

## THE DEVELOPMENT OF BRITISH ELECTRICITY TRADING AND TRANSMISSION ARRANGEMENTS (BETTA)

### OFGEM CONSULTATION PAPER MAY 2002

#### RESPONSE FROM SCOTTISHPOWER

##### 1 Summary

1.1 **ScottishPower's position on the development of GB trading and transmission arrangements remains unchanged. However, the direction of this DTI/Ofgem consultation paper causes considerable concern.**

1.2 Our position may be summarised as follows:

- **ScottishPower will welcome a complete package of reform in Scotland that includes BETTA, the ending of the restructuring contracts, and satisfactory transmission access and charging arrangements.**
- **The implementation of BETTA must create a level playing field for competition and therefore must involve the dismantling of the vesting arrangements in Scotland, including the restructuring contracts.**
- **Transmission access and charging arrangements are crucial. These must be fair to existing players and consistent with energy policy objectives including the expansion of renewables in Scotland.**

1.3 However, **progress in some areas and lack of progress in others since the last consultation has increased our concern that such a package will, not be delivered along with BETTA and that wholesale trading arrangements will not be developed for GB which are satisfactory for all parties and provide a sound framework for competitive and sustainable energy supplies into the future,**

1.4 Our main concerns arising from the paper are:

- **the lack of progress on the restructuring contracts;**
- **the GB system operator model proposed by Ofgem which goes beyond those functions which are essential for the efficient operation of a GB market and introduces complex interface and contractual arrangements which may compromise system security and safety;**
- **the mechanism for progressing the position on transmission access and losses. The largest impact of changes in these areas would be felt in Scotland via the extension of arrangements to Scotland under BETTA. Yet the forum in which the issues are being taken forward is concerned only with the England and Wales position.**

This response sets out these and other concerns in more detail.

- 1.5 We **are** working with Government and **Ofgem** and fully **participating** in the working **groups** with the aim of developing a package which creates a level **playing** field for **all generators** and suppliers across **GB**. A significant change **in** direction will however be required in **our** view for an acceptable and workable package to be delivered for implementation in April 2004.

## 2 Introduction

- 2.1 This paper sets out **ScottishPower's** response to the joint **Ofgem/DTI** paper published in May 2002 reporting on the previous consultation on British Electricity Trading and **Transmission** Arrangements (**BETTA**), giving some conclusions and putting forward further issues for consultation. A separate response has been submitted to the **DTI** on the draft Regulatory Impact Assessment
- 2.2 **ScottishPower** welcomes the vision of the **BETTA** trading arrangements with the prospect of:
- . being able to trade on commercial terms with counterparties anywhere in GB in relation to the purchase and sale of wholesale electricity;
  - . having equal access to the balancing mechanism and other balancing arrangements (without the onerous host obligations of the current arrangements);
  - being subject to the same transmission access, charging and losses arrangements as our competitors, so long as these are fair to existing players especially in Scotland.
- 2.3 We also welcome the decision to treat the Scotland-England interconnector in the same way as all other transmission assets within the total GB system and the ending of the discriminatory arrangements whereby Scottish generators carry all the costs of providing the benefits of generation competition to customers in England and Wales.
- 2.4 We are glad to see that **Ofgem** accepts (Annex 2) that retail prices in Scotland, after allowing for charging differences in network costs, have moved broadly in line with those in England and Wales.
- 2.5 Our welcome for the broad vision of the **BETTA** trading arrangements is tempered by concern in a number of areas, including:
- the restructuring contracts;
  - the system operator/transmission owner split;
  - . the transmission access charging and losses arrangements;
  - the process for ensuring adequate scrutiny from a GB perspective of the arrangements which will be implemented at the start of **BETTA**;
  - the ability to meet the target implementation date.

### 3 Restructuring **Contracts**

3.1 **ScottishPower** remains firmly of the view that **BETTA** must include effective measures to **deal** with the restructuring contracts, which, as **Ofgem/DTI** recognise, underpin the arrangements put in place at Vesting.

3.2 **To** that extent we are not satisfied with **Ofgem/DTI's** proposals for 'appropriate co-ordination' of **BETTA** with a "parallel" initiative on **the restructuring** contracts (see paragraph 3.8 of the May paper). We would reiterate, in that regard, the statements made in **our** response to the **December 2001** consultation paper, in **particular**:

**We** fully endorse **Ofgem's** assessment that "the creation of a more competitive framework in Scotland requires **fundamental change** to the arrangements put in **place** at Vesting." In **particular**, we agree **that** the circumstances that dictated **those** arrangements **have materially** changed and **char**, as **Ofgem** has previously pointed out, they are now a **barrier** to effective **competition** in **Scotland**.

As **Ofgem** points out in the December paper, the restructuring contracts underpin the Vesting arrangements. In **our assessment**, it is essential therefore that any dismantling of the vesting arrangements **carried** out as **part** of **BETTA** involves, at the same time, the termination of any restructuring contracts that would otherwise continue beyond the **BETTA** implementation **date**.

3.3 **ScottishPower's** continued support for **BETTA** is, as we have made **clear**, **dependent** in **part** on the inclusion of such measures as a **core element of the BETTA package**. **We would call** upon **Ofgem and DTI** to give a **firm and** unambiguous **commitment to work** constructively **with** US and other relevant **stakeholders on that basis**.

#### **4 Allocation of Functions between the System Operator and Transmission Owners**

4.1 **ScottishPower** believes that initial conclusions reached by **Ofgem** in the **May** consultation on the allocation **of functions between the** system operator and the transmission **owners are** not supported either by the primary **objectives** of **BETTA** or by the criteria laid out by **Ofgem** in allocating functions between the system operator and **the** transmission **owner**.

4.2 **Ofgem** has **proposed various** criteria in the allocation of functions giving **particular** weight **to** two criteria:

(1a) functions that directly affect **market** participants, and which cannot be **easily codified** and effectively monitored to ensure that **no** bias is **being exercised**, should be separated from those **with market affiliations**;

(1b) access **to confidential** data, which may **reveal the** intentions of **participants** in market-based activities, should be available only to those that do not have affiliated interests in those same market-based activities.

4.3 These requirements are met in **all** three of **the models** of system **operator/transmission** owner **split** - including the thin model where the system **operator** directs those issues responsible for the **real** time and the **real** time **integrity** of the electricity network.

4.4 However, **Ofgem** appears to have **placed** little weight on its remaining criteria, including:

(2a) it is **practical, efficient** and economic to undertake **the** various functions of the system **operator** separately from the functions of the separate transmission owners;

(3) the one-off costs of **effecting the** changes should be as low as possible, **taking** into account **both** central costs and participants' costs;

(5) there is the ability to ensure effective asset management, including **safety and** environmental issues to meet both shorter and longer **term** obligations;

and the criterion that **Ofgem** explicitly **introduced** in the May consultation (**para A3.38**) that:

(6) functions continue to **be** carried out by those **parties** who are **currently** responsible for them unless there is **a requirement to reallocate responsibility** in order to meet the objectives of **BETTA**.

4.4 These criteria, together with the stated objective of **BETTA** to **introduce** to Scottish customers the **benefits** of the wholesale **competition** now established in England and Wales, clearly lead to the thin model of system operator as being the one that **best** meets the objectives and criterion.

- 4.6 Broadly speaking **the** role of system operator should **be** limited to those real time operations needed to facilitate the wholesale **market** and to maintain the integrity of the **electricity network, while** the transmission **owner** would plan, operate and maintain the grid, **provide connections to new customers** and through **appropriate** connection agreements **recover** the costs **of** owning and operating transmission assets.
- 4.7 The thin system **operator** model is pragmatic **and** achieves **Ofgem's** stated objectives. It **also** significantly **minimises** risks in its design and implementation. It provides a model **which allows** the transmission owners to **maintain** the value of their transmission businesses, and to grow and develop it in response to **all stakeholders** needs, including for **example** customers seeking generator connections, and the requirements of the governments and Scottish Executive in building networks which **are** suitable for the growth **of renewables needed to meet the UK's international obligations.**
- 4.8 The rugged nature of much if the Scottish terrain combined with adverse weather has impacted supplies to Scottish customers on **several** occasions over the past few **years.** Whilst 'steady state' trading arrangements can be controlled nationally, the integrated nature of Scottish Transmission and Distribution support the retention of a thin **model, allowing** local configuration of the network by the transmission owner during times of stress. We believe **our** customers value the **local** integrated network control and emergency **management** systems which **minimised** disruption **during recent** severe weather events and which were **recently** commended by DTI. **Long** lines of **communication** to a remote system **operator** in **perhaps** the South of England, to switch lines in Scotland, particularly under storm conditions, **will** impact **restoration** times and degrade **emergency** response, The **132kV** network in Scotland is a particular instance of the close integration between **transmission** and distribution functions in ensuring supplies to SW Scotland are restored as quickly **as** possible.
- 4.9 A **number of the** responses to the December **consultation noted** that **the** proposed **timescale** for **implementation in April 2004** was ambitious. **Significant slippage** has already occurred since the December consultation – for example it **was** originally suggested that the consultation that appeared in May **would** appear in February. No adjustment has been made to the **proposed timescale** for implementation. It is therefore the pragmatic, and the least risk choice to **implement** a thin system **operator** which will be consistent with the **goals** of a **UK** market.
- 4.10 **Ofgem** proposes making the **transmission** owners responsible far the planning and delivery **of** new investments, **as well** as the maintenance **of** assets. **ScottishPower** fully supports this **allocation** of functions. This will promote system security and **allow** the full benefits **from** integrated planning of **both load** and non load related investment. **Additionally, in the case** of the two **Scottish Transmission Licensees** allow for the benefits of transmission and **distribution** co-ordination to be retained.
- 4.11. Electricity networks **are** a viral **part** of the national infrastructure, and **particularly** important to **the** development of Scotland. We strongly **support** the **retention** of investment decisions **with** the transmission owner, based an network integrity and **customer** need, and subject to regulatory review **of** prudence. Electricity is an

essential part of the Scottish economy, and decisions on appropriate infrastructure to support the economy should remain with the owners of the local network

**4.12** The allocation of functions proposed by Ofgem fails to consider the needs of the transmission owners in carrying out the functions allocated to them by Ofgem. The new transmission owners will not succeed without appropriate direct linkages to the generators on their network as opposed to being mediated through a third party (the system operator). These linkages would allow transmission owners to plan major maintenance outages on their transmission systems at the same time as generators take their major annual outages. Such co-ordination has successfully taken place between SP Transmission (SPT) and generators on the SPT network for many years. For example, it allows necessary outages at major substations to which generators are connected to take place with minimum disruption to the generators' plans. These linkages will provide the transmission owners with the information they need to plan the development of their network. These linkages will also provide the transmission owners with the information they need to offer generators new connections which are appropriate to the generators' needs. SP Transmission notes that new connection offers to generators often change from that requested by the generator at the initial approach. Through dialogue between the companies more suitable and cost effective connection solutions emerge. Such an approach would be consistent through recognising that generators seeking connection to the distribution systems in Scotland would in any event deal with the companies directly. Since many of the new connections are at the cusp of the distribution and transmission systems such an approach will be the most consistent as well as the most effective.

**4.13** In relation to the specific details of the allocation of functions proposed by Ofgem, ScottishPower would note the following:

- . It is appropriate for the system operator to be responsible for the purchase and call-off of balancing services.
- Transmission outage plans and regional outage plans should be developed by the transmission owner, with a co-ordination, rather than approval, role being played by the system operator.
- The planning and offering of new connections should remain with the transmission operators.

**4.14** It is appropriate for the system operator to maintain a co-ordination role when developments on one system impinge upon another. In many respects this is a development of the existing British Grid Systems Agreement processes. ScottishPower notes Ofgem's concerns regarding assurance that new connections are managed in an independent and non discriminatory process, and supports these aims. These issues will exist not only with the transmission owners, but also with the distribution operators throughout Great Britain. These concerns can be tackled both by the application of competition law through licence conditions and by a more transparent methodology of publishing applications for connection to the transmission system. In many parts of the United States (for example in the PJM connection), information about connections is readily available to all parties on the web. This avoids suggestions that the network operator may favour an affiliated generation business. Additionally, it should be noted that information about

connection **applications** is often **available** both through the press and through **the** planning **process**.

- 4.15 It is therefore appropriate that the transmission **owners should maintain** connection agreements with the users on their **network**, and be responsible for **proposing** and **collecting** tariffs for connections and use of system. **Appropriate** charges **would** be made between the **transmission operators** in respect of either use of each **other** systems, or in respect of any special network **developments** that had taken **place** in furtherance of government **policy** – such as **that** needed **to** accommodate a rapid expansion of renewable, Balancing use of system **payments** would **however** be paid by the users to the system **operator**.



## 5 Appointment of a GB System Operator

- 5.1 **ScotishPower** believes that the appointment and governance of the new system operator is crucial for confidence in the open and transparent working of the new BETTA market.
- 5.2 The role of the system operator is crucial to the market. The system operator has a unique role in holding contracts with market players, These contracts are exercisable by the system operator alone in operational timescales, with the additional privileged right to exercise of contracts in the post-gate closure period. The structure of these contracts is such that only limited aggregate information about them is made known to the market. Such a privileged role in the market place requires appropriate arrangements for the appointment and governance of this party, and continued and focussed regulatory scrutiny.
- 5.3 However the consultation paper is largely silent about these issues except to note that 'appropriate incentives and licence conditions on transmission owners and the GB system operator and the application of competition law will be capable of regulating effectively the ability of the GB system operator to favour any affiliated transmission owner'.
- 5.4 The activities of the transmission owners are one of the drivers for the contractual relationships proposed by Ofgem. However it is doubtful whether a system operator having an internal relationship with one transmission owner and external contractual relationships with the other two will lead to even handed treatment between transmission owners by the system operator.
- 5.5 **ScotishPower** notes that there was significant support in the responses to the December consultation for an independent system operator. Only one respondent promoted the ownership of the system operator in the same group as one of the transmission owners. This one respondent to the December consultation who advocated an integrated transmission system operator model highlighted a number of perceived inefficiencies that could arise as a result of separating system operator and transmission owner functions. These included for example:
- the widespread use of short term plant ratings;
  - flexible outage arrangements including live line working, short emergency return to service and accelerated maintenance;
  - the use of real time monitoring of transmission plant.
- 5.6 Such proposals highlight the ability of a system operator and associated transmission owner to manipulate savings in a non-transparent manner and the implication that this sort of efficiency will be realised on one network but not on the other two.
- 5.7 Such savings can still be achieved between a system operator who is managed independently of a transmission owner in a transparent manner by the introduction of appropriate incentive schemes between them. Separation of the system operator from all the transmission owners would therefore ensure both transparency and efficiency in that the savings would be achieved across the entire GB network.

- 5.8 The governance and appointment of the **system operator** is **therefore** crucial. **Best practice will** be developed by reference to both developments in other **countries** and in **respect of other** related appointments in this country.
- 5.9 Governance models which are best practice and should be thoroughly **explored** include:
- **the** appointment of **Elexon** as the **BSCCo** for **the NETA market in England**, and
  - **the governance of RTO West in the United States**
- 5.10 Points in common between these models include that of an independent **governing board**. **Additionally**, the **RTO West model** provides for a **trustee selection committee** with the right to appoint the **independent governing board**. Board members must meet a **conflict of interest standard** and **serve staggered terms**. The trustee selection is such that members of the Board of Trustees include **individuals** possessing collectively a broad **range** of relevant expertise in commodities markets (**including commodities trading risk management**), **electric bulk power transmission** in the Western Interconnection, utilities management, law, finance, economics, accounting, information **technology, engineering**, regulation and public policy. **Trustee members are selected** by a wide range of **stakeholders**, with **suitable** candidates being proposed by an appropriate **search firm**. Meetings of the Board and Committees **are open** to the public.
- 5.11 Finally, **Ofgem's** concerns about **the affiliation** of the **transmission owner with** energy businesses are **understandable**, if misplaced. There is no **evidence** to back up **Ofgem's assertion** that appropriate incentives, **licence** conditions and the **application** of competition law **are capable** of regulating the **GB system operator** from **favouring** an associated transmission owner **compared** to their belief that such measures are not sufficient to prevent abuse when the **GB system operator** has an **affiliated generation interest**

## 6 Transmission Issues

- 6.1 We **support** the idea that the three transmission **owners** should implement consistent transmission access and charging arrangements that allow users access **to the GB trading market without** pancaking of charges. However, care must be **taken** when moving to such a regime **to ensure that all parties are** treated equitably. The paper **makes** a number of references **to** locational signals being provided by the access and charging regime. There is also a reference in the Regulatory Impact Assessment to the **fact** that the benefits to **customers** in **England and Wales** due to **BETTA will be small** because the **market** is **far** larger than the Scottish market. **This leverage effect** due to the relative size of the markets and the **geographical** distance between them will also act **to exaggerate** the impact of any transmission **losses** and charging regimes which are designed to give locational **signals**.
- 6.2 We **are particularly** concerned that systems based on **zonal** marginal losses **or** the current **ICRP** methodology used by NGC will give extreme signals to users of the **Scottish transmission** systems **because of their reference to the large and distant load centres** of the south (a situation that would apply under **these** methodologies even if **generation** and load is in balance within Scotland). While we **recognise** that the quest for economic efficiency may necessitate some locational **signalling** we would be concerned if a system based on forward estimates of the **cost** of future investment was **to be implemented** at a time when substantial **entry** of renewable generation in Scotland is anticipated. We noted with **interest**, and fully support, the comments made on behalf of Scottish **Ministers** at the 20 June seminar regarding the detrimental **effect** which **Ofgem's** desire for locational charging **of** transmission costs could have **on** the development of the renewable energy resources of **northern** Scotland. The need for and the siting decisions of renewable generators are driven by **considerations other** than the **effect** on **transmission** investment, **as indeed** were the siting decisions of the pre-vesting Scottish generating plant. We **note, in passing**, that it would be unacceptable if the potential **impact** of locational charges on new renewable generation **were** to be **ameliorated** at the expense of **the pre-vesting** generation.
- 6.3 Nor, however, do we favour a scheme **similar to** that introduced for generator connection charging in the Scottish **Hydro Electric Transmission Limited area**. This scheme increases the total share of transmission charges paid by generators and seems to be a departure **from Ofgem's previous policy** of encouraging shallow entry charging. We would welcome a **clear** steer **from Ofgem** regarding their current preference on the principle **of** deep or shallow entry charging.
- 6.4 We **note** that development of new access arrangements for England **and** Wales has **started** under the governance of **the CUSC Amendments Panel**, and that NGC has initiated a thorough **review** of its transmission charging **methodologies**. However, given the **importance of** transmission issues to the users of the Scottish networks **we** do not believe that these fundamental reviews should be **carried out solely** from the point of view of **participants** in England and Wales. We were not reassured by the policy outlined at the 20 June seminar that **GB** consultation for **BETTA would be carried out** based on the **England and Wales** documents extant at the time. Unless the current reviews in England and Wales are suspended and **replaced** by a **GB** process under the auspices of the **BETTA** project, we believe **this issue could** undermine the **BETTA** process completely.

- 6.5 There will be pressure for any new **charging** methodology **to** be “**harmonised**”. It must be **recognised** that such **harmonisation can** occur at different levels, and does not mean that the charges will be the **same**. For example the objectives **could** be **harmonised**, with different principles **applied to** each **network**, or the principles and objectives could be **harmonised but** with **different parameters** appropriate to **each network**. It is appropriate that these **charges should** be **agreed** and collated by the local transmission **operator**.
- 6.6 It is clear that the **NGC** network and the two **Scottish** networks **have significantly** different **characteristics**. For example, **132kV** forms **part** of the **transmission** network in **Scotland**, but not **in England** and **Wales**. **The** topologies of the networks are **different**. **The** security standards applied **to** the networks are different. **Any** moves to **harmonise charging** must be carefully **considered - as well as** considering the **position** of parties connected to the **132kV** networks in Scotland **compared** to generators attached to the **132kV** networks in England and Wales.

## 8 Programme

- 8.2 At this stage with **the challenging targets** of implementing **BETTA** by **April 2004**, a clear **programme** of work **with clear responsibilities** laid out in an **overall** framework document is urgently needed. **Ofgem** intend to **rely** on the new **GB** system **operator**, the existing **transmission licence** holders and **central service** providers to deliver appropriate system developments. This cannot be achieved **without** a clear statement and **agreement** of **responsibilities** between the parties.
- 8.2 Furthermore the necessary investment of many millions of pounds by these parties in **making** appropriate changes to the existing legal **contracts**, and in **specifying**, developing, **implementing** and testing systems will not take place without clear **guarantees** of cost recovery.
- 8.3 **As already noted**, the **timescales** for implementation are challenging. **To** achieve them, **two** necessary preconditions are:
- a clear framework and
  - an agreement on cost recovery before expenditure is incurred by the affected parties.
- 8.4 In addition there have been a number of major projects of a **similar scale to BETTA**, for which **Ofgem** and/or **DTI** have **been responsible**, including the Electricity **Pool** in England & Wales, the opening of **full supply competition** in **1998**, **NETA**, and the **Utilities Act transfer schemes** which **for various reasons** did **not** meet their original **target implementation** dates.

This **causes** additional **concern** that the target **date** of April 2004 might not be met. For this **reason** we believe that **Ofgem** should:

- evaluate and **publicise** the risks of not meeting **the** target **date**;
- develop any **necessary** contingency plans, **and**;
- a establish processes to monitor and update its progress against **plan** and **re-evaluate** its **risk** assessment if necessary.