Planning and operating standards under BETTA

An Ofgem/DTI conclusion document

June 2003

Summary

Currently, the transmission systems of the existing three transmission licensees in Great Britain ("GB")¹ are planned, developed and operated in accordance with standards specified in their respective transmission licences. These standards set out the criteria that the existing licensees are required to apply when planning, developing and operating their transmission systems to ensure a required level of security and quality of supply² under conditions that ought reasonably to be foreseen. The applicable standards and criteria differ from licensee to licensee³ to correspond with different geographical, climatic and economic factors.

In the May 2002 report⁴, Ofgem/DTI stated that one objective of the British Electricity Trading and Transmission Arrangements ("BETTA") reforms was to introduce a set of GB transmission arrangements, and that it might be preferable for these arrangements to include a harmonised set of security and quality of supply standards. It was recognised that further work was required in order to determine the most appropriate way forward on this issue.

In the May 2002 report Ofgem/DTI also noted that the System Operator ("SO"), Transmission Owner ("TO") Expert Group ("STEG")⁵ was advising Ofgem/DTI in the further development of proposals on the detailed allocation of activities between transmission owners and the GB system operator. In advance of the implementation of revised governance arrangements for electrical standards⁶, and recognising that the existing planning and operational standards apply to integrated transmission companies, Ofgem/DTI have, through STEG, also requested the expert advice of the existing transmission licensees in considering how to progress issues relating to the conformance of standards under BETTA.

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¹ SP Transmission plc, Scottish Hydro Electric Transmission Limited (SHETL) and The National Grid Company plc (NGC).

² Both quality and security of supply are addressed in both planning and operating timescales.

³ In the case of NGC, the standard of planning and operation is referred to as the "security and quality of supply standard". The Scottish licensees are required to plan and operate so as to meet a "transmission system security standard and quality of service". In this document the terms "planning and operating/operational standard(s)", and "security and quality of supply standard(s)" are used

⁴ "The Development of British Electricity Trading and Transmission Arrangements (BETTA): Report on consultation and next steps." Ofgem/DTI, May 2002 Ofgem38/02.

⁵ Terms of references and notes of STEG meetings are available on the Ofgem website at www.ofgem.gov.uk/scotland/steg.htm.

⁶ See "Governance of electrical standards, Final proposals", Ofgem. 08/10/02 - 64/02.

In March 2003, Ofgem/DTI published a consultation on the planning and operating standards to apply under BETTA⁷ (the "March 2003 consultation") based on the preliminary conclusions of the transmission licensees. The March 2003 consultation:

- summarised the main issues identified by the transmission licensees in the work that they had undertaken through STEG
- set out Ofgem/DTI's views on the above
- explained that, in any event, it was not anticipated that there will be any significant change to the security and quality of supply delivered to different GB transmission customers under BETTA compared with the service which they receive prior to the implementation of BETTA⁸
- recognised that different standards may apply to different users of the GB transmission system and proposed that these differences may need to be taken into account in the development of the connection and use of system charging methodology to apply under BETTA, and
- invited views on all aspects of this consultation.

In parallel with taking forward work on the standards that should apply under BETTA, Ofgem/DTI have also been considering how and on whom the responsibilities to comply with such standards should rest under BETTA. The background and latest proposals on these matters are set down in the June 2003 licences consultation⁹.

This paper considers the responses on the initial conclusions presented in the March 2003 consultation and discusses Ofgem/DTI's further thinking on these issues and sets out Ofgem/DTI's final conclusions. In particular, Ofgem/DTI continue to be of the view that as a minimum, consideration should be given to harmonising definitions in operating standards such that the GB system operator staff have a common set of definitions that apply across the assets owned by each of the three transmission owners. The principal conclusions made in this document are that:

⁷ "Planning and operating standards under BETTA, and Ofgem/DTI consultation, March 2003. 14/03.

Ofgem/DTI recognise that a harmonised operational standard may well result in a small changes to the security of supply delivered to certain GB transmission customers under BETTA. In the event that such issues arise it is currently the intention of Ofgem/DTI to consult fully on the impact of these issues.

⁹ "The Regulatory framework for transmission licensees under BETTA. Second consultation on electricity transmission licences under BETTA, and Ofgem/DTI consultation, July 2003".

- in accordance with the recommendation of the transmission licensees set down in the March 2003 consultation, a more detailed review of existing operating standards be undertaken to assess whether it is practical and beneficial for aspects of the existing operational standards to be aligned with a view to identifying which aspects may be practically harmonised under BETTA from day one
- Ofgem/DTI request that the transmission licensees commence this work, and that this work should also consider the costs of harmonisation
- Ofgem/DTI should develop a timetable for this work with the transmission licensees and this timetable should subsequently be published
- that the work should be progressed by the transmission licensees and reported back to STEG
- any proposals relating to harmonisation of operational standards identified as part of this analysis will be the subject of an industry-wide Ofgem/DTI consultation
- it is not currently anticipated that there will be any significant change to the security and quality of supply delivered to different GB transmission customers under BETTA compared with the service which they received prior to the implementation of BETTA, and
- to the extent that different standards apply to different users of the GB transmission system, the appropriate commercial treatment of such differences needs to be considered. Ofgem/DTI accept that there could be a number of potentially appropriate mechanisms to deal with any differences that exist and that in addition to taking such differences into account in developing the charging methodology to apply under BETTA it may also be appropriate to consider making use of derogations¹⁰ and/or considering the specific terms for connection and/or use of system applying to certain users. Ofgem/DTI will further consult upon these matters in due course.

¹⁰ Licensees can request a derogation which may be granted at the discretion of the Authority.

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1. Rationale

- 1.1. The rationale for BETTA is set out in the December 2001 consultation¹¹ and the May 2002 report¹². Further, 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, which explains the purpose and impact as well as the expected costs and benefits of the proposed primary legislation to enable the BETTA reforms.
- 1.2. The principle objective of BETTA is to put in place a set of arrangements that will facilitate the development of competition in the wholesale trading of electricity for GB based on, where appropriate, the present arrangements in England and Wales. In the May 2002 report and in the December 2002 consultation¹³, Ofgem/DTI stated that in meeting this objective it might be preferable for the BETTA arrangements to include a harmonised set of security and quality of supply standards.
- 1.3. The three transmission licensees in GB currently operate to different system security and quality of supply standards¹⁴. These standards set out the criteria that the existing licensees are required to apply when planning, developing and operating their transmission systems to ensure a required level of security and quality of supply under conditions that ought reasonably to be foreseen. The applicable standards and therefore criteria differ from licensee to licensee.
- 1.4. Given the above, it has been necessary to consider whether the existing different standards should be retained or whether, given the introduction of a single GB wholesale electricity market under BETTA, it is appropriate to seek to harmonise some or all of the aspects of these standards.

¹¹ The Development of British Electricity Trading and Transmission Arrangements (BETTA): A consultation paper, Ofgem, December 2001 Ofgem 74/01.

¹² See footnote 4.

¹³ "Regulatory framework for transmission licensees under BETTA. Volumes 1-4." An Ofgem/DTI consultation, December 2002 88/02.

¹⁴ See earlier footnote 3.

- 1.5. From a practical perspective, Ofgem/DTI recognise that work to harmonise operating and planning standards is a complex technical matter. However, whilst it is possible that some limited harmonisation of standards may occur for day-one operation under BETTA, Ofgem/DTI do not currently propose that there will be any significant change in the service delivered to transmission customers for day-one for BETTA¹⁵. Against the background of other significant change taking place for the implementation of BETTA, Ofgem/DTI do not believe that such a change (and its associated review and possibly lengthy implementation) would be appropriate. Furthermore, past experience has shown that such reviews need to consider complex issues and can be time consuming.
- 1.6. Whilst it may be considered that the simplest practical solution for initial operation under BETTA would be to simply roll forward the existing differing standards, Ofgem/DTI do not believe that is the case. As a minimum, Ofgem/DTI believe that consideration should be given to harmonising definitions in operating standards such that the GB system operator staff have a common set of definitions that apply across the assets owned by each of the three transmission owners.
- 1.7. The existing transmission licensees have also suggested that a more detailed review should be undertaken to assess whether it is practical and beneficial for aspects of the existing operational standards to be aligned. In the March 2003 consultation, Ofgem/DTI stated that they agreed with the recommendations of the transmission licensees.
- 1.8. Ofgem/DTI also agreed that further work is required to determine the most appropriate way forward on this issue and that such work should be progressed on the basis of the recommendations made by the transmission licensees, as outlined in the March 2003 consultation. That document proposed that the transmission licenses should conduct a more detailed review of existing standards in order to assess whether it is practical and beneficial for aspects of the existing operational standards to be aligned with a view to identifying which aspects of existing standards may be practically harmonised under BETTA from day one.

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¹⁵ See earlier footnote 8.
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1.9. Finally, Ofgem/DTI note that further work on the harmonisation of standards will need to be developed in parallel with the work being progressed through the June 2003 licences consultation, which sets out the proposed licence obligations requiring transmission licensees to undertake certain of their licensed activities in accordance with the prevailing standards under BETTA.

1.10. The rationale for this document is to:

- consider the responses received to the issues raised in the March 2003 consultation, and
- in light of those responses, set s down Ofgem/DTI's conclusions on the issues raised in order to provide a basis for taking these matters forward.

2. Timetable

- 2.1. This is the second document published by Ofgem/DTI on the treatment of planning and operating standards under BETTA. This paper is the conclusions document following the March 2003 consultation, setting out responses to the March 2003 consultation and Ofgem/DTI's conclusions in view of these responses.
- 2.2. It is proposed that the further work on harmonisation of standards proposed in this document should be progressed by the transmission licensees through the STEG Development Groups ("DGs") and reported back to STEG. Ofgem/DTI intend to develop and publish a timetable for progression of this work.
- 2.3. It is recognised that any issues affecting health and safety arising from this work will need to be progressed with the Health and Safety Executive (HSE).
 Ofgem/DTI will, in discussion with the HSE and transmission licensees, consider how any such matters should be taken forward.

3. Background

- 3.1. The background to and key aspects of the BETTA reforms were set down in the December 2001 consultation, the May 2002 report and the December 2002 consultation.
- 3.2. The December 2001 consultation noted that the three transmission systems in GB are currently planned and operated to comply with different system security and quality of supply standards. In addition to identifying the relevant standards, the December 2001 consultation noted that:
 - each licensee has different criteria applying to generation connections and demand connections
 - for each licensee, different criteria apply in relation to generation connections, demand connections and the main interconnected transmission system. The standards applying in relation to the interconnector between Scotland and England are also different
 - different criteria apply to planning and development than to operation of each transmission network
 - in the application of each individual element of a particular standard, different fault scenarios and possible system configurations are considered and one or more of these scenarios may dictate transmission investment or operating requirements
 - in most cases, more than one design option would satisfy the criteria within the planning standards. In such circumstances, the licensee needs to make technical and economic assessments of each option to select the optimum design solution
 - there is flexibility within each of the standards such that higher or lower levels of security may be permitted subject to customer request or economic justification, and

- the definition of transmission assets includes 132kV assets in Scotland, whereas in England and Wales only assets with voltages above 132kV are included.
- 3.3. The December 2001 consultation explained that in its October 2001 submission¹⁶ to the Performance and Innovation Unit, Ofgem noted that the current arrangements provide poor signals of the need for additional transmission capacity and poor incentives to invest in new capacity¹⁷. It was explained that Ofgem will be consulting on the form of incentive arrangements to apply and as identified in the December 2001 consultation it will be necessary to consider the implications for standards under BETTA in the light of developments in transmission access arrangements.
- 3.4. In any event, the December 2001 consultation noted that were standards to be conformed, a number of significant issues were likely to arise, which may include the following:
 - certain parts of a GB transmission system and/or connections may either exceed or not comply with any revised or conformed standard. This may require licensees to seek derogations¹⁸ from the Authority, or new infrastructure to be installed. The potential costs involved could be significant
 - the level of security and quality of supply will change in some areas, and associated increases or decreases in costs will arise. This may be through choice, or may arise as a consequence of conforming a mandatory standard
 - whether the terms on which those participating in a single GB market under BETTA are equitable to the extent that standards applied to the connection of different participants differ, and

¹⁶ "Performance and Innovation Unit, Energy Policy Review. A submission by the Office of Electricity and Gas Markets", October 2001; www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/287 29oct01.pdf

¹⁷ The December 2001 document stated that "it has long been recognised that RPI-X regulation is most effective in securing operating efficiency gains but does not provide companies with appropriate investment incentives on a growing network. That is why Ofgem has been extending the RPI-X framework by developing output measures as part of the price controls of the main transmission systems. Ofgem is therefore working on a range of improvements to the price controls, to improve the signals of the need for investment and to improve the incentives to invest."

¹⁸ See earlier footnote 10.

- from whom the costs of meeting planning and operating standards (ie the embedded transmission and balancing costs) in each area should be recovered.
- 3.5. Finally, the December 2001 consultation noted that the issue of conformance of standards was a matter that would require further consideration under BETTA, and that it was an issue that is closely linked with the development of transmission charging arrangements. Views were invited upon whether in principle it was desirable to seek to conform planning and operating standards as part of BETTA, and the factors that should influence any decision to do so.
- 3.6. The May 2002 report summarised the responses received to the December 2001 consultation and set out Ofgem/DTI's preliminary views in light of those responses. Whilst some respondents were in favour of conformance and some thought that the costs of conformance would be negligible, others argued that the present arrangements, which differed between Scotland and England and Wales, had served the different communities well and that the costs involved in conformance would not provide commensurate benefits.
- 3.7. Given the above, it was necessary to consider further how to progress issues relating to the conformance of standards under BETTA in advance of the implementation of revised governance arrangements for electrical standards, and in order to do so, Ofgem/DTI requested the assistance of the existing transmission licensees in the STEG. STEG has served as a focus for requesting and coordinating the assessment and review of the existing standards undertaken by the transmission licensees. STEG has also provided advice and information on, amongst other things, technical matters associated with transmission operations, transmission operational planning, transmission maintenance, transmission investment planning and managing new connections to the transmission system. In relation to the specific issue of planning and operating standards to apply under BETTA, Ofgem/DTI requested that the three transmission licensees draft a series of papers to offer expert advice and information on the current standards that are applied in each of the three transmission areas and also to establish:
 - the extent of the differences between the operational and planning standards of the three transmission licensees

- some of the options open under BETTA for dealing with the differences between the planning and operational standards of the three transmission licensees and the relative merits of each option identified, and
- an approach that could reconcile differences in the current or proposed combined operating standards into common principles that could be used to class the level of risk of not meeting the standard as acceptable (ie can be managed) or unacceptable, given that a GB operational standard would provide a more robust basis for operating the network than continuing to utilise the existing three standards.
- 3.8. Volume 2 of the December 2002 consultation stated that irrespective of whether or not a single set of standards is introduced, Ofgem/DTI's current view was that in general terms, the GB system operator should be subject to a licence obligation to meet those aspects of standards relating to operating criteria on the GB transmission system, and that transmission owners should be subject to a licence obligation to meet those aspects of standards relating to the planning criteria.
- 3.9. It was also noted that given the allocation of transmission activities between the GB system operator and the transmission owners, it was likely that co-operation will be needed between all licensees in order to ensure that the security and quality of supply standards can be met in relation to the transmission system as a whole. Ofgem/DTI's initial view was that it would be necessary to put in place 'reinforcing' licence obligations that recognise this required co-operation. It was, for example, envisaged that a transmission owner would have to take into account the views of the GB system operator and the other transmission owners in meeting the relevant planning criteria of the standards (Ofgem/DTI expect that the processes associated with these interactions between the licensees will be set down in the SO-TO Code ("STC")). Similarly, in meeting the relevant operational criteria of the standards, it was noted that it was likely to be necessary for the GB system operator to rely upon services provided by transmission owners (again, with the proposal that the processes by which these services will be delivered being set down in the STC).

- 3.10. In the March 2003 consultation, Ofgem/DTI further discussed issues¹⁹ relating to the treatment of planning and operating standards under BETTA. This document:
 - summarised the main issues identified by the transmission licensees in the work they have undertaken through STEG
 - set out Ofgem/DTI's views on the above and proposed:
 - to accept the recommendation of the transmission licensees that a more detailed review of existing operating standards be undertaken to assess whether it is practical and beneficial for aspects of the existing operational standards to be aligned with a view to identifying which aspects may be practically harmonised under BETTA from day one
 - to request that the transmission licensees commence this analysis work, and
 - that Ofgem/DTI should develop a timetable for the analysis work to be carried out by the transmission licensees and that this timetable should subsequently be published to ensure that the work will be progressed by the transmission licensees and reported back to STEG, and that any proposals relating to the harmonisation of operational standards that are identified as part of this analysis work should be the subject of a future Ofgem/DTI consultation
 - explained that, in any event, it is not anticipated that there will be any significant change to the security and quality of supply delivered to different GB transmission customers under BETTA compared with the service which they received prior to the implementation of BETTA²⁰, and
 - recognised that different standards may apply to different users of the GB transmission system and proposed that these differences may need to be

¹⁹ See footnote 7.

²⁰ See earlier footnote 8.

taken into account in the development of the connection and use of system charging methodology to apply under BETTA.

- 3.11. In parallel with taking forward work on the standards that should apply under BETTA, Ofgem/DTI have also been considering how and on whom the responsibilities to comply with such standards should fall. Some initial thoughts on these matters were set down in the December 2002 consultation. In the light of the responses to this consultation, Ofgem/DTI have further developed their thinking on this matter and, and reference is made to the June 2003 licences consultation²¹. This document sets down further proposals for how the licence obligations on the GB system operator and transmission owners in relation to meeting relevant standards should apply under BETTA.
- 3.12. The remainder of this document summarises the responses received to the March 2003 consultation on each of the above points and sets out Ofgem/DTI's conclusions on these proposals and the way forward for progressing this work.

Related consultation papers

- 3.13. A number of other consultation documents associated with the Ofgem/DTI BETTA project have been recently published as follows:
 - ♦ an Ofgem/DTI document on the SO-TO Code under BETTA²²
 - ◆ a report of Ofgem/DTI conclusions on the consultation on the Settlement
 Agreement for Scotland (SAS) under BETTA²³
 - a report on Ofgem/DTI conclusions on the first consultation on a GB
 BSC, together with proposed legal text for the GB BSC²⁴

²¹ See earlier footnote 9.

²² The SO-TO Code under BETTA. Summary of responses and conclusions on Volumes 3 and 4 of the December 2002 consultation on the regulatory framework for transmission licensees under BETTA, and further consultation on content of the SO-TO Code. Ofgem/DTI June 2003, Ofgem 40/03.

²³ "The Impact of BETTA on the Settlement Agreement for Scotland (SAS), An Ofgem/DTI conclusions document", 29th May 2003, Ofgem 34/03.

²⁴ "The Balancing and Settlement Code under BETTA, Ofgem/DTI Conclusions and Consultation on the legal text of a GB BSC", May 2003, Ofgem.

- a report on Ofgem/DTI conclusions on the first consultation on a GB
 CUSC, together with proposed legal text for the GB CUSC²⁵, and
- a consultation on Transmission Licences²⁶ under BETTA (the June 2003 licences consultation).
- 3.14. In addition, a number of consultation documents are soon to be published as follows:
 - a consultation on changes to Generation, Supply and Distribution Licences under BETTA²⁷
 - a report on Ofgem/DTI conclusions on the first consultation on a GB
 Grid Code, together with proposed legal text for the GB Grid Code²⁸
 - a consultation paper on small generator issues under BETTA
 - a consultation paper on the framework for transmission charging under BETTA, and
 - a consultation on the form of the incentive arrangements that should apply to transmission licensees under BETTA.

Outline of this document

3.15. This document covers a range of matters raised in the March 2003 consultation in relation to the conformance of standards under BETTA. Chapter 4 of this paper provides a summary of the main issues raised in the March 2003 consultation. Chapter 5 summarises the responses made on each of the specific matters raised in the March 2003 consultation. Chapter 6 sets out Ofgem/DTI's conclusions.

²⁵ "The Connection and Use of System Code, Ofgem/DTI conclusions and consultation on the legal text of a CUSC to apply throughout GB". Ofgem/DTI May 2003, Ofgem.

²⁶ See earlier footnote 9.

²⁷ "Changes to electricity generation, distribution and supply licences under BETTA, An Ofgem/DTI consultation", January 2003, Ofgem 04/03

²⁸ "The Grid Code under BETTA. Ofgem/DTI conclusions and consultation on the legal text of a GB Grid Code". Ofgem/DTI, July 2003. Ofgem.

4. Summary of March 2003 consultation

Background to March 2003 consultation

- 4.1. In considering how to progress issues relating to the conformance of standards under BETTA in advance of the implementation of revised governance arrangements for electrical standards, and recognising that the existing planning and operational standards apply to integrated transmission companies, Ofgem/DTI requested, through STEG, the expert advice of the existing transmission licensees. Ofgem/DTI requested that the three transmission licensees draft a series of papers to offer expert advice and information on the current standards that are applied in each of the three transmission areas.
- 4.2. The transmission licensees submitted three papers to STEG²⁹ which made the following points:
 - there are a number of differences in the planning and operating standards applied to the three transmission systems in GB
 - that the GB system operator, in conjunction with the transmission owners, should, for day one of BETTA, develop a new GB operational standard. It should be possible within this new standard to reconcile differences in present operating standards into common principles that could be used to class levels of risk of not meeting the standard as acceptable (ie could be managed) or unacceptable risks to the system
 - that the planning standards presently applied are appropriate for the network characteristics and geography. Further analysis would be required to ascertain the extent of any benefits associated with seeking to unify planning standards across the three transmission owner areas. Any option chosen with respect to planning standards should give due regard to interactions with operational standard(s) and the need for coordination between planning and operational timescales. Moreover, it

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²⁹ Paper 1, "Review of existing standards" submitted to STEG on 31 July 2002. Paper 2, "Options for standards under BETTA" submitted to STEG on 3 September 2002. Paper 3, "Combined operational standard" submitted to STEG on 30 October 2002. See appendix to the March 2003 document. Planning and operational standards under BETTA

- would be highly challenging to achieve a suitably robust, unified planning standard in time for day one of BETTA
- that there are a number of degrees to which the operational standards under BETTA could be integrated, which include:
 - developing limited modifications to the existing operational standards by introducing a regional element, which effectively accommodates the different standards north and south. This would provide common terminology and a framework for the consistent interpretation of the standards
 - a reconciliation of the differences between the standards. Such a reconciliation will need to take account of the design of the existing networks and the applicable planning standards in each transmission licence area. It will also require a thorough examination of the present operating standards, investigation of risks and an assessment of the level of these risks
- the licensees recommended that an examination such as that set down in the second of the above two options should take place and that the results should underpin the work required to produce the simplest level of integration of the operating standards. If the outcomes of this analysis work were positive, then a new standard at the next level of integration would be recommended and development work taken forward by the transmission licensees, and
- the above approach would provide objective evidence for the development of the new GB operational standard and inform Ofgem/DTI's proposal for the operating standard to be in place for day one of BETTA.

Views of transmission licensees in the March 2003 consultation

4.3. The March 2003 consultation included in Appendices 1-3 the papers submitted to STEG by the transmission licensees and set out Ofgem/DTI's preliminary

conclusions based on the work of the transmission licensees. The document also explained that the transmission licensees considered that:

- in the case of planning standards, under BETTA it would, initially at least, be appropriate to retain those standards presently applied to each of the three existing transmission systems
- in the case of operating standards under BETTA some harmonisation of existing standards would be practicable and desirable, and
- in order to gain a fuller understanding of those aspects of the operating standards that it would be practical/desirable to harmonise from day one, a more detailed review of the operating standards should be undertaken by the transmission licensees and taken forward through STEG.

Ofgem/DTI's views in the March 2003 consultation

- 4.4. From a practical perspective, Ofgem/DTI recognised that harmonising operating and planning standards is a complex technical matter. Therefore, Ofgem/DTI concluded that, as a minimum, it would appear sensible to give some consideration as to whether steps should be taken to harmonise definitions in operating standards such that the GB system operator's staff have a common set of definitions for working in place for day one of BETTA. Furthermore, to the extent that further harmonisation can take place so as to avoid different sets of rules in undertaking security assessment studies, for example Ofgem/DTI considered that there may be significant practical benefits from further harmonisation from day one.
- 4.5. In the March 2003 consultation, Ofgem/DTI proposed:
 - to accept the recommendation of the transmission licensees that a more detailed review of existing operating standards be undertaken to assess whether it is practical and beneficial for aspects of the existing operational standards to be aligned with a view to identifying which aspects may be practically harmonised under BETTA from day one
 - to request that the transmission licensees commence this analysis work,
 and

that Ofgem/DTI should develop a timetable for the analysis work to be carried out by the transmission licensees and that this timetable should subsequently be published to ensure that the work will be progressed by the transmission licensees and reported back to STEG, and that any proposals relating to the harmonisation of operational standards that are identified as part of this analysis work should be the subject of a future Ofgem/DTI consultation.

4.6. Furthermore, in the March 2003 consultation, Ofgem/DTI:

- indicated that on the basis of the proposed approach, it was not anticipated that there would be any significant change to the security and quality of supply delivered to different GB transmission customers under BETTA compared with the service which they received prior to the implementation of BETTA³⁰.
- recognised that different standards may apply to different users of the GB transmission system and proposed that these differences may need to be taken into account in the development of the connection and use of system charging methodology to apply under BETTA.
- 4.7. Finally, Ofgem/DTI invited views on the above proposals.

³⁰ See earlier footnote 8. Planning and operational standards under BETTA Ofgem/DTI

5. Respondents' views

Introduction

5.1. This Chapter sets out the responses received in relation to the proposals included in the March 2003 consultation.

May 2003 consultation

- 5.2. Nine respondents provided comments in relation to the matters raised in the March 2003 consultation and on the preliminary view of Ofgem/DTI that in the case of operating standards under BETTA some harmonisation of existing standards would be practicable and desirable.
- 5.3. The vast majority of respondents agreed with Ofgem/DTI's proposal to support the approach recommended by the transmission licensees that some conformity in operational standards is desirable and the view that this should be achievable for BETTA Go-live. These respondents supported the recommendation that a more detailed review of existing operational standards be undertaken with a view to identifying which aspects may be practically harmonised under BETTA from day one.
- 5.4. A number of respondents also agreed with the view taken by Ofgem/DTI that the issues associated with conforming the current planning standards are more complex than those for operational standards and agreed that conformance for BETTA will not be achievable given the limited timeframe and the complexities associated with the geographical, economic and climatic factors involved. Against this background, a number of respondents agreed that the current planning standards are appropriate for the network characteristics to which they are applied and that it is neither practical nor necessary to carry out a fundamental review of planning standards prior to BETTA. Notwithstanding the above, two respondents made the general observation that to achieve the objectives of BETTA and establish a "level playing field" across GB, a continuing aim of the BETTA reforms should be to unify standards across GB.
- 5.5. One respondent noted that the review of operating standards would concentrate on the practical matters of harmonising definitions and terminology within the Planning and operational standards under BETTA

- existing standards. Another respondent stated that it recognised that it would be desirable for there to be a single set of principles for operating the GB transmission network and agreed that the extent to which this can be achieved from BETTA day one will require further work.
- 5.6. Separately, another respondent agreed with the recommendation made by Ofgem/DTI but noted that any review should "evaluate the pros and cons of each conformance option, including both full conformance and retention of present geographically delineated criteria, for both operating and planning criteria."
- 5.7. Two respondents stressed that any changes to the current standards should receive careful consideration and scrutiny. One respondent stated that any review should ensure that the commercial implications of not unifying the standards are fully understood (ie incumbent benefits to transmission users and the effect on a level playing field).
- 5.8. Of the respondents that commented, the majority supported Ofgem/DTI's proposal to request that the transmission licensees conduct a more detailed review of the existing operating standards; that the results of this work should be reported back through STEG, and that the subsequent Ofgem/DTI proposals will be the subject of a consultation. However, three respondents noted that the March 2003 consultation indicated that further consideration of standards is expected to be initiated under the arrangements implemented by the Grid and Distribution Code Review Panels. It was suggested that a working group be established to ensure that other industry members outwith the transmission licensees are also provided with an opportunity to participate in this process prior to industry wide consultation. One respondent made the further point that the work required to strengthen harmonisation of existing operating standards should also be ratified by the Review Panels.
- 5.9. Four respondents commented on the proposal by Ofgem/DTI that the review will also need to consider the costs of harmonisation. One respondent noted that any change in standards in one or more of the transmission areas will lead to a change in costs. Another respondent stated that the cost of these changes should be allocated in proportion to the associated benefits.

- 5.10. One respondent stated that any change from the current standards should be subject to rigorous cost benefit analysis.
- 5.11. Separately, another respondent assumed that the recently published Ofgem/DTI document "Recovery of Costs under BETTA" will address the mechanism by which costs are recovered from the industry.
- 5.12. There was broad support for the notion that Ofgem/DTI should develop and publish a timetable for this work with the transmission licensees. A number of respondents agreed that when considering which elements of the standards it would be practicable to unify an estimate of the timescale in which any changes might be made should be made. One respondent noted that the processes for agreeing the scope, timetable, deliverables and monitoring of works should be defined and agreed with the industry before Ofgem/DTI sanctions any work. Another respondent noted that progressing this work through STEG will allow for the setting of a timetable, and the publication of progress alongside other STEG workstreams.
- 5.13. There was widespread support for Ofgem/DTI's proposal to consult on any changes to the operational standards identified as part of this analysis. One respondent stressed the importance of ensuring that areas of contention in unifying standards are consulted upon separately and discussed as part of STEG and any separate industry-wide working group.
- 5.14. Separately, another respondent strongly recommended that the review should also "produce and justify proposals on planning criteria since these will be critical to minimising the total cost of transmission, reducing the scope for dispute between the three transmission licensees and maximise confidence going forward." It also noted that recommended options for conformance should be substantiated in comparison with other options.
- 5.15. Three respondents agreed with the view taken by Ofgem/DTI that moves to conform the security and quality of supply standards should not result in the need for any significant investment in the transmission network (and significant new costs). The respondents who commented on this matter also welcomed the view that different GB transmission customers should expect to receive the same quality of supply at day one of BETTA as that which they received prior to the implementation of BETTA.

- 5.16. One respondent noted however that that the intention that there should be no change in the "level of security" should be considered with regard to the security of the GB system as a whole. It suggested that, where appropriate, use could be made of derogations and/or "customer choice" to manage any impact on existing customers and the overall costs of implementing a conformed standard.
- 5.17. Six respondents provided comments on the proposal that different standards that may apply to different users of the GB transmission system should be taken into account in developing the charging methodology to apply under BETTA. A number of respondents believed that the application of different standards may produce different connection and use of system charges under BETTA which could be seen as discriminatory between transmission users in different areas. There was strong support from those respondents that commented on this issue that work must be undertaken to minimise these differences.
- 5.18. One respondent stated that the initial harmonisation work will improve transparency and practicality but will have the additional benefit of "laying the groundwork for any future work on harmonisation and provide a framework for the assessment of the implications for transmission charging." It expressed the view that this could allow for a harmonised operational standard with a geographic zoning mechanism to permit variations in security levels. The same respondent also contended that the standards should remain the key driver for network investment and supported the view that incentivisation should take place within a system which continues to be based largely on security standards and central planning. It is for this reason that the respondent supported the principle that transmission charging should take account of the differences in standards.
- 5.19. The same respondent stressed that if the GB charging methodologies were to incorporate a locational charging element then it firmly believed that the different implications for system design or security levels to customers arising from different standards must be taken into account in the formulation of these methodologies. It emphasised that the expression of the current standards in common terms will facilitate this comparison and the implications for network investment and service levels.

- 5.20. One respondent noted that the scope for variations of "levels of security" among different customers is inevitably limited by the interconnected nature of the transmission system in GB and the need for it to be "planned and operated in a coordinated manner". It emphasised that in order to discharge these obligations, the transmission licensees must therefore maintain the security of the main interconnected system in the interests of all customers as codified in the security standard. It expressed the view that the role of the transmission charging methodology is then to ensure an appropriate recovery of costs arising from the application of the standard. In doing so, the respondent believed that the charging methodology may be considered separately from the security criteria and need not form part of a review of security standards.
- 5.21. Another respondent expressed the view that in order for BETTA to achieve its goal, all users need assurances that they are competing on the same basis.
- 5.22. A number of additional comments were made by respondents on matters not covered in the March 2003 consultation. These are summarised below:
 - two respondents noted that any work relating to harmonisation of standards should not foreclose the options for treatment of the 132kV system in Scotland
 - one respondent suggested that in the interests of transparency the definition of the applicable standards for each licensee should be moved to within the main body of the licence
 - one respondent considered it appropriate for there to be a periodic review of the security standards after the introduction of BETTA to take account of the likely increase in renewable generation. The same respondent noted that it is appropriate that the planning and operating standards be revised together, and any such review should be conducted jointly by the transmission licensees
 - one respondent suggested that Ofgem/DTI produce a single categorical statement to the effect that the security and quality of supply that different GB customers will receive at day one of BETTA will essentially be the same that they received prior to BETTA's implementation "unless modified by proposals forming part of the BETTA project which would

- identify the potential impact and be the subject of an Ofgem/DTI consultation."
- the same respondent suggested that it would be sensible to eventually include the planning and operating standards within the GB Grid Code to "improve the clarity and simplify the governance arrangements", and
- one respondent noted that whilst the current integrated system is operated coherently, the principles of acceptable and unacceptable risk are subtly different in different locations.

6. Ofgem/DTI views and conclusions

Introduction

6.1. This Chapter sets out Ofgem/DTI's view on the issues raised by respondents to the March 2003 consultation, sets down Ofgem/DTI's conclusions on these matters. In short, Ofgem/DTI propose to continue to develop the arrangements that should apply under BETTA on the basis of the proposals set down in the March 2003 consultation.

Ofgem/DTI views

- 6.2. Ofgem/DTI note that the majority of respondents agreed that some conformity in operational standards is desirable and achievable by BETTA day one. Ofgem/DTI accept the recommendation of the transmission licensees to undertake a more detailed review of the existing operational standards to assess whether it is practical and beneficial for aspects of the standards to be aligned with a view to identify which aspects may be practically harmonised under BETTA from day one.
- 6.3. Ofgem/DTI concur with the views of several respondents who noted that any review should evaluate the pros and cons of each conformance option and believe that any changes should be subject to appropriate scrutiny and consideration. Ofgem/DTI also note the arguments made by respondents who argued that the options of full conformance and the commercial implications of not unifying the standards should be fully understood. Ofgem/DTI accept that it will be necessary to understand the costs of implementing any proposed changes to standards, and expect an evaluation of cost implications would form part of the more detailed review.
- 6.4. Ofgem/DTI note the arguments of those respondents who suggested that industry members should participate and agree the scope of the work to be progressed before any work is sanctioned. Ofgem/DTI also note that in future, consideration of standards is expected to be initiated under the governance arrangements that may be proposed by the Grid and Distribution Code Review Panels. However, Ofgem/DTI continue to believe that for the time being, it is appropriate that the

transmission licensees undertake this analysis work as part of the overall arrangements that have been developed to take forward BETTA development. This will help to ensure that in addition to bringing the relevant expertise to bear, the matters are progressed in conjunction with other associated BETTA matters. It is therefore proposed to progress on the basis set down in the March 2003 consultation, ie that Ofgem/DTI will develop and publish a timetable for the analysis work; that the work will be progressed and reported back to STEG and that any proposals relating to the harmonisation of operational standards that are identified as part of this analysis work will be the subject of a future industry-wide Ofgem/DTI consultation. However, Ofgem will be happy to provide progress updates at panel meetings upon request.

- 6.5. Ofgem/DTI note that the majority of respondents accepted the fact that different standards may apply to different users of the GB transmission system and that this should be taken into account in developing the charging methodology to apply under BETTA. Ofgem/DTI also note the suggestion that, where appropriate, use could be made of derogations and/or "customer choice" to manage any impact on existing customers and the overall costs of implementing a conformed standard, ie the contractual terms for connection and/or use of system for certain users could be varied to reflect the different arrangements to manage any impact on existing customers and the overall costs of implementing a conformed standard.
- 6.6. Ofgem/DTI are of the view that the most appropriate approach to this issue is to first consider exactly what standards could be practicably applied from the initial operation of BETTA, and then to give consideration as to whether it is appropriate to apply different commercial treatment as a consequence of any differences. Ofgem/DTI accept that there could be a number of potentially appropriate mechanisms to deal with any differences that exist and that in addition to taking such differences into account in developing the charging methodology to apply under BETTA, it may also be appropriate to consider making use of derogations³¹ and/or "customer choice" options, ie the contractual terms for connection and/or use of system for certain users could be varied to reflect the different arrangements.

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³¹ See earlier footnote 10. Planning and operational standards under BETTA

- 6.7. Ofgem/DTI note that there was widespread support for the view that moves to conform the security and quality of supply standards are not intended to result in any significant investment in the transmission network (and significant new costs). Furthermore, Ofgem/DTI welcomed the support for the view that the security and quality of supply that different GB transmission users should expect to receive will essentially be the same to that which they received prior to BETTA's implementation, unless modified by proposals forming part of the BETTA project, which would identify the potential impact and be the subject of an Ofgem/DTI consultation.
- 6.8. In response to a number of specific issues raised (some of which are not directly related to the issue of planning and operating standards under BETTA),
 Ofgem/DTI's views are as follows:
 - the work relating to harmonisation of standards should include consideration of the treatment of the 132kV system in Scotland
 - the proposals for structure and content of the relevant licence conditions
 referring to standards are discussed in the Licences Consultation
 - whether or not it is necessary to undertake a periodic review of the security standards after the introduction of BETTA to take account of the likely increase in renewable generation is outside the scope of the BETTA reforms
 - whilst Ofgem/DTI continue to believe that it is appropriate that the existing standards are substantially retained under initial implementation of BETTA, it is recognised that there will be a change in responsibilities in the transmission sector under BETTA and some limited changes to the standards may take place as a consequence of the processes described in this paper, and
 - any proposal to include the planning and operating standards within the GB Grid Code to "improve the clarity and simplify the governance arrangements" is considered outside the scope of the BETTA reforms.

Ofgem/DTI conclusions

- 6.9. In summary, the principal conclusions made in this document in relation to matters raised in the March 2003 consultation are that:
 - in accordance with the recommendation of the transmission licensees set down in the March 2003 consultation, a more detailed review of existing operational standards should be undertaken with a view to identifying which aspects may be practically harmonised under BETTA from day one
 - Ofgem/DTI request that transmission licensees carry out this work and that they should also consider the costs of harmonisation
 - Ofgem/DTI should develop a timetable for this work with the transmission licensees and that this timetable should subsequently be published.
 - any proposals relating to harmonisation of operational standards identified as part of this analysis will be the subject of an industry-wide Ofgem/DTI consultation
 - as a consequence of this approach, it is not anticipated that there will be any significant change to the security and quality of supply delivered to different GB transmission customers under BETTA compared with the service which they received prior to the implementation of BETTA, and
 - to the extent that different standards apply to different users of the GB transmission system, the appropriate commercial treatment of such differences needs to be considered. Ofgem/DTI accept that there could be a number of potentially appropriate mechanisms to deal with any differences that exist and that in addition to taking such differences into account in developing the charging methodology to apply under BETTA it may also be appropriate to consider making use of derogations³² and/or "customer choice" options, ie the contractual terms for connection and/or use of system for certain users could be varied to reflect the

³² See earlier footnote 10. Planning and operational standards under BETTA Ofgem/DTI

different arrangements. Ofgem/DTI will further consult upon these matters in due course.