The Grid Code under BETTA

Ofgem/DTI conclusions and second consultation on the text of a GB Grid Code and conclusions on change management between the STC and each of the GB CUSC, GB BSC and GB Grid Code

Volume 1

May 2004 99/04a

Summary

This document is the third in a series of three planned consultations to develop a Grid Code to support British Electricity Trading and Transmission Arrangements (BETTA) which are planned to be introduced in April 2005¹. 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 second consultation on a GB Grid Code
- 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 second draft of the GB Grid Code and invites views on this text.

This document comprises two volumes. Volume 1 summarises the issues that were consulted upon in the second GB Grid Code consultation paper, provides an overview of responses received to that consultation and the subsequent four mini-drafting consultations on matters associated with the GB Grid Code and sets out Ofgem/DTI's conclusions. It identifies those modifications to the existing grid codes which have been approved by the Authority since the second 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.

¹ Which is subject to Royal Assent to the Energy Bill which includes the Electricity (Trading and Transmission) provisions by July 2004.

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

- change management arrangements between the STC and user facing codes need to be set down. For the GB BSC and GB CUSC provisions need to be included that require joint working arrangements with the STC (in a similar manner to those already in place for core industry documents) and that enable the BSC or CUSC panel to invite a representative of the STC Committee to sit on a working group where modifications or amendments which may have consequential effect on the STC are to be discussed. For the GB Grid Code provisions need to be included that require joint working arrangements with the STC. The existing Grid Code Review Panels already have the ability to invite anyone to attend a working group and it is not proposed to introduce any limits to this ability for the GB Grid Code Review Panel. Transmission owners will be able to raise matters for review in relation to parts of the Grid Code with which they are required to comply by virtue of an obligation placed upon them to do so in the STC
- the composition of the Grid Code Review Panel will be as proposed in the previous consultation paper. Each transmission owner will have a seat on the panel to the extent that Panel matters relate to Grid Code obligations with which transmission owners are required to comply under the STC
- as proposed in the previous consultation, obligations on users in the GB
 Grid Code should be generally as specified in the England and Wales
 Grid Code and 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
- a revised draft of the operating code dealing with safety co-ordination is provided which has a separate section for England and Wales and for Scotland. These sections are largely the same but have been separated to maximise clarity for operational personnel. The STC will require transmission owners to work in accordance with the safety procedures specified in the Grid Code.

Consideration of the application of the Grid Code to Large Embedded Generators in Scotland is undergoing further detailed consideration as set out in the small generators conclusions paper².

Views are invited on the second draft text of the GB Grid Code.

² Small generator issues under BETTA: an Ofgem/DTI conclusions document. May 2004. Ofgem #96/04.

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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 2001³ ('the December 2001 consultation paper') and a report of May 2002⁴ ('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, amongst other things, 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 document⁵ 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. In September 2003, Ofgem/DTI published their conclusions on the first GB GridCode consultation and consulted upon the first draft of a Grid Code to apply

³ 'The Development of British Electricity Trading and Transmission Arrangements (BETTA): A consultation paper', Ofgem, December 2001. Ofgem #74/01.

⁴ 'The Development of British Electricity Trading and Transmission Arrangements (BETTA): Report on consultation and next steps' Ofgem/DTI, May 2002. Ofgem #38/02.

⁵ 'The Grid Code under BETTA, Ofgem/DTI consultation on a grid code to apply throughout GB' Ofgem/DTI, December 2002. Ofgem #78/02.

throughout GB⁶. That consultation is referred to in this document as 'the second GB Grid Code consultation'. Since September 2003, four 'mini-drafting consultations' on the drafting of the GB Grid Code have also been published⁷.

1.7. The rationale for this document is to consider the responses received to the second GB Grid Code consultation and the mini-drafting consultations and to reach conclusions on the issues raised. Volume 1 also considers modifications that have been approved to the existing grid codes since the second 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. Chapter 6 of Volume 1 includes a commentary on an updated text for the GB Grid Code (GBGC Draft 2 or GBGC D2) and invites views on the draft text which is provided in volume 2.

⁶ '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', Ofgem #111/03. ⁷ 'Operating Codes 1, 2, 6, 7, 9, 10 and 12'. October 2003. Ofgem #132/03.

^{&#}x27;Connection Conditions, Operating Code 5 and General Conditions' . November 2003. Ofgem #154/03. 'Operating Code 8 & 11, Balancing Codes'. February 2004. Ofgem #30/04.

^{&#}x27;Planning Code, Data Registration Code and Glossary & Definitions. February 2004. Ofgem #37/04.

2. Timetable

- 2.1. As described in the second GB Grid Code consultation, this document is the third in a set of three planned 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 third GB Grid Code consultation and includes the second draft legal text of the GB Grid Code
 - responses to this consultation document should be sent by 18 June 2004 to Bridget Morgan (details below)
 - subject to the responses received, it is planned that conclusions and a third draft legal text for the GB Grid Code ('GBGC D3') will be published in July 2004. It is anticipated that the GB Grid Code will be given legal force through powers provided by the E(TT) provisions of the Energy Act. The legal transition to a GB Grid Code will be addressed and consulted upon where appropriate in the near future, and
 - further changes to the GB Grid Code that will apply under BETTA may be required during the period between production of draft 3 of the GBGC ('GBGC D3') and BETTA go-live. Should such changes arise, their inclusion in the GB Grid Code will be consulted upon at the time at which they arise.
- 2.3. Detailed discussions have been held with the transmission licensees and users⁸ concerning the development of a Grid Code under BETTA and Ofgem has provided updates about BETTA at meetings of the Grid and Distribution Code Review Panels. Regular updates of progress in developing a GB Grid Code will

⁸ The GB grid code expert group (GCEG). Notes of the meetings of this group are published on the BETTA (GCEG) area of the Ofgem website 'www.ofgem.gov.uk'.

continue to be made at future meetings of the Grid and Distribution Code Review Panels.

- 2.4. In December 2002, the Minister made an announcement concerning the GB system operator⁹ ('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. Ofgem/DTI are grateful for the participation of the Grid Code Expert Group (GCEG)¹⁰ in assisting Ofgem/DTI with technical expertise to support their development of the GB Grid Code.

Views invited

- 2.6. 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.
- 2.7. Responses marked 'Response to third GB Grid Code consultation' should be sent by 18 June 2004 to:

Bridget Morgan Technical Directorate

⁹ See Hansard, 17 December 2002, Official Report. Column 45WS.

¹⁰ See Ofgem website, www.ofgem.gov.uk, BETTA (GCEG) area of work for more information.

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

- 2.8. Please e-mail responses to <u>BETTA.consultationresponse@ofgem.gov.uk</u> marked 'Response to third GB Grid Code consultation'. All responses will be forwarded to the DTI.
- 2.9. If you wish to discuss any aspect of this document, please contact Bridget Morgan at Ofgem or Renata Williams at the DTI (e-mail: <u>renata.williams@dti.gsi.gov.uk</u>, 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 allows¹¹. Such legislation is included in the Government's Energy Bill is referred to in this document as the Electricity (Trading and Transmission) provisions ('the E(TT) provisions') of the Energy Bill or, based on an assumption of Royal Assent to such a Bill, as 'the E(TT) provisions of the Energy 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 licensees¹², on a Balancing and Settlement Code (BSC) to apply throughout GB¹³, on the Connection and Use of System Code under BETTA¹⁴ and on the Settlement Agreement for Scotland (SAS) under BETTA¹⁵.
- 3.5. On 30 January 2003, the DTI published the draft Electricity (Trading and Transmission) Bill¹⁶ together with the Regulatory Impact Assessment, which has

¹¹ See Hansard, 15 April 2002 Official Report Column 748W.

¹² 'Regulatory framework for transmission licensees under BETTA, an Ofgem/DTI consultation, December 2002. Ofgem #88/02.

¹³ 'The Balancing and Settlement Code under BETTA, Ofgem/DTI consultation on a BSC to apply throughout GB', December 2002. Ofgem #80/02.

¹⁴ 'The Connection and Use of System Code under BETTA, Ofgem/DTI consultation on a CUSC to apply throughout GB', December 2002. Ofgem #79/02.

¹⁵ 'The Impact of BETTA on the Settlement Agreement for Scotland (SAS), an Ofgem/DTI Consultation', December 2002. Ofgem #81/02.

¹⁶ See DTI press notice P/2003/60 published 30 January 2003 on www.dti.gov.uk follow 'Press Notices'.

been the subject of pre-legislative scrutiny by the Trade and Industry Select Committee (TIC). This process is complete and the TIC published a report¹⁷ on 8 April 2003.

- 3.6. Subsequently, the Government has brought forward the legislation required to implement BETTA as part of the Energy Bill. The Energy Bill received its Second Reading in the House of Lords on 11 December 2003, and having completed its passage through the Lords, it is anticipated that it will receive its Second Reading in the House of Commons shortly.
- 3.7. On 30 September 2003, Ofgem/DTI published the second GB Grid Code consultation, on 20 November 2003 a consultation on small generators under BETTA¹⁸ and on 30 November a third consultation on the GB BSC¹⁹.
- 3.8. On 16 December 2003, Ofgem/DTI published the third consultation on the GB CUSC²⁰ and on 19 December 2003, the third consultation on the regulatory framework for transmission licensees²¹.
- 3.9. Work is ongoing in other areas of the BETTA project, such as the drafting of a code (the 'SO-TO Code' or 'STC'), which may affect aspects of the GB Grid Code. 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.
- 3.10. 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

¹⁷ '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 1 and 2.' See www.parliament.uk/parliamentary committees/trade and industry.cfm.

 ¹⁸ 'Small Generator issues under BETTA, An Ofgem/DTI consultation document', Ofgem #145/03.
 ¹⁹ 'TheBSCunder BETTA: Ofgem/DTI conclusions and second consultation on the legal text of a GB BSC', Ofgem # 152/03.

²⁰ 'The CUSC under BETTA: Ofgem/DTI conclusions and second consultation on the legal text of a GB CUSC.' Ofgem #167/03.

²¹ 'Regulatory framework for transmission licensees, Ofgem/DTI', Ofgem # 78/03.

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.

4. Summary of responses and Ofgem/DTI views

- 4.1. In the second GB Grid Code consultation and in the subsequent mini-drafting consultations, Ofgem/DTI sought views on a number of issues associated with the development of a GB Grid Code. Those issues are considered here, together with the views of respondents and Ofgem/DTI's views.
- 4.2. Fourteen parties provided their views on the second GB Grid Code consultation. They are listed in Appendix 1.

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

- 4.3. The second GB Grid Code consultation described: the current change coordination between the BSC, CUSC and core industry documents; the detailed steps of the change management process and invited views on whether additional measures for change co-ordination between the STC and each of the user facing codes would be appropriate under BETTA, in particular between the Grid Code and the STC, and if so, what they should be.
- 4.4. One respondent considered that should a transmission licensee wish to vary STC requirements which affect site requirements that are defined in the Grid Code, Users should be represented in discussions. Another considered it would be better to merge the Grid Code and the STC to minimise governance and change co-ordination issues. Another respondent considered that the Grid Code/STC split reduces transparency and would require efficient change co-ordination processes. This respondent stated that the need to ensure change co-ordination between regulated codes must not provide an opportunity for any parties to delay change. This respondent considered that the extent of current co-ordination between the codes was overstated and that parties can currently only note cross-code impacts when considering a change proposal to a particular code. The respondent further stated that constructive discussion about cross-code issues was hampered by the rigorous application of the boundaries of the codes and that introduction of a further code may exacerbate problems. This

respondent supported the proposed mechanism outlined for the STC and the Grid Code to facilitate joint consideration and development of cross-code matters and co-ordination of consultation and reporting and thought that this should be extended to encompass other codes.

- 4.5. Another respondent considered that each of the panels should be able to set up joint working groups covering two or more codes to develop and assess proposed code changes in a co-ordinated manner with the remit of considering the implications of potential change across the whole of GB trading and transmission.
- 4.6. Another respondent thought that cross-code impact assessment and change management should take place and supported co-ordinated working but considered that separate consultations and reports detailing the proposed changes to each code would be required because the objectives for each of the codes as provided in the licence are slightly different.
- 4.7. Another respondent thought that it was vital to have mechanisms in place for change management that would ensure all codes align and that individual (code) reports proposing related change should go to Ofgem simultaneously. Another respondent was concerned that users should have the opportunity to challenge obligations imposed by a transmission owner via the STC at a sufficiently early stage to avoid any mechanistic 'pass-through' of provisions to the user code.
- 4.8. Another respondent thought that the transmission arrangements were overcomplicated and fragmented and that co-ordination of changes would be avoided if transmission owners were parties to the user facing agreements. This respondent considered that putting obligations on the GB system operator would further consolidate NGC's position as 'controller of the change process' within the industry framework documents and noted that they had responded to a DTI consultation by supporting that the wide range of codes and documents should be grouped and come under industry governance with a number of independent secretariats. The respondent expressed disappointment that BETTA is not being used as an opportunity to consolidate the contractual framework and streamline the governance processes. This respondent further noted that the England and Wales Grid Code (EWGC) review process is less formal than the amendment and modification processes for the CUSC and BSC and that therefore there was not,

under the EWGC, an obvious trigger point for an assessment of whether a specific matter would have an impact on the STC. This respondent further stated that if the transmission licensees unaffiliated to the GB system operator were not to be formally involved in discussion of cross code issues this would constitute discrimination against the non-affiliated transmission owners. The respondent thought that it would be inappropriate for the Grid Code Review Panel (GCRP) to discuss technical standards without transmission licensees who had the primary responsibility for design and construction of the transmission system in Scotland and that such a model would result in a loss of technical expertise. This respondent further noted that the effectiveness of cross-code change with respect to the Grid Code has to be tested, as they were not aware of any Grid Code changes which had produced CUSC or BSC changes.

- 4.9. Another respondent did not consider that change co-ordination between the Grid Code and the STC would provide sufficient protection for transmission owners unless they had the right of veto or right of appeal particularly on safety matters.
- 4.10. Ofgem/DTI have further considered the proposed and existing change coordination mechanisms in light of these comments. The second GB Grid Code consultation stated that the STC would be a core industry document, however, subsequent to this, it was proposed in the third consultation on the regulatory framework for transmission licences²² that the STC would not need to be a 'core industry document' as it would have similar governance and change management processes to the BSC and CUSC.
- 4.11. The BSC and the CUSC in their licence conditions require an assessment of the impact of proposed changes on core industry documents and also to secure and implement change to core industry documents which are consequent upon a change to the BSC or the CUSC. The Grid Code licence condition has an obligation on NGC to consult in writing all Authorised Electricity Operators which are likely to be materially affected in relation to any proposed revision to the Grid Code.

²² Paragraph 8.56 of 'Regulatory framework for transmission licensees, Ofgem/DTI', Ofgem # 78/03.

- 4.12. The existing codes have the following provisions:
 - the BSC obliges the panel to establish joint working arrangements to progress change to core industry documents that may be required consequent to a change to the BSC. It also enables the panel to set up working groups to consider proposed changes, such working groups to be comprised only of people nominated by BSC parties. Modification reports to the Authority must include an impact assessment of the proposed modification on core industry documents and on parties in general. At the request of the BSC Panel or BSCCo, NGC can be asked to assess the impact of a proposed modification on the computer systems and processes of NGC
 - the CUSC has the same arrangements as the BSC in respect of joint working arrangements for core industry documents and the setting up of working groups (whose members are required to be drawn from those nominated by CUSC parties). However, the CUSC also gives BSC parties the right to propose amendments and to attend Amendment Panel meetings
 - the England and Wales Grid Code has no explicit joint working arrangements with the other codes. Changes to the BSC and CUSC as a result of changes to the Grid Code are rare and could be dealt with by the explicit raising of a modification or amendment to the BSC or CUSC. The Grid Code constitution and rules reflect the requirement in the licence to consult with all Authorised Electricity Operators and the Grid Code Review Panel may establish sub-committees and working groups with no restrictions on the membership of them.
- 4.13. The current STC drafting obliges the STC committee to establish joint working arrangements with the BSC and CUSC panels and core industry document owners²³ to progress change to those documents consequent on a change to the STC. It also obliges those proposing changes to the STC, where possible, to

²³ Note that the Grid Code is a Core Industry Document

indicate the impact of the proposed change on the BSC, CUSC and core industry documents.

- 4.14. Ofgem/DTI note the comments about the effectiveness of the existing change coordination processes but do not consider it appropriate to use the BETTA powers to introduce changes other than those made necessary by the introduction of the STC. Therefore no proposals are put forward here to change the BSC, CUSC or Grid Code change management or change co-ordination arrangements other than changes necessary to address the introduction of the STC.
- 4.15. Ofgem/DTI propose to amend the BSC to apply to the STC the same arrangements that the BSC currently has with core industry documents. This would oblige the BSC Panel to establish joint working arrangements with the STC Committee and to consider the impact of any proposals to modify the BSC on the STC. Ofgem/DTI propose also to enable²⁴ the BSC Panel to invite representatives from the STC committee to join a working group when, and only when, the panel identifies the likelihood of an impact of a proposed modification to the BSC upon the STC. Equivalent arrangements are proposed between the CUSC and the STC.
- 4.16. The Grid Code does not currently have a requirement to establish joint working arrangements with the BSC, the CUSC or other industry documents to progress change consequent on a change proposal to the Grid Code. However, Ofgem/DTI propose to change the Grid Code to introduce an obligation on the Grid Code Review Panel to establish joint working arrangements with the STC as it is considered that there is likely to be a greater level of interaction between changes to the Grid Code and the STC than between changes to the Grid Code and the CUSC or BSC. Ofgem/DTI propose that in respect of the Grid Code no new requirements are needed with respect to working groups as the Constitution and Rules of the Grid Code do not restrict the Panel in its choice of representatives for sub-committees and working groups, and so to enable the GCRP to invite representatives of either the STC committee or BSC or CUSC

²⁴ Note that it is not appropriate to oblige the panels to invite such a representative since they are not obliged to set up a working group. The joint working arrangements obligation is considered sufficient.

panels, when and only when, the GCRP identifies the likelihood of an impact of a proposed change upon the STC, would introduce a new and unnecessary restriction on the GCRP.

Given that the majority of respondents were in favour of separate consultation 4.17. and reporting under the codes, and noting that the codes have different sets of objectives against which change is assessed, Ofgem/DTI do not consider that it is necessary or desirable to amend the existing arrangements to require joint reports to be made when there is a joint working group. Ofgem/DTI consider that their proposals to provide for representatives to join working groups operating under the governance of an individual code will provide an appropriate means of co-ordination of change without incurring the complexity that could arise if the governance arrangements of the codes were amended further to provide for joint working groups operating under some form of joint governance between codes. Ofgem/DTI do not consider that the provisions of the codes should prohibit efficient joint working if the relevant panel(s) or committee used the same working group to progress their considerations of the full impact of a proposed change. Ofgem/DTI agree with the respondents on the desirability of co-ordination with respect to, in particular, the timing of publication of consultations and reports to the Authority and consider that this could be managed through the joint working arrangements between the codes that have been proposed.

Composition of the Grid Code review panel

4.18. The second GB Grid Code consultation made proposals in respect of the representation on the Grid Code Review Panel. Respondents made the following comments in respect of the composition of the review panel. One respondent again considered that there should be a seat reserved for a nuclear generator and did not accept the Ofgem/DTI premise that this was not a change required for BETTA; one thought that because of the development of renewable technologies that renewable generators should have three seats; another thought that if the

renewable generators were to have a dedicated seat that the small/medium representative should be reserved for a non-renewable generator. One respondent supported Ofgem/DTI's recognition of the need for balance on the panel and as such were surprised that the GB system operator had been allocated four seats in addition to chair and secretary. Further comments were made on the involvement of transmission owners in the GCRP and these are considered in the next section. A detailed comment was made on the drafting between the General Conditions (GCs) and Constitution and Rules (C&R) which is addressed in chapter 6.

- 4.19. Proposals in the second GB Grid Code consultation with respect to GCRP representation sought merely to bring together differences between the two existing Grid Codes. For generator representation, the current differences are that the Scottish GCRP (SGCRP) has a renewable generator representative and the capacity criterion (representatives of greater than and less than 1GW of capacity) is set at a different level to that than in England and Wales (5GW). Respondents made no comment on the proposed change in capacity requirements for generators (to 3GW).
- 4.20. With regard to the proposal that one seat be reserved for nuclear generators, Ofgem/DTI stated in the second GB Grid Code consultation that they did not consider this to be a change required for BETTA. This respondent had made earlier representation on this point stating that it believed that a separate a seat on the panel was justified because of the importance of transmission system reliability to the safety case requirements for nuclear generators. Ofgem/DTI do not see how the introduction of BETTA justifies such a change from the current position. The respondent has not provided evidence that the change in criteria proposed for generator representation has significantly affected their position.
- 4.21. Ofgem/DTI do not consider it appropriate to use the BETTA powers in relation to any of the other detailed comments raised on Panel composition and therefore do not propose to change the proposals set down in the second GB Grid Code consultation with respect to the composition of the Grid Code Review Panel other than with respect to the consistency point which is discussed in paragraph 6.139 and the involvement of transmission owners that is discussed below.

Involvement of transmission owners in the GCRP

Governance of electrical standards

- 4.22. In the context of the Grid Code Review Panel (GCRP), the second GB Grid Code consultation stated that Ofgem/DTI would consider the role of transmission owners in relation to the governance of electrical standards arrangements introduced and, if appropriate, would intend to provide for the involvement of transmission owners in such arrangements.
- Since the second GB Grid Code consultation, the Authority has approved 4.23. changes to the EWGC to introduce arrangements for the Governance of Electrical Standards (GES) and these were implemented in March 2004. This change introduced a new role for the Grid Code Review Panel with respect to the governance of a defined list of electrical standards used in respect of the transmission system. Procedures have been provided to allow changes to be proposed to any of the standards on the list and to allow for changes to be made to the list of standards. The EWGC list of electrical standards is divided into two sections: section (a) contains 18 'NGTS' (National Grid Technical Specifications²⁵) and section (b) 5 Electronic Data Transfer (EDT) and Electronic Dispatch Logger (EDL) specifications²⁶. The procedures state that NGC or a User can propose to amend one of the listed standards and propose to add or delete a standard to the list and that such a proposal will be sent to the GCRP. If no objections are raised within 20 days then the proposal shall be deemed approved. If the proposer wishes for the proposal to be tabled at the next Panel meeting or if someone raises an objection to the proposal then it will be discussed at the next Panel meeting. If there is 'broad consensus' at the Panel meeting then NGC will make the change. If not then the Panel may establish a working group and in any event, NGC will consult with Authorised Electricity Operators (AEOs) liable to be materially affected by the proposal. If there is

²⁵ For example: NGTS1 'Ratings and General Requirements for Plant, Equipment, Apparatus and Services for the National Grid System and Direct Connections to it' and NGTS3.2.5 'Voltage Transformers for use on the 132 kV, 275 kV and 400 kV Systems'. These standards were previously only referenced in bilateral agreements.

²⁶ These specifications and their change management were already referred to in the EWGC.

broad consensus in the consultation then NGC will make the change. If not then the matter will be referred to the Authority who will decide whether the proposal should be implemented and will notify NGC of its decision. The Scottish transmission licensees are currently developing proposals for the Scottish Grid Code (SGC) and in light of their participation at the joint GCRP/SGCRP/Distribution Code Review Panel (DCRP) working group are expected to propose similar arrangements but with separate lists of electrical standards for each transmission area.

4.24. Ofgem/DTI has not yet received details of the GES proposals for the SGC and does not have equivalent defined lists of electrical standards for the Scottish transmission licence areas. However, Ofgem/DTI expects that these lists will include technical standards of similar scope to those included in the EWGC arrangements and as such expect that their governance under the GBGC would require the involvement of transmission owners.

STC drafting

- 4.25. As drafting on the STC has progressed, a number of areas have been identified where the STC would need to set out provisions which apply to transmission owners in an identical form to the way in which they appear in the user facing code. It is proposed in these areas that rather than reproducing the text in the STC for the purposes of placing the necessary obligations upon transmission owners, transmission owners should be obliged under the STC to comply with the relevant text that appears in the user-facing code. The areas in the Grid Code which have been identified are: OC8, certain sections of the Connection Conditions i.e. CC.6.1-6.3, sections of the General Conditions relating to the GES arrangements and potentially also sections of the Planning Code.
- 4.26. This approach avoids unnecessary, exact duplication of text in the STC, and simplifies ongoing change management. It does mean, however, that transmission owners are required to have some direct involvement in the change management of this text in the relevant user-facing codes and this is considered above in paragraphs 4.3 to 4.17. Ofgem/DTI consider that this approach is appropriate only where the obligations on the transmission owners are an exact replica of the user-facing obligations. Unsurprisingly, these are areas in relation to the standards to be used in planning the transmission systems and to site

specific safety matters. This approach does not affect the manner in which contractual obligations are placed on transmission owners.

- 4.27. In respect of OC8 (Safety Co-ordination), Ofgem/DTI note that in many respects the transmission owner will fulfil the same role as NGC does in England and Wales and in order to maximise clarity for operational personnel, two annexes of OC8 have been proposed, one for England and Wales and the other for Scotland (see paragraph 4.70 below for further discussion). In the annex for Scotland the obligations on the transmission licensee have been written as though they rested on the transmission owner. It should be noted that this drafting approach does not affect the contractual position between users and the transmission sector i.e. all contractual obligations are owed between the GB system operator and users under the Grid Code and provisions have been inserted in the General Conditions to reflect this (see further discussion in chapter 6 on OC8)). Similarly, contractual obligations are owed between the GB system operator and transmission owners under the STC.
- 4.28. The approach to drafting outlined above means that proposals to change certain provisions in the GB Grid Code (with which transmission owners are required to comply under the STC) can only be raised as a change to the GB Grid Code (as opposed to a change to the STC) as these provisions will only be set out in the GB Grid Code. Ofgem/DTI therefore consider it is appropriate that the GCRP can consider matters for review from a Relevant Transmission Licensee, in relation to the particular matters with which it is required to comply via the STC.

Transmission owner representation at GCRP

- 4.29. Transmission owner representation on the GCRP has been further reviewed by Ofgem/DTI in light of responses to the previous Grid Code consultations, the GES arrangements and the STC drafting approach outlined above.
- 4.30. In response to the previous consultation, one respondent proposed that it should be sufficient to invite transmission owners to provide technical expertise to GCRP meetings and subgroups, whereas another thought because of the extent of interaction between the GBGC and the STC that it would be appropriate for transmission owners to be represented on the GCRP. The two Scottish transmission licensees were both of the opinion that transmission owners should

have formal participation in the GCRP arguing that they had both relevant technical expertise and a relevant commercial locus given their concerns on the commercial impact of the GBGC to their role as transmission owner in relation to the connection to and investment in their assets.

4.31. Whilst believing that a necessary part of BETTA is to ensure that transmission licensees with affiliated generation and supply interests are not able to exert inappropriate influence over user requirements in user facing codes, Ofgem/DTI consider that, given the role of the GCRP in the GES arrangements (as outlined in paragraph 4.25) that it is appropriate that each of the transmission owners should be represented at the GCRP and this is reflected in the drafting of the General Conditions.. Ofgem/DTI considers that the GCRP would not be able to adequately discuss or agree to changes to a standard should the relevant transmission licensee not be represented at the meeting and believes that this would adversely affect the effectiveness of the GES arrangements. Given that transmission owners will have a seat on the GCRP for GES purposes, Ofgem/DTI also propose that transmission owners should be able to participate in discussions at the panel in relation to the matters directly affecting them in the GBGC i.e. the sections of the GBGC with which they are required to comply via the STC. Ofgem/DTI consider that it is appropriate for transmission owners to be involved in the change management of such elements of the GB Grid Code.

4.32. The complete proposed composition of the panel is shown here:

User Community	England and Wales	Scottish Panel	GBGC Panel
	Panel		
Generators	5	6	6
Distribution	3	1	3
Network Operators			
Transmission	5	6	5+2
licensees ²⁷			
Others	5	5	5
Total	18	18	21

²⁷ Note this includes the Chairman.

MW levels for data requirements

- 4.33. In the second GB Grid Code consultation, Ofgem/DTI stated that it would be operationally prudent under BETTA to impose data requirements for generators in Scotland on a similar basis to those which exist in the SGC today. Ofgem/DTI noted that the SGC reflects regional differences in the characteristics of the two transmission systems in Scotland and proposed to align the definitions of Small Power Station, Medium Power Station and Large Power Station with the current central despatch limits of 30MW in the South of Scotland and 5 MW in the North of Scotland. The consultation also explained that if this resulted 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. Derogations from the GBGC will be considered by Ofgem in accordance with the usual Ofgem procedure; information on this procedure can be found on the Ofgem website²⁸.
- 4.34. Ofgem/DTI considered that basing requirements on existing, regionally varying MW levels, would 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 would continue to deliver a working and operational transmission system across GB. Ofgem/DTI therefore proposed 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 was connected. Ofgem/DTI further noted that the GB system operator would be able to review these thresholds in light of experience in operating the GB transmission system.
- 4.35. Ofgem/DTI also proposed that the definition of Genset should be amended from that of a generating unit at a Large Power Station to also include other classes of directly connected Power Stations (i.e. Medium and Small) so that requirements on a genset basis would also need to be fulfilled by any directly connected power stations. It was not proposed for the GBGC to include this requirement as

²⁸ 'Guidance Note – Derogation from Codes and Standards in Electricity Generation, Supply, Distribution and Transmission Licences'.

a regional difference as all generating units connected to the transmission system in England and Wales are at Large Power Stations and thus within the existing EWGC definition of genset.

- One respondent considered that the MW levels should be the same across the 4.36. GB system, as it currently was across each transmission system. The respondent noted that the 5 MW level in the North of Scotland had been effectively ignored with respect to wind generation that had recently connected and noted that these generators had not been required to submit physical notifications for this plant. The respondent did not accept that different technical characteristics of transmission networks justified different MW levels and noted that there were such regional variations within current transmission areas but that a single MW level applied within each area. This respondent was concerned that if user requirements were to be dependent upon the physical characteristics of the transmission system then this implied that as the transmission system changed the limits may change and that this would add further uncertainty to users. The respondent stated that the MW levels should be the same across the GB transmission system and noted that if additional site specific requirements could be shown to be necessary that these should be dealt with on a site specific basis. The respondent considered that there should be an immediate review of the proposed MW levels.
- 4.37. Another respondent accepted that there may be a need for regional differences in the MW levels and also considered that the different requirements of various technologies should be considered. The respondent considered that the use of bilateral agreements to determine requirements would not provide an efficient solution and encouraged consideration of an early review of requirements.
- 4.38. Another respondent supported the requirement for regional differences and pointed out that this needed to be supported by an appropriate legal framework to allow the requirements to be enforced.
- 4.39. Another respondent noted that the regional differences in limits represented a prudent approach but would want to see a review of the limits as soon as possible. This respondent did not support the application of any limits tighter than those already in force.

- 4.40. Another respondent noted that individual obligations placed on users via bilateral agreements was not an appropriate option and stated that requirements placed on generators should primarily be a function of size and not voltage of connection. The respondent also thought that setting the Small Power Station level at 5MW across Scotland was unduly low and that the value should be set differently for the North and South or set at a common, but higher level for both areas.
- 4.41. Another respondent considered that the proposal for different MW levels in each area was the antithesis of a market and clearly discriminatory. This respondent thought that requirements on users associated with local network issues should be set by individual agreement and not through the blanket specification of geographical requirements. This respondent further noted that the existing SGC provided for the transmission system operator to agree alternative requirements to those defined in the SGC with users. This respondent argued that the current SGC requirements were to enable the transmission system operator to control tie line flows between Scotland and England and that the limits had been defined as a finer level of control was required on a smaller network than a larger network. This respondent did not support what it considered to be the continued extension of the reach of the GB system operator to smaller and smaller plant. The respondent considered that it would be better to apply the EWGC requirements across GB and then for the GB system operator to negotiate more onerous requirements with relevant users where necessary. The respondent also stated that care should be taken not to impose genset type requirements on small generators which were bussed before connecting to the transmission system though a single connection point.
- 4.42. Another respondent thought, as a current transmission system operator in Scotland, that the proposals were overly restrictive and clearly discriminatory. The respondent thought that the proposal to vary the definition of Large Power Station to be consistent with the existing central despatch levels in order to minimise the necessary disturbance to the existing technical arrangements, was open to debate when the entire framework of the SGC was being replaced.
- Another respondent sought clarification of the proposals and stated that if the 4.43. intent was to capture further generating units as Balancing Mechanism Units (BMUs) in Large Power Stations complete with associated obligations (eg to The Grid Code under BETTA CP3 Volume 1 Ofgem/DTI

submit Physical Notifications (PNs), be Control Points and have EDL or telephony installed) then the proposals would be unacceptable. This respondent outlined the potential requirements on their existing generating plant. The respondent did not believe that there was sufficient justification for classifying a 5MW power station in the North of Scotland as Large and argued that the current 5MW level was to allow the transmission system operator to balance a significantly smaller system and for management of the local North of Scotland transmission network. The respondent did not consider that there was a need for a 5MW level in respect of balancing the much larger GB transmission system. In relation to network operation, the respondent noted that the SGC has other mitigating provisions such as cascade hydro and the ability of the transmission system operator to exercise discretion in the scope of information required from a user depending on the user's size, location and nature of the user's facility. The respondent did not consider that the GB system operator would need to place more onerous obligations on existing generators than currently exist given that security of supply is currently maintained. The respondent also considered that the GB system operator would wish to despatch MW blocks of a reasonable size and that the new requirements would reduce the availability of flexible generators. The respondent pointed out that the proposed new definition of Large Power Station, the removal of cascade hydro definitions and the removal of discretion on the part of the GB system operator could only result in a step change in requirements on users in the North of Scotland and would not meet Ofgem/DTI's minimum disturbance criteria. The respondent noted that a requirement on Embedded Large Power Stations to submit PNs would be a significant increase in the obligations on these embedded generators. The respondent considered that Ofgem/DTI's position of supporting the continuance of regional differences while not proposing to continue with the existing treatment of cascade hydro was discriminatory.

4.44. Ofgem/DTI note that arrangements in the existing SGC are currently more flexible than those in England and Wales and that a consequence of applying the England and Wales arrangements across GB will be the loss of this flexibility. Ofgem/DTI further note that much of this flexibility is provided via bilateral agreements between a user and the transmission licensee and not on a transparent basis. Several respondents have commented that bilateral arrangements under the Grid Code should not be considered as an appropriate

alternative to Ofgem/DTI's proposal because such arrangements are not transparent or efficient in a competitive market. Other respondents recognised that defined MW levels are transparent and fair but noted that further work would need to be done to review the requirements and find the most suitable basis on which they could be set. These respondents agreed with the Ofgem/DTI proposal that the current central despatch limits would provide a starting place for the development of longer term arrangements but that it has to be recognised that the market trading arrangements will lead to some necessary changes in operation (eg changes from the current practice of physical despatch of geographical groups of generating plant to an individual genset basis). Ofgem/DTI accept that there currently may be users who, with the agreement of the transmission licensee are not required to meet the existing specified requirements in the SGC. Ofgem/DTI consider that in such cases, those users should be able to demonstrate these agreements in a request to Ofgem for derogation from the GBGC. Ofgem will consider whether there is sufficient justification to grant a derogation. It is not the intention under BETTA to impose technical requirements that were not necessary prior to BETTA and which are not required as a direct consequence of introducing common market arrangements. Ofgem/DTI consider that defining a common set of requirements with the ability to apply for derogation will provide for fairness and transparency and is consistent with the views of most respondents. Ofgem/DTI also acknowledge that the existing SGC central despatch levels may only be required for control of balancing flows on smaller systems but as noted by one of the respondents who raised this point, Grid Code requirements are also designed to enable the transmission system operator to operate the transmission system safely and securely and Ofgem/DTI considers it is not possible to differentiate between these needs without experience of operating the GB transmission system. As stated in the second GB Grid Code consultation, Ofgem/DTI consider that to reflect the regional differences in the characteristics of the transmission system, and the relative impact of users on that network, it is operationally prudent to impose requirements on a similar basis to those which exist today. Ofgem/DTI would support a review of the MW levels required for the GBGC as soon as possible after the GB system operator has gained some experience of operating the GB transmission system under BETTA.

Ofgem/DTI have done further work to develop their understanding of the Grid 4.45. Code requirements that need to be placed on embedded generators in Scotland and how these might be applied where such generators are not licensed. The understanding of the obligations which would be placed on plant in Scotland if the proposed GBGC (based on the EWGC), together with the proposed changes in definitions (Small, Medium and Large Power Stations and Genset), was to be applied in Scotland is even more complex than was recognised in the second GB Grid Code consultation. As recognised in the previous paper, the EWGC variously places requirements on Gensets, balancing mechanism units (BMUs) and Large, Medium or Small Power Stations. The differences in the choice of category to which requirements are applied appears to relate to the development history of the sub-code concerned and currently in England and Wales the descriptor used generally makes no difference as to which plant the requirements apply to because all generating units at Large Power Stations are also BMUs or Gensets. For example, the EWGC specifies the requirements for mandatory ancillary services on a Generating Unit basis but specifies the instructions for ancillary services on a BMU basis. Application of the requirements in the current EWGC to Scotland would not produce equivalent requirements to those that exist in the SGC, because in Scotland, not all embedded generating units at Large Power Stations would also be BMUs, (e.g. where these units are licence exempt then they will not be required to be BMUs). This matter is considered in detail in the recently published Small Generator Issues conclusions document²⁹. In that document, Ofgem/DTI consider that it is important to ensure that the ability of the GB system operator to operate the network is not reduced relative to system operation today. However, Ofgem/DTI note that further work is required by the transmission licensees to identity the types of services required from embedded plant and how such plant will be operated. Ofgem/DTI also consider proposals for how such requirements can be applied to generators in the legal framework given that some embedded plant is licence exempt. Again as set out in the small generator issues paper, two broad options are contemplated; one whereby the Distribution Network Operator (DNO) is obliged to ensure that such generators enter into a

²⁹ See footnote 2.

contract with NGC which requires them to comply with such requirements and one whereby the DNO ensures such requirements are provided by the generators. In the light of further work in this area, Ofgem/DTI plan to issue a mini-consultation paper on the appropriate way forward in June 2004.

- 4.46. In developing such a way forward, Ofgem/DTI are keen to ensure that the obligations placed on generators reflect, as far as practicable, the obligations that are currently in place today, and do not place unnecessary additional obligations or burdens on such generators.
- 4.47. On the specific points raised by one respondent concerning the definition of Control Point and the consequential effect of whether EDL would be required at individual power stations where there was no current need for this level of control, Ofgem/DTI do not consider that the control arrangements of power stations in Scotland should necessarily be affected by the introduction of BETTA. Ofgem/DTI recommend that if this respondent (or any other concerned party in Scotland) considers that the EWGC definition of Control Point could not be read to adequately reflect the existing arrangements in Scotland then it would be appropriate to raise this in response to this consultation.
- 4.48. Cascade hydro is considered further in paragraph 6.136.

Safety co-ordination

4.49. The mini-drafting consultation on OC8 (safety co-ordination)³⁰ explained the approach that had been taken in drafting OC8 was different to the rest of the GB Grid Code. The GB Grid Code has been drafted so that all transmission licensee rights and obligations are placed on the GB system operator given that the GB system operator will be responsible for the contractual provision of connection and use of system service to users and 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

³⁰ See footnote 7.

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.

- 4.50. OC8 of the GBGC has been drafted to reflect the practical, rather than contractual arrangements that will prevail. Accordingly the drafting reflects that, in Scotland, the majority of the transmission licensee safety co-ordination activity will be conducted by the relevant transmission licensee. This approach was adopted in response to concerns from the transmission licensees that, in particular, the practical responsibility for roles in relation to safety should be clear to all users on the face of the GB Grid Code and that the drafting should avoid implying a role for NGC's practical (or "on the ground") involvement in safety matters which they will not be required to have a practical role in under BETTA.
- 4.51. The mini-drafting consultation noted that, irrespective of the wording used in OC8 in the GB Grid Code, it is not possible for any party to contract away obligations arising under health and safety legislation. The purpose of the approach taken to drafting OC8 of the GBGC was to try to reflect, on the face of the document, who would actually be undertaking matters in relation to safety at a particular site to avoid introducing any possible and unnecessary confusion.
- 4.52. It further noted that this approach meant that many of the drafting references to "safety co-ordination in Scotland" did not reflect procedural differences but merely clarified that, in Scotland, the relevant transmission licensee (ie SPT or SHETL) would, in practice undertake the role.
- 4.53. Seven responses were received to the mini-drafting consultation on OC8. Of these, two respondents had no comment and one other had a specific drafting comment on OC8.1.1 which is addressed in chapter 6 of this document.
- 4.54. One respondent had several drafting comments, many of which concluded that there was no need for some of the regional differences that had been proposed and these are addressed in chapter 6 also.

- Another respondent stressed the necessity of an appropriate framework for safety 4.55. under BETTA. This respondent noted that OC8 had been based on the EWGC and that under the EWGC the user only had to deal with one transmission company. This respondent considered that BETTA represented a major change in that the user would now have to deal with two transmission parties in respect of control and safety and that this would have a number of impacts: that the arrangements should provide for how each party should act and who had authority to act; that all parties should work to one document; and that the transmission licensees ability to fulfil its statutory obligations should not be prejudiced under BETTA. This respondent considered that there was a requirement to bind together the GB system operator, transmission owner and user in respect of safety and proposed a multilateral document, the Scottish Safety Code which would provide a single text (written so as to provide clarity of roles to an operational user); governance procedures; and enforceability between all parties.
- 4.56. This respondent also noted that the proposed draft of GBGC OC8 contained a significant number of changes from the existing SGC OC6 and cautioned against unnecessary changes to safety arrangements which would increase the retraining requirements for users and transmission owners at a time when significant changes are already being made to introduce BETTA. This respondent quoted as an example that one of the proposed changes was recently considered by the SGCRP as a possible change to SGC OC6 and was rejected as unnecessary. This respondent noted that the proposed draft of GBGC OC8 only dealt with safety switching and that other control situations should be considered such as operational switching, emergency switching and black start. This respondent also made some specific comments which are addressed in chapter 6.
- 4.57. Another respondent agreed that where the subject matter was related to responsibilities in relation to health and safety matters, the GB Grid Code should make reference to the transmission licensee who would in practice be responsible for discharging these obligations. This respondent agreed with the approach to considering regional differences being acceptable where the difference is material and as a result of such matters as technical standards or technical requirements and in the case of safety, also being to take account of

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existing safety practices. This respondent made detailed comments on the drafting which are addressed in chapter 6.

4.58. Another respondent was concerned that the lack of a contractual link between the user and the transmission owner would jeopardise safety. This respondent considered that a fundamental component of a safe system of work was the clear definition of roles and responsibilities. In this respondent's view, the new introductory paragraph of OC8 was an unacceptable confusion of the operational environment by contractual issues. This respondent thought that as a minimum, OC8 should be written as separate codes for Scotland and for England and Wales. This respondent further stated that the split-transmission model had the incentive to create a confusing operational environment for users' staff faced with two control authorities, the GB system operator and the local transmission owner. This respondent's preference was for operational and safety issues to be dealt with in licensee-specific tri-partite agreements. This respondent argued that these tri-partite agreements would be a means of maintaining the existing high level of safety at operational interfaces and ensure clarity and certainty in an area where these are imperative. This respondent made further detailed comments and expressed the opinion that because of the other work being undertaken for BETTA and because they did not see that the changes to OC8 were necessary for BETTA that they strongly urged rolling the current SGC OC6 forward as a regional variation.

STC back-off of OC8

- 4.59. Subsequent to the mini-drafting consultation, a meeting was held with the three transmission licensees to discuss the approach to 'backing off' contractual obligations in relation to OC8 matters in Scotland under the STC and how the obligations in OC8 should contractually be allocated. At this meeting three options were considered for OC8 back-off.
 - Option 1: was to adopt the standard approach to STC back-off. This would be to identify in OC8, contractual obligations which needed to be discharged by relevant transmission licensees and obligations on users which were for the benefit of a relevant transmission licensee and to draft a set of complementary obligations (and rights) for transmission owners in the STC

- Option 2: was to place an obligation in the STC on relevant transmission licensees to comply with relevant aspects of OC8. Note that under this option, as with option 1, the contractual enforcement route would be between NGC and the user and NGC and the relevant transmission licensee. There would not be a contractual relationship between the relevant transmission licensee and the user
- Option 3: was to place an obligation on the relevant transmission licensee to comply with OC8 in the Interface Agreement with the user. Under this option the contractual route for enforcement of GBGC OC8 in Scotland would be between the user and the relevant transmission licensee under the interface agreement.
- 4.60. The transmission licensees were asked to consider these options and submit further views to assist in the preparation of this consultation document. The views of the transmission licensees were as follows.
- 4.61. One transmission licensee thought that safety issues were wider than the Grid Code and the STC. This licensee proposed that the key objectives of the safety arrangements should be: clarity to the GB system operator, transmission owner and user as to their roles and obligations; clarity of the arrangements to operational personnel; compatibility with Ofgem's BETTA model; to assist the licensees to discharge their statutory safety obligations; and promote best practice in safety matters. The licensee considered that the BETTA arrangements represented a major change for users in Scotland, in that they would have to deal with two transmission companies in respect of control and safety. The licensee further considered that the proposed BETTA changes could have the following consequences: the user might see ambiguity between the roles and authority of the two transmission licensees; additional risks may arise if the users and transmission owners were working to different documents; possible prejudice to the ability of the transmission licensees to discharge their wider statutory obligations in relation to safety and BETTA must not prejudice their ability to discharge these obligations.
- 4.62. The views of this transmission licensee on the options were as follows:
- Option 1 failed the test of having a single unambiguous set of arrangements
- Option 2 was a better basis for development than Option 1 but would require transmission owners to be directly involved in the governance of OC8 under the GB Grid Code
- Option 3 combined the advantages of Option 2 with a clear definition of enforceability. The licensee considered that this option would give wider assurance to all parties that their counterparty would carry out their designated tasks and was therefore more compatible with other statutory obligations outside the Electricity Act.

This licensee considered that Option 3 formed the best basis for further development of a single framework between users, the GB system operator and transmission owners. The licensee thought that the single framework should also cover other matters including switching and black start. The licensee thought that this could be developed into a document called a 'Scottish Safety Code'. Further, this licensee could see significant merit in having two versions of OC8, one to apply in England and Wales and one in Scotland as it considered that; this would increase clarity by removing the need for references to 'in Scotland' and 'in England and Wales'; this would make it easier to maintain the structure of the existing SGC OC6, and thus minimize retraining problems that would result from differences between GBGC OC8 and SGC OC6.

- 4.63. Another transmission licensee had the following views on the three options:
 - Option 1 was more consistent with the general principles that have been adopted in the design of BETTA, such that the user-facing obligations are the responsibility of NGC, and the transmission owner obligations to NGC are set out in the STC. This licensee noted that there would be a need to maintain the consistency of the two arrangements and so there would clearly have to be the same cross-code change management to ensure that the STC exhibit of OC8 was at all times identical to the Grid Code OC8. However, the licensee also noted that this type of safety

management procedure was not one that was subject to frequent change and as such did not foresee any particular problems with this

- Option 2 was a variation on Option 1 in that the Grid Code obligations on NGC would be backed-off by placing a direct obligation on the transmission owners through the STC. In the licensee's view, placing an obligation on transmission owners in the STC to comply with even a part of the Grid Code could set a precedent that the STC could be used as means to oblige transmission owners to comply with other contractual arrangements that NGC has in force with users. However, this obligation would also imply that the transmission owners would have the right to participate in the review process of the user facing documents
- Option 3 would be more cumbersome, extending the scope of the interface agreement. The licensee noted that it would also be unusual to bind both parties to a Code which neither has any ownership of. A User's obligation to comply with the Grid Code is already enforced through the CUSC, and it is the GBSO who "owns" the CUSC and the Grid Code.
- 4.64. This licensee did not rule out any of the options, considering that all three could be made to work, but expressed an "order of preference" of Option 1 first, for consistency with the BETTA principles, then Option 2 since this would be consistent with one party (NGC) placing an obligation on another (the transmission owner) to comply with a Code which NGC has ownership of and their least favoured option was Option 3.
- 4.65. Another transmission licensee proposed that each option should be judged against the following criteria: unambiguous; consistent procedures; minimum change; appropriate transparency and governance; and consistent with the BETTA arrangements.
- 4.66. This transmission licensee had the following views on the options:
 - the licensee understood that under Option 1 the STC would have a 'mirrored' copy of OC8 and would retain the contractual interface of NGC/user and NGC/transmission owner. The licensee believed that this

option was more complex and ambiguous than the others and would allow for possible confusion between the parties implementing the procedure and introduced greater potential for inconsistency in the procedures which would be written in two separate documents. This option also presented for a higher risk that the two documents would get "out of step" given the differing governance processes

- Option 2 was effectively Option 1 except the complexity of 'mirrored' text in different documents is removed. Thus the clear advantage of option 2 was that the transmission owners and users would be working to the same document, OC8. This removed the scope for inconsistency and the potential for confusion possible with the two separate documents created by option 1. It also retained the BETTA principle that the contractual interface should where possible be between the user and the GB system operator. Option 2 also removed the issue of coordination of changes to two separate documents. The licensee noted that NGC would have an obligation to consult with all Authorised Electricity Operators on proposed changes to the Grid Code and that therefore, transmission owners would have the opportunity to comment, or even raise a sustained objection, to Grid Code change proposals. The licensee noted that whilst the proposed arrangements did not allow transmission owners to directly propose changes to OC8, the licensee believed that this could easily be built in through the STC / Grid Code change coordination arrangements
- The licensee considered the main advantage of Option 3 to be that it provided for the direct contractual relationship between the transmission owner and the user. The licensee considered that whilst this would give a more direct route re enforcement issues (particularly in "real time") it changed the nature of the Interface Agreement which to date had been dealing with limited local site issues, such as shared site facilities. The licensee considered that adding the contractual relationship between the user and the transmission owner in respect of safety increased the significance of the Interface Agreement. The licensee also questioned whether any greater clarity of roles would be achieved by using the Interface Agreement to direct a user or transmission owner to OC8 as

opposed to the STC or Grid Code. The licensee suggested that having this further document which had not historically been used for such a purpose would actually cause more confusion.

4.67. Based on the above reasoning, this licensee suggested that Option 2 was marginally preferable to Option 3. The licensee considered that Option 1 was most consistent with other BETTA arrangements, and could be implemented, but did not believe it represented the best option for safety co-ordination procedures. Irrespective of the option that was taken forward, the licensee saw the merits in having two versions of OC8 text, one for Scotland and one for England and Wales, rather than incorporating regional differences within the procedure that already exists for England and Wales. The licensee considered that this would add clarity to the document and have the advantage of familiarity for all parties. However, the licensee proposed that this should not be SGC OC6 as is. The licensee considered that the Scottish version would need to take account of the different split between OC8 and the Connection Conditions in the EWGC than in the SGC and other differences between the procedures that have been approved by Ofgem, following consultation, as reasonable or beneficial to include i.e. the recent changes in England and Wales to cover working near to HV apparatus.

Ofgem/DTI views on safety co-ordination

4.68. Ofgem/DTI have considered the responses to the mini-drafting consultation and the transmission licensees' views on the options for STC back-off of OC8 provisions. Ofgem/DTI note that all respondents were in agreement with the proposed approach to directly reference the Relevant Transmission Licensee in the GB Grid Code OC8. Ofgem/DTI note that under BETTA users in Scotland will interface with two transmission licensees and that this matter has been discussed in STEG development groups and highlighted at the GCEG. The transmission licensees have also met to discuss specifically the issue of coordination of safety matters. Ofgem/DTI appreciate that the ability to fully progress these issues to final completion has not been possible in the absence of complete knowledge of the legal framework (including the codes) that will support BETTA and expect that with the publication of these matters may now

be progressed further. At this stage, the concerns expressed by one transmission licensee and one user about the potential for confusion in relation to responsibilities for safety co-ordination, do not seem to be shared by the other transmission licensees or other respondents to consultations. For example, it is not clear that there is a need to establish a multilateral safety framework, nor that it is necessary to develop substantially more detailed documentation identifying exactly when users should communicate with the GB system operator and when with the transmission owner. Ofgem/DTI accept that this matter needs further consideration and that it is certainly the case that adequate user training will need to be undertaken, and will look to these further discussions to resolve the remaining concerns that have been identified. Ofgem/DTI also note that it may be appropriate to consider adopting the approach described above in relation to OC8 in relation to other elements of the Grid Code.

- With regard to the presentation of the regional differences in GBGC OC8, 4.69. Ofgem/DTI note that one transmission licensee was content to base OC8 on the EWGC and did not express concern over the presentation of regional differences, but the other two considered that GBGC OC8 would be better presented by separating the requirements that apply in England and Wales from those that will apply in Scotland. Of these, one thought that, the safety coordination rules should be based on those in the EWGC and the other that, if the regional differences were presented in this manner, that SGC OC6 should be used as a basis for the Scottish arrangements. The arguments in favour of basing the GBGC on EWGC OC8 are that it would provide a common platform for GB safety co-ordination arrangements and would fit with the Connection Conditions (CCs) and the Glossary and Definitions (G&Ds). The arguments in favour of basing GBGC OC8 in Scotland on SGC OC6 are that it would minimise structural change for parties in Scotland and therefore the consequential need for retraining that would result from such change.
- 4.70. Ofgem/DTI note that significant change would be required to SGC OC6 to make it compatible with the environment of the GBGC and that many of the detailed comments made by the two supporters of this approach are on this contextual drafting, with few points on the substantial content of the procedures in the draft GBGC OC8 that could not readily be accommodated in the regional differences. Also, the analysis conducted by GCEG comparing the existing EWGC and SGC

sub-codes identified few differences in the requirements. In consideration of the views of all the respondents Ofgem/DTI propose that the requirements in GBGC OC8 should be separated between requirements 'in England and Wales' and requirements 'in Scotland' but that the basis of the GBGC OC8 should be the EWGC OC8. Ofgem/DTI note however with this regional separation, that specific comments raised in respect of the differences between SGC OC6 and GBGC OC8 will be addressed in an attempt to minimise the necessary changes and therefore training requirements. Specific comments on GBGC OC8 are addressed in chapter 6. In particular, Ofgem/DTI note the comments that the introductory paragraph in GBGC OC8 is unsuitable to be included within an operational procedure and propose to move this to the GCs.

4.71. Ofgem/DTI have further considered the options for STC back-off described in paragraph 4.59 and believe that compared with Options 2 and 3, Option 1 has the disadvantage of not providing common arrangements for safety co-ordination between relevant parties. Ofgem/DTI further consider that Option 3 has the disadvantage of departing from the standard contractual arrangements that have been proposed to apply under BETTA. Ofgem/DTI believe that Option 2 has the advantages of defining the arrangements for safety co-ordination in a single document and being consistent with the standard contractual arrangements to apply under BETTA. Ofgem/DTI propose that the STC back-off of GBGC OC8 should be based on Option 2. The drafting of GBGC OC8 that is presented in Volume 2 of this consultation has been developed assuming an associated STC back-off requiring transmission owner compliance with GBGC OC8.

Changes to the existing Grid Codes

- 4.72. Chapter 5 of the second GB Grid Code consultation proposed two changes which had been approved by the Authority since the first GB Grid Code consultation for inclusion in the GB Grid Code. These were:
 - 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

- 4.73. Six respondents commented on these matters; all supported their inclusion in the GBGC. Ofgem/DTI agree that those approved changes as proposed in the second GB Grid Code consultation should be included in the GB Grid Code. One respondent further noted that he could see no need for further consultation on a GB basis if a matter had been properly consulted on for the EWGC. Another respondent commented that when changes to the EWGC were discussed at GCRP their impact on BETTA was considered.
- 4.74. Further changes which have been approved to the existing Grid Codes since the second GB Grid Code consultation are discussed in chapter 5.

Possible future Grid Code changes

- 4.75. In line with the general view that it is now appropriate for Ofgem to consult on the possible impact of changes to existing user facing codes when applied on a GB basis, this consultation builds on the approach adopted in the previous consultations (consulting on the GB applicability of changes that have been approved to either of the existing Grid Codes) and, noting the views of respondents in paragraph 4.73, Ofgem also seeks views on the potential GB impact of change proposals that:
 - have been submitted by a transmission licensee that are currently being considered by Ofgem
 - are currently the subject of consultation by a transmission licensee, or
 - are being developed into a report to the Authority by a transmission licensee following public consultation.

Ofgem considers that including its request for views in this consultation is a helpful way of drawing users' attention to current proposals to change the existing Grid Codes in a co-ordinated manner. This is not intended to be the consultation on the applicability of any of changes to the existing Grid Codes that may be approved by the Authority in the future, for inclusion in the GB Grid Code, however Ofgem/DTI's view on the suitability of such changes that would be set out in the consultations about the further development of the GB Grid Code will be informed by responses received. Ofgem also intends to separately

publish the sections of this consultation that form its consultation on current Grid Code change proposals in an open letter to both the GCRP and SGCRP.

- 4.76. As this is intended to be the last in the series of the consultations³¹ to develop the GB Grid Code, Ofgem considers that it will now be appropriate to follow a similar procedure for GB wide consultation on proposed changes to both of the existing Grid Codes to that which has been adopted in relation to BSC Modification and CUSC Amendment Proposals.
- 4.77. The following describes the procedure that Ofgem will follow in relation to change proposals that are made in relation to either of the existing Grid Codes:
 - Ofgem will initiate a GB wide consultation when a transmission licensee consults on a proposed change to either of the Grid Codes. This GB consultation will seek views on the impact the code change may have on a GB wide basis compared to the impact that the change would have in England and Wales or in Scotland given that it is expected that BETTA will be implemented in the near future
 - the timescale for the GB consultation will be dependent on the complexity of the Grid Code change proposals but in general the period of Ofgem's GB consultation is expected to be consistent with that of the licensee's consultation
 - the timing consideration for a Grid Code change proposal that the Authority has been asked to consider on an urgent basis may preclude GB wide consultation. Such instances would be considered on a case by case basis
 - Ofgem will publish such GB consultations on its website and will also notify the chair of the GCRP, SGCRP and DCRP

³¹ A fourth paper will give conclusions and near final text.

- the GB consultation will request that responses on the GB wide impact of the proposed changes to the relevant existing Grid Code are made directly to Ofgem
- Ofgem will normally publish responses it receives to the GB consultation on its website, and
- responses to the GB consultation will be considered by Ofgem alongside the report to the Authority submitted by the transmission licensee in making its decision on the change proposal according to the objectives of the existing Grid Codes and Ofgem's wider statutory duties.
- 4.78. In respect of any changes to the existing Grid Codes that are approved by the Authority, Ofgem/DTI will consult on whether such changes should be incorporated in the GBGC. Such consultations are likely to take the form of an open letter rather than a full consultation paper.

Presentation of draft text

4.79. Six respondents commented on the presentation of draft GBGC text. All six respondents agreed with the proposal that the next draft text will be change marked against the then existing EWGC with separate identification in the commentary of any changes made to the proposed text between the previously published GBGC draft text and this version. This will maintain a change marked version of the GB Grid Code against the existing EWGC. One respondent noted that it would be helpful to provide cross-referencing between the SGC and the EWGC and Ofgem/DTI have produced this cross-referencing as part of the mini-drafting consultations³².

 $^{^{\}rm 32}$ See footnote 7.

Other issues

- 4.80. One respondent asked for early publication of a programme for the BETTA project which would facilitate planning of resources. Ofgem/DTI are currently working on the transition to BETTA and expect to publish a paper on the approach to transition in May. When this work is complete Ofgem/DTI will publish a high level plan on the website.
- 4.81. One respondent considered that there was a need to establish a 'BETTA date' in relation to the applicability of certain obligations under the various GB codes to pre and post BETTA connections. This date would then be used to classify plant and apparatus as pre or post BETTA in the same way as is done for vesting and NETA. This matter is discussed in the detailed comments on the Connection Conditions in paragraph 6.54.
- 4.82. One respondent considered that there would be a need to provide communication facilities between the transmission owner and the User. Another respondent noted that under the proposed operational switching and contingency arrangements that the transmission owners would be required to communicate directly with users. This respondent thought that the GBGC should reflect this in order to avoid confusion as it was not considered appropriate for users to have to refer to the STC. This respondent suggested that this should either be contained in the General Conditions or in the particular codes affected (e.g. OC7, OC8, OC9 etc). Ofgem/DTI will review the need for such provisions in the GBGC in light of the relevant detailed procedures for transmission licensees that are being finalised by the STEG Development Groups.
- 4.83. One respondent noted that Site Responsibility Schedules (SRS) were critical for the safe and secure operation of the transmission system and were concerned that Scottish versions were significantly different to those in England and Wales. The respondent suggested that further work was needed to confirm the BETTA requirements and that the STC should make provision for exchange of such information. It is intended that, in Scotland, the transmission owners will be required to develop Site Responsibility Schedules, and it is recognised that the

relevant obligations will need to be incorporated into the STC. This matter is also being considered as a transition and implementation issue. Ofgem/DTI note that STEG DG1³³ is considering the SRS that are required for connection sites in Scotland and Ofgem/DTI will review the appropriateness of Appendix 1 to the GBGC CC in light of the output from this work.

4.84. One respondent noted that there needed to be a process for developing, documenting and agreeing the capabilities of existing Scottish plant (eg against the requirements in GBGC CC.6.3). This will be considered in the context of work on the transition to BETTA.

³³ STEG DG1 is SO –TO Expert Group Development Group 1: Control Room and Outage Planning.

5. Changes to the existing Grid Codes

5.1. The second GB Grid Code 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 five changes to the England and Wales Grid Code since the second GB Grid Code consultation was issued, these are:
 - Proposed Grid Code changes to incorporate new Capacity terms arising from CUSC CAP043 (A/03), which was implemented on 31 October 2003 ('revision11')
 - Proposed changes to Grid Code OC8 Safety co-ordination for work near to HV apparatus in substations (E/02) and Proposed housekeeping changes (H/03), which were implemented on 24 November 2003 ('revision 12')
 - Grid Code Modifications to support the introduction of a Maximum Generation Service (J/03), which was implemented on 28 November 2003 ('revision 13')
 - Changes to BC2.9.2.2 to support the issue of Emergency Instructions for Maximum Generation Service via Electronic Data Communication Facilities (B/04), which was implemented on 2 March 2004 ('revision 14')
 - Grid Code Modifications to support the implementation of revised Governance of Electrical Standards (K/03), which was implemented on 22 March 2004 ('revision 15')
 - Proposed Change to the 'Data Validation, Consistency & Defaulting Rules' under the Grid Code (C/03), which was approved on 16 October 2003 and will be implemented at 11am on 25 May 2004, and

- Proposed Grid Code Modifications to Incorporate New Provisions Relating to the Flow of Information on Mothballed Plant and Alternative Fuels (L/03) which was approved on 6 May 2004 and will be implemented on 25 May 2004.
- 5.3. The changes included in A/03 related to the introduction of two new terms that were introduced in the CUSC (Transmission Entry Capacity (TEC) and Connection Entry Capacity (CEC)). The changes introduced a requirement on users making an application for a CUSC contract to include information about the desired level of TEC and CEC. The change also set out that NGC will treat TEC and CEC information for Committed and/or Connected Projects in the same way as other types of Committed and/or Connected Projects Planning Data in terms of confidentiality.
- 5.4. The changes included in E/02 introduced new safety co-ordination requirements for Users working near to NGC's HV equipment within a substation and vice versa.
- 5.5. The changes included in H/03 corrected a number of typographical errors in references from the Planning Code to other parts of the EWGC.
- 5.6. The changes included in J/03 were consequential on changes made to the Transmission Licence Special Condition AA4 statements³⁴ to introduce a new balancing service Maximum Generation Service. The Grid Code changes enabled NGC to make use of this type of balancing service by the issue of an Emergency Instruction.
- 5.7. The changes included in B/04 were to BC2.9.2.2 to enable NGC to instruct the Maximum Generation Service via electronic data communication facilities.
- 5.8. The changes included in K/03 were to introduce new arrangements for the governance of electrical standards. These changes introduced a new role for the GCRP as part of a new procedure for considering changes proposed by a user or

³⁴ Information about the AA4 statements is available from NGC's website and can be found at the following url : <u>http://www.nationalgrid.com/uk/indinfo/balancing/index.html</u>.

NGC to electrical standards that have been defined to be within the scope of these governance arrangements.

- 5.9. The change included in C/03 will amend the definition of the 'Data Validation, Consistency and Defaulting Rules' in the Glossary and Definitions to reflect a revision to this document. The main changes to the 'Data Validation, Consistency and Defaulting Rules' were:
 - a change to the standard defaulting rules that apply to data submitted by Interconnector Users to reflect the normal defaulting rules applied elsewhere in Europe. The change means that if NGC does not receive a validated data submission from an Interconnector User then the Physical Notification, Quiescent Physical Notification, Maximum Export Limit and Maximum Import Limit will be defaulted to zero, and
 - to allow for specific agreement between NGC and an Interconnector User to apply defaulting arrangements.
- 5.10. The changes included in L/03 will introduce a new requirement for generators to provide NGC with information about return to service times for mothballed plant and alternative fuels that may be used for gas fired power stations.
- 5.11. The drafting of the GB Grid Code in the mini-drafting consultation on OC8 included the changes to the EWGC OC8 (revision 12). The changes for the Governance of Electrical Standards (revision 15) are considered in more detail in chapter 6 in the section on General Conditions.
- 5.12. Ofgem/DTI do not consider that the changes listed above present any issues when applied across GB which are different to their application in England and Wales. Given the intention is for other England and Wales codes and methodologies to form the basis of the BETTA arrangements, Ofgem/DTI consider that this view is also appropriate for the Grid Code changes that were consequential to changes to other England and Wales documents (A/03, J/03 and B/04). Ofgem/DTI propose that all of these changes should be incorporated into the GB Grid Code and those that have already been implemented have been incorporated into the proposed legal text shown in volume 2 of this consultation document. However, Ofgem/DTI consider that following implementation, the

approved changes outlined above are also suitable for inclusion in the GB Grid Code and proposes to incorporate such changes at the appropriate time.

- 5.13. The Authority has approved one change to the Scottish Grid Code since the second GB Grid Code consultation was issued, this is:
 - Proposed Changes to the Data Registration Code (SA1/2003) which was approved on 4 May 2004 and will be implemented on 1 June 2004.
- 5.14. The changes included in SA1/2003 were to conform the company specific Data Registration Codes to a single set of SGC schedules. Ofgem/DTI note that one consequence of this change has been to more closely align the Data Registration Codes of the two existing Grid Codes and does not propose any amendments to the draft of the GB Grid Code as a consequence of this decision.

Change proposals being considered by the Authority

- 5.15. Ofgem is also considering a number of reports to the Authority from the transmission licensees proposing changes to their respective Grid Codes. A copy of these reports³⁵ is available from NGC's website³⁶. The following provides a summary of the changes that have been proposed to the EWGC:
 - Proposed Changes to Operating Code OC2 Outage Planning (F/03)

These changes include a proposal to change the reporting period and duration for NGC's outage plans.

 Proposed Changes to Connection Conditions CC6.3.3 in respect of frequencies below 49.5Hz (E/03)

This change includes a proposal to amend the frequency response requirement for Combined Cycle Gas Turbine (CCGT) plant.

 Proposed Change to the 'Data Validation, Consistency and Defaulting Rules' under the Grid Code (A/04) This change reflects a proposal to amend the 'Data Validation, Consistency and Defaulting Rules' such that NGC will check Physical Notifications against CEC (or for embedded generation a pseudo CEC) as opposed to against Registered Capacity.

 Provisions relating to Embedded Large Power Stations and constraints in User Systems (D/01)

This report does not propose any changes to the EWGC and was submitted by NGC following a review of the provisions identified above.

- 5.16. Ofgem invites views on the GB wide impact of these proposed changes to the EWGC.
- 5.17. Ofgem is also considering a number of reports from the transmission licensees proposing changes to the Grid Codes to better define obligations for non-synchronous and synchronous generating plant:
 - Proposed Grid Code Changes to Incorporate New Generation Technologies and DC Interconnectors (Generic Provisions) (D/03) submitted by NGC.
 - Report on Consultation SB/2002 submitted by the chair of the SGCRP proposing changes to the SGC relating to windfarms.
 - Report SA/2003-R2 on Consultation SA/2003 submitted by the chair of the SGCRP proposing changes to the Data Registration Code of the SGC reflecting obligations proposed in SB/2002.

Since the submission of these reports, Ofgem has co-ordinated joint work³⁷ to seek a consistent approach across the two Grid Codes in relation to obligations for new generation technologies. It is anticipated that the relevant transmission

³⁵ Other than the report to the Authority arising from consultation D/01 which can be obtained from Ofgem. ³⁶ http://www.nationalgrid.com/uk/indinfo/grid_code/mn_consultation_papers.html

³⁷ Notes from the 'New Technologies and the Grid Codes' Ofgem Open Forum are available on Ofgem's

website (<u>http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/6794_ForumMinutesFinal.pdf</u>).

licensees will consult on revised change proposals for their respective Grid Codes in the near future.

Current consultations on proposed changes to the Grid Codes

- 5.18. NGC is currently consulting on three change proposals to its Grid Code:-
 - Further proposed changes to Grid Code OC2 (F/04)
 - Grid Code Compliance Issues with Refurbishment Plant (D/04), and
 - Proposed changes to Grid Code OC8 associated with Management of Safety Keys and Other Housekeeping Changes (C/04).
- 5.19. Copies of these consultation papers are available from NGC's website. Ofgem invites views on the GB wide impact of these proposed changes to the EWGC.
- 5.20. There are no current consultations on change proposals to the SGC.
- 5.21. Ofgem also notes that NGC has consulted on proposed changes to Operating Code OC1 of its Grid Code but that a report to the Authority has not yet been submitted. A copy of NGC's consultation 'Proposed Changes to Operating Code OC1 – Demand Forecasting' (G/03) is available from NGC's website. Ofgem invites views on the GB wide impact of these proposed changes to the EWGC.

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. This is version 2 of the draft GB Grid Code ('GBGC D2')
- 6.2. The drafting of the proposed GB Grid Code has been undertaken by NGC on behalf of Ofgem/DTI, under Ofgem/DTI's policy direction and in accordance with drafting assumptions provided by Ofgem/DTI.
- 6.3. Ofgem/DTI will undertake a review of the draft changes to the transmission licences, STC, GB BSC, GB CUSC and GB Grid Code 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.

Drafting approach

- 6.4. A substantial amount of work has been undertaken to identify differences between the requirements in the two existing Grid Codes and Ofgem/DTI has published this information in the form of comparison tables included as appendices to each of the four mini-drafting consultations³⁸. This work is available on the Ofgem website under the BETTA (GCEG) area.
- 6.5. Ofgem/DTI asked in the second GB Grid Code consultation for views on 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. Two respondents considered that surgery or open sessions would be useful to Scottish Parties and NGT said that they would be happy to support any Ofgem/DTI initiative in this area. As respondents did not seem to have many generic issues with the drafting of the Grid Code, Ofgem/DTI consider that at this stage, it would seem more appropriate for individual discussion to be held where a

³⁸ See footnote 7.

specific issue or difficulty is identified. Individuals are always welcome to contact Ofgem to discuss particular specific points and queries as invited in 2.9.

- 6.6. It should be noted that proposals for the GBGC that were proposed by Ofgem/DTI in the previous consultation and mini-drafting consultations which were not objected to by respondents to these consultations have been concluded to be appropriate and have been included in this draft of the GBGC.
- 6.7. Views are invited on all of the drafting in Volume 2.

Generic changes

6.8. References to NGC, which had been replaced in 'GBGC D1'³⁹ with the term 'GB system operator', have been restored to 'NGC' in conformance with the GB CUSC. Paragraph 6.7 of the December 2003 GB CUSC consultation⁴⁰ proposed that given the expectation that NGC would be appointed as the GB system operator and given the expectation that NGC would undertake both GB system operation activities and transmission owner activities in England and Wales, that Ofgem/DTI considered that it was appropriate to refer to NGC as opposed to the System Operator to make clear that the GBGC obligations applying to NGC applied to NGC in its full capacity as both GB system operator and owner of transmission assets in England and Wales.

Glossary and definitions

6.9. Two respondents noted that it was not clear how the definition of Area Manager fitted with discussions in relation to interface arrangements for users connected to a Scottish network and that given there is a definition of a Responsible Manager which appears to relate to the safety arrangements for that interface it is not clear why the Area Manager is relevant to Scottish users. Ofgem/DTI agree that some clarification is required on this point and propose that this is considered in the discussions referred to in 4.68.

³⁹ GBGC Draft 1 ('GBGC D1') was published as volume 2 of the second GB Grid Code consultation. ⁴⁰ See footnote 20.

- 6.10. One respondent noted that current Black Start arrangements in Scotland involve stations which are not 'Black Start' stations in respect of the GBGC definitions and that this definition may require amendment. Ofgem/DTI will review the proposed definition in light of any proposals which arise in STEG DG1⁴¹ on this matter.
- 6.11. One respondent considered that Business Day would need to account for differences in holidays between Scotland and England and Wales. Ofgem/DTI note that this definition is not amended in the GB BSC and is under review in the STC and will consider the approach to be adopted in the GBGC in respect of this definition when the STC review is complete.
- 6.12. One respondent considered that the definitions for Control Telephony and Operational Switching would be subject to clarification of the final operating arrangements for users connected to Scottish networks. The respondent considered that if the user's control staff were to receive instructions from both the GB system operator and the transmission owner, then these definitions should be reviewed. Ofgem/DTI will further review these GBGC definitions when the detailed descriptions of the associated STC procedures are available.
- 6.13. One respondent did not support the inclusion of a definition of Cascade Hydro Plant in the GBGC noting that this type of plant also exists in England and Wales and had not previously needed to be separately defined. Another respondent considered that the need for the definition was dependent on this outcome of the Elexon review into non standard BMU configurations. Ofgem/DTI will consider the need for this definition when the Elexon review is complete.
- 6.14. One respondent considered that the definition of Control Point needed to be clarified to allow large hydro generators to continue to be controlled from an energy management centre. The respondent understood that it was not Ofgem/DTI's intention to change the way these hydro stations were operated as part of BETTA but was concerned that the current definition included guidance stating 'For a Generator this will normally be at a Power Station'. Ofgem/DTI

⁴¹ STEG DG1 is SO –TO Expert Group Development Group 1: Control Room and Outage Planning.

confirm that operational arrangements are not expected to change because of BETTA but consider that the definition proposed in GBGC D1.5 adequately reflects this.

- 6.15. Two respondents considered that the current SGC requirements concerning 'Cluster' were not appropriate for the GBGC and noted that Ofgem is currently considering proposals to change both the EWGC and SGC on this matter. One of these respondents considered that the expertise for predicting energy output of wind farms from generators should rest with the generator and not the GB system operator. Ofgem/DTI note that the use of cluster reflects the existing requirement in the SGC, and considers that this should be reflected in the GBGC. However, Ofgem/DTI will review this further should related changes be approved to either of the existing Grid Codes.
- 6.16. One respondent asked whether the Customer Demand Management Notification Level was on a GSP or GSP Group basis. Ofgem/DTI note that the requirements in OC1 are 'averaged over any half hour on any Grid Supply Point' and consider that this clarification is more usefully stated in the provisions rather than in the Glossary and Definitions.
- 6.17. One respondent noted that throughout the text reference is made to GB and believed that this should be defined. Ofgem/DTI will consider this matter further as part of the review of conformance across the codes.
- 6.18. Ofgem/DTI notice that the definition of Interconnection Agreements currently refers to agreements between NGC and an Externally Interconnected System Operator and/or and Interconnector User. Ofgem/DTI request views on whether this needs amendment in the GBGC.
- 6.19. One respondent considered that the definition of Interface Agreement was confusing and should cross refer to the definition in the CUSC rather than be separately defined in the GBGC. Ofgem/DTI have amended the definition of Interface Agreement in GBGC D2 to reflect the respondent's comment.
- 6.20. Following consideration of the provisions in the Planning Code (in particular section 6), Ofgem/DTI have amended the proposed definition of Licence Standards presented in GBGC D1 to include both the GB system operator and

transmission owner conditions in the draft transmission licence that refer to transmission system security standards and quality of service.

- 6.21. One respondent noted that there are a number of definitions that are not proposed to be included in the GBGC that relate to the Moyle Interconnector and that this assumed that the Moyle Interconnector would be handled as a generic Interconnector. The respondent suggested that this should be confirmed before these definitions are removed. These definitions will be considered as part of the review of interconnector requirements to be presented in the mini-drafting consultation referred to in paragraph 6.71 below.
- 6.22. One respondent noted that the definition of National Demand included generation from Embedded Large Power Stations and that this would mean that the output from generators down to 5MW in capacity would be included in the demand figure. Ofgem/DTI note this comment.
- 6.23. Two respondents considered that GB Demand was a misleading term and that Transmission System Demand would be a better name for the definition. Ofgem/DTI agree with this and have included this amendment in GBGC D2.
- 6.24. One respondent noted with respect to the definition of Planned Outage that outage data will be required of generation plant down to the level of 5MW. Ofgem/DTI note this comment.
- 6.25. One respondent noted that the change marking on the System Fault Dependability Index made the formula unclear and presumed it read $D_p = 1 - F_1/A$. Ofgem/DTI note that this should not have been change marked in GBGC D1.5 and confirm that the respondent had correctly interpreted the formula.
- 6.26. One respondent considered that the definition of Total System should include the word 'interconnected'; this respondent had not considered this necessary for England and Wales but considered that it was necessary for GB when Scotland was included in the arrangements. This respondent asked if the Shetland Isles were considered to be part of the Total System. Ofgem/DTI note the concern about the need to include interconnected within the definition and will consider the definition further as part of the consistency check across the codes. Ofgem/DTI can confirm that the Shetland Isles, as they are part of a User System, are included in the definition of Total System.

Planning Code (PC)

- The second GB Grid Code consultation stated that data received by the GB 6.27. system operator that needed to be passed to transmission licensees would need to be identified in the Planning Code. One respondent noted that given the significant generation interests of transmission owners in Scotland that appropriate confidentiality provisions covering this data were expected to be in place under the STC. Another respondent noted that whilst it might be relatively simple to identify standing data transfers, possibly through the Data Registration Code (DRC), that confidentiality of operational information such as notification of events may be better handled under the general confidentiality clauses in the CUSC and the STC. Ofgem/DTI accept that it is appropriate to ensure that appropriate confidentiality provisions are included under the BETTA framework, and attention is drawn to the confidentiality provisions proposed by Ofgem/DTI draft licence conditions SPT C and SHETL C in the April 2004 licences consultation⁴² and in Section F of the STC text in the April 2004 STC⁴³ consultation. Ofgem/DTI also note that the STC data requirements and confidentiality provisions have not yet been finalised and any impact on the GBGC drafting will be considered when these requirements have been more fully identified.
- 6.28. The mini-drafting consultation on the Planning Code requested views on whether the list of 'technical and design criteria that are applied in the planning and development of the Transmission System' currently listed in Appendix A of the SGC should be included in the GBGC.
- 6.29. One respondent noted that some of the standards might fall into a similar category to those in the GES arrangements that have recently been implemented in England and Wales, although this respondent also noted that some of the standards within SGC PC Appendix A are licensed planning standards. Another respondent thought that the drafting of the PC should be reconsidered following

⁴² Publication of near final transmission licence conditions under BETTA. Ofgem/DTI. April 2004. Ofgem # 82/04.
⁴³ See feature 47

⁴³ See footnote 47.

the Authority's decision on the GES arrangements proposed for the EWGC and that Appendix A of the SGC should be reviewed with the aim of assimilating them into the GBGC rather than the retention of an appendix to the Planning Code. Another respondent considered that the Scottish standards needed to be referenced somewhere and, in the absence of an alternative they would support an equivalent of SGC Appendix A as a regional difference in the GBGC. Another respondent supported this view and stated that, following the decision on GES in the EWGC, it would be important to develop a list of standards required by transmission owners in Scotland and that the GES arrangements would need to be modified to take account of the views of transmission owners.

- 6.30. Ofgem/DTI consider the GES arrangements in the section on the General Conditions in paragraph 6.142 below but note that the standards referred to in the GES arrangements are generally of a more detailed nature than those referred to in SGC PC Appendix A. STEG DG4⁴⁴ are currently reviewing the security standards to apply to the transmission system under BETTA to inform Ofgem/DTI's proposals for a harmonised (where practicable) security standard. The implications of any changes proposed by Ofgem/DTI to the security standards will need to be considered in relation to the provisions in the GBGC PC. Subject to this further work, Ofgem/DTI propose that the list of planning standards in the SGC PC Appendix A and the text that refers to them in SGC PC 4.1 and 4.2 should be included as a regional difference in the GBGC as PC.6.2 and Appendix C.
- 6.31. The drafting of GBGC PC.6.1 has been amended to reflect the statutory and licence duties of the transmission owners as well as the GB system operator, to ensure that the service provided to the user across GB under the Grid Code is not changed (compared to the service provided to users in England and Wales under the EWGC currently) as a result of changes to the transmission licensing structure under BETTA. An associated change has been made to the definition of Licence Standards which is discussed in 6.9.

⁴⁴ DG4 is Development Group 4: Investment Planning

- 6.32. Three respondents supported the change to the definition of Supergrid Voltage and the regional differences proposed as a result of this. Another respondent supported the change to the definition but noted that the accompanying changes had extended the scope of the system operator's interest in user system networks compared to the GBGC D1. The respondent stated that previously networks below 50kV were excluded from system operator interest but were now included in Scotland and said that this was inconsistent with the treatment in England and Wales where network operators are not obliged to provide NGC with information about networks connected by either 400kV to 33kV transformers or 275 to 33kV transformers. Another respondent did not consider it necessary or viable for network operators to provide information about all interconnected parts of the subtransmission system operating at a voltage greater than 30kV to the GB system operator and observed that due to the nature of their network this would mean a full model of the distribution network being provided. This respondent did not believe that the provision of such detailed information was necessary for the system operator to plan and operate the system.
- 6.33. Ofgem/DTI consider that the proposed requirement in GBGC PC.A.2.2.2 is an appropriate equivalent to applying the EWGC requirement in Scotland and that it would be inappropriate to apply the 50kV criteria in Scotland as this would not provide for any data on interconnection between separate Connection Points or information relating to the connection of large or medium embedded power stations. STEG DG1 is considering the required scope of this information provision obligation and Ofgem/DTI will further review the GBGC in light of this work. Ofgem/DTI note that if a licensee has a specific issue with complying with this obligation then it should consider whether a derogation request should be made to Ofgem.
- 6.34. One respondent supported the proposal that EWGC PC5.4 should be adopted across GB such that the same Seven Year Statement (SYS) information would be supplied in Scotland. The respondent considered that the restriction to available information for Scotland (as is currently defined in SGC PC 5.3.4) would be inappropriate. Two other respondents saw no need to continue with this SGC provision.

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- 6.35. One respondent had significant concerns relating to the application of the Planning Code and the Data Registration Code to existing generating stations in Scotland. The respondent stated that the stations were compliant with or had 'derogations from' the existing SGC and fulfilled the necessary obligations for information provision to the satisfaction of the current system operator. The respondent further noted that as the two existing Planning Codes were substantially the same that there should be no requirement on existing generators to resubmit standing data under the PC or the DRC for the start of BETTA. Ofgem/DTI note that there are no formal derogations from the existing SGC and that collection and transfer of data for the start of BETTA is a matter being considered in the context of work on the transition to BETTA. On an enduring basis, licensed parties will have a duty to comply with the GBGC and it should be noted that the GBGC contains obligations on users to provide data to the GB system operator on an annual basis. There is provision in the licences for licensees to apply to the Authority for derogation against the Grid Code obligations if required.
- 6.36. The same respondent noted that GBGC PC.3.2(a) requires information on Large Embedded Power Stations to be submitted directly to the GB system operator. The respondent stated that existing provisions in relation to Scottish embedded generation units providing Grid Code information stemmed from the Distribution Code (DPC 7.3.3(a)) and that this should continue. The respondent considered that there should be no requirement for embedded generators to submit this data directly to the GB system operator and considered that obligations in the GBGC should be no more onerous than at present. This respondent stated that any alternative to this approach would be discriminatory against such Scottish generation compared to equivalent generation in England and Wales.
- 6.37. Ofgem/DTI note that the Distribution Code DPC 7.3.3(a) states that 'Embedded Generators in excess of 30MW (in South of Scotland) and 5MW (in North of Scotland) ...shall supply to the DNO any information requirements detailed in the relevant Grid Code.' The SGC requires that this data is submitted to 'the Company' (eg SGC PC 5.2.1) (ie either SP Transmission limited or Scottish Hydro-Electric Transmission limited) and therefore embedded generators are currently required to submit such data to the system operator. However, these

requirements on embedded generators are being considered further as discussed in paragraph 4.45 and the respondent's comments will be considered in this context. The respondent further noted on this matter that the blanket application of the Grid Code to such small generators would not be appropriate and explained this view using the example of the requirements in GBGC PC.A.5.4.1 that requires users to submit response values at 6 loading points across the range of output of a generator.

- 6.38. One respondent had further detailed comments arising from the PC comparison table in Appendix 1 of the mini drafting consultation. This respondent did not see the need to remove the information referred to in the objective SGC PC 2.1(c) 'to outline the procedures by which Users can apply for Connection to and/or Use of System' and thought that the opportunity should be taken to inform users through any means possible about the connection process. This respondent noted that some 'Users' may not be CUSC signatories. With respect to the objective in SGC PC 2.1(d) which reflects the current transmission licence objective for the Grid Code, this respondent considered that the GBGC needed to reflect the different obligations on the transmission owner to plan the system and the system operator to operate the system. This respondent did not see why SGC PC 6.3.1 (detailing the 'right to reject an application') could not be retained in the GBGC, even as a regional difference. Ofgem/DTI continue to think that it is not appropriate to duplicate matters in the GB Grid Code that are dealt with either in the transmission licence or the GB CUSC.
- 6.39. GBGC D1 PCA.4.5 incorrectly amended 'through non-NGC interconnections' to 'through non-Transmission System interconnections'. This has been corrected in GBGC D2 to 'through non GB Transmission System interconnections'.
- 6.40. It has been noted in drafting that GBGC PC.A.8.1 and PC.A.3(d) could have been misleading in that they could have been read that 275kV and 400kV were only relevant in England and Wales and not Scotland. The drafting of these provisions has been revised to clarify that the requirements apply to 275kV and 400kV throughout GB and also to 132kV in Scotland.

Connection Conditions

- 6.41. One respondent noted that it was proposed that GBGC D1.5 CC.5.2(g) would include the existing SGC requirement to exchange names of Safety Co-ordinators in Scotland. This respondent considered that this requirement should be extended to include the obligation in SGC OC6 4.3.2 for this list to be updated when there is a change to any of the named co-ordinators. Ofgem/DTI agree with this suggestion and have proposed revised drafting for GBGC D2 CC.5.2(g).
- 6.42. One respondent considered that the regional difference proposed in GBGC D1.5 CC.6.1.5(b) concerning harmonic distortions resulting from the connection of non-linear loads may confuse Users in England and Wales as to their position if limits were not specified in the bilateral agreement with NGC. This respondent argued that if such a clarification as has been proposed for Scotland is required then this should be applied also to England and Wales. Ofgem/DTI agree that the proposal in GBGC D1.5 could be confusing. Since Ofgem/DTI consider that this clarification is helpful in cases where relevant distortion limits have not been specified in the bilateral agreement and believe that this wording reflects the requirement in both Scotland and in England and Wales, Ofgem/DTI propose to remove the qualification 'in Scotland' from GBGC CC.6.1.5(b).
- 6.43. One respondent was concerned that the reference to 'voltages 132kV and below' in the drafting proposed for GBGC D1.5 CC.6.1.7(b) (in relation to Flicker Severity) should not be construed to mean that the Grid Code had governance of requirements on networks below 132kV; this respondent asserted that the requirements for networks at voltages below 132kV were the provenance of the Distribution Code and believed that the appropriate governance for requirements relating to these networks should be clear. Ofgem/DTI note this comment and believe that the scope of the Grid Code is clear from the definition of transmission.
- 6.44. One respondent noted that CC.6.2.1.1(a) referred to 'Licence Standards' and that this may require a regional difference. Ofgem/DTI note this comment and will consider this further in light of the output from the work that DG4 is undertaking to develop proposals for harmonised GB security standards.
- 6.45. One respondent noted that it was difficult to draw any conclusions about the relevance of the dates used in GBGC CC6.2.1.2 without knowledge of the justification for their inclusion in the EWGC. Another respondent advised that

the dates used in this complex part of the EWGC may not be suitable to apply in Scotland and also noted that the applicable standards may not be appropriate to apply in Scotland either. One respondent noted that EWGC CC6.2.1.2 was developed with the aim of preserving the rights of existing connected parties in England and Wales and believed that any amendments that are proposed for the GBGC should not erode the position of these connected parties. Another respondent stressed that existing plant and apparatus in Scotland should not be considered as new connections for the purposes of GBGC CC6.2.1.1. This point is also discussed in paragraph Error! Reference source not found.. One respondent believed that existing users in Scotland should not face new capital expenditure requirements as a consequence of BETTA or be required to apply for a derogation from these GBGC requirements. This respondent considered that the equivalent provisions in the SGC should be included in the GBGC such that the rights of existing users in Scotland are preserved. A further respondent noted concerns about the clarity of the proposed GBGC CC6.2.1.2 obligations that would be imposed on substation plant and apparatus. In particular, this respondent noted as an example of these concerns, that plant connected to the transmission systems in Scotland would not have been 'subject to a bilateral agreement' in January 1999 and therefore questioned the appropriate interpretation of the reference to 'relevant standards/specifications'. Ofgem/DTI note the comments made by respondents and will consider these points further as part of the transition and implementation arrangements for BETTA.

6.46. In the mini-drafting consultation a regional difference was proposed to CC.6.2.1.2(e) to reflect the provisions in SGC CC 4.2.1(c) in respect of the control of a connection to the transmission system by a circuit breaker (or circuit breakers). The SGC provision differed slightly in that it specified that more than one circuit breaker could be involved and was on all users, whereas the equivalent provision in England and Wales was on generators only (in GBGC D1.5 CC.6.2.2.1). Paragraph 4.23 of the CC mini-drafting consultation proposed a regional difference to the generator requirement in GBGC CC.6.2.2.1 to reflect that this requirement would apply only in England and Wales, as the Scottish requirement on generators was included in CC.6.2.1.2(e). One respondent commented that they did not consider the reasons given in paragraph 4.23 of the CC mini-drafting consultation the sufficient to retain a regional difference. This respondent was concerned that any requirement for more than one circuit

breaker as a condition of connection was unlikely to be driven by the technical capability to interrupt the maximum short circuit current and in most cases would result in unnecessary connection costs. Another respondent noted that this regional difference properly recognised some of the different configurations of the transmission system in Scotland. Another respondent noted that this drafting could imply to Network Operators and Non-Embedded Customers in England and Wales that they did not require a connection controlled by one or more circuit breakers. This respondent noted that the Electricity Safety Quality Control Regulations 2002 clearly indicate that each connection should be controlled by one or more circuit breakers. Ofgem/DTI note that the requirement in GBGC CC6.2.2.1 was proposed to cover existing conditions in Scotland and is permissive rather than a requirement to provide more than one circuit breaker. However, Ofgem/DTI accept that including this requirement as a regional difference could be confusing to Network Operators or Non Embedded Customers in England and Wales. Ofgem/DTI do not consider that the following proposal will change the requirement on Network Operators and Non Embedded Customers in England and Wales and so propose to remove 'in Scotland' in the drafting in GBGC D2 CC.6.2.1.2(e) and to delete CC.6.2.2.1.

- 6.47. One respondent noted that GBGC CC.6.2.2.2.2(a) stated that slower fault clearance times could be specified in the bilateral agreement and noted that the SGC provides only for these slower times. This respondent queried how these arrangements would be put in place. This respondent also noted that GBGC CC.6.2.2.3.2 should not require retrospective fitting of protection equipment for existing generation. Ofgem/DTI consider that such a requirement would be specified in the bilateral agreement. Ofgem/DTI note that these matters for existing connections will be considered as part of the transition and implementation arrangements for BETTA.
- 6.48. GBGC D1.5 CC.6.2.2.2.2(b) proposed a regional difference in respect of backup protection clearance times. One respondent stated that they were not aware of any technical reason to apply significantly more onerous requirements for back up protection in Scotland and considered that the difference may be as a result of the SGC assuming only one main protection in stating the requirements. Ofgem/DTI note the comment.

- 6.49. One respondent noted that the proposals for a regional difference in CC.6.2.2.4 and CC.6.2.3.5 did not appear to be the result of a technical requirement but a consequence of proposed working methods. This respondent suggested that a regional difference should not be supported by the GBGC and further proposed that the ability to work on written authority should be extended to England and Wales. Another respondent considered that the written authority should involve the GB system operator on the basis that although the generator would be working on its own equipment, such equipment interfaces closely with transmission equipment and such work increases operational risk. Ofgem/DTI note that the proposed clause reflects different working practice but considers that these exist as a result of the different geographical conditions in Scotland. Ofgem/DTI note that the respondent considered it appropriate to extend the existing SGC provisions to GB but do not consider this to be a change necessary for BETTA. Ofgem/DTI note the concerns relating to the possible adverse impact on transmission system operation and agree that these regional differences should be amended to include the GB system operator. Revised drafting is proposed in GBGC D2. Ofgem/DTI consider that provision for any liaison on this matter which is required between the GB system operator and the transmission owner will be set down in the STC.
- 6.50. One respondent noted that the wording of the protection requirements in GBGC D1.5 was complex but appeared to have been suitably transposed to the GBGC.
- 6.51. In the mini-drafting consultation on the CCs, Ofgem/DTI sought views on their proposal for GBGC CC.6.3.1 that the qualification in the statement 'This section sets out the technical and design criteria and performance requirements for Generating Units..... but does not apply to Small Power Stations, hydro units and renewable energy plant not designed for Frequency and voltage control' should apply only in England and Wales and was not appropriate for Scotland as such plant was currently used to provide services to the transmission system operator. One respondent strongly supported the proposal not to apply this qualification to plant in Scotland expressing concern that if such services were no longer available to the GB system operator then new transmission or distribution infrastructure would be required. Another respondent considered that it may be appropriate to provide some relaxation say for Embedded Small Power Stations in Scotland. This respondent considered that a review of requirements should be

conducted similar to that being undertaken with respect to Licence Exempt Embedded Medium Power Stations in England and Wales and a view taken as to whether these requirements can be enforced via the Distribution Code or whether compliance with a portion of the Grid Code may be necessary. Another respondent noted that the changes proposed as a result of NGC's consultation on generic provisions (D/03) would be relevant to this provision and that if Ofgem/DTI had evidence that all plant which would be excluded by such a statement was currently excluded, then the EWGC qualification could be applied across GB. Another respondent argued that the existing ability under the SGC for the transmission system operator to agree with the user, without the formality of a derogation application, what connection conditions were appropriate to a particular connection means that the EWGC and SGC effectively place equivalent requirements on this class of generator but using different methods. This respondent asserted that in Scotland, the requirement to provide frequency and voltage control was waived in the case of small stations and generating plant not designed to have the capability. This respondent also noted that these EWGC provisions were subject to change proposals. Another respondent noted that given the existing ability in Scotland of transmission system operators to agree to connection conditions with users as other than as set out in the SGC, that it was not appropriate to apply a blanket provision for requirements without recognising these historical arrangements. This respondent also noted that some services are provided to the transmission system operator by renewable and hydro plant in Scotland. Another respondent noted that changes have been proposed to the EWGC ("generic provisions") which if approved would remove this qualification from the EWGC.

- 6.52. In light of these responses and given that services are currently provided by the plant which might be excluded by this qualification to support transmission system operation, Ofgem/DTI do not intend to change the proposed drafting of GBGC D1.5 CC.6.3.1.
- 6.53. One respondent noted that they did not consider that wind generators would be able to meet the requirement in GBGC CC.6.3.7 (c)(i) to operate satisfactorily as an isolated system. Ofgem/DTI note this comment and consider that should this type of compliance issue arise, then the user would seek to agree a solution with

the GB system operator that may result in the GB system operator and generator (if a licensed party) applying to the Authority for derogation from this obligation.

- 6.54. One respondent was pleased that the requirement for a 'BETTA date' had been acknowledged in the proposals in respect of GBGC CC.6.3.7(f) and (g) but did not believe it was sensible to set a fixed date of 1 April 2005, or that that date would be suitable given that a full set of requirements would not be available by one year before that date. This respondent noted that given the similar provision in England and Wales had allowed one year's notice, it would be better to define the 'BETTA Date' as one year after code designation, go-active or go-live and that the final choice could be made when the transition arrangements were being considered. Ofgem/DTI will review the respondent's point further in its consideration of transitional issues but do not propose to amend the drafting in GBGC CC.6.3.7(f) and (g) at this time.
- 6.55. Ofgem/DTI note that several respondents identified a typographical error in GBGC D1 CC6.3.7(f) which should have read '...<u>before</u> 1 April 2005'. This has been corrected in GBGC D2.
- 6.56. One respondent noted that the proposal to include a requirement in the GBGC for generators to provide anemometer readings for a small aggregation of wind turbines at a level of 5MW was inappropriate given the change in system control requirements that would result from BETTA and further noted that as a consequence of the BETTA changes that the impact of a wind farm of this size would not be of significance to the GB system operator. Another respondent noted that the generic provisions changes that NGC has proposed to the EWGC were significantly different from these existing SGC provisions. Ofgem/DTI note that other respondents commented on this matter in the context of the G&D (see paragraph 6.15) but remain of the view that it is appropriate to include this existing SGC requirement in the GBGC. As described in paragraph 6.15, Ofgem/DTI will review this further should related changes be approved to either of the Grid Codes.
- 6.57. Four respondents noted the proposal to remove the general statement concerning responsibility for maintenance etc in CC.7.1 from the GBGC. One of these respondents noted that the exclusion of CC.7.1 would mean the loss of a general principle which could be used in disputes but considered that provided

the points were sufficiently covered elsewhere they did not object to its removal. The other three respondents considered that the clause did not confer any specific obligations and supported its removal. Ofgem/DTI conclude that this clause will not appear in the GBGC.

- In GBGC D1 certain drafting, relating to safety matters in the CCs, had been 6.58. drafted to acknowledge that the three transmission licensees each had their own safety rules and procedures. One respondent considered that the drafting in GBGC D1 CC.7.2 which distinguished between the GB system operator and the relevant transmission licensee did not lead to clarity and noted also that it seemed to have been ignored in Appendix 1 (the pro forma for a Site Responsibility Schedule). Ofgem/DTI note this comment but also acknowledge the concern expressed by the transmission licensees that this distinction should be made clear to users in the GBGC. Ofgem/DTI considers that the availability of the drafting for GBGC OC8 will assist with the clarity of the drafting approach for GBGC CC7.2. Ofgem/DTI note that Appendix 1 of the GBGC CC currently refers to companies rather than documented roles and that STEG DG1 is considering the format of the Site Responsibility Schedule in this appendix in respect of sites in Scotland. Ofgem/DTI will consider the impact of any proposals that emerge from this review on the drafting of the GBGC.
- 6.59. One respondent noted that there was no equivalent to 'approval of Safety Rules' as in SGC OC6 4.1 in the proposed draft of the GBGC. This respondent noted that the proposals in GBGC CC7.2 are different. Ofgem/DTI note that the provisions in CC.7.2 do not replicate those in SGC OC6 4.1 and that this point is addressed further in paragraphs 6.94 and 6.95.
- 6.60. Paragraph 4.24 of the CC mini-drafting consultation proposed that the wider requirement on Users to maintain their plant and apparatus in the SGC should be retained as a regional difference in the GBGC and this was proposed as clause CC.7.7.3. in GBGC D1.5. One respondent expressed disagreement with the existing SGC clause and considered that with the continuation of the current arrangement to require users to monitor system fault levels was unwarranted. Another respondent noted the proposal to carry across to the GBGC the 'statements regarding short circuit ratings from the SGC, which clarify safety related issues' (which Ofgem/DTI understand to refer to the proposal in GBGC D1.5 CC.7.7.3) and suggested that these could be made applicable on a GB

basis. Another respondent noted that presenting this clause as a regional difference could 'promote the wrong message' in England and Wales. Ofgem/DTI note the respondents' views but consider that the application of the SGC arrangements GB wide would be a change to the arrangements in England and Wales that are not required for the introduction of BETTA but consider it is appropriate to reflect significant differences in the technical requirements that exist currently in the SGC in the GBGC.

Operating Codes (OCs)

OC1 Demand Forecasts

- The mini-drafting consultation on the OCs proposed that the Demand Control 6.61. Notification Level and the Customer Demand Management Notification Level should be set at 5MW in Scotland. Three respondents did not agree that the limit should be set at 5MW in Scotland; one of these respondents stated that the level should be standardised to the 12MW used in England and Wales as soon as possible; and one of these respondents considered that this level had been set because of the need to manage tie-line controls and that as it is possible to control internal circuits in England and Wales with a level of 12MW that this should be the level across GB. Another respondent agreed that a regional difference was required and that the 5MW level proposed was appropriate. As Ofgem/DTI noted in the mini-drafting consultation the equivalent level in the SGC is effectively 0MW, but 5MW was suggested as being more appropriate. Ofgem/DTI also note that such levels have been set not only because of tie-line control purposes but also for management of the local transmission network. Ofgem/DTI do not consider that the respondents have provided sufficient technical justification to change their proposals to have a regional differentiation in limits of 5MW in Scotland and 12MW in England and Wales for both Demand Control Notification Level and Customer Demand Management Notification Level.
- 6.62. The mini-drafting consultation on the OCs noted that the SGC required information from all Independent Generating Plant (ie all plant not subject to central despatch) and asked whether the EWGC OC1 provisions requesting information from Medium Power Stations would be sufficient. Two respondents considered that it should be unnecessary to collect data at any level lower than The Grid Code under BETTA CP3 Volume 1
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5MW and another that, given the definition of medium, that this should be adequate. One respondent noted that as there was no definition of Medium Power Station in SHETL's area it was not clear whether the provisions on Medium Power Stations were meant to apply to Large Power Stations in the SHETL area. This respondent did not believe these information requirements were necessary at the level being suggested and would not support lowering the level to capture Small Power Stations.

- 6.63. Another respondent noted that the EWGC has developed on the basis that Small and Medium Power Stations are not connected to the Transmission System and as such the requirements for information on plant within these categories is minimal and detailed in OC1 (and the related sections of the PC i.e. generally treated as negative demand for the purposes of operation). This respondent further noted that OC2 had historically dealt with Power Stations connected to the transmission system (or embedded yet of such a size to have a significant impact on the operation of the transmission system) and as a result much more detailed information is exchanged between Generators and the system operator under OC2. This respondent suggested that the current drafting may be more appropriate if OC1 (and the related sections of the PC) were limited to apply to all embedded Small and Medium Power Stations and OC2 applied to all generators at directly connected Power Stations and embedded Large Power Stations.
- 6.64. In respect of this last respondent's points, Ofgem/DTI have discussed in paragraph 4.45 that further work is needed to clarify the requirements on embedded Large Power Stations in Scotland. Ofgem/DTI note that it was proposed in the second GBGC consultation that the definition of 'Genset' should change to include directly connected Small and Medium Plant and that it already includes all Large Power Stations, whether embedded or directly connected. The definition of Genset is discussed further in 6.66 below.
- 6.65. Ofgem/DTI note that respondents did not think that the requirements of OC1 needed to apply also to Small Power Stations in Scotland and on the basis of the responses Ofgem/DTI agree with this. In answer to the query from one respondent on Medium Power Stations in the SHETL area, as there is no definition of Medium Power Stations in the SHETL area Ofgem/DTI confirms that
it was not intended that requirements on Medium Power Stations should apply in the SHETL area.

OC2 Operational Planning and Data Provision

- 6.66. One respondent supported the change proposed to the definition of Genset. Another respondent supported the definition but considered that care should be taken in extending a Grid Code designed for two voltage levels (400kV and 275kV) to one with three (i.e. including 132kV) by making definitional changes. This respondent was concerned that this approach may result in duplicate obligations and cited as an example that the change in definition of Genset would mean that for medium directly connected power stations, network operators would have a responsibility to provide information on these under OC1 and that the generator would have similar obligations under OC2. This respondent noted that because of the change in definition of Genset, the text was inconsistent in OC2.4.1.1(a) and that in OC2.4.1.2.1 the phrase 'a provisional Genset outage programme (covering both Embedded and non-Embedded Large Power Stations)' no longer makes sense. Another respondent supported the change in definition of Genset and noted that there were some instances of drafting in OC2 which would require further amendment as they included the assumption the there were no medium or small directly connected power stations.
- 6.67. Ofgem/DTI note the general support for the change in definition of Genset and will review the GBGC to identify consequential drafting points which arise from adopting the revised definition of Genset for inclusion in the GB Grid Code. Further proposals will be included in a mini-drafting consultation which will be published to accompany this paper in time for consideration with this consultation.
- 6.68. The mini-drafting consultation on the OCs proposed that an equivalent to SGC OC2.1.8, which allows for the reduction of administrative burden on Users in particular circumstances, should be included in the GBGC. Five respondents supported this proposal. Of these five respondents; one added that it would be useful if the GB system operator could indicate the likely levels to which this provision might apply; they also suggested that this provision should be extended to England and Wales; another stated that it would be preferable for

this to be achieved through the definition of size of output captured as opposed to a discretionary arrangement; another that this had been an effective way of managing communication between the transmission system operator and users and should be welcomed by the GB system operator and users. Another respondent did not entirely agree with the proposal, and thought that the provision should stipulate that any alternative arrangements would require the agreement of the GB system operator. The respondent noted that in certain locations a relatively small user may have a significant effect and that this was particularly true in the case of system stability which was understood to be a particular issue in Scotland. This respondent also did not think it was appropriate to relax the requirement for repetitive submissions as this was not qualified by any size criteria and that in order to provide confidence in the validity of the data held, the respondent thought that it needed to be submitted periodically. The respondent suggested alternative wording of 'In Scotland, it may be possible, with the agreement of the GB system operator, to reduce the administrative burden for users in producing planning information where the output or demand is small.'

- 6.69. Ofgem/DTI note the general support for the inclusion of this existing SGC provision in the GBGC. On the specific points raised by respondents: Ofgem/DTI do not think it would be possible to provide likely indications of the levels at which this provision might apply as these would vary according to the particular circumstances of plant and network configuration and that as this provision does not currently exist in the EWGC that it will not be appropriate to extend this SGC provision to England and Wales as it could not be considered to be necessary for BETTA. Ofgem/DTI agree with the last respondent that it would not be desirable for the provision to apply to repetitive data submissions for all sizes of user; Ofgem/DTI also agree that the user should not assume the right to such treatment and so propose that the provision should be drafted as suggested at the end of paragraph 6.68.
- 6.70. Four respondents did not support retaining the provisions in the SGC with respect to the interconnector. One of these respondents stated that this seemed inappropriate unless the data needs of Moyle were genuinely different. Another of these respondents stated that these provisions related to the Scotland-England interconnector arrangements and that as the EWGC did not have provisions

which support its users trading activities on external systems there seemed no reason to retain the Scottish provisions in the GBGC. Another of these respondents stated that these requirements were only appropriate in the context of how two separate Scottish system operators managed their systems against a fixed transfer with England and Wales whilst Scottish participants were participating in both the England and Wales and the Irish market. One respondent noted that the EWGC did not cover the collection of information from Interconnector Users; that this had not been required historically due to NGC's relationship with the interconnector asset owners; that NGC had received information on England and Wales' interconnectors through other routes as it was an asset owner of both existing interconnectors; and that this relationship would not exist in relation to the Moyle interconnector. This respondent noted that the treatment of Moyle should be considered as a regional difference and proposed that the existing provisions in the SGC should be included in the GBGC for Moyle. This respondent noted that this would affect other sub-codes of the Grid Code (eg CCs, PC and DRC).

- 6.71. Ofgem/DTI note that the EWGC does not generally include provisions relating to interconnectors and note the view that this is because of NGC's role as an asset owner of the existing interconnectors and that information for these interconnectors has been obtained by way of other agreements. Ofgem/DTI note that respondents who were opposed to the retention of the interconnector provisions as a regional difference had not considered that the GB system operator did not necessarily have an alternative means of obtaining data on the Moyle interconnector. Ofgem/DTI consider that it would be preferable for such arrangements to be included in the Grid Code will review the existing SGC Moyle provisions for inclusion in the GBGC. Further proposals will be included in a mini-drafting consultation which will be published shortly in time for consideration with this consultation.
- 6.72. One respondent considered it appropriate to retain SGC OC2 5.19 for Suppliers to provide information on teleswitching Load Management Blocks and thought that this should apply to GB. Another respondent noted two main reasons for Suppliers notifying Load Management Blocks; tie-line control purposes and system security purposes. This respondent thought that it might be appropriate to retain the requirement where there were system security considerations and if it

was to be retained as a regional difference than it should be restricted to information transfer which is strictly necessary to run the system. Another respondent did not believe that there was any need to retain this information considering that they would be immaterial in the context of balancing an integrated GB system. Another respondent stated that they understood that Load Management Blocks had a significant role in the operation of the transmission system in Scotland and that the exchange of information relating to them should be maintained in the GBGC. This respondent thought that it might be more appropriate to place such provisions in OC1.

- 6.73. Ofgem/DTI understand that considerable use is made of Load Management Blocks in Scotland and consider that it is appropriate to retain such information provision for the GB system operator. Ofgem/DTI note that these load management blocks will no longer be instructed for the control of tie-line transfers. There are references to Load Management Blocks in OC2, OC8, SDC1 and 2 and the G&D of the SGC. Ofgem/DTI will review these provisions for Load Management Blocks and come forward with proposals. These proposals will be included in a mini-drafting consultation which will be published shortly in time for consideration with this consultation.
- 6.74. Two respondents noted that the requirement in GBGC OC2.4.1.3.4(c) to provide details of manual and automatic load transfer capabilities at 10MW in Scotland and 12MW in England and Wales was so close that they should be standardised to 12MW now. Another respondent considered that considering the relationship between the transmission and distribution companies in Scotland that the transfer of information was not carried out as it is in England and Wales. This respondent believed that, considering the relative impact on the network, that the size appropriate for Scotland should be considerably less than 12MW. This respondent stated that 12MW in England and Wales would generally represent less than 5% of the load at a Grid Supply Point whereas in Scotland 10MW would probably represent an average of the order of 30%. This respondent suggested that as a minimum the regional difference should be 5MW for Scotland.
- 6.75. Ofgem/DTI note the views of respondents. Ofgem/DTI has consistently taken the view that the requirements specified in the existing SGC must be deemed to be adequate to provide for the operation of a secure system. Ofgem/DTI therefore
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consider that the requirement should remain at the level specified in the SGC, 10MW.

- 6.76. One respondent noted that it should remain possible for a user to be represented by a Trading Point as their interface with the GB system operator as was allowed in SGC OC2 4.4. Ofgem/DTI consider that this is provided for in GBGC GC.5.2.
- 6.77. In the STC consultation, Ofgem/DTI concluded that some data provided to the GB system operator by generators in accordance with GBGC OC2 should be shared with transmission owners and that the STC would be developed to define the scope of the required data exchange. When this data exchange requirement has been defined, Ofgem/DTI will review the drafting of GBGC OC2 and define the user information that the GB system operator is able to exchange with transmission owners under the STC.

OC5 Testing and Monitoring

- 6.78. The mini-drafting consultation noted that the SGC does not have specific provision for testing and monitoring of generating units although it was understood that such provisions were generally covered by other bilateral agreements in Scotland. One respondent asked for clarification that such provisions in bilateral agreements would be removed as part of the GB CUSC conformance process such that the GBGC provisions would apply in a similar manner to all generators.
- 6.79. Ofgem/DTI can confirm that the provisions in the GBGC OC5 will apply to all generators and that it is the intention that the GB system operator enters into standard CUSC agreements with parties in Scotland.

OC645 Demand Control

6.80. One respondent noted that if the table which appears in the British Grid Systems Agreement (BGSA) relating to the Application of Low Frequency Disconnection has governance arrangements which allow for industry consultation then it could

 $^{^{\}rm 45}$ OC4 in the SGC.

be placed in the GBGC; however if it represented notified data then it should be put in SYS. Another respondent noted that work relating to a recent amendment proposal to the EWGC had highlighted the need for transparency of low frequency demand settings notified to network operators by NGC that are currently only publicly available through the BGSA. The respondent noted that an amendment was soon to be raised to the EWGC that would propose that the first trigger point of 48.8Hz be included in the EWGC. The respondent thought that although the BGSA currently defined general trigger points, that the main setting of interest to users was the first trigger point. Ofgem/DTI note that the amendment to which the respondent refers has now been proposed by NGC and the report to the Authority (C/03) is being considered by Ofgem.

- 6.81. The mini-drafting consultation highlighted that the requirement in GBGC OC6.7.2 which implies an obligation on network operators to provide demand reduction of 20% on a GSP basis might be difficult to achieve in Scotland and suggested that it might be more appropriate to define the obligation for Scotland on a wider basis. Three respondents agreed it may not be possible for the network operator to provide 20% automatic reduction for some GSPs and that therefore a regional difference was appropriate for GSPs where the network operator could not meet the requirement. Another respondent noted that demand control should be spread over as many users as possible with minimum exceptions.
- 6.82. Ofgem/DTI note that in Scotland this issue might also apply to the requirements in GBGC OC6.4.5(b), OC6.5.6(ii) and OC6.6.2(c) and therefore propose to add to another objective in OC6.2.2:

'For certain Grid Supply Points in Scotland it is recognised that the requirements in OC6.4.5 (b), OC6.5.6 (ii), OC6.6.2 (c) and OC6.7.2 (b) may not be possible. In these circumstances NGC and the relevant Network Operator(s) will agree equivalent requirements covering a number of Grid Supply Points.'

OC7⁴⁶ **Operational Liaison**

- 6.83. One respondent noted that GBGC OC7 deals with the exchange of operational information and as such some information exchanged under OC7 would need to be passed onto transmission owners. The respondent thought that this information may be difficult to codify and though that a general statement should be included to cover for such exchange; and that the same comment applied to OC10. Another respondent stated that they did not see how the provisions of OC7, OC9 and OC10 could work without the transmission owners' involvement or without parallel provisions being in place in the STC.
- 6.84. The arrangements for the allocation of transmission sector roles and responsibilities arising from the GB system operator's rights and obligations in the procedures set out in GBGC OC7 and OC10 are discussed in paragraph 6.37 of the recent consultation on the STC⁴⁷. Ofgem/DTI note that the definition of the STC rights and obligations are still being developed and that the current STC drafting obliges transmission owners to become involved in Event Reporting and/or Joint Investigations when requested to do so by the GB system operator. Views are invited in the STC consultation as to whether this approach is an appropriate allocation of roles between the GB system operator and transmission owners in relation to the GBGC OC7 and OC10 procedures.
- 6.85. The drafting of GBGC OC7 will be further reviewed by Ofgem/DTI in light of responses to this consultation and the STC consultation.

OC8⁴⁸ Safety Co-ordination

6.86. It should be noted that the underlying principles relating to OC8 (Safety Coordination) are also discussed in the section starting at paragraph 4.49 of this document. This section deals with the detailed comments that were received to the mini drafting consultation on OC8. As stated in paragraph 4.70, GBGC OC8

⁴⁶ OC5 in the SGC.

⁴⁷ The SO-TO Code under BETTA: Ofgem/DTI summary of responses and conclusions on the June 2003 document and subsequent mini consultations, and further consultation on the draft legal text; proposals for CUSC changes in relation to limitation of liability; and matters relating to the timescales for processing new connection applications. April 2004. Ofgem #90/04.

has been redrafted to separately present the requirements for England and Wales and for Scotland. Ofgem/DTI however considered that it would be beneficial for these separate sections to be presented as appendices to a common operating sub-code. Therefore an introductory section similar to EWGC OC8 has been included in the drafting proposed for the GBGC.

- 6.87. Two respondents considered that the style of the proposed drafting for GBGC D1 OC8.1.1 was not appropriate for OC8. Ofgem/DTI note that GBGC OC8 will be used by operational personnel and agree that the proposed statement in GBGCD1 OC8.1.1 would more appropriately fit within another part of the GBGC. As such, Ofgem/DTI propose to include the revised drafting of this statement as section 13 of the General Conditions. This statement has been revised to reflect the proposed STC obligations on transmission owners to comply with GBGC OC8 as discussed in 4.68 and comments received from respondents on the accuracy of the statement.
- 6.88. One respondent asserted that the statement "for the avoidance of doubt all contractual liabilities arising in connection with such obligations shall exist between the System Operator and the Relevant User" was wrong, and should read "for the avoidance of doubt all liabilities, with the except of any exclusion or limitation of liability, arising and the Relevant User". Ofgem/DTI are comfortable that the exclusions and limitation of liabilities are effective without further express reference to them in this drafting.
- 6.89. One respondent noted that the proposed draft for GBGC OC8 did not unambiguously state that in Scotland the procedure for safety precautions will be between the transmission owner and the user. This respondent noted that instead the preamble used the words "will in practice be performed ...". This respondent considered that these words did not exclude the GB system operator from either carrying out these procedures or attempting to direct these procedures and that this must be clarified. Ofgem/DTI propose that the concerns of this respondent should be pursued in the discussions referred to in paragraph 4.68.

⁴⁸ OC6 in the SGC.

- 6.90. One respondent considered that GBGC D1 OC8.1.2 could be read as implying that OC8 covered transmission licensee to transmission licensee safety precautions as well as transmission licensee to externally interconnected system operator safety precautions. Ofgem/DTI note that externally interconnected system operators are excluded from the scope of OC8 in GBGC OC8.3.1. Ofgem/DTI note that currently transmission licensee to transmission licensee safety precautions are included in the BGSA and that STEG DG1 is currently considering options for safety co-ordination between transmission licensees. Ofgem/DTI do not consider that the Grid Code procedures for safety co-ordination (EWGC OC8 and SGC OC6) currently apply between transmission licensees and do not propose that GBGC OC8 should apply in that way under BETTA.
- 6.91. Two respondents commented with respect to GBGC D1 OC8.1.5 that Site Responsibility Schedules in Scotland document the ownership, control and safety responsibility for each item of plant at an interface site but do not individually name the Safety Co-ordinators. One of these respondents stated that the exchange of names of authorised safety representatives in Scotland is dealt with elsewhere (in the regional difference in GBGC D2 OC8A2.4.2.2). Ofgem/DTI note the comment and propose to clarify the drafting by amending GBGC OC8A1.1.5 and OC8A2.1.5 to 'Site Responsibility Schedules document the control responsibility Safety Co-ordinators for each item of plant and apparatus for each site.'
- 6.92. Two respondents commented on GBGC D1 OC8.1.6, which provides for a regional difference for the relevant transmission licensee to agree alternative procedures in place of a Record of Inter-System Safety Precautions (RISSP). One of these respondents supported the inclusion of this clause which replicated the intention of SGC OC6 1.2. This respondent questioned, given the legal framework, how any agreement between the relevant transmission licensee and the user could be given any legal authority. Both respondents noted that clause OC8.1.8 referred to in the list did not exist. One of these respondents noted that the requirement in the equivalent list in SGCOC6 4.1 for the approval of Safety Rules did not seem to form part of the relevant list in OC8 and that the requirements of CC7.2 did not seem to be equivalent. The other of these

respondents proposed a change to the drafting to read 'Such operational procedures shall <u>be deemed to</u> satisfy the requirements of paragraphs...'.

- 6.93. Ofgem/DTI note that transmission owners will be obliged under the STC to comply with GBGC OC8 and that users will be obliged to comply with the GBGC and therefore in Ofgem/DTI's opinion there is sufficient 'legal authority' for the relevant transmission licensee and user to agree alternative procedures in place of a RISSP. Ofgem/DTI note that the reference in GBGC D1 OC8.1.6 to OC8.1.8 was incorrect and should have read OC8.1.7. This has been corrected in GBGC D2 to OC8A2.1.7 which is the equivalent of SGC OC6 4.2. Ofgem/DTI have reviewed the requirements of CC7.2 and agree that the equivalent provision to SGC OC6 4.1 is in GBGC OC8A2.4.1 and so have changed this reference. With respect to the proposed change to the drafting, Ofgem/DTI have not incorporated the change proposed by the respondent which is not in the existing SGC drafting and which seems to be trying to clarify a contractual issue which Ofgem/DTI do not consider is appropriate for this operational procedure.
- 6.94. Paragraph 4.18 of the mini-drafting consultation on OC8 explained that the GBGC used the term 'Local Safety Instructions' where the SGC uses 'Safety Rules'. One respondent noted that the term Local Safety Instructions had a specific meaning within the safety systems of Scottish Power UK Division which was not equivalent to its use in the EWGC. The respondent further stated that the equivalent specification of safety procedures was contained within other documentation at the user site and that it did not appear to be appropriate to amend the definition to the effect that where no Local Safety Instructions existed the Local Safety Instructions would be the Safety Rules. Another respondent noted that SP Transmission does not have Local Safety Instructions and that they work to Safety Rules. This respondent suggested that either the drafting or the definitions needed to be changed.
- 6.95. Ofgem/DTI note that this would appear to be a significant distinction and that given the revised presentation of the two sets of arrangements propose to use the term 'Safety Rules' in the proposed Appendix to GBGC OC8 to apply in Scotland where it is currently used in the SGC drafting.

- 6.96. Two respondents noted that the proposed definition for 'Earthing' (in GBGC D1 OC8.1.7.2(3)(i)) had lost the term 'where reasonably practical' which is included in the SGC and that this flexibility needed to be carried over to the SGC. Ofgem/DTI note that this point had been considered at GCEG but that they had considered that this situation would be covered by the alternative provision in GBGC D1 OC8.1.7.2(3)(ii). Views are invited on the validity of this interpretation and if this is not found to be accurate then Ofgem/DTI will consider revised drafting.
- 6.97. One respondent commented on GBGC D1 OC8.1.7.2.2(b) that SP Transmission does not 'place a Caution Notice at the point of separation'. Ofgem/DTI note that the drafting in this clause allows for such an occurrence 'if it is a part of that method, a Caution Notice must be placed at the point of separation' and so do not propose to change the drafting for GBGC D2 OC8A2.1.7.2(2)(b).
- 6.98. Two respondents commented on the statement in GBGC D1 OC8.3.1 that 'The procedures for the establishment of safety co-ordination by the System Operator with Externally Interconnected System Operators are set out in Interconnection Agreements with each Externally Interconnected System Operator'. One of these respondents noted that with respect to Moyle, that this agreement would probably be with the interconnector owner rather than the external system operator and so proposed to change the drafting to 'The procedures for the establishment of safety co-ordination by NGC in relation to External Interconnections are set out in Interconnection.' The other respondent, noted that while properly removing external interconnections from the scope of OC8, this clause failed to recognize that it would be the respective transmission owners who would apply safety precautions, not the GB system operator.
- 6.99. With respect to the proposed drafting change, as this statement is for information only, and the change presents a more accurate picture of the Moyle arrangements, Ofgem/DTI have proposed this change in GBGC D2. With respect to the comment on transmission owners, Ofgem/DTI considers that the GBGC sets out the responsibility to establish the contractual position and therefore correctly refers to NGC (the GB system operator)..

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- 6.100. One respondent noted that under GBGC D1 OC8.4.1.1(a)⁴⁹ Bilateral Agreements will be entered into between the GB system operator and the user which detail matters of interest to the transmission owner. Ofgem/DTI note that any matters of interest to the transmission owner in these agreements will be dealt with under the STC.
- 6.101. One respondent noted that GBGC D1 OC8.4.1.1(a) did not provide the GB system operator with information on the Local Safety Instructions to be used in Scotland. This respondent considered that the GB system operator, as the party with all contractual liabilities under OC8, should at least receive copies of and possibly be required to approve as reasonable, Local Safety Instructions and any other relevant information. Ofgem/DTI propose that consideration of this matter should be progressed in meetings of the transmission licensees to address safety matters as referred to in paragraph 4.68.
- 6.102. One respondent noted that the drafting in GBGC D1 OC8.4.1.2 and OC8.4.1.3 referring to 'either party' or 'a party' could be ambiguous and proposed revised drafting. Ofgem/DTI note that with the revised presentation of these provisions in OC8A1 and OC8A2 that this problem has been ameliorated and do not propose further changes to the drafting.
- 6.103. One respondent commented on the provision in GBGC D1 OC8.4.3.2 allowing the relevant transmission licensee to use an alternative format to the RISSP. This respondent was concerned that the full contractual implications of this needed to be assessed and that this could not be done without the related STC drafting. This respondent suggested that the alternative RISSP format should contain similar provisions to GBGC D1 OC8.4.3.3a) to c) in order to limit the variation from the RISSP format set out in Appendix A to GBGC OC8. This respondent considered that additional appendices could be included for use in Scotland if parties in Scotland believed it was required. Two respondents commented on the template for a RISSP to be used in Scotland, one stated that it would be helpful to maintain the existing SGC template for now with moves towards

⁴⁹ For Connection Sites in Scotland in accordance with the timing requirements of its Bilateral Agreement, each User will supply to the Relevant Transmission Licensee a copy of its Local Safety Instructions relating

standardisation considered after BETTA and the other that they would be willing to adopt the proposed GBGC form.

- 6.104. Ofgem/DTI note that the provisions in GBGC D1 OC8.4.3.3a) to c) are more restrictive than those currently specified in the SGC and replicated in GBGC D1 OC8.1.6 and given that this provision has been proposed as a regional difference do not consider that further restrictions should be imposed. Ofgem/DTI consider that it would be appropriate to assess the relevant contractual matters between the transmission licensees and address these in the STC . The format of the template was compared at GCEG and they are very similar, Ofgem/DTI consider that it would be preferable to conform the template in the GBGC but note the majority of respondents are content to conform at a later stage and so have proposed the existing SGC template for GBGC OC8A2.
- 6.105. One respondent noted that there was no mention of prefixes for Scotland in GBGC D1 OC8.4.3.5, OC8.4.3.6 and OC8.4.3.7. Ofgem/DTI noted in the minidrafting consultation that they had proposed drafting in GBGC D1 OC8.5.4.5 to apply to Scotland which used prefixes and suffixes and asked for views on whether this was applicable in Scotland. This respondent's understanding was that the relevant transmission licensees have a similar unique numbering system and believed that OC8 should make reference to the system or processes that the relevant transmission licensee, through the GB system operator, required users to adopt and that the GB system operator should also have access to these as the contractual counterparty to the user.
- 6.106. One respondent noted that SP Transmission details its RISSP numbering in their Grid System Operation Instructions which are provided to users. This respondent noted that a method for passing the relevant information which was appropriate for both the GB system operator and transmission owners was required. The respondent further noted that OC8.5.4.5 was inconsistent with the numbering of RISSPs for SPT, and made a similar comment on GBGC D1 OC8.7.3. One respondent considered that the form in Appendix D was only of relevance to England and Wales and another respondent that given the uncertainty of the

to its side of the Connection Point at each Connection Site.

arrangements in Scotland for prefixes that this may best be redrafted as a Transmission System Safety Circular. Ofgem/DTI note the comments of the respondent on the RISSP numbering and, on the information provided, propose to amend GBGC D2 OC8A2.5.4.5 and GBGC D2 OC8A2.7.3 to add 'where applicable' in relation to prefixes in Scotland. Given the proposed presentation of OC8 in the GBGC, Ofgem/DTI consider that, unless further requirements are identified as part of the consideration of transmission licensee processes in the STEG DG work, that Appendix D should remain specific to England and Wales.

- 6.107. In paragraph 4.30 of the mini-drafting consultation, Ofgem/DTI requested views on whether the concept of 'transfer of control' in SGC OC6 4.11.1(c) was equivalent to the EWGC OC8.6. One respondent noted that they considered that the particular wording in the SGC was a reflection of the particular wording used on the 'Sanction for Test' form which is issued to the person in charge of the testing. The respondent stated that on that form, the Control Person who confirms that the safety precautions have been carried out also confirms that control of the apparatus under test is transferred to the person in charge of the testing and that such a transfer of control could not take place to allow testing on a cross-boundary circuit without a corresponding transfer of control from the Implementing Safety Coordinator to the Requesting Safety Coordinator. The respondent stated that if such a transfer of control was implicit in the agreement "to permit the testing" as specified in the EWGC then they considered that the respondent could see no difficulties with this change. Another respondent stated that the 'transfer of control' during testing has been discussed previously in England and Wales and had been rejected because of concerns on system control and safety. In light of these responses, Ofgem/DTI do not propose to change the previous proposals for this provision.
- 6.108. The mini-drafting consultation noted that the provisions of GBGC OC8.7 (Emergency Situations) would be new provisions for Scotland. One respondent noted that 'the new provisions should avoid confusion should such a situation occur at one of our user sites.' Ofgem/DTI note this comment. Another respondent noted that in England and Wales the interaction will be between NGC and a Distribution Network Operator, but that in Scotland the interaction would be between a transmission business and its affiliated distribution business and that therefore these may use different internal processes. This respondent

also noted that there may be specific circumstances where it would be difficult to apply this procedure such as with the SPT line to Cruachan interacting with a distribution line belonging to Scottish and Southern where there would be no local connection point from which to start the procedure.

- 6.109. Ofgem/DTI note that GBGC D1 OC8.7.2 requires the Safety Co-ordinator for the Transmission System and the Safety Co-ordinator for the User's System to agree that the procedure should take effect, and does not set out what happens if there is no agreement, and therefore do not propose to change the drafting proposed in GBGC D1.
- 6.110. One respondent noted that the issue of a Permit for Work for proximity work (GBGC D1 OC8.8) was considered by the SGCRP as a possible change to SGC OC6 and that the SGCRP decided that such a change was not necessary. The respondent noted that such a change would require a change to the internal Management Safety Procedures for SPT and SPD and that the extent of this change was currently being evaluated. Another respondent stated that the obligations in GBGC D1 OC8.8 represented best practice and should therefore be applied GB wide and noted that this had been considered for inclusion at GCEG. This respondent also considered that the regional difference proposed in GBGC D1 OC8.8.1.3 (the 'failure to agree' point) should be amended, as in some cases, the work might be able to progress without the safety precautions being in place, and that the current drafting would prevent this. This respondent suggested that the drafting state that the 'request shall not progress' rather than 'the work shall not progress'. Another respondent noted that, whilst these would be new provisions for Scotland, GCEG had not considered the inclusion of these provisions to be significant. This respondent further noted that they did not consider that there was a need for the regional difference proposed in respect of the 'failure to agree' point and that the EWGC approach for the default provision for the location of safety precautions was acceptable. Another respondent did not foresee any problems with this new provision and noted on the 'failure to agree' point that while the Scottish position may lean more to the achievement of safety than to the commencement of work, it would be helpful if it was complimented by an escalation procedure to avoid deadlock.
- 6.111. Ofgem/DTI note that it is preferable to have common procedures across GB where this is possible and do not propose to change the proposals in GBGC D1
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other than to propose to remove the regional difference in GBGC D1 OC8.8.13 and the similar provision in GBGC D1 OC8.5.1.5. However, Ofgem/DTI will review the proposed drafting in light of any further comments detailing the impact of the introduction of the EWGC proximity working arrangements in Scotland.

- 6.112. One respondent noted that the GBGC proposed to adopt the EWGC definition of High Voltage ('a voltage exceeding 650 volts') rather than the SGC definition ('a voltage exceeding 1000 volts)'. This respondent noted that this would lead to an incompatibility with their current Safety Rules and that this would be an unnecessary change.
- 6.113. Ofgem/DTI note that it is preferable to have common definitions where possible for the benefit of users who operate in England and Wales and Scotland. Ofgem/DTI further note that this was not raised as an issue at GCEG and that only one respondent has raised this as an issue. Ofgem/DTI do not propose to amend the definition at this stage but would welcome views on the extent of the difficulty that the proposed change would cause.
- 6.114. One respondent noted that the definition of HV Apparatus in GBGC D1 OC8 is more restrictive than the definition in SGC OC6 and may require further thought. Ofgem/DTI note this comment and will consider any further views raised on this matter.
- 6.115. The mini-drafting consultation asked for views as to whether an equivalent form to the one presented in Appendix E would be required for the SHETL and SPT areas. One respondent considered that if the Permit to Work in Appendix E was presented as an example for one company then this would be sufficient. The drafting has been amended to suggest contacting the relevant transmission licensee for a more relevant example.
- 6.116. The following minor drafting change has been raised by a respondent and Ofgem/DTI propose its inclusion in GBGC D2:
 - In GBGC D2 OC8.2.1(ii), OC8A1.2.1(ii) and OC8A2.2.1(ii), '(as the case may be)' has been inserted to reflect the drafting in the earlier part of these clauses.

OC9⁵⁰ Contingency Planning

- 6.117. One respondent noted that to the extent that transmission owners are involved in the event of contingency arrangements (eg black start or islanding) or get involved in processes between the GB system operator and the user where there are loss of facilities such as communications then these must be catered for in the GB Grid Code and in a document which the respondent referred to as the 'Scottish Safety Code'. Another respondent advised that it was not possible to comment on the drafting until further discussions had been held at STEG Development Groups. Another respondent noted that there is a considerable volume of work to establish Local Joint Restoration Plans and OC9 De-Synchronised Island Procedures before go-live.
- 6.118. Ofgem/DTI has not been advised of any consequential impact of the proposals from the STEG Development Groups that would require changes to the black start procedure in GBGC OC9. Work such as the establishment of Local Joint Restoration Plans that are required as part of the transition and implementation processes is being dealt with as an element of work on the transition to BETTA.

OC10⁵¹ Event Information Supply

- 6.119. Two respondents noted the potential involvement of transmission owners in the OC10 processes (as raised in OC7 above). This matter is discussed in paragraph 6.84 above. The drafting of GBGC OC10 will be further reviewed by Ofgem/DTI in light of responses to this consultation and the STC consultation.
- 6.120. Four respondents did not believe that there was a need to include suppliers in the scope of OC10. One respondent questioned why an obligation on suppliers to provide information on actions relating to Load Management Blocks should be restricted to suppliers in Scotland. Another respondent considered that provisions relating to Load Management Blocks should be retained in the GBGC.

⁵⁰ OC7 in the SGC.

⁵¹ OC8 in the SGC (Operational Event Reporting and Information Supply).

6.121. Load Management Blocks have been considered in paragraph 6.73. As suppliers are included in the provisions of SGC OC8, Ofgem/DTI consider that it would be appropriate to include them also in the provisions of GBGC OC10. The drafting will be considered as part of the mini-drafting consultation referred to in 6.73.

OC11⁵² Numbering and Nomenclature of HV Apparatus at Certain Sites

- 6.122. One respondent noted that DG1 was considering the process for Asset Nomenclature. Another respondent considered that the proposed drafting for GBGC OC11 did not make it clear that it is the transmission owners who remain responsible for the numbering and nomenclature of plant and noted that the draft STC provides for appropriate discussion between the GB system operator and the transmission owner. This respondent thought that GBGC OC11 should allow for direct communication between the transmission owner and the user. Another respondent noted that the SGC does not specify the current Scottish standards and that this was proposed as a regional difference. This respondent considered that, as a minimum, the GB system operator should have access to the standards that the GB system operator would contractually be required to comply with and provide. This respondent also considered that users in Scotland should have the same visibility of standards as users in England and Wales.
- 6.123. Ofgem/DTI note that back-off provisions for GBGC OC11 will be included in the STC but are content that the proposed GBGC OC11 drafting provides users with the equivalent to their rights and obligations in comparison with the current arrangements.

OC12⁵³ System Tests

6.124. One respondent noted that the System Test requirements in the two Grid Codes are very similar. This respondent thought that the additional hurdle in EWGC OC12.4.4.4 that failure to respond to a test proposal prevented the test from

⁵² Equivalent of OC11 is OC9 in the SGC (Numbering and nomenclature of Electrical Apparatus at Certain Sites).

⁵³ OC10 in the SGC.

going ahead compared to the SGC where this would be deemed to mean approval would be detrimental to the ability of the GB system operator to arrange a System Test. Another respondent noted that system tests were likely to require significant involvement of the transmission owners and that it might be appropriate to highlight this relationship in OC12.

- 6.125. Ofgem/DTI note the comment on the System Test requirements but do not consider that it would be appropriate to include a regional difference for what is essentially a GB system-wide matter and do not propose to change the drafting proposed for GBGC OC12.
- 6.126. Ofgem/DTI note that following further consideration of the appropriate allocation of the roles between transmission licensees as part of the STC development work, there may be a need for further review of the proposed drafting for GBGC OC12.

Balancing Codes (BCs)

BC1 Pre Gate Closure Process

- 6.127. GBGC D1 proposed that, in Scotland, BM Units with a Demand Capacity of greater than 5MW should submit Physical Notifications. Two respondents commented that the 5MW level for demand seemed low; one of these considered that this was not comparable to the level of demand information currently received by the transmission system operator in Scotland and the other hoped that with experience of operating the GB transmission system that this limit could be raised.
- 6.128. The limit was chosen to reflect the closest equivalent requirement in SGC SDC1 7.1.5 relating to information requirements on Load Management Blocks and to match equivalent requirements on generators. Ofgem/DTI consider that it would be prudent to gain operational experience prior to assessing an alternative appropriate level for this limit and so do not propose to change this drafting.
- 6.129. No changes are proposed to this draft of BC1.

BC2 Post Gate Closure Process

- 6.130. No comments were received on GBGC D1 BC2. On reviewing the drafting it has been noted that there were some typographical errors in BC2.5.3.1, BC2.7.2 and BC2.7.3. These have been corrected in this draft.
- 6.131. It has been noted in reviewing the drafting that the limits set in table BC2.A.2.6 on MVAr output are set at +/- 25MVAr and that because of the smaller size of generating units in Scotland that these might more appropriately be set at 5% of Registered Capacity for gensets in Scotland. SGC SDC2 4.5(b) provides for instructions to generators at specific MVAr levels but does not appear to specify a performance requirement in respect of MVAr. Requirements for MW despatch are specified in SDC2 4.7.3 at 1MW or 2% of registered capacity. Views are invited on the application of a performance requirement of 5% of registered capacity for MVAr performance for gensets in Scotland.
- 6.132. No further changes are proposed to this draft of BC2.

BC3 Frequency Control Process

- 6.133. One respondent proposed that hydro generating units that were not capable of providing frequency response due to the limitations on the rate of change of their output because of water management statutory obligations should be treated in a similar fashion to Existing Gas Cooled Reactor Plant under BC3.5.3 such that they would only be required to operate in Limited Frequency Sensitive Mode at all times. Whilst they understood that Appendix 3 of the CCs⁵⁴ would not apply to Scottish plant with a completion date before the BETTA go-live date they sought clarification that the hydro units would only be operated in Limited Frequency Sensitive Mode so that it would be clear that these generators would never be in breach of their Grid Code obligations.
- 6.134. Ofgem/DTI believe that it is clear that because these generators have a completion date prior to the BETTA go-live date that this requirement will not apply to them and do not see the need to clarify this further.

⁵⁴ Minimum frequency response requirement profile and operating range for new generating units and/or CCGT modules with a completion date after 1 January 2001 and BETTA go-live date in Scotland

- 6.135. One respondent noted that should specific provisions be required for cascade hydro units then these would probably be required in a similar manner to those that existed for CCGT modules and CCGT Generating Units in the EWGC. Another respondent considered that the dynamic data set for an individual BM Unit should be sufficient to reflect the capability of such plant and that the provisions of SDC2.4.5 did not appear to be additional to this data set. This respondent further noted that alternatively cascade hydro plant could be treated in a similar manner to CCGT matrices in the EWGC.
- 6.136. Ofgem/DTI are awaiting the outcome of a consultation conducted by Elexon on applications for non standard BMUs (balancing mechanism units). Should the outcome of that consultation require any changes to the GB Grid Code they will be considered in a further consultation.

Data Registration Code

6.137. Two respondents commented on the proposals set out in the mini drafting consultation relating to the Data Registration Code (DRC). One respondent noted that Ofgem/DTI had not proposed any regional differences in the DRC. This respondent noted that GCEG had identified a number of minor differences which were considered as appropriate for inclusion as regional differences in the GBGC DRC. This respondent provided an example of one such regional difference noting that the EWGC required time constants in 'short circuit' form as this meets NGC's bespoke power systems analysis software requirements whereas the time constants in open circuit form meet SPT and SHETL's standard power systems analysis software requirements. This respondent noted that the recommendation of GCEG was that the GBGC DRC should cater for both forms of time constants. Another respondent noted that the information required to be submitted to the GB system operator under the GBGC DRC had already been provided to the current transmission system operator and believed that this data should be transferred to the GB system operator directly by the relevant transmission licensee. This respondent was concerned that there should be no risk of generation not being permitted to participate in BETTA should any data not be registered by BETTA Go-Live. This respondent further noted that the formalisation of any necessary derogations should take place sooner rather than later. The latter point raised is similar to that raised in paragraph 6.35 in respect

of the Planning Code requirements. Ofgem/DTI note that these issues are being considered in the transition to BETTA, but in relation to the point raised about derogation notes that Ofgem will discuss possible derogation requirements with any licensee who makes such a request.

6.138. Ofgem/DTI will review the GCEG DRC meeting notes and come forward with proposals in a mini-drafting consultation to accompany this consultation paper.

General Conditions

- 6.139. One respondent noted an inconsistency between the drafting of the General Conditions (GC) and Constitution and Rules (C&R) concerning the renewable generator representative. The GC had 'a person representing renewable Generators' and the C&R had 'a person representing Generators with only renewable Power Stations'. The respondent wished to conform to the wording of the GC because they considered it likely that a Generator with renewable generation would also operate non-renewable generation. It is proposed to conform the wording in GBGC D1 C&R to that proposed in GBGC D1 GC. Ofgem/DTI note that the representative of renewable generators in the SGC is qualified by the words 'the person representing Renewable Generators shall not be employed by any company or associated company who provide a representative under categories (c)(i) or (c)(ii)' ie shall be from a different company to the generator representatives at the SGCRP, and note that the EWGC also has a Small and Medium generator representative (c(vii)). Given that there are procedures in the C&R for resolution in the event that there is a contest for representation, Ofgem/DTI have not proposed to add similar gualification to that used in the SGC but views are invited on this. The wording has also been changed from renewable generator to 'novel units' to reflect the terminology of the existing EWGC.
- 6.140. GBGC GC.4.2(b) has been amended and section GC.4.6 has been added toGBGC D2 to reflect the change management proposals discussed in paragraphs4.16 and 4.22.
- 6.141. One respondent noted that Ofgem/DTI had recognised that changes may be needed to GC.6.1.1 and 6.1.3 in respect of data and notices. This respondent considered that such changes would be necessary e.g. in respect of notifications

of safety coordinators. No proposals have been made in this draft to change GC.5 and GC.6 in consideration of this point and the matters raised in 4.82 regarding communications between the GB system operator, the relevant transmission licensee and users. Ofgem/DTI will review the need for such changes to the GBGC in light of further work on the detailed transmission licensee processes being progressed by the STEG DGs..

- 6.142. Since the second GB Grid Code consultation, the Authority has approved changes to the EWGC to introduce arrangements for the proposals for the Governance of Electrical Standards (GES) and these were implemented in March 2004. The GES proposals are described in 4.23.
- 6.143. The Scottish transmission licensees with the assistance of SGCRP members are currently developing proposals for the SGC and are expected to propose similar arrangements to those in the EWGC but with separate lists of electrical standards for each transmission area. It is not clear at this stage whether the GB system operator would need to have a role in relation to the governance of electrical standards that apply only in Scotland. Ofgem/DTI consider that the specifications currently identified in (a) and (b) to the Annex of the General Conditions (i.e. the electrical standards relevant to NGC' s transmission system and the EDT and EDL specifications) will not be of concern to the transmission owners but there may be other standards that apply across GB. Ofgem/DTI will review the role of the GB system operator in relation to the electrical standards that apply only in Scotland when further detail is available about the nature of the standards that are required to be within the scope of these governance arrangements. In this draft it is not proposed that NGC should have the right to propose change to the standards listed in sections (c) and (d). In terms of the GBGC, Ofgem/DTI propose that the lists of electrical standards such as those proposed for the SGC are included as sections (c) and (d) of the annex to the General Conditions and that each Relevant Transmission Licensee is given the right to propose changes to a standard or to the list of standards.
- 6.144. One respondent suggested adding 'The System Operator and' before 'Users should note that...' in GC.11 Confidentiality and also to add 'section 6' after CUSC. Ofgem/DTI note that the definition of the term 'User' also includes NGC in respect of the GCs. Ofgem/DTI consider that CUSC parties will be sufficiently

familiar with the CUSC not to require a specific reference in the GBGC and that to add such a reference could cause a change co-ordination issue.

6.145. No other new changes are proposed to the General Conditions in this draft.

Constitution and Rules

- 6.146. One respondent highlighted the need for good change co-ordination between the STC Committee and the Industry Code Panels and noted that the current STC drafting suggests that there is a need for the various Industry Code Panels to set up joint working arrangements to facilitate the identification, co-ordination and implementation of change to the Codes. This respondent noted that the governance arrangements for the GBGC do not form part of the GBGC itself, but are merely required within the GCs of the Grid Code and questioned how these arrangements for joint working will be enabled between the STC Committee and the GB GCRP. Ofgem/DTI note that the Panel is obliged to 'establish and comply at all times with its own rules and procedures relating to the conduct of its business, which shall be approved by the Authority⁵⁵. Such changes have been consulted on in this GB Grid Code consultation process and it is proposed to approve the C&R to come into effect to reflect the changes made to establish the GBGC.
- 6.147. Changes to the drafting of GBGC C&R 5.1(x) are described above in paragraph6.139.
- 6.148. In GBGC D2, C&R 4.1.2 has been amended and C&R 20 has been added to reflect changes to the GBGC GCs that are set out in paragraph 6.140.
- 6.149. 'to' has been added as the first word in GBGC C&R 4.1.6 to make this consistent with other parts of GBGC C&R 4.1.
- 6.150. No other new changes are proposed to the C&R in this draft.

⁵⁵ GBGC GC.4.4.

Appendix 1 : List of respondents

List of respondents to second GB Grid Code consultation paper:

BP Grangemouth
British Energy
British Hydropower Association
British Nuclear Fuels Limited – Magnox Generation
British Wind Energy Association
Centrica
EDF Energy
Grangemouth CHP Limited
National Grid Transco
Powergen
RWE Innogy
Scottish and Southern Energy
Scottish Power Energy Management Limited
SP Transmission Limited
List of respondents to Operating Codes 1, 2, 6, 7, 9, 10, 12 mini-drafting consultation
EDF Energy
National Grid Transco
Powergen
RWE Innogy
Scottish and Southern Energy
Scottish Power Energy Management Limited
SP Transmission Limited

List of respondents to CCs, OC5 and GCs mini-drafting consultation

EDF Energy

National Grid Transco The Grid Code under BETTA CP3 Volume 1 Ofgem/DTI

Powergen

RWE Innogy

Scottish and Southern Energy

Scottish Power Energy Management Limited

SP Transmission Limited

List of respondents to OC8, OC11 and BCs mini-drafting consultation

EDF Energy

National Grid Transco

Powergen

RWE Innogy

Scottish and Southern Energy

Scottish Power Energy Management Limited

SP Transmission Limited

List of respondents to PC, DRC and G&D mini-drafting consultation

EDF Energy

National Grid Transco

Powergen

Scottish and Southern Energy

Scottish Power Energy Management Limited

SP Transmission Limited