission system under both normal and abnormal operating conditions; and

(c) a planning code specifying the technical and design criteria and procedures to be applied by the licensee in the planning and development of [the ~~licensee's~~ transmission system] and to be taken into account by persons connected or seeking connection with [the ~~licensee's~~ transmission system] in the planning and development of their own plant and systems~~.~~;

(d) procedures relating to the outage of generation sets and a balancing code specifying, among other matters, information to be submitted by authorised electricity operators to the licensee for the purposes of, and the making of offers and bids in, the balancing mechanism, and the issuing by the licensee of instructions by reference to such offers and bids.

6. The licensee shall give or send a copy of the ~~licensee's~~ Grid Code (as from time to time revised) to the Authority.

7. The licensee shall (subject to paragraph 8) give or send a copy of the ~~licensee's~~ Grid Code (as from time to time revised) to any person requesting the same.

8. The licensee may make a charge for any copy of the ~~licensee's~~ Grid Code (as from time to time revised) given or sent pursuant to paragraph 7 of an amount which will not exceed any amount specified for the time being for the purposes of this condition in directions issued by the Authority.

9. The licensee shall take all reasonable measures to secure and implement (consistently with the relevant procedures), and shall not take any steps to prevent or unduly delay, changes to the STC, such changes being changes which are appropriate in order to give full and timely effect to and/or in consequence of any amendment which has been made to the Grid Code.

10. ~~9.~~ In preparing, implementing and complying with the ~~licensee's~~ Grid Code (including in respect of the scheduling of maintenance of [the ~~licensee's~~ transmission system]), the licensee shall not unduly discriminate against or unduly prefer any person or class or classes of person in favour of or as against any person or class or classes of persons.

11. ~~10.~~ The Authority may (following consultation with the licensee) issue directions relieving the licensee of its obligations to implement or comply with the ~~licensee's~~ Grid Code in respect of such parts of [the ~~licensee's~~ transmission system] and/or to such extent as may be specified in the directions.

12. In this condition, authorised electricity operator includes any person transferring electricity to or from Great Britain across an interconnector.

Annex B: Commentary on Grid Code Standard Licence Condition

1.1 The starting point for the drafting of this proposed licence condition is the standard condition B7 (Licensee's Grid Code), together with relevant provisions in standard condition C5 (Supplementary Grid Code Condition for England and Wales).

1.2 On the basis that the numbering for the new standard conditions for transmission licences has not yet been finalised, this draft condition is not numbered.

1.3 Ofgem/DTI are currently considering the appropriate definition for 'transmission system' in the licences and whether a single definition is appropriate for all conditions[60].

1.4 In the current standard condition 7 (Licensee's Grid Code), the Grid Code (described as the licensee's Grid Code) is the Grid Code in force at the date that condition comes into force. This approach is retained for the current draft condition.

1.5 In view of the introduction of a single GB system operator under BETTA , the need to distinguish in each licence the licensee's Grid Code from other such Codes expressly by the phrase 'licensee's Grid Code' is no longer considered necessary. On that basis, the words at paragraph 1 of the current standard condition describing the Grid Code as the licensee's Grid Code have not been included at paragraph 1 of the draft condition. In consequence, references throughout the draft condition are to the 'Grid Code', rather than to the 'licensee's Grid Code'. This drafting approach has been adopted on the basis that there will be only one 'transmission system' operated by the GB system operator and also as explained in chapter 4 there will be only one Grid Code. As work on the draft licence conditions progresses this and other assumptions will need to be confirmed.

1.6 Ofgem/DTI do not intend that the Secretary of State will, under BETTA, be required to designate a new GB Grid Code. Instead it is intended that the existing England and Wales Grid Code (with the inclusion of specific regional

[60] See para 2.6 in Annex A of Regulatory framework for transmission licensees under BETTA, June 2003. Ofgem #59/03.

provisions in relation to Scotland as required) will be extended to GB. In view of this intention, Ofgem/DTI consider that further changes are likely to be required to existing paragraphs 1 and 2 of this licence condition to reflect that the GB Grid Code will not be a new document. Ofgem/DTI will be considering this matter further as part of its work on the implementation of BETTA.

1.7 In paragraph 5, an additional sub-paragraph (d) has been added. The wording is taken from paragraph 1, standard condition C5 (Supplementary Grid Code Condition for England and Wales).

1.8 Paragraph 9 of the draft licence condition requires the licensee to take all reasonable measures to secure and implement and to not take steps to unduly delay changes to the STC which are required as a consequence of any changes made to the GB Grid Code. As a result, the licensee will be required to assess whether changes to the Grid Code require it to use the amendment procedures for the STC and progress any amendment to that document in accordance with those procedures. A mirror condition is proposed for the STC licence condition, in this regard, as set out in the June 2003 transmission licence consultation[61]. As proposals are developed on the most appropriate manner in which to achieve effective change co-ordination between the GB Grid Code and the STC, the wording in this paragraph of the licence condition may need to change.

1.9 Paragraph 12 extends the definition of authorised electricity operator to include interconnectors for the purpose of this licence condition and is taken from paragraph 2, standard condition C5 (Supplementary Grid Code Condition for England and Wales). It is noted that such a condition does not apply in the current standard condition D5 (Supplementary Grid Code Condition for Scotland). However to apply this condition only to interconnectors in England and Wales would appear to be discriminatory and so no such limitation is proposed.

[61] See condition which follows para 3.25 in Annex B1 of 'Regulatory framework for transmission licensees under BETTA', June 2003. Ofgem #59/03.