Small Generator Issues under BETTA

An Ofgem/DTI Consultation Document

November 2003

Summary

The objective of the British Electricity Trading and Transmission Arrangements (BETTA) reforms is to implement new trading and transmission arrangements that are designed to promote the creation of a single competitive wholesale electricity trading market and to introduce a single set of arrangements for access to and use of the transmission system in Great Britain (GB).

In order to meet the stated objective of the BETTA reforms it is important to ensure that the new arrangements promote a competitive wholesale market by providing non-discriminatory access to the market for all generators in the GB market, including small generators.

This document discusses the different ways in which the implementation of BETTA might impact on small generators, and sets out proposals in certain key areas. There are a number of ways in which BETTA can be expected to benefit small generators particularly in Scotland, both transmission and distribution connected. Generators will have access to a larger market within which to sell their output, and access to the transmission system will be provided by a party (the GB system operator) that is independent from generation or supply interests. Small distribution-connected generators will have access to the same 'embedded benefits' as generators in England and Wales. Further, the consolidation of the different market rules in Scotland and England and Wales under a single set of GB codes and documents will reduce complexity for parties wishing to trade across GB.

The basis for consultation under BETTA is the trading and transmission arrangements that prevail in England and Wales. These market rules support a competitive market in which generators of varying sizes participate. The current arrangements in England and Wales therefore provide, in Ofgem/DTI's view, a sensible starting point for consultation. However, the transition to GB arrangements involves a new class of generator against which the market rules in England and Wales are untested. In Scotland there are a number of small generators connected to the transmission system at 132kV. In England and Wales all small generators are connected to distribution networks.

The detailed implications of the BETTA reforms for small generators, and in particular those connected to the 132kV network in Scotland, have been raised through a number of different consultation processes over recent months. Ofgem/DTI has collated these emerging issues and, together with its own analysis, has generated a consolidated list of

issues where further consultation is considered appropriate or where Ofgem/DTI believe it would be useful to set out its views.

The key issues and proposals that Ofgem/DTI are seeking views on through this consultation are that in implementing BETTA:

- the Exemption Order made under section 5 of the Electricity Act setting out the criteria under which a generator is automatically exempt from the requirement to hold a generation licence should be harmonised between England and Wales and Scotland;

- the classification of 132kV lines as forming part of the transmission system in Scotland should not be revisited in order to remove perceived commercial differences in treatment between transmission and distribution connected generators, and

- an interim measure to reduce transmission charges for small generators connected to the 132kV network in Scotland is appropriate to remove undue differences in the treatment of this class of generator in comparison with distribution connected small generators.

Ofgem also propose to undertake work in the longer term to ensure greater consistency of transmission charges and benefits between transmission and distribution connected generators, which will facilitate the removal of the interim measure proposed in this document.

This document also discusses and seeks views on a number of more detailed points concerning transmission-connected small generators and the operation of the Connection and Use of System Code ("CUSC"), the Balancing and Settlement Code ("BSC") and the Grid Code under BETTA.

It is Ofgem/DTI's intention to issue a conclusions document on these issues in February 2004. Additionally, Ofgem/DTI would expect the specific proposals on transmission charging to be reflected in the initial consultation on GB transmission charging methodologies by National Grid Company ("NGC") to be commenced shortly.

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1. Rationale

1.1. The objective of the British Electricity Trading and Transmission Arrangements (BETTA) reforms is to implement new trading and transmission arrangements that are designed to promote the creation of a single competitive wholesale electricity trading market and to introduce a single set of arrangements for access to and use of any transmission system in Great Britain (GB).

1.2. The rationale for BETTA was set out initially in an Ofgem consultation paper of December 2001[1] ('the December 2001 consultation') and reaffirmed in a joint Ofgem/DTI report of May 2002[2] ('the May 2002 report'). DTI has also published a Regulatory Impact Assessment (RIA) which assesses the likely costs and benefits of the BETTA reforms. The RIA was published in draft in May 2002 for consultation, and published in final form with the draft Electricity (Trading and Transmission) Bill (the 'E(TT) Bill') in January 2003.

1.3. The December 2001 consultation set out Ofgem's view that it was appropriate and timely to implement market based wholesale trading arrangements in Scotland. It was proposed that the most appropriate way of achieving this was through the creation GB balancing and settlement arrangements, a common GB transmission charging regime, common terms throughout GB for connection to and use of the transmission system, removing the current commercial arrangements surrounding use of the Scotland-England interconnector assets and incorporating those assets into the GB transmission system and the creation of a GB system operator responsible, at a minimum, for balancing the GB transmission system.

1.4. It was also proposed that the basis for consultation on the arrangements to apply across GB should be the arrangements in place in England and Wales. Consequently, consultation has been progressed by Ofgem/DTI over recent months on the detail of GB versions of the Connection and Use of System Code

[1] 'The Development of British Electricity Trading and Transmission Arrangements (BETTA): A consultation paper', Ofgem, December 2001: Ofgem #74/01.
[2] 'The Development of British Electricity Trading and Transmission Arrangements (BETTA): Report on consultation and next steps' Ofgem/DTI, May 2002: Ofgem #38/02.

(CUSC)[3], Balancing and Settlement Code (BSC)[4] and Grid Code[5]. In addition, Ofgem/DTI shortly intends to issue a conclusions document on the framework for transmission charging under BETTA.

BETTA and small generators

1.5. In order to meet the stated objective of the BETTA reforms it is important to ensure that the new arrangements promote a competitive wholesale market by providing non-discriminatory access to the market for all generators in the GB market, including small generators. Ofgem/DTI recognise the importance of small generators in stimulating competition and promoting technological innovation, and similarly recognises the need to ensure that the costs of market entry and participation are not prohibitive. It is therefore, in Ofgem/DTI's view, appropriate to consider the specific question of how BETTA impacts on small generators.

1.6. There are a number of ways in which size of generating plant is a relevant factor in the way in which generators are treated under legislation, codes and subsidiary documents currently in place in England and Wales and Scotland. However, different size thresholds are used in different contexts. To illustrate, 50MW is a key threshold as it means an automatic exemption from the requirement to hold a generation licence, the Grid Code in England and Wales differentiates between small (less than 50MW), medium (between 50 and 100MW) and large (greater than 100MW), while the National Grid Company's ("NGC's") network use of system charges use a threshold of 100MW in assessing the liability of distribution-connected generation for such charges.

1.7. It is Ofgem/DTI's view that the current arrangements in England and Wales promote a competitive wholesale market, including for a significant number of small generators that participate in that market. The Energy White Paper noted that it is vital, in the context of the Government's policy objectives, for the

[3] Connection & use of System Code under BETTA: Volumes 1 and 2 – Ofgem/DTI, June 03 #46/03 and #45/03
[4] The Balancing and Settlement Code under BETTA: An Ofgem/DTI conclusions and consultation on the legal text of a GB BSC – Volumes 1 and 2 – Ofgem/DTI, June 03 #40/03 and #39/03
[5] The Grid Code under BETTA – Ofgem/DTI conclusions and consultation on the text of a GB Grid Code and consultation on change co-ordination between the STC and user-facing industry codes: Volume 1 – Ofgem/DTI, Sept 03 #111/03

trading arrangements in England and Wales not to discriminate against small generators. The White Paper noted that some changes, with particular relevance to the position of small generators in the market, have been made to the trading rules in England and Wales since the introduction of the arrangements in 2001, and noted that this work must continue.

1.8. In Ofgem's view, the current governance arrangements whereby parties can propose changes to the CUSC, Grid Code and BSC have been demonstrated to provide a clear and workable framework for identifying and implementing changes to ensure that the market rules operate in a non-discriminatory way. Other things being equal, therefore, the arrangements in England and Wales, including the governance arrangements for handling proposed changes to the market rules, might also be expected to promote competition if applied to GB.

1.9. However, other things are not equal. There are differences between the current England and Wales market and the prospective GB market that necessitates further consideration of what arrangements might be expected to deliver non-discriminatory access to market for all generators, with particular emphasis on the position of some small generators in Scotland.

1.10. The specific difference between the England and Wales arrangements and the prospective GB arrangements is the presence of small, transmission–connected generators. In Scotland there are a number of small generators connected directly to the transmission system, and this number could increase over time. In contrast, all small generators currently participating in the market in England and Wales are connected to distribution systems. While it might be the case that the market rules do not need to be adjusted in any way to accommodate this new class of generator, the arrangements can be considered to be untested in this regard.

1.11. Differences between the England and Wales market and the prospective GB market, and the implications of these differences for some small generators in Scotland, have been highlighted by a number of parties through different consultation processes over recent months, including the process of pre-legislative scrutiny of the draft E(TT) Bill undertaken by the Trade and Industry Select Committee (TISC).

1.12. Ofgem/DTI has collated these emerging issues and, together with its own analysis of issues, has generated a list of issues where further consultation is considered appropriate or where Ofgem/DTI believes it would be useful to set out its views. The purpose of this document is to progress consultation on these issues.

2. Timetable

2.1. On 15 January 2003, the Government announced its intention to introduce legislation in order to have BETTA in place no later than April 2005[6]. On 18 June 2003 Ofgem confirmed that the target for BETTA go-live date is April 2005.

2.2. The closing date for responses to this consultation is 15th January 2004. It is anticipated that conclusions on the matters raised in this consultation will be published in February 2004. Should any changes be required to draft industry codes (for example the GB BSC or GB CUSC) as a result of those conclusions, these will be progressed in March 2004.

Views invited

2.3. Parties are free to raise comments on any of the matters covered in this document and in particular on those matters where views have been requested. 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[7].

2.4. Responses marked 'Small Generator Issues' should be sent by 15 January 2004 to:

David Halldearn
Director, Scotland and Europe
Office of Gas and Electricity Markets (Ofgem)
9 Millbank
London
SW1P 3GE
Fax: 020 7901 7479

[6] See Hansard, 15 January 2003, Official Report Column 647W.
[7] www.ofgem.gov.uk

2.5. Please e-mail responses to BETTA.Consultationresponse@ofgem.gov.uk marked 'Response to Small Generator Issues Consultation'.

2.6. All responses will be forwarded to the DTI.

2.7. If you wish to discuss any aspect of this document, please contact Colin Sausman at Ofgem (email: colin.sausman@ofgem.gov.uk, telephone: 020 7901 7339 or 07887 830185) or Maria Bazell at the DTI (email: maria.bazell@dti.gov.uk, telephone 020 7215 6159).

3. Background

3.1. This chapter provides a summary of the BETTA proposals and the process of consultation to date. It also provides background information on the wider policy context, as set out in the Government's Energy White Paper.

BETTA

The proposals

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

3.3. The four principal elements of BETTA are:

- the introduction of a common set of trading, balancing and settlement arrangements across GB
- the introduction of a common set of transmission pricing arrangements and a common set of contractual provisions for access to and use of the transmission system across GB
- the introduction of common independent balancing arrangements, through the creation of a single GB system operator that is independent from generation or supply interests, and
- removal of the current commercial arrangements surrounding use of the Scotland-England interconnector and incorporation of those assets into the GB transmission system.

3.4. A key theme running through these proposals is the notion of non-discriminatory access to the same market for all generators and suppliers across GB.

3.5. In the May 2002 report Ofgem/DTI published their conclusions in the light of responses to the issues raised in the December 2001 consultation and provided additional information on key matters associated with progressing BETTA. In that paper Ofgem/DTI concluded that the development of effective competition

across GB is contingent upon the creation of a GB system operator that is independent[8] of generation and supply interests and that it is appropriate to allocate certain transmission related functions (including, at a minimum, GB system balancing) to the GB system operator. Ofgem/DTI also concluded that it is appropriate to introduce GB balancing and settlement rules and a single set of contractual and charging arrangements across GB for access to and use of the transmission system.

3.6. Following the May 2002 consultation paper, Ofgem/DTI has consulted further on the detail of the BETTA proposals. This process in ongoing. The key areas of detailed consultation are as follows:

- Transmission licenses under BETTA
- Generation, Supply and Distribution licenses under BETTA
- BETTA and the Settlement Agreement for Scotland (SAS)
- a GB BSC
- a GB CUSC
- a GB Grid Code
- an SO-TO Code
- price controls and incentives
- recovery of costs under BETTA, and
- GB transmission charging arrangements.

3.7. Further information on each of these topics, including copies of published documents and associated contact names and details, can be found on Ofgem's website.

[8] Other than for balancing services under BETTA, the party should not undertake itself, nor should it have affiliates who will, be undertaking the activity of generation or supply in GB, or be trading GB electricity, or be carrying out any other relevant activity which may conflict with the party carrying out the activities of the GB system operator in an independent and non-discriminatory manner.

3.8. Small generator issues cut across a number of different documents, and in Ofgem/DTI's view the overall process of consultation will be enhanced by considering them in a single document. This particular consultation should therefore be viewed as complementary to the other BETTA consultations.

Legislation for BETTA

3.9. The implementation of the BETTA reforms as set out in the December 2001 and May 2002 consultation papers requires primary legislation. As set out in chapter 2, on 15 April 2002, the Government announced its intention to bring forward legislation to implement BETTA when Parliamentary time allows[9]. Such legislation is referred to in this document as the Electricity (Trading and Transmission) Bill ("the E(TT) Bill") or, based on an assumption of Royal Assent to such a Bill, as "the E(TT) Act".

3.10. On 30th January 2003, the DTI published the draft E(TT) Bill[10] together with the RIA. The draft Bill has been the subject of pre-legislative scrutiny by the TISC. The Committee published its findings[11] on 8 April 2003. Its conclusions included the following:

> *"A fair and equitable market requires that all participants are treated on the same basis. It is contrary to the principles of open competition that generators connected to the electricity network at 132kV in one part of the country and supplying only their local network should have to incur costs which are not borne by competitors of similar size doing the same thing in another part of the country. Whether by regulation or amendment of the industry codes to exempt small generators from the burden of transmission charges, or by other means, an equality of treatment must be established among generators connected at 132kV.*[12]"

3.11. In response to this recommendation, the Government's response was:

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[9] See Hansard, 15th April 2002 Official Report Column 748W
[10] See DTI press notice P/2003/60 published 30 January 2003 on www.dti.gov.uk follow 'Press Notices'.
[11] 'The British Electricity Trading and Transmission Arrangements: Pre-legislative scrutiny of the draft Electricity (Trading and Transmission) Bill. Fifth report of session 2002-03. Volumes 1 and 2 – www.parliament.uk/parliamentary_committees/trade_and_industry.cfm

[12] Fifth Report 2002-003: British Electricity Transmission and Trading Arrangements Vol. 1, Trade & Industry Select Committee, HC-468-I, 8 April 2003.

"We agree with the Committee's assessment that where generators are undertaking the same activity, merely in a different part of the country, they should be treated in a non-discriminatory way. We also believe that the treatment and definition of a particular piece of the network should be based on what that piece of network is used for. In Scotland 132kV is used for the bulk transfer of electricity and should therefore remain as part of the transmission network."

The Energy White Paper

3.12. In February 2003 the Government published its Energy White Paper, "Our energy future – creating a low carbon economy" (the "White Paper")[13]. The White Paper set out four goals for the Government's energy policy:

- to put ourselves on a path to cut carbon dioxide emissions by some 60% by about 2050, with real progress by 2020
- to maintain the reliability of energy supplies
- to promote competitive markets in the UK and beyond, and
- to ensure that every home is adequately and affordably heated.

3.13. The White Paper stressed the importance of changes to the pattern of generation over coming years to contribute towards the creation of a low carbon economy, including an aspiration to see 20% of electricity supplied from renewable sources by 2020. The White Paper also stated that liberalised and competitive markets will continue to be a cornerstone of energy policy in providing a framework for these shifts in the pattern of generation to occur efficiently. The White Paper recognised that additional measures, such as the Renewables Obligation and carbon emissions trading schemes, are necessary where market mechanisms fail to place a sufficient value on outcomes that contribute to longer term reductions in carbon emissions.

3.14. The White Paper also noted that it is vital for the trading arrangements in England and Wales not to discriminate against small generators. As the intention

[13] Energy White Paper, Our energy future –creating a low carbon economy, Presented to Parliament by the

is to use the England and Wales arrangements as the basis for the development of the GB arrangements, an implication of this statement not explicit in the White Paper itself, is that trading and transmission arrangements under BETTA must not discriminate against small generators. While the White Paper recognised that some changes have been made to the trading rules in England and Wales to this end, it was noted that this work must continue.

4. Legal Framework

4.1. This chapter provides the following:

- a summary of those elements of the current legal framework relevant to the issues raised in this document
- a summary of the proposed changes to the legal framework to implement BETTA, and
- a discussion on the current framework for exemption from the prohibition on generating electricity without a licence in the context of a competitive GB wholesale market under BETTA.

The current legal framework

4.2. The aim of this section is to give an overview of the regulatory framework currently in place in relation to the electricity industry in England and Wales and, in particular, those aspects relevant to the issues discussed in this document. The analysis of the current legal and regulatory framework is not intended to be exhaustive and serves only to highlight those issues relevant to the subject matter of the consultation in this document.

The Electricity Act 1989

4.3. The Electricity Act 1989 as amended by the Utilities Act 2000 (the EA 1989) essentially lays down the legislative structure under which the electricity industry operates. Consequently it sets out the role and duties of the Secretary of State and the Authority as well as the licensing regime under which the generation, transmission, distribution and supply of electricity takes place in England and Wales.

Role and duties of the Secretary of State and the Authority

4.4. Under the EA 1989 the principal objective of both the Secretary of State and the Authority is as follows:

"….to protect the interests of consumers in relation to electricity conveyed by distribution systems, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the generation, transmission, distribution or supply of electricity." [14]

4.5. In addition to the principal objective, the EA 1989 places a number of general duties on the Secretary of State and the Authority. These include a duty on both the Secretary of State and the Authority to carry out their respective functions in a manner which they consider is best calculated to secure a diverse and viable long term energy supply and to have regard to the effect on the environment of activities connected with the generation, transmission, distribution or supply of electricity[15]. Furthermore, the Authority must also have regard to any guidance issued from time to time by the Secretary of State in relation to social or environmental policies[16].

Licensing system

4.6. Under the EA 1989 it is a criminal offence for anyone to generate, transmit, distribute or supply electricity[17] unless that person is authorised to do so by a licence granted by the Authority[18] or is granted an exemption by the Secretary of State[19]. The exemptions that currently exist in relation to generators are discussed further at paragraph 4.21 below.

4.7. The EA 1989 defines the transmission system in England and Wales to include assets of over 132kV and above whereas in Scotland it includes assets of 132kV and above.

4.8. By virtue of section 7 of the EA 1989 the Authority may include in a licence such conditions (whether or not relating to the activities authorised by the licence) as appear to it to be requisite or expedient having regard to the duties imposed under sections 3A to 3C[20]. Furthermore, section 8A allows licences to

[14] Section 3A(1).
[15] Section 3A(4).
[16] Section 3B(2).
[17] Section 4(1).
[18] Section 6
[19] Section 5(1).
[20] Section 7(1)(a).

incorporate standard conditions by reference to them and also allows the Authority to modify them to such extent as it considers requisite to meet the circumstances of a particular case. The EA 1989 also provides the Authority with the power to ensure enforcement with any licence conditions that it imposes through the imposition of orders securing compliance and provides the Authority with the ability to levy financial penalties for non-compliance[21].

4.9. Of particular relevance to this paper are the licence conditions imposed on distribution and transmission licensees in England and Wales regarding their charging regimes as well as those relating to the requirement for industry codes such as the BSC, CUSC and Grid Code and those relating to non – discrimination. These licence conditions are discussed in more detail in Chapter 5.

Renewables Obligation

4.10. As a result of section 32 of the EA 1989 and the orders made under it[22], all licensed electricity suppliers in GB are under an obligation (known as the Renewables Obligation) to source a growing percentage of their total sales from eligible renewable sources.

4.11. Compliance with the Renewables Obligation is demonstrated by presenting Renewables Obligations Certificates ("ROCs") to the Authority in respect of year long periods. ROCs are issued to accredited generators for eligible renewable electricity generated within the UK and supplied to customers in GB. As an alternative to supplying renewable energy, suppliers may fulfil part or their entire obligation by paying a buyout price to the Authority which is adjusted in line with the retail prices index. The proceeds are then returned to suppliers in proportion to the number of ROCs that each supplier presents to discharge this obligation.

[21] Sections 25 and 27A.
[22] The Renewables Obligation Order 2002 (SI 2002/914) and Renewables Obligation (Scotland) Order 2002 (SI 2002/163)

Competition legislation

4.12. As well as the regulatory framework provided for under the EA 1989, the electricity industry is also subject to both EU and UK competition legislation and, in particular, Articles 81 and 82 of the EC Treaty and the Competition Act 1998[23].

Articles 81 and 82 of the EC Treaty

4.13. Articles 81 and 82 of the EC Treaty apply to the electricity industry and prohibit certain types of anti-competitive arrangements and conduct. Article 81 prohibits any agreements between undertakings, decisions by associations of undertakings and concerted practices which have the object or effect of preventing, restricting or distorting competition and which may affect trade between Member States. Article 82 prohibits any abuse of a dominant position in a market which may affect trade between Member States. The potential consequences of infringing these prohibitions include fines and claims from third parties. Furthermore, any agreement infringing Article 81 is void.

Competition Act 1998

4.14. The Competition Act 1998 (the CA 1998), which repealed the Restrictive Trade Practices Act 1976 amongst others, reflects Articles 81 and 82 of the EC Treaty by prohibiting certain types of anti-competitive arrangements and conduct. Any agreements between undertakings, decisions by associations of undertakings and concerted practices which have the object or effect of preventing, restricting or distorting competition in the UK which may affect trade within the UK are prohibited under the Chapter I prohibition and any abuse of a dominant position in a market in the UK and which may affect trade in the UK is prohibited under the Chapter II prohibition. The potential consequences of infringing these prohibitions are also similar and include fines and claims from third parties. Furthermore, any agreement infringing the Chapter I prohibition is void.

[23] The Enterprise Act 2002 also applies to the electricity industry and provides that those persons dishonestly engaging in any price fixing, market sharing, limitation of production or "bid-rigging" arrangements will be committing a criminal offence.

EU Directives

4.15. There are also two EC Directives which are directly related to the electricity industry in GB and the effect of which also impacts upon small generators.

4.16. The first, the EC Directive concerning common rules for the internal market in electricity[24] establishes the framework for Member States to open up part of their electricity markets to competition. It addresses a number of issues including open, non-discriminatory and transparent rules of access to electricity networks.

4.17. The second, the EC Directive on the promotion of electricity produced from renewable sources[25]must be implemented by October 2003. The Directive includes a requirement that Member States ensure that the charging of transmission and distribution fees does not discriminate against electricity from renewable energy sources, including in particular electricity from renewable energy sources produced in peripheral regions, such as island regions and regions of low population density.

Proposed changes to the legal framework under BETTA

4.18. As part of the implementation of BETTA it is proposed that the legal framework should be altered by amending section 4 of the EA 1989 to create a prohibition on participation in the transmission of electricity.

4.19. In addition, it is proposed that the Secretary of State be granted powers to modify special and standard licence conditions of electricity licences for the purpose of introducing BETTA.

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[24] Directive 96/92/EC of the European Parliament and the Council of 19 December 1996 concerning common rules for the internal market in electricity. This Directive will be repealed by Directive 2003/54 of the European Parliament and of the council concerning common rules for the internal market in electricity on 1 July 2004. Directive 2003/54 provides for the further liberalisation of the internal market in electricity.
[25] Directive 2001/77/EC of the European Parliament and the Council of 27 September 2001 on the promotion of electricity produced from renewable sources in the internal market electricity.

Framework for licence exemption

4.20. As mentioned in paragraph 4.6 above, section 5 of the EA 1989 enables the Secretary of State to exempt an individual party or class of parties through the issue of an order from the prohibition on the generation, transmission, distribution and supply of electricity without a licence. To date the Secretary of State has issued three orders under section 5[26].

4.21. The first of these established a series of classes which were exempt from the requirement to hold a licence. The Order establishes four classes of generator that are automatically exempted from the prohibition on generation. The classes, in essence, consist of persons who do not hold a generation licence and who:

- do not export more than 10MW from any one generating station or those that do not export more than 50MW (where the declared net capacity is less than 100MW)
- only generate electricity at a generating station which is on an offshore installation and who only supply such electricity to premises which are or are part of an offshore installation
- only provide electrical power from generating stations which were connected to the system in England and Wales on 30 September 2000, and are not normally capable of exporting more than 100MW, or
- only provide electrical power from generating stations which were connected to the system in England and Wales on 30 September 2000 (if their maximum generation capacity has not since been increased) and were not required to submit those stations to central despatch.

4.22. The Class A exemption described above uses the concept of declared net capacity. The Order stipulates how this is to be calculated. The calculation varies depending on the fuel source used.

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[26] The Electricity (Class Exemptions from the Requirement for a Licence) Order 2001, SI 2001/3270 and the Electricity (Exemption from the requirement for a Generation Licence) (England and Wales) Order 2002, SI 2002/823.

4.23. For generating stations driven by means other than water, wind or solar power, declared net capacity is the highest generation of electricity which can be maintained indefinitely without causing damage to the plant (less so much of that capacity as is consumed by the plant).

4.24. For generating stations driven by water, wind or solar power declared net capacity is as set out in the above paragraph, divided by a factor (B). The value of B is defined in the Order and depends on the type of generating plant, as set out in Table 1 below:

Table 1

Description of station	**Value of B**
Tidal or wave power	0.33
Any form of water power other than tidal or wave power	1
Wind power	0.43
Solar power	0.17

4.25. The second Order does not extend to Scotland. It provides for an exemption for Powergen CHP Limited in relation to its Stoke CHP generating station and Powergen Cogeneration Limited in relation to its Castleford CHP generating station on condition that Powergen CHP Limited and Powergen Cogeneration Limited do not hold generating licences, their respective generation stations are connected to the system and are not normally capable of exporting more than 100MW to the system. The third Order provides for an exemption for NWP Offshore Limited in relation to its North Hoyle generating station on the same basis.

4.26. In the past twelve months, DTI has consulted on nine individual applications for licence exempt status, and has received a number of other applications on which it has yet to consult. North Hoyle was the first of these. All relate to plant that is capable of exporting between 50 and 100 MW to the total system.

Ofgem/DTI views

4.27. BETTA will create a single GB market for trading wholesale electricity. The framework for licence exemption influences, to some extent, the terms upon

which generators will participate in this market. It would appear to be appropriate to ensure that all similar generators participating in this market are treated in a similar fashion. The licence exemption framework is a potential way in which similar generators located in different parts of GB might be treated differently.

4.28. For generators connected after 30 September 2000 the licence exemption regime is identical. A generator is licence exempt if they meet the criteria set out in Class A or Class B above, or if they apply successfully for an individual licence exemption to the Secretary of State.

4.29. However, for generators connected prior to 1 October 2000, there is a potential difference in treatment between England and Wales and Scotland. Specifically, a generator which is capable of exporting between 50 and 100MW and was connected before 1 October 2000 would be automatically licence-exempt if it was located in England and Wales, but would not be automatically licence-exempt if located in Scotland.

4.30. It is possible for individual parties to seek to remove any such differences in practice through application to the Secretary of State for an individual exemption, with the exemption given effect through a new Order. However, this is inevitably more onerous than the process implied for a generator which is licence-exempt under the class exemption Order, where the generator has simply to assure itself that it is eligible for an exemption under one of the four criteria specified in the Order.

4.31. Ofgem/DTI propose that all generators connected before 1 October 2000 should automatically be licence exempt regardless of their location. Ofgem/DTI would welcome any views on this proposal.

5. Current arrangements in England and Wales

5.1. In developing the market rules to apply under BETTA, the basis for consultation under BETTA is the arrangements that prevail in England and Wales. This section explains the key elements of these arrangements, highlighting those aspects which have particular relevance to small generators.

5.2. The purpose of the chapter is to provide a broad overview of the context within which small generators operate in England and Wales, and to enable the issues discussed later in this document to be placed in context.

5.3. The chapter has five sections:

- Balancing and Settlement Code ("BSC")
- Connection and Use of System Code ("CUSC")
- Grid Code
- Transmission charges, and
- Distribution charges.

5.4. Within each section there is a short description of the legal framework within which each of these documents is created and operates, and an outline of the particular aspects that have most relevance to small generators.

BSC

5.5. It is a standard condition of the transmission licence for England and Wales (NGC's transmission licence) to have in force a BSC which sets out the terms of the balancing and settlement arrangements for the total system. The BSC is designed so the arrangements facilitate the achievement of certain objectives which are set out in the Transmission Licence. The BSC also sets out flexible procedures for its modification.

5.6. The BSC is given contractual force through a framework agreement. The obligation to be a party to the BSC Framework Agreement and to comply with the BSC is a standard condition of all generation, transmission, distribution and

supply licences applying to parties operating in England and Wales. Other parties may voluntarily accede to the BSC Framework Agreement if they wish to trade electricity (either physically or on a financial basis only). In addition, it is a requirement of certain parties to the CUSC to also be parties to the BSC (see below).

5.7. The primary purpose of the BSC is to provide for the calculation and subsequent settlement of energy imbalances. It also sets out market-based arrangements (the "Balancing Mechanism") for the provision of balancing services to NGC in timescales close to real time.

5.8. In order for imbalances to be calculated, flows of electricity onto and off the system must be attributed to individual parties. The BSC sets out who is to be responsible for particular exports and imports, and the responsibilities of those parties. Responsible parties are obliged to:

- ensure that appropriate metering equipment is installed
- register metering systems[27]
- establish and register Balancing Mechanism Units ("BM Units"), and
- allocate BM Units to a Trading Unit.

5.9. The BSC stipulates that a generator shall be responsible under the BSC for exports from its plant. There is an exception in the BSC for exemptable plant, where the generator is able to nominate another BSC party to be responsible on its behalf[28].

5.10. The technical requirements for metering equipment are set out in subsidiary documents to the BSC (the metering Codes of Practice). The requirements set out in the Codes of Practice vary by export or import capacity. There are also provisions within the BSC for derogations to be granted in certain circumstances against the requirements in the Codes of Practice.

[27] Metering equipment that a party is or will be required to install.
[28] Section K, 1.2.2(a)(ii) –exemptable plant is plant where the party responsible would not be required to hold a generation licence if it had no other generation interests.

5.11. There are two ways in which metering systems can be registered under the BSC: Central Meter Registration Service ("CMRS"), and; Supplier Meter Registration Service ("SMRS"). Metering systems that measure imports and exports of plant and apparatus at boundary points connected to the transmission system are required to be registered in CMRS. Metering systems at boundary points to distribution systems can choose to be registered in SMRS or CMRS. Licensed generation must also be registered in CMRS regardless of where it is located.

5.12. The BSC uses the concept of Grid Supply Point (GSP) Groups in order to categorise metering systems of supplier BM Units not directly connected to the transmission system. The boundaries of GSP Groups are broadly equivalent to the boundaries of the ex-Public Electricity Supplier (PES) distribution networks.

5.13. A BM Unit can, in some circumstances, comprise more than one metering system. For example, a BM Unit can be comprised of any number of SMRS-registered metering systems (provided that they are all in the same GSP Group). For example, the metering system associated with a distribution-connected generator can form a BM Unit with the metering systems of a Supplier within the same GSP Group, with the relevant volumes under the BSC being the net volumes of that combination.

5.14. Further, it is possible for two Suppliers to enter into a "Shared SVA Meter Arrangement" by which either the export from or the import to (but not a combination of the two) the same plant or apparatus can be shared between the two Suppliers. The sharing is on the basis that one Supplier takes a fixed amount of the export or import (as the case may be) and the other Supplier takes the variable portion which remains. The variable portion may be an export or an import.

5.15. The plant and apparatus comprising a BM Unit with a single metering system registered in CMRS must be registered as a single BM Unit[29]. However, the BSC also provides in some instances for the grouping together of more than one BM Unit. This is termed a Trading Unit. The formation of Trading Units is limited to BM Units within the same GSP Group, or co-located transmission-connected BM Units.

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[29] Section K, 3.1.4(a)

5.16. A recent modification to the BSC has created the concept of a Base Trading Unit within each GSP Group. All Supplier BM Units and Exempt Export BM Units within each GSP Group are deemed to form part of the Base Trading Unit, although parties are able to opt out of the Base Trading Unit if they wish.

5.17. The BSC rules for registering meters and forming BM Units and Trading Units have a number of implications for the nature of liabilities under the BSC. There are four main areas.

- **ELEXON Costs** – the administration of the BSC is undertaken by ELEXON as the BSCCo. ELEXON is a not-for-profit organisation. Its costs are recovered from BSC parties. The structure of ELEXON charges is specified in the BSC. Some cost elements are recovered on a flat (per BM Unit) basis, while other costs vary on the basis of BM Unit metered volumes. The way in which parties form BM Units therefore affect their individual liability for these charges.

- **Transmission Losses**[30] - The BSC sets out rules for the contribution of BSC parties towards the total quantity of transmission losses. The adjustment is made through the application of "loss factors" to the BM Unit Metered Volumes prior to the calculation of energy imbalances (and other matters).

- **Residual Cashflow Reallocation Cashflow (RCRC)** – Absent the RCRC it would be possible under the BSC for a difference in any given settlement period to arise between total payments made to parties and total charges levied on parties. The BSC sets out how any such surplus or deficit RCRC is recycled. The reallocation is based on BM Unit metered volumes. The charge or payment for individual parties therefore depends on how BM Units are configured in Trading Units.

5.18. In England and Wales currently all licence exemptable plant is distribution connected. It is therefore possible under the BSC for all such generators to form a BM Unit with a local (i.e. within the same GSP Group) supplier. In effect, the

[30] There is a difference between the total amount of energy put on to the transmission and the amount available to be taken off the transmission system. This represents energy consumed by the transmission system itself (e.g. through energy lost in the form of heat from the wires), and is termed 'transmission losses'.

small generator 'sits behind' the Supplier BM Unit. The vast majority of small generators in England and Wales choose this trading option. It has the following characteristics:

- the risk of imbalance (as a result of the generator failing to generate as anticipated one hour before real time, with the associated exposure to imbalance prices) is borne in the first instance by the Supplier as registrant of the Supplier BM Unit
- transmission losses are applied to the net imports or exports from the Supplier BM Unit, i.e. imports net of any embedded generation
- the generator can only participate in the Balancing Mechanism indirectly, via the supplier, and
- the supplier BM Unit's metered volumes are lower than they would otherwise be for the purposes of calculating trading charges in respect of ELEXON's costs, and in respect of payments or charges associated with RCRC.

5.19. The ability for the supplier BM to reduce its liability for BSC trading charges, contribution to transmission losses, and eligibility for RCRC payments (or charges) by forming a BM Unit with a distribution-connected generator are elements of what is collectively termed 'embedded benefits'. There are other elements to embedded benefits, relating to transmission charging (see below).

5.20. Embedded benefits under the BSC are not available to transmission-connected generators. The BSC does not permit transmission-connected generators to register in SMRS (which in turn means that they cannot 'sit behind' a supplier BM Unit) or form Trading Units.

CUSC

5.21. The requirement to offer terms to a party wishing to connect to or use a licensee's transmission system is a standard condition of a transmission licence. In addition, NGC as the transmission licensee for England and Wales is required

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In England and Wales transmission losses account for 1.5% to 2% of total electricity generated.

under its license to prepare a CUSC setting out the terms of the arrangements for connection to and use of its system and to establish and operate procedures for the modification of the CUSC.

5.22. The CUSC is given contractual force through a Framework Agreement. All generation, transmission, supply and distribution licensees in England and Wales are obliged through their respective licenses to become parties to the CUSC Framework Agreement and to comply with the CUSC. Unlicensed parties who are connected to the transmission system are required by NGC to become a party to the CUSC Framework Agreement in entering into a connection agreement with NGC.

5.23. In addition, distribution-connected unlicensed parties might also be required to sign up to the CUSC, albeit through a less direct route. The CUSC obliges Distribution Network Operators ("DNOs") not to energise a new connection or to permit ongoing use of its system until the relevant party has completed a CUSC use of system application and has entered into an appropriate form of bilateral agreement with NGC. It might be the case in these circumstances that no bilateral agreement is determined to be necessary.

5.24. The CUSC deals with commercial arrangements for the use of the transmission system, and some aspects of connection to it. It covers such matters as requirements for security cover, payment terms, arrangements in the event of default and the provision of data to NGC in order to calculate charges.

5.25. It is a requirement of the CUSC that a party enters into appropriate bilateral agreements with NGC. Standard forms of these bilateral agreements are published as exhibits to the CUSC. The bilateral agreements include site-specific connection agreements which, among other things, require parties to pay the relevant (i.e. in line with NGC's charging methodology statements – see below) connection charges.

5.26. There are also bilateral agreements relating to the provision of mandatory ancillary services (if it is a requirement of the Grid Code for a particular generator to provide such services), and agreements relating to site access.

Grid Code

5.27. It is a standard condition of a transmission licence that the licensee shall have in force and implement and comply with a Grid Code which covers the technical aspects of connecting to and using the transmission system. The Grid Code includes sub-codes dealing with connection to the system, operation of the system and planning the system. All generation, supply and distribution licensees are obliged to comply with the Grid Code and also people who have bilateral connection and use of system agreements with NGC.

5.28. In Scotland, there is a single Grid Code (the Scottish Grid Code) which is maintained by both transmission licensees in the area, SP Transmission Ltd (SP Transmission) and Scottish Hydro Electric Transmission Limited (SHETL). The Scottish Grid Code is of a broadly similar structure to the England and Wales Grid Code but has different technical requirements, including those that relate to the size of plant to which requirements apply.

Transmission charges

5.29. There are licence conditions stipulating how NGC, in recovering its allowed revenues, calculates charges for individual users. These licence conditions use the concept of a charging methodology. NGC is required to develop methodologies for use of system charges and for connection charges. It is required to ensure that agreements with users comply with these methodologies.

5.30. The charging methodologies are required to meet certain relevant criteria[31]. NGC is obliged to keep its methodologies under constant review, and to bring forward proposals for change if in its view such changes would result in a methodology that better met the relevant objectives. NGC is required to publish methodology statements which are to be approved by Ofgem. Proposed changes to the methodology statements must be consulted upon with users. Ofgem can veto proposed changes following consultation with users.

[31] The relevant criteria are set out in the Standard Licence Conditions of NGC's Electricity Transmission Licences. The relevant criteria for use of system are set out in Condition C7A(5) and for connection in Condition C7B(11).

NGC's current use of system charging methodology

5.31. The use of system charging methodology currently adopted by NGC has two elements. The first element relates to Transmission Network Use of System (TNUoS) charges. The second element relates to Balancing Services Use of System (BSUoS) charges.

5.32. As noted above, NGC is obliged through its licence to keep its methodologies under constant review to ensure that changes that would have the effect of better meeting the relevant criteria are identified and brought forward. During 2003 NGC has undertaken a process of review and industry consultation, and in September 2003 consulted on a number of specific changes to its connection and use of system charging methodologies. It is anticipated that NGC will shortly bring forward formal change proposals to Ofgem for consideration. Ofgem has a period of 28 days within which it can veto proposed changes.

5.33. Further details on the outcome of NGC's charging review can be found on the charging page of NGC's website[32].

TNUoS

5.34. NGC's TNUoS charges are levied on generators and demand. Charges vary by location. There are fifteen charging zones for generation and twelve charging zones for demand. The charging zones for demand are in line with DNO authorised areas. NGC's charging review has led to a preliminary view that it might be appropriate to increase the number of charging zones for generation, to around thirty five zones.

5.35. The TNUoS tariff in each zone is published as a single figure in NGC's charging statement[33]. However, it can be considered to have two elements:

- a charge that varies by zone to reflect the costs imposed on the network by users in that area. This is derived using a stylised representation of available transmission routes to estimate the difference in marginal cost (in terms of additional km of transmission line) of increments in

[32] www.nationalgrid.com/uk/indinfo/charging/index.html
[33] With the exception of demand tariffs which are published as £/kW figure for half-hourly metered

generation or demand at each node on the network[34] (average across nodes in each zone), and

- a flat charge to reflect the overall cost of providing a secure network. This second element is used so that NGC is able to recover its total allowed revenue, and to ensure in aggregate that generator charges account for 27 per cent of total TNUoS revenue.

5.36. The following parties are liable for NGC's generation TNUoS charges:

- the Lead parties of BM Units comprising Licensable Generation from which the whole or part of a Power Station or Trading Unit that is capable of exporting 100MW or more, as agreed with NGC
- the Lead parties of BM Units comprising generation that has a Bilateral Connection Agreement with NGC, and
- Interconnector Asset Owners capable of exporting 100MW or more.

5.37. Hence, distribution-connected generators with capacity greater than 100MW attract a liability for TNUoS charges, but small distribution connected generators do not (unless they choose to participate in the Balancing Mechanism). Further, all transmission-connected generators, regardless of size, attract a liability for TNUoS charges.

5.38. In addition, distribution connected generators who are not liable for TNUoS charges receive a payment from NGC if they are generating at system peak. This is another element of 'embedded benefits'. The payment is based on the demand tariff for the zone within which the generator is located. In effect, small distribution-connected generators are treated as negative demand for charging purposes. This payment is therefore highest in zones where demand charges are highest. The payment is intended to reflect the value to NGC of distribution-connected generation reducing demands that would be placed on the transmission system.

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customers and as a £/kWh figures for non-half-hourly metered demand.

[34] NGC's charging review is considering the relative merits of alternative ways of modelling the network to derive the locational element to TNUoS charges, including the use of DC load flow models.

BSUoS

5.39. Balancing costs are recovered via BSUoS charges, which cover the costs of bids and offers accepted in the Balancing Mechanism provided for in the BSC, the costs of all balancing services, a number of other adjustment parameters, a level of associated internal costs, and any associated incentive payments under NGC's balancing services revenue restriction.

5.40. All CUSC Parties are liable for BSUoS charges based on the energy which they take from or supply to NGC's system in each half hour Settlement Period. BSUoS charges do not vary by location, and are levied equally on generation and demand. The average BSUoS charge during 2002/03 was 60p per MWh.

5.41. The metered volumes used to calculate BSUoS are those used to calculate energy imbalances under the BSC. Therefore, the charges faced by any individual party will depend on how they form BM Units and Trading Units. The flexibility available to distribution-connected exemptable generating plant in this regard means, in effect, that the output of the generator can reduce another party's liability for BSUoS. This is another form of 'embedded benefit'.

Connection

5.42. The connection charging methodology adopted by NGC currently is based on the site-specific attribution of connection assets to individual users. The charges faced by each user are determined by the capital value of these assets (in particular, the depreciation charge and rate of return associated with the assets) and associated maintenance costs.

5.43. Connection assets are identified by NGC using a 'shallow' approach, i.e. it does not include within the definition of connection assets those assets that might be required to reinforce the main interconnected network to accommodate a new connection. It does, however, include assets that are shared between a number of parties connecting at the same point.

5.44. NGC has brought forward a change proposal, in the light of its charging review, to exclude all shared or shareable assets from the definition of connection. Shared or shareable assets would, consequently, be reclassified as system assets,

with the associated costs recovered through use of system charges rather than connection charges. This proposal is currently being considered by Ofgem.

Distribution charges

5.45. Each DNO has a condition within its licence restricting the total revenue it is permitted to recover from users of its distribution system. These revenue restrictions require that average charges fall in real terms year-on-year.

5.46. DNOs are required to have in place a statement of connection and use of system charges. DNO's are required by their licenses to ensure that charges levied for connection and use of system are transparent and non-discriminatory.

5.47. The structure of charges adopted is broadly similar across DNOs. There are variations in the level of charges reflecting differences in allowed revenues under the various prices controls and differences in the underlying charging bases. There are also some differences across DNOs in how the underlying charging principles are interpreted.

Use of system charges

5.48. DNO charges for use of system are levied on demand customers. There is no use of system charges for generators.

Connection charges

5.49. Generators connecting to a distribution network are liable for charges based on the cost of the assets directly required by the new connection plus the cost of any necessary reinforcement of shared assets. The charges faced by an individual generator are therefore site-specific and dependent on network capacity at the time at which they connect. The boundary between connection and system assets is therefore 'deeper' than that adopted by NGC currently.

Ofgem review of the structure of distribution charges

5.50. Ofgem and the industry have been working for some time on a project to review the structure of charges levied by electricity distribution companies. One of the key drivers for this work has been the extent to which the existing structure of

distribution charges is appropriate given the continuing growth of distribution connected generation. This work has been progressed through a series of consultation documents and open workshops.

5.51. Ofgem has also established a steering group to further progress this work. The Implementation Steering Group (ISG) initially met on 25 September 2003. Proposed terms of reference for the group were subsequently published on 10 October 2003. These set out the key objective of the group as being to consider the issues associated with adopting a common set of distribution charging objectives, the boundary between connection and use of system charges and the introduction of generator distribution use of system charges. The terms of reference also confirmed that the Group would meet bi-monthly, it would comprise a small cross section of the industry chaired by Ofgem and would run at least initially until the end of 2004.

5.52. This work is being taken forward with the intention that changes to the present charging regime should be timed to come into effect no earlier than the start of the next distribution price control period in April 2005. However, it is also recognised that some changes may take longer than this and may potentially not come into effect until 2010.

5.53. In November Ofgem published an initial decisions document on the structure of electricity distribution charges[35]. In light of a number of concerns expressed in response to the June 2003 consultation over the feasibility of implementing wide-ranging changes by April 2005, Ofgem modified it proposals. The November paper proposed that the most tractable problems with the current structure should be addressed for April 2005. These included developing a common connection boundary for demand and generation, the proposal that generators should no longer pay 'deep' connection charges and potential changes to the charging framework to avoid unnecessary unpredictability including long-term tariff models. On the other hand, the decision on the approach for charging users to apply in the longer term will be made in 2006. These proposals will be developed by the ISG.

[35] Structure of Electricity Distribution Charges - Initial decision: Ofgem, Nov 2003 #142/03

6. BETTA and small generators

6.1. This chapter reviews the BETTA reforms as a whole from the perspective of small generators.

6.2. The purpose of BETTA is to promote effective competition in the trade of wholesale electricity across GB. Effective competition requires that barriers to market entry and exit are minimised, and that all parties can participate in the market on equal (i.e. non-discriminatory) terms.

6.3. The basis for consultation under BETTA is the trading and transmission arrangements that prevail in England and Wales. These market rules support a competitive market in which generators of varying sizes participate. The current arrangements in England and Wales therefore provide in Ofgem/DTI's view a sensible starting point for consultation.

6.4. It is recognised that issues are raised by the transition to GB market arrangements, such that the arrangements in England and Wales might need to be modified for application across GB. Ofgem/DTI are consulting on the issues raised in respect of each core industry code, including consultation on draft legal text. This document takes a view across the piece at the arrangements that have most relevance to small generators. This thematic approach is being used by Ofgem/DTI to complement to ongoing consultation in respect of each individual industry code.

6.5. The issues discussed in this chapter are grouped under two sub-headings: 'Transmission' and 'Trading'. The same sub-headings are used in subsequent chapters, where specific issues are identified and discussed, and where views are invited.

Transmission

6.6. BETTA will result in two key changes for users of the transmission system. First, transmission services will be provided to users by the GB system operator, rather than the host transmission licensee (including, in the case of SP Transmission and NGC, in their capacity as owners of the assets that comprise the Anglo-Scots interconnector) as is currently the case. Second, the rules governing the

relationship between users of the transmission system (including the charging arrangements) will be common across GB.

6.7. There will be four key GB-wide documents in this regard:

- a GB CUSC
- a GB Grid Code
- GB transmission charging methodologies for connection and use of system, and
- a GB BSC.

6.8. There are a number of benefits for generators resulting from the change in structure of the transmission system. The key theme running through these benefits is the concept of non-discrimination. The arrangements are intended to ensure that comparable generators across GB have access to the same commercial opportunities, and are subject to obligations derived from the consistent application of common principles.

6.9. The creation of a level playing field is particularly important in facilitating market entry by new generators and suppliers. In turn, this could be expected to be particularly relevant to small generators. The benefits of BETTA in this regard are:

- the provider of transmission services to users (i.e. the GB system operator) would be independent of generation and supply interests, hence moving away from the current situation whereby new connectees in Scotland must contract for transmission services with an affiliate of a competitor
- the charges for connecting to and using the transmission system would be calculated on a consistent basis for all generators and suppliers. Arbitrary differences in how transmission costs are recovered from users across the three transmission areas (and the Anglo-Scots interconnector), which must inevitably work to the disadvantage of some generators in the context of a single GB market, would not therefore be possible, and

- the market rules would be rationalised within a single GB CUSC, GB Grid Code and GB BSC and users would be equally enfranchised across GB in terms of the ability to propose changes (and to comment on changes proposed by other parties).

6.10. The BETTA reforms will introduce significant changes to the transmission arrangements affecting small generators in Scotland which are directly connected to the transmission system. Currently, there is around 1GW of generation capacity connected to the 132kV transmission network in Scotland. Distribution-connected generators in Scotland will also experience a degree of change as a result of the operation of embedded benefits. The extent of change for generators in England and Wales will be more limited.

Trading

6.11. The key change under BETTA in respect of the trading of electricity is the introduction of GB arrangements for balancing and settlement, set out in a GB BSC and operated by a GB BSCCo. Consequently, as a result of GB arrangements for calculating imbalance, parties will trade GB energy rather than England and Wales energy or Scottish energy. The concept of trading across the Scotland-England interconnector will be removed.

6.12. This is an important development for generators across GB, but has particular significance for generators in Scotland. Access to a much larger market on non-discriminatory terms is particularly important for the development of the generation sector in Scotland, including small and renewable generators, because of the limited amount of domestic demand in Scotland.

6.13. Under the current trading arrangements in Scotland the two host generation businesses face different imbalance arrangements to independent generators and have fundamentally different obligations. For example, the two host generation businesses are obliged to provide wholesale energy to third parties at a regulated price. These arrangements collectively provide for a much less liquid market for generators in Scotland relative to their counterparts in England and Wales.

6.14. The liquidity of the energy market might be expected to affect the extent to which renewable generators can obtain a competitive price for ROCs. Arguably,

providing access to a deeper, more liquid market will enable renewable generators in Scotland to realise a better price for their product (including ROCs). It will certainly increase available trading options, e.g. by trading energy and ROCs separately.

6.15. Further, the introduction of GB balancing and settlement arrangements based on those in place in England and Wales will streamline the market rules for parties trading across more than one transmission area under the current arrangements, and will provide greater scope for participation (through the ability to propose modifications and to comment on modification proposals) in the development of those market rules over time, and furthermore is anticipated to introduce to such generators the concept of financial remuneration for denial of access to the transmission system in certain circumstances, a feature of the existing arrangements in England and Wales. Finally, such generation may have an opportunity to provide and be remunerated for other balancing services.

6.16. All of the above elements might be expected to be particularly beneficial for small generators. A single set of market rules might be expected to reduce the cost and complexity of entering the market – which might otherwise be prohibitive for small generators wishing to trade across GB. More inclusive and transparent governance arrangements under a GB BSC might be expected to provide small players and new entrants with greater scope to address any ways in which market rules operate to the advantage of larger incumbents. Independence in the provision of access to and use of the transmission system should enhance market confidence in the trading and transmission arrangements.

7. Emerging issues

7.1. The specific implications of the BETTA reforms for small generators have been raised through a number of different consultation processes over recent months. The three specific processes that have generated issues are:

- pre-legislative scrutiny of the draft E(TT) Bill by the TISC
- responses to specific BETTA consultation documents, and
- ad hoc discussion and correspondence between interested parties and Ofgem/DTI.

7.2. Ofgem/DTI has collated these emerging issues and, together with its own analysis, has generated a consolidated list of issues where further consultation is considered appropriate or where Ofgem/DTI believes it would be useful to set out its views. This chapter summarises the issues that parties have identified through public consultation and sets out Ofgem/DTI's consolidated list of issues.

Pre-legislative scrutiny of the E(TT) Bill

7.3. The process of pre-legislative scrutiny of the E(TT) Bill provided an opportunity for parties to submit written and oral evidence to the TISC. A number of parties raised issues relating to the treatment of small generators, and this was in turn reflected in the Committee's report.

7.4. There were two broad themes:

- the different definition of transmission voltages adopted in England and Wales compared to Scotland, and the associated differences in treatment for 132kV connected generation, and
- the use of the England and Wales market arrangements as a basis for consultation for GB arrangements, and perceived difficulties for small generators operating under the England and Wales arrangements.

Differences in transmission voltage definitions

7.5. A number of respondents raised the issue of the different voltage definition of transmission adopted in England and Wales compared to Scotland. Typically 132kV is a distribution voltage in England and Wales but a transmission voltage in Scotland.

7.6. One party considered that the pursuit of a single set of trading and transmission arrangements for GB would be compromised by the different treatments of the 132kV network in Scotland, putting Scottish generators at a disadvantage.

7.7. A number of parties contended that a failure to address this issue would result in 132kV-connected generators in Scotland being unduly disadvantaged. In the view of these parties such a position would run counter to the Government's objectives in respect of the growth of renewables, given the current and anticipated amount of generation from renewable sources in Scotland.

7.8. A number of parties suggest possible remedies. One party felt that way forward would be to re-designate the Scottish 132kV assets as distribution assets by an appropriate amendment to the definition of 'high voltage lines' within Section 64 of the EA 1989. Another party argued that the definition of transmission could be retained, but that adjustments would need to be made to industry codes to ensure that parties of the same size connected at the same voltage operated under the same commercial conditions, irrespective of whether the connection voltage is defined as transmission at the point of connection.

7.9. The TISC report noted that:

> *"It is contrary to the principles of open competition that generators connected to the electricity network at 132kV in one part of the country and supplying only their local network should have to incur costs which are not borne by competitors of similar size doing the same thing in another part of the country. Whether by regulation or amendment of the industry codes to exempt small generators from the burden of transmission charges, or by other means, an equality of treatment must be established among generators connected at 132kV"*

7.10. The report did not therefore directly advocate a change in the definition of transmission set out in the EA 1989 as a means of providing an equality of treatment for generators connected at 132kV.

7.11. In it response to the report, the Government agreed that small generators directly connected to 132kV should be treated in a non-discriminatory way (vis a vis their counterparts in England and Wales).

Consultation based on England and Wales arrangements

7.12. The cost of participating in the market in England and Wales for small generators was raised by a number of respondents. One particular issue was the difficulty for small players to keep up with the many rule changes since the introduction of the market arrangements. Other parties noted that the imbalance arrangements under NETA were perceived to be particularly difficult for small generators with uncertain output.

7.13. A number of parties raised a general concern that the market arrangements in England and Wales had created difficulties for small generators (both renewables and CHP) in England and Wales, and that BETTA would magnify these difficulties. One respondent stated that the England and Wales market arrangements should not be adopted into BETTA without sufficient changes and reforms. It was, however, recognised that changes to the BSC since NETA go live had reduced the extent of these perceived difficulties. It was also noted that DTI has taken steps to reduce such difficulties through its support for organisations that provide information to small generators.

7.14. One party raised a concern about the unpredictability of the output of small generators and the extent to which the England and Wales arrangements penalised such unpredictability through the imbalance arrangements and the Balancing Mechanism.

7.15. One party expressed a view that there were factors inherent in the England and Wales arrangements which resulted in Combined Heat and Power ("CHP") plant realising lower prices than other generators. This respondent drew a comparison with arrangements under the Electricity Pool, which the respondent viewed as more favourable towards CHP plant.

7.16. A number of parties specifically voiced support for the re-introduction of capacity payments. One party expressed a view that the opportunity presented by BETTA should be used to change the requirement to notify contracts in advance of real time. In its view this characteristic of the England and Wales arrangements placed a significant burden on small players and those with uncertain outputs such as renewable generation. The party was also concerned about the use of two cash out prices for imbalances and the lack of a capacity payment.

7.17. The TISC report highlighted the need to ensure that the introduction of BETTA did not result in obstacles to small generators of the same magnitude as experienced by small generators upon implementation of NETA. It noted that some of the difficulties cited by parties, and in particular in relation to the cost of doing business under the NETA arrangements, were similar to evidence provided to an earlier investigation of these issues. While the report welcomed the demonstrated flexibility in the market rules and DTI's actions to provide support to small players, it questioned the extent to which the changes had had any effect yet.

7.18. In its response to the report, the Government listed the changes that had been made under NETA which were helpful to small generators, and explained why BETTA would create a more accessible route to market for all types of generators. The Government went on to say that:

> *"… we appreciate the ongoing concerns of industry participants. We will continue to monitor the progress of CHP and renewables under NETA as well as consulting extensively on small generators under the BETTA process. The result of this consultation will help us as to further steps needed to ensure that our targets for renewable energy generation, as outlined in the White Paper, are in no way hindered by BETTA."*

Responses to BETTA consultation documents

BSC consultation responses

7.19. In December 2002 Ofgem/DTI published a consultation paper on a GB BSC. Eight respondents commented on issues relating to small generators. Of these,

four commented specifically on the treatment of 132kV connected generators in Scotland. Ofgem/DTI has subsequently published a further document in the light of consultation responses.

7.20. One respondent, whilst recognising that the 132kV network in Scotland has a different role from the 132kV network in England and Wales, commented that the differences in treatment between distribution and transmission connected generators were material. The respondent also noted that if generation connected at 132kV were not eligible for embedded benefits, then this could affect the development of renewable generation in Scotland. Another respondent noted that the issue of small generators connecting at transmission level is particularly relevant to Scotland due to the projected growth of Scottish renewable projects.

7.21. One respondent expressed concern that small generators connected at 132kV in Scotland would face more complex trading arrangements than if they were connected at distribution level. This respondent proposed that 132kV should therefore be reclassified as distribution in Scotland.

7.22. One respondent suggested that industry codes to be implemented under BETTA, including a GB BSC, should be drafted such that treatment of generators was harmonised in respect of voltage of connection, irrespective of whether the connection was to a distribution system or the transmission system.

7.23. One respondent expressed the view that if transmission assets were defined exclusively by voltage and geography then this would lead to inconsistencies and distortions. The respondent considered that the application of the BSC to generation should be related to the size of the generators in the first instance rather than the voltage of connection.

7.24. One respondent noted that the difference in classification of what constitutes a transmission system in England and Wales compared to Scotland may also require a more explicit description of the requirements within the BSC for parties to enter into Connection Agreements and/or comply with the Grid Code.

7.25. One respondent considered that in order for generators to compete on equal terms throughout the BETTA area, then exemption levels should be standardised.

It was the respondent's view that this would ensure that all similar sized generators would be exposed to similar levels of charges.

7.26. Ofgem/DTI have subsequently published a second consultation paper on the BSC[36] in June 2003. Respondents noted that the consultation on small generators was outstanding and continued to express concern that there would be unequal treatment of generators across the system due to the classification of 132kV system in Scotland as transmission. Several respondents expressed concern that there would be insufficient time for subsequent cycles of consultation.

7.27. One respondent noted that there was a balance to be struck between the economic purity of the trading arrangements and progress towards meeting the Government's renewables targets but thought it essential that market mechanisms should not be distorted in order to provide support for renewable energy. Another respondent thought that the issue needed to be resolved urgently to avoid creating unfair discrimination against developments in Scotland and possibly contravening the EU Directive on Renewables.

CUSC consultation responses

7.28. In December 2002 Ofgem/DTI published a consultation paper on a GB CUSC. Seven respondents provided comments which concerned small generators. Several respondents were concerned about whether licence exempt generators (LEGs) should be obliged to sign up to the CUSC.

7.29. One respondent considered that imposing the provisions of a GB CUSC on transmission connected, licence exempt generators, would result in discrimination between similar sized generating plant in Scotland and England and Wales. This respondent considered that the criteria used to define whether a generating unit is subject to the provisions a CUSC should be dependent on the size of the generator rather than the voltage of connection. In the view of the respondent, LEGs should therefore not be required to sign up to the CUSC.

7.30. Another respondent did not believe that any changes were needed to the CUSC with regard to LEGs. If generation in Scotland is connected to the transmission

[36] 'The Balancing and Settlement Code under BETTA. An Ofgem/DTI conclusions and consultation on the legal text of a GB BSC, 06/06/03. Ofgem#39/03.

system at 132kV or less then it should continue to be treated as transmission assets and should be required to enter into connection and use of system agreements on this basis.

7.31. One respondent considered that if 132kV assets were to remain as transmission in Scotland then any inclusion of 132kV equipment or a 132kV network in a GB CUSC must make clear that this remains a distribution voltage in England and Wales and any provision for definition of interfacing with a 132kV transmission network must be for Scotland only. The respondent emphasised that it would not support the designation or treatment of any 132kV network in England and Wales as anything other than as part of the distribution system, and that those connected to it should not have to be party to the GB CUSC.

7.32. Two other respondents suggested that should the CUSC be applicable to small generators, then any CUSC provisions should be simple, transparent and flexible in their application. In the respondents' view this would assist in the development of renewable generation. One of these respondents also expressed concern about discrimination in relation to where 132kV generators were located and considered that when amending industry documents such as the CUSC it would be possible to align the commercial framework across GB. This could be achieved by defining the parameters in terms of generation capacity, configuration and location, rather than by the network to which they connect being licensed as 'transmission' or 'distribution'.

7.33. One respondent considered that alternative methods of achieving harmonisation need to be identified before consulting further.

7.34. One respondent made a number of comments about process. In particular, the respondent was concerned that the decision to consult separately on small generators issues could result in these issues being marginalised. The respondent expressed a view that this had occurred during the development of NETA.

7.35. Ofgem/DTI have subsequently published a second consultation paper on the CUSC[37] in June 2003. Several respondents expressed concern about the financial

[37] 'The Connection and Use of System Code under BETTA - Ofgem/DTI conclusions and consultation on the Small Generator Issues under BETTA

and technical liabilities that will be placed on small generators having to comply with the CUSC and BSC. One respondent noted that this would require substantial non-core resource. Several respondents noted that they would wish to have the option to assign the responsibilities and risks entailed in these documents to a third party.

7.36. Another respondent noted that treating 132kV as transmission in Scotland would create disadvantages to Scottish generators in transmission charges, access to embedded benefits and having to sign the CUSC. Being a CUSC signatory would introduce the need for uncertain company guarantee provisions and does not permit the seller to assign his meter to a Supplier which then guarantees the supply of ROCs to the purchaser and allows them to trade under the GSP in the same Distribution area.

7.37. Several respondents proposed that generators in Scotland connected to the 132kV network should be considered 'distribution connected' for the purpose of use of system charging and if they were licence exempt should not need to sign the CUSC.

7.38. Another respondent noted that the classification of the 132kV network in Scotland as transmission would also impact the rules for transmission losses, transmission charges, the definition of trading units and the ability to trade under a GSP and that it may be necessary to introduce provisions in the GB CUSC which facilitate a distinction between 132kV and higher voltages on the transmission network.

Grid Code responses

7.39. In December 2002[38] Ofgem/DTI published a consultation paper on a GB Grid Code. One respondent considered that that it would be confusing and inefficient to subject Scottish 132kV connections to the GB Grid Code whilst England and Wales 132kV connections would be subject to the GB Distribution Code.

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legal text of a GB CUSC, 13/06/03. Ofgem#46/03.

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

7.40. Another respondent was concerned that generation which is unlicensed and not connected to the transmission system but which affects or uses the transmission system would not appear to have any direct requirement to comply with the GB Grid Code. The respondent proposed that there should be an obligation in the GB Grid Code on Distribution Network Operators to have an obligation in the Distribution Code that requires generation to comply with the relevant sections of the GB Grid Code.

7.41. Another respondent noted that small generators, including some that are licence exempt, would be 'sucked into more onerous requirements that are only appropriate to plant connected at 275kV and above'. The respondent proposed that the 132kV network in Scotland performing a transmission function should be viewed in the light that distribution systems are going to become more active i.e. more like transmission networks.

7.42. Another respondent was concerned at the proposal to reflect regional differences in the GB Grid Code and thought that BETTA ought to involve the creation of 'one single market for electricity trading ….drawn up to reflect the needs of operators, users etc across the whole GB operating area'.

7.43. Ofgem/DTI have subsequently published a second consultation paper on the GB Grid Code[39] in September 2003. Responses to this consultation are due on 25 November 2003.

Transmission charging responses

7.44. In August 2003 Ofgem/DTI published a consultation paper on transmission charging under BETTA. A number of parties commented on the interaction of small generator issues and transmission charging.

7.45. Specifically, five respondents noted that the failure by Ofgem/DTI to consult upon and resolve the question of how small generators connected at 132kV should be charged was constraining the wider debate on transmission charging, and was failing to provide respondents with a complete picture of BETTA.

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[39] 'The Grid Code under BETTA - Ofgem/DTI conclusions and consultation on the legal text of a GB Grid Code, September 2003. Ofgem#111/03.

7.46. Three parties expressed regret that as a result the treatment of small generators would not be taken into consideration by the initial GB system operator in providing indicative charges (scheduled for November/December 2003). One respondent argued that the overall consultation period on transmission charging may consequently need to be extended.

7.47. Six respondents commented on the impact of the GB transmission charges on renewables and other small generators. Two respondents argued that the charging arrangements should not disadvantage small generators. One respondent welcomed changes that would support distributed generation and argued that such generators should continue not to pay transmission charges if licence exempt and that this principle should be extended on a GB basis. Another respondent noted that there may, in future, be a requirement to change arrangements for paying embedded benefits, as existing arrangements in England and Wales are not sufficiently robust to cope with significant embedded generation such as the north of Scotland. One respondent fundamentally opposed changes to charging principles pursuant to the introduction of GB transmission charges in respect of renewable generators.

7.48. Two parties argued that there must be equal treatment for all generators connected at 132kV. One of those respondents argued that liability for TNUoS charges should be based on existing connection agreements and that NGC's current liability rules for embedded generators should continue to apply.

Consolidated list of issues for further consideration

7.49. Ofgem/DTI has considered the issues identified by parties and, together with the findings of its own analysis of the interactions between BETTA and small generators, has developed a number of specific areas where further consultation is necessary or where it is appropriate for Ofgem/DTI to set out its views.

7.50. Ofgem/DTI has identified four specific issues that relate to the transmission arrangements proposed under BETTA. These issues, which are discussed in more detail in the next chapter, are as follows:

- the basis for the current definitions of transmission and distribution

- the development of GB charging arrangements as they might be anticipated to affect small, transmission-connected generation relative to the charges faced by distribution-connected generation

- the extent to which obligations anticipated under the GB system operator's Grid Code might be considered to be disproportionate for small generators, and

- the extent to which obligations under the CUSC (other than the obligation to pay transmission charges) might be considered to be disproportionate for small generators.

7.51. Similarly, Ofgem/DTI has identified two specific issues that relate to the trading arrangements proposed under BETTA. These issues, which are discussed in more detail in the next chapter, are as follows:

- the mechanisms under which a GB BSCCo's costs would be recovered from users through trading charges under a GB BSC, and

- the extent to which the range of trading options available would be more limited for small transmission-connected generators, including trading options which utilise consolidation services.

8. Discussion of emerging issues and proposals

8.1. The previous chapter highlighted a number of issues which in Ofgem/DTI's view require further consideration to ensure that, from the perspective of small generators, the arrangements to be put in place under BETTA meet their objective, i.e. to promote GB-wide wholesale competition.

8.2. The issues raised can be considered under two types:

- First, issues that relate to costs of entering and participating in the GB market and whether these are proportionate for small generators which are directly connected to the transmission system. There are no small generators in England and Wales which are directly connected to the transmission system. As such, this question will not have been asked of the current market rules in anything other than a hypothetical sense
- Second, issues that relate to differences in treatment between distribution and transmission connected small generators, and whether these differences in treatment are justified and proportionate. While differences in treatment are a feature of each of the current arrangements in England and Wales and Scotland, the nature of these differences will change under BETTA (for example, as a consequence of GB transmission charging) and the context within which such differences might unduly disadvantage individual small generators will change, i.e. as a result of the creation of a single, competitive GB wholesale market.

8.3. The issues raised cut across various codes and documents and span transmission and trading arrangements. In line with the structure of the previous chapter, transmission-related issues and trading-related issues are discussed separately below.

Transmission-related issues

8.4. This section discusses the key issues for small generators in respect of the transmission arrangements proposed under BETTA highlighted in the previous chapter. There are four subsections:

- definition of transmission
- charging and 132kV transmission-connected generators
- a GB Grid Code and small generators, and
- a GB CUSC and small generators.

8.5. These issues are discussed in turn below and Ofgem/DTI's views are set out. Respondents' views are invited.

Definition of transmission

8.6. The objective of the BETTA reforms is to implement new trading and transmission arrangements that are designed to promote the creation of a single competitive wholesale electricity trading market and to introduce a single set of arrangements for access to and use of any transmission system in GB. Implicit in this objective is recognition that the scope of BETTA does not include significant reform to the distribution sector. The extent to which parties are affected by BETTA will therefore depend to a large degree on to the extent to which they require transmission services in order to undertake their activities.

8.7. The need for parties to use the transmission sectors depends on how the scope of the transmission sector is defined. Transmission of electricity and distribution of electricity are separately licensed activities. They are therefore recognised as being activities different in nature from each other. The respective licensees are subject to different licence obligations, which in turn feed through to different rights and obligations for users. For example, NGC's obligation to have in place a CUSC results in a contractual arrangements with users that is fundamentally different in terms of rights and obligations to a distribution use of system agreement. Differences such as this have been a feature of the electricity sector in GB since vesting.

8.8. It has been suggested that one solution to the perceived problem of differences in treatment between small transmission-connected generators and small distribution-connected generators in the context of BETTA would be to redefine the 132kV network in Scotland as distribution.

Ofgem/DTI's views

8.9. It is the view of Ofgem/DTI that redefining the scope of transmission to exclude the 132kV network in Scotland would be inappropriate both at a fundamental level, and in the context of the policy objectives of BETTA. The reasons for Ofgem/DTI's views are as follows:

- the existing distinction drawn in the licensing regime between transmission and distribution is not arbitrary. It reflects the physical purpose of different sets of wires. The primary purpose of the 132kV network in Scotland is the bulk transfer of electricity. It is clear, even through the most cursory inspection of the network in Scotland, that a system excluding 132kV lines would not be sufficient to transfer bulk flows of energy around Scotland, i.e. to perform the function of transmission

- while it could be argued that under certain circumstances some 132kV wires in England and Wales facilitate the bulk transfer of energy (i.e. perform the function of transmission), and that conversely some 132kV wires in Scotland perform the function of local distribution, Ofgem/DTI are of the view that a (principally) voltage-based definition of transmission continues to be robust when considered in aggregate, i.e. that the existing boundary of 132kV and above in Scotland and above 132kV in England and Wales should continue to be used to differentiate between transmission and distribution. Although this assessment might change over time, as a consequence of growth in embedded generation, currently there is an order of magnitude difference between Scotland and England and Wales in the proportion of 132kV network that primarily serves the purpose of transmission

- an assessment of whether the allocation of activities between transmission and distribution licensees is appropriate is a much wider issue than BETTA, and by implication outside the scope of the legislatives powers being sought to implement BETTA

- the objective of BETTA is to deliver open and non-discriminatory access to a GB transmission system as a means of promoting wholesale

competition. A reclassification of 132kV in Scotland would, by reducing the scope of the transmission system, reduce the benefits of BETTA for a significant proportion of current and, importantly, future generators and 132kV connected demand customers. Such parties would not benefit from the ability to contract for connection and use of system with a system operator independent of generation or supply interests, and

- a reclassification of the 132kV network in Scotland as distribution would change the pattern of cost recovery. Distribution costs are recovered from local users, while transmission costs under BETTA would be recovered from GB transmission users. Significant investment in the 132kV network in Scotland to accommodate new generation in Scotland would, if 132kV were reclassified as distribution in Scotland, be paid for by distribution users is Scotland. This would appear inequitable, given that the primary purpose of the investment would be to facilitate electricity flows from Scotland to other areas of GB.

Charging and 132kV transmission-connected generation

8.10. Transmission licensees have licence obligations that require them not to discriminate and to promote competition. In order to fulfil these objectives, the charges applied by transmission companies should be cost-reflective. Cost-reflective charges encourage efficient decisions by generators on where to locate and ensure that efficient decisions are consistently rewarded. It is, however, important that legitimate cost reflective differences between parties are recognised in the charges they face. This is a relevant consideration when examining differences between transmission versus distribution connected generators.

8.11. The arrangements in Scotland operate differently to those in England and Wales. In both Scottish transmission areas, distribution-connected generators are liable for transmission charges for the proportion of their output that they are deemed (on a case by case basis) to export on to the transmission system. The relevant charge in SP Transmission's area is £12.90 per kW. In England and Wales all licence exempted generators connected to the distribution system are assumed not to use the transmission system and are therefore exempt from transmission charges.

8.12. Ofgem/DTI has assessed the arrangements currently in place in England and Wales, and the differences in treatment that would prevail between generators connected at 132kV in England and Wales and in Scotland if these arrangements were extended to GB. This assessment has been undertaken in the light of the policy objectives, set out in Ofgem's statutory duties, to promote competition and ensure non-discrimination. Ofgem/DTI has also assessed the alternative solutions put forward by interested parties against these same criteria. The results of this work, and the consequent proposals, are set out below.

8.13. In developing the proposals, Ofgem/DTI has recognised that the appropriate policy response might be a combination of short term time-limited measures, which in themselves would not represent an enduring solution, combined with longer term reforms.

(i) Models proposed by other parties

8.14. Through the process of consultation and through individual correspondence, two broad alternative models have been proposed to Ofgem/DTI to address perceived deficiencies in the England and Wales model applied to the GB transmission system. This does not include the proposal to redefine transmission and distribution, which Ofgem/DTI has rejected for the reasons set out above. The two models working within the existing definitions of transmission and distribution are:

- to treat small generators connected at 132kV in Scotland as if they were distribution-connected, and
- to exempt small generators connected at 132kV from transmission-related charges.

8.15. Ofgem/DTI does not consider either of these options as appropriate in the light statutory duties to promote competition and to ensure that the arrangements are non-discriminatory.

8.16. The first option would mean that small, 132kV-connected generators in Scotland would be treated, for the purposes of assessing a range of transmission-related charges, as not using the transmission system, and would benefit financially as a consequence despite the fact that are clearly making use of the transmission

system. This would appear to discriminate against small generators who are connected to a distribution system because it would be treating dissimilar generators in the same way.

8.17. The TISC report in its conclusions noted the following:

> *"It is contrary to the principles of open competition that generators connected to the electricity network at 132kV in one part of the country and supplying only their local network should have to incur costs which are not borne by competitors of similar size doing the same thing in another part of the country."*

8.18. A transmission connected generator is supplying energy for the purpose of addressing the mismatch between generation and demand across the transmission network. It is not supplying local demand in the same way as a small distribution connected generator. This difference is reflected in the commercial rights that generators have to use the systems to which they are connected. Therefore, to treat transmission and distribution-connected small generators identically for charging purposes while retaining differences in the rights afforded to generators would not in Ofgem/DTI's view be consistent with the objective of delivering a set of non-discriminatory arrangements.

8.19. The second option would mean that small, 132kV-connected generators in Scotland would make no contribution at all to network costs. This would place them at an advantage to distribution-connected generators (who would have paid a 'deep' connection charge) and to transmission-connected generators (who would face ongoing use of system charges). This would appear to raise issues of discrimination. It would also provide an inefficient signal (in effect, a loophole in the charging arrangements) for generators to locate at 132kV in Scotland. This could be expected to unnecessarily increase network costs over time.

(ii) Application of the England and Wales arrangements to GB

8.20. The application of the prevailing arrangements in England and Wales across GB would result in all transmission-connected generators (regardless of size) being liable for changes associated with the use of the transmission system and use of the wholesale trading arrangements. It would also limit eligibility for embedded

benefits to those parties who are connected to a DNO network, and are either licence exempt or below 100MW in size.

8.21. Ofgem/DTI's assessment of the application of the arrangements in England and Wales to GB has highlighted one particular area of concern which does not have a material effect in the current market in England and Wales since there are currently no small, transmission-connected generators. However, the presence of small, transmission-connected generators in Scotland will give it material effect under BETTA. In Ofgem/DTI's view it is therefore appropriate to consider potential alternative interim measures.

8.22. The specific area of concern relates to the TNUoS benefit of a distribution-connected generator being able to net off demand with a local supplier. In order to illustrate the effect, it is necessary to consider separately the component parts of NGC's TNUoS tariff. The TNUoS tariff has two elements. First, a marginal cost-based charge that varies by location. This charge is positive in areas where there is excess generation, and negative in areas where there is excess demand. Second, a residual recovery charge that ensures that NGC recovers its total allowed revenue, and ensures that 27% of total TNUoS revenue is recovered from generation. This element is a uniform (i.e. non-locational) adjustment (£/kW) for demand, and a similar but lower adjustment for generation.

8.23. The net benefit of a small embedded generator being able to count its output against the demand of a local supplier is the residual charge avoided by the generator plus the residual charge avoided by the supplier[40]. If the share of this total net benefit realised by the generator (recognising that this will depend on a negotiation between the supplier and the generator) is greater than the equivalent residual charge levied by the relevant DNO, then the generator will be better off (regardless of the actual marginal costs associated with its connection and ongoing use of the system) as a result of connecting to a distribution system rather than the transmission system. Such systematic bias would not be consistent with non-discrimination and would distort competition.

[40] Essentially, through the netting off arrangement between the supplier and the generator the positive (or negative) locational charge avoided by the generator is cancelled out by negative (or positive) locational charge avoided by the supplier – leaving the avoidance of the residual charges (which are both positive in all cases) as the remaining net benefit.

8.24. Ofgem/DTI understand that the total residual charge for demand currently implied by NGC's charging methodology in England and Wales is in the order of £8.60 per kW, of which around £2.00 is paid by generation and £6.60 is paid by demand. While the equivalent charge by DNOs is less transparent, given its incorporation within a 'deep' connection charge, it would appear that it is significantly less than £8.60. Indeed, one interpretation of the 'deep' connection charging policy is that all residual costs (i.e. those over and above the marginal costs associated with each connection) are recovered from demand.

8.25. Ofgem/DTI is therefore of the view that the operation of the TNUoS embedded benefit confers a benefit to small distribution-connected generation relative to small transmission-connected generation, and that this difference in treatment is not proportionate. Its continuation within a common set of GB arrangements does not therefore appear consistent with the objectives of BETTA.

Ofgem/DTI's views on next steps

8.26. Two separate strands of works are required in order to resolve this issue on an enduring basis, and to ensure that parties are not unduly disadvantages in the short term.

8.27. In the longer term Ofgem consider it appropriate to undertake work in the longer term to ensure greater consistency of transmission charges and benefits between transmission and distribution connected generators, which will facilitate the removal of the temporary interim measure proposed in this document. This will ensure on an enduring basis that investment signals are consistent and efficient. This is particularly important in the context of anticipated new investment in generation capacity over the next decade.

8.28. However, it is recognised that an enduring solution delivered through the programme of work outlined above will not resolve the issue in the immediate timescales of BETTA go live. Ofgem/DTI therefore considers as appropriate an interim measure to ensure that small generators connected at 132kV in Scotland are not disadvantaged in the short term relative to other parties within the class of small generators. The most direct way of implementing such an interim and time-limited measure is through the use of system charges of the GB system operator.

8.29. Ofgem/DTI plans to publish shortly its conclusions in respect of transmission charging. The proposals document on transmission charging, published in August 2003, proposed that it was appropriate for the GB system operator to develop proposals for its GB charging methodologies through consultation with the industry, and in the light of its anticipated licence obligations in this regard. Subject to the separate consultation on 132kV connected generators in Scotland, it also proposed that the licence obligations of the GB system operator should be based upon those in place for NGC currently. Following the publication of Ofgem/DTI's conclusions, it is anticipated that the initial GB system operator will start its consultation process.

8.30. It is Ofgem/DTI's view that a methodology which did not incorporate specific measures to address the problem identified above may not be as effective in promoting competition and protecting the interests of customers as it could be.

8.31. Further, it is Ofgem/DTI's view the nature of the issue implies a particular form of interim measure as appropriate. The source of potential discrimination relates to differences between transmission and distribution-connected small generators in the recovery of residual costs. Residual costs are those costs remaining once revenues from connection charges and the locational element of use of system charges have been collected. A response to this disparity which appears focused, and proportionate in the light of the consequent effect on other transmission connected parties, would appear to be to exempt small generators connected at 132kV from the transmission residual charge (or its equivalent under a GB charging methodology) and to adjust upwards by a small amount the charges faced by other transmission user.

8.32. For the avoidance of doubt it is Ofgem/DTI's view that small, transmission-connected generators should be liable for all other transmission-related charges on the same basis as other transmission-connected generators.

8.33. The effect of this measure would depend on the detail of the GB charging methodology proposed by the GB system operator. However, a transmission use of system tariff with a locational element and a residual cost-recovery element would appear to a generic structure for any cost-based charging methodology. NGC's current methodology and NGC's proposals for change from April 2004 in England and Wales both adopt such a structure. Under

NGC's existing methodology in England and Wales Ofgem/DTI estimate that the reduction in the tariff could be in the order of £2.00 per kW.

Implementation issues

8.34. The adoption of an interim measure as proposed above raises a number of implementation issues. The operation of the current licence obligations on NGC have the effect of delegating the development of the charging methodologies to NGC. It is obliged to bring forward change proposals for consultation with the industry, and subsequent consideration by Ofgem, if in its view such changes would be better meet the relevant objectives.

8.35. The potential interim measure highlighted above reflects what is considered to be necessary in the short term to reduce disparities that would otherwise persist between transmission charges for transmission and distribution connected generators, thereby promoting competition and protecting the interest of customers. It does, however, reflect both distribution and transmission charges. Were there an equivalent residual charge on generation connected to distribution network, then the interim measure may not necessarily be appropriate. NGC can only reasonably consider how its charging methodologies impact on users of its transmission system (and not the charges faced by users of other networks) in determining how best to meet its licence obligations. NGC, acting unilaterally, does not have the necessary scope (and data) to identify and quantify the type of interim measure that Ofgem/DTI consider to be appropriate.

8.36. This implies that more prescriptive measures, additional to those current in place for NGC in respect of charging methodologies, might be required in order to implement Ofgem/DTI's proposals. One option, upon which Ofgem/DTI would welcome views, is for a discount equal to the residual element of generation charges under the GB system operator's approved use of system charging methodology to be specified on the face of the licence of the GB system operator.

8.37. A further refinement to this model would be to specify a termination date (e.g. three years after BETTA go live) for the discount. If, in the light of progress towards an enduring solution, Ofgem deemed that it was appropriate to lift the

discount earlier that the specified date, then a licence modification proposal could be raised.

8.38. There are also more detailed implementation issues to consider, most notably the eligibility criteria for such a discount. One model, which has the benefit of clarity, would appear to generators with entry capacity below a certain specified size (e.g. 100MW) and connected to the GB transmission system at 132kV.

8.39. Ofgem/DTI would expect the initial GB system operator to reflect the possible interim measure in its initial consultation document on its GB charging methodologies, expected to be published shortly, and subsequent consultations. In the first instance it would be constructive if residual element of the indicative generation tariff were identified in the initial consultation document.

Views invited

8.40. Ofgem/DTI would welcome views on any of the issues raised in this section. In particular, views are invited in respect of:

- whether it may be appropriate to treat small transmission-connected generators differently to other transmission-connected generators and the extent to which this may mitigate against a level playing field for all generators under BETTA, and
- whether the suggested interim measure is proportionate and consistent with the objective of non-discrimination, and the anticipated obligations of transmission licensees under BETTA in this regard and
- The implementation issues associated with the suggested interim measure.

The CUSC and small generators

8.41. The key obligations under the CUSC with obvious commercial implications for small generators are those associated with the payment of connection and use of system charges, the obligation under the CUSC to be a BSC party and to comply with the Grid Code. These last two issues are discussed elsewhere in this document.

8.42. The key issue in respect of the CUSC per se would appear to be the size and complexity of the document itself. A certain amount of resource would need to be committed to gain an understanding of the provisions in the CUSC (e.g. to a level sufficient to explain to potential financial backers and to understand the commitments being entered into) in the first instance, and to monitor changes to the CUSC over time. This might represent a particular burden for small, independent generators because the cost is inherently fixed in nature.

8.43. This is a new issue under BETTA because all small generators in England and Wales are distribution-connected, and are not therefore generally obliged to sign up to the CUSC Framework Agreement. While in some instances it is possible for NGC to require distribution-connected generators to enter into an agreement with NGC pursuant to the CUSC, this is not routinely required of small, distribution-connected generators in England and Wales.

8.44. There would appear to be two related questions to consider. First, what obligations need to be in place to facilitate connection to and use of the transmission system by a small, transmission-connected generator, and in particular might the obligations that need to be in place be any different to those in place for other classes of generator? Second, upon whom should these obligations rest?

8.45. In respect of the first question, it is not clear to Ofgem/DTI that there are differences between small generators and other generators who are transmission connected that warrant a fundamentally different form of agreement to connect to and use the transmission system. Put another way, it is Ofgem/DTI's view that a GB CUSC should continue to encompass all transmission-connected generators as is presently the case in England and Wales.

8.46. In respect of the second question, it is clear to Ofgem/DTI that someone must take responsibility for the connection and use of the system by every transmission-connected generator. Further, it is proper for this responsibility to be matched with a common set of obligations, as set out in the CUSC since. Were it not, the result would be that other CUSC parties, or GB customers, through the GB system operator's charges, would be paying for the commercial commitments and risks off-loaded by that party. However, it is not clear that this party must necessarily be the party who owns the plant. There are provisions in

the BSC that enable small generators to, in effect, confer responsibility for metering systems to another BSC party by bilateral agreement with that party.

8.47. In Ofgem/DTI's view, it is appropriate to consider how such arrangements might operate in respect of responsibility for a small generators transmission connection pursuant to a GB CUSC.

8.48. However, arguably there is scope under existing arrangement for one CUSC party to take responsibility for the obligations of another CUSC party, through a bilateral agreement between the owner of generating plant and a party that might handle its interface with NGC in the first instance and on an ongoing basis. The question would appear to be whether, and how, such arrangements might be made explicit under the CUSC (noting that such agreements are not actively facilitated under the CUSC today). For example, whether the bilateral agreement conferring the agent status should be of a standard form in a similar way to other bilateral agreements pursuant to the CUSC.

Views invited

8.49. Ofgem/DTI would welcome views on any of the issues raised in this section. In particular, views are invited in respect of:

- whether it may be appropriate for more explicit measures to be taken under the GB CUSC to facilitate the transfer of responsibility of obligations to another party.

The Grid Code and small generators

Size bands in existing Grid Codes

8.50. The Grid Codes currently in place in England and Wales and in Scotland place a number of obligations on generators in respect of the technical operation of the respective transmission systems. These obligations are not the same for all generators. Size is a relevant factor in determining what obligations apply to any individual generator, but there are also other factors. For example, under NGC's Grid Code obligations differ in some instances depending on whether the generator is connected to NGC's system or to a distribution network.

8.51. Further, obligations can differ between individual generators as a result of derogations granted by Ofgem or (as is more usual under the Scottish Grid Code) by agreement with SP Transmission or SHETL, and in a more limited set of circumstances with NGC in respect of its Grid Code.

8.52. The England and Wales Grid Code has three size bands, through the application of which some obligations vary: 'Small' is a power station of less than 50 MW; 'Medium' is between 50 and 100MW and 'Large' is 100MW and above. The Scottish Grid Code also has size bands in relation to a 'central despatch limit' which is 30MW in SP Transmission's area and 5MW in SHETL's. Many of the requirements in the Scottish Grid Code apply to all generators, regardless of size and point of connection (i.e. whether transmission or distribution connected).

Mandatory ancillary services

8.53. One particular set of obligations, which has been raised in the context of consultation on a GB CUSC, is the provision of mandatory ancillary services, such as reactive power and frequency response. In England and Wales, the obligations to be able to provide such services are set out in the Grid Code and the arrangements for compensating generators in the event that services are required to be provided are set out in the CUSC.

8.54. Under the England and Wales Grid Code there is an exclusion from the requirement to be able to provide mandatory ancillary services for Small Power Stations (i.e. less than 50MW) and for hydro units and renewable energy plant not designed for frequency and voltage control[41]. It should be noted that there are ongoing discussions about the interpretation of this exclusion.

8.55. Under the Scottish Grid Code all generators regardless of size or point of connection are required to be able to provide all mandatory ancillary services, unless by agreement otherwise with SP Transmission or SHETL. Generators are not compensated in the event that services are required. The details of such agreements between individual generators and SP Transmission or SHETL (which reduce the obligations that parties would otherwise face under the Scottish Grid Code) are not known by Ofgem/DTI. For example, Ofgem/DTI does not know

[41] E&W Grid Code CC.6.3.1.

whether reduced obligations are routinely agreed on the basis of the size of the generator.

Sending and receiving data

8.56. The England and Wales Grid Code places obligations on generators to provide data to NGC, and to be able to receive and act upon operational instructions from NGC. These specific obligations are linked to obligations in the CUSC and BSC.

8.57. Specifically, all BM Participants[42] are obliged[43] to provide operational data and bids or offers to NGC in a prescribed format using an Electronic Data Transfer ("EDT") link, and users who wish to participate in the Balancing Mechanism are required[44] to have appropriate automatic logging devices installed at the Control Points of its BM Units (Electronic Despatch Logging "EDL") to receive balancing mechanism acceptances and operational instructions from NGC.

8.58. There is, however, scope within these arrangements for small participants to pass on some of these obligations to another party. The requirements of NGC as defined in the Grid Code relate in this context to 'Control Points'. A Control Point for a BM Unit at a Small Power Station, or a BM Unit with a Demand Capacity of less than 50MW, can be 'a point from which data submission is co-ordinated for a BM Participant and instructions are received from NGC'. This is similar to the BSC which allows an exemptible generator to authorise another person who is a BSC Party to be responsible for the export. In effect, exemptible generators can appoint an agent to take responsibility for providing data to NGC, and receive instructions from NGC. A generator is not obliged to participate in the Balancing Mechanism, and so can avoid the need to incur the cost of an EDL link by not participating in the Balancing Mechanism.

Ofgem/DTI views

Size bands in existing Grid Codes

[42] A person who is responsible for and controls one or more BM Units. Note this does not imply they have to be active in the Balancing Mechanism.
[43] E&W Grid Code CC.6.5.8(a).
[44] E&W Grid Code CC.6.5.8(b).

8.59. The definition of size bands and the obligations that map onto them in the three respective areas reflect the pattern of connected generation in each area and the characteristics of the respective networks. The obligations reflect what has been considered necessary, in the view of each of the transmission licensees, to ensure system integrity and maintain operating standards.

8.60. The transition to a GB Grid Code under BETTA must not, in any way, reduce system integrity or the ability to meet operating standards. In the first instance, therefore, it seems prudent to retain the obligations currently in place and the definitions proposed for small, medium and large generators for the GB Grid Code have been drafted to reflect this regional variation. In the longer term it appears appropriate to seek to harmonise obligations across GB where possible. However, this should only be undertaken following a comprehensive process of review and in the light of experience of operating a GB transmission system. To this end, Ofgem/DTI has proposed in the September 2003 consultation on the GB Grid Code to add a new objective for the GB system operator to seek to minimise regional differences in the Grid Code.

Mandatory Ancillary Services

8.61. In respect of the provision of mandatory ancillary services the argument set out above also applies. It seems prudent to ensure that current levels of provision are maintained under BETTA, on the basis that this is the level of provision that is deemed necessary at present to ensure system integrity.

8.62. However, there is a process to be undertaken in the transition to BETTA to formalise, where appropriate, the instances where a generator has agreed with SP Transmission and SHETL to reduce the obligations it would otherwise face under the Scottish Grid Code. Under BETTA, all generators will need to comply with all aspects of a GB Grid Code unless there is an explicit carve-out on the face of the Grid Code or a formal derogation granted by Ofgem. The flexibility from the obligations set out in the GB Grid Code through private bilateral agreement with the GB system operator is expected to be limited to a similar extent to the current England and Wales Grid Code.

Sending and receiving data

8.63. It seems entirely reasonable for the GB system operator to collect information for operational purposes on the planned export or import of all parties who are connected to the transmission system. The issue for Ofgem/DTI in the context of BETTA is to consider whether the manner in which it would be collected pursuant to a Grid Code based on the Grid Code currently in place in England and Wales places an undue burden on small, transmission-connected generators.

8.64. Ofgem/DTI understand that specialist IT equipment is not necessarily needed to submit data and therefore it is Ofgem/DTI's initial view that the existing EDT provisions in NGC's Grid Code would not represent an undue burden on small, transmission connected generation if applied across GB. It is understood that the technical requirements represent a Standard PC and modem, and that the defaulting rules for data submissions are that much of the information required would only need to be provided with occasional updates.

8.65. Ofgem/DTI does, however, recognise that the costs associated with an EDL link are more significant[45]. However, it is Ofgem/DTI's initial view that the existing provisions in the BSC and Grid Code that enable small generators to, in effect, appoint an agent to handle EDL-based communications on its behalf are a robust mechanism to provide small generators with potential access to the Balancing Mechanism. It should also be noted that the current arrangements applied to GB would also provide for small, transmission-connected generation to opt out of the Balancing Mechanism and thereby avoid costs associated with EDL (either directly, or via any charges levied for this service by a third party).

Views invited

8.66. Ofgem/DTI would welcome views on any of the issues raised in this section in respect of the provision by small generators of data and mandatory ancillary services under BETTA.

[45] Whilst NGC provides the EDL communications between the EDL router and the control point, the user is responsible for provision of hardware and software beyond the EDL router.

Trading-related issues

8.67. This section discusses the key issues for small generators in respect of the trading arrangements proposed under BETTA highlighted in the previous chapter. There are two subsections:

- trading charges under the BSC, and
- trading options for small transmission-connected generators, including trading options which utilise consolidation services.

8.68. These issues are discussed in turn below, and views are invited.

Trading charges under the BSC

8.69. ELEXON as the BSCCo is a not-for-profit organisation. Its costs each year are recovered from BSC parties through charging arrangements specified in Section D of the BSC. There are various elements to these charges. Some charges are only applicable where parties take certain services, e.g. related to whether meters are registered in Supplier Volume Allocation (SVA) or Central Volume Allocation (CVA). Charges can be a fixed amount per BMU per month, or a variable amount based on metered volumes.

8.70. The actual charges levied by ELEXON are affected by outturn costs and metered volumes. However, ELEXON publishes indicative charges in its annual business plan. Further information on how trading charges are derived under the BSC can be found on ELEXON's website[46].

8.71. If similar arrangements were introduced under a GB BSC then, other things equal, small transmission-connected generators would be liable for charges on the same basis as other transmission-connected generators. If the structure of charges under a GB BSC were broadly comparable to the structure of charges under the current BSC in England and Wales, then small transmission-connected generators would face some fixed charges and some charges linked to output.

[46] www.elexon.com

Ofgem/DTI views

8.72. It is Ofgem/DTI's initial view that the current structure of charges under the BSC in England and Wales would not result in disproportionate trading charges for small generators if it were applied in broadly the same way under a GB BSC.

8.73. This view reflects two factors. First, the extent to which charges are linked to a significant extent to metered volumes. All generators will face trading charges commensurate with their metered volumes. Second, trading charges account for relatively small sums of money. While the existence of some fixed (i.e. per BMU) charges will necessarily represent a relatively larger burden (per MWh) for small generators, this reflects the nature of the underlying costs and in aggregate it does not constitute, in Ofgem/DTI's view, a barrier to entry for small generators.

Views invited

8.74. Ofgem/DTI would welcome views on any of the issues raised in this section, and in particular whether small generators should be liable for ELEXON charges on the same basis as other transmission connected or larger distribution connected generator.

Trading options for small transmission-connected generators

8.75. There are three ways for small generators in England and Wales to sell their output: (other than by 'spilling' energy and incurring the associated imbalance charges):

- by contracting with a local supplier, and thereby avoiding central balancing and settlement arrangements
- by selling forward and seeking to reduce imbalance risk through consolidation (either directly with other BSC parties) or via a 'consolidator' (which could mean that the generator itself does not need to be a BSC party), or
- by selling forward and participating directly in the balancing and settlement arrangements.

8.76. The review of the initial impact of NETA on small generators[47] noted that of these three options, the significant majority of small generators chose the first option. This position was reconfirmed in the one-year review of NETA, and it is understood that this continues to be the case today.

8.77. The CUSC currently in place in England and Wales states that all users who are connected to or using the NGC transmission system shall be a party to the BSC, with the exception of directly connected customers being supplied by a Trading Party (which in this context means a licensed supplier). This implies that generators connected at 132kV in Scotland would be obliged to be BSC parties under a GB CUSC with this clause in it.

8.78. In turn, the obligation for all transmission-connected generators to be a party to the BSC means that the trading option chosen by nearly all small generators in England and Wales would not be available to generators connected at 132kV in Scotland. It is not possible under the existing BSC for a centrally registered generator (noting that all transmission-connected generators must be centrally registered) to 'sit behind' a Supplier BM Unit. It would also mean (under the current rules under the BSC for registering meters centrally, and aggregating such centrally-registered meters) that trading centrally via a consolidator (while avoiding being a BSC party itself) is not an option either.

Ofgem/DTI views

8.79. It is not immediately clear to Ofgem/DTI whether it is necessary for small, directly connected generators to necessarily be parties to a GB BSC. While it is necessary for the output of the generator to be accounted for through a GB BSC, it is for further consideration whether this could not be undertaken by a party acting on behalf of the small, transmission-connected generator.

8.80. If the obligation to be a BSC party were to be removed for small generators, then this would appear to give directly connected small generators the same range of central trading options as small distribution-connected generators who choose to be centrally registered. Specifically, it would enable small transmission-

[47] Review of the New Electricity Trading Arrangements (NETA) and the impact on small generators - Ofgem, August 2001

connected generators to avoid being a BSC party if they traded via a consolidator.

Views invited

8.81. Ofgem/DTI would welcome views on whether it is necessary for small, transmission-connected generators to be required to be parties to the GB BSC, and what the implications would be of a 'carve out' for such generators, similar to that granted to directly-connected demand customers under the existing CUSC in England and Wales. Ofgem/DTI would also welcome views on how such a 'carve out' provision might be framed, given the need for the generator's output to be accounted in some way through a GB BSC.

Access to consolidation services

8.82. The section above noted that it is appropriate to consider further whether it must necessarily be the case for small, transmission-connected generators to be required to be parties to a GB BSC. The alternative would appear to be to enable such generators to opt out of being a BSC party if another party, i.e. a consolidator, took responsibility for the generator's output under the BSC.

8.83. This raises two issues. First, a GB BSC that prohibited the aggregation of output of centrally registered meters (as is currently the case in England and Wales) would not entitle small, transmission connected generators to benefits of consolidation in terms of management of imbalance risk. Second, even if this barrier were removed, then would consolidation services be available to small transmission-connected generators in practice?

8.84. The BSC in England and Wales provides various opportunities for consolidators to offer services to SVA-registered generators. Further, a number of modifications have been made to the BSC since its inception to better facilitate the role of consolidators[48]. However, some parties have expressed concern at how the role of consolidators under the BSC has evolved in practice.

[48] For example, since June 2002 consolidators are allowed to register the Export Metering on embedded generation sites in CVA whilst allowing the import to remain in SVA.

Ofgem/DTI views

8.85. The extent to which generators trade their output centrally under the BSC through a consolidator reflects two things. First, the relative ease with which consolidators can offer their services within the market, i.e. the extent to which there are barriers to entry for potential consolidators. Second, the extent to which generators perceive trading via a consolidator as commercially advantageous. If current volumes of energy being traded via consolidators reflects a lack of demand for such services, rather than barriers to supply, then the scope for changes to market rules increasing the use of consolidation services is limited.

8.86. However, it might be the case that the creation of a GB market changes the pattern of demand for consolidation services, in particular from small, transmission-connected generators. Such generators would not have the option to trade 'off the system', because they would be transmission-connected. This might stimulate demand for consolidation. In this context it is important to ensure that the trading rules to be put in place under BETTA facilitate consolidation.

8.87. It is Ofgem/DTI's view that the current arrangements in England and Wales provide a sound basis for the growth of consolidation services to meet any growth in demand for such services pursuant to the creation of GB trading arrangements. Since the inception of the BSC, significant time and resources have been committed to this issue by the industry and Ofgem through the process of BSC modifications. Consequently, the BSC has been modified in a number of ways. For example, in March 2002 a modification was made to provide an additional mechanism to allow the output of an Exemptable Generating Plant to be split into a fixed amount of energy and an unpredictable amount of energy.

Views invited

8.88. Ofgem/DTI would welcome views on whether the existing framework set out in the BSC in England and Wales provides a sound basis for enabling consolidation services providers to meet any growth in demand for such services in the context of a GB market. If respondents perceive barriers to exist, then Ofgem/DTI would

welcome views on what these barriers are and what remedial action might be required.

Other issues

8.89. Ofgem/DTI has sought to identify a complete list of the key issues in respect of small generators and BETTA. However, given the complex and inter-related nature of the issues identified, it is possible that some issues have been overlooked. Ofgem/DTI would welcome views on the completeness of the list of issued identified.

9. Next steps

9.1. It is Ofgem/DTI's intention to publish a conclusions document on the issues raised in this consultation document in February 2004. The conclusions document will summarise responses to this consultation document, and set out Ofgem/DTI's proposals in the light of responses.

9.2. Where the consequent proposals require changes to the GB industry codes, there will be further consultation on the detailed legal text. The consultation on draft legal text will supplement the ongoing consultation on the GB CUSC, BSC and Grid Code.

9.3. Separately, it is anticipated that NGC, in its capacity as initial GB system operator, will commence it consultation process on GB charging methodologies in the next few weeks. The proposals set out in this consultation paper in respect of transmission charging will be reflected in NGC's initial consultation. In Ofgem/DTI's view it is important that NGC illustrate the effect of Ofgem/DTI's proposals on indicative GB use of system charges at this early stage in order to inform debate.