



# **CONTRACTUAL AND ADMINISTRATIVE BARRIERS FACING LICENCE-EXEMPT GENERATION UNDER NETA**

A report to Slough Heat & Power Ltd

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CONTRACTUAL AND ADMINISTRATIVE BARRIERS FACING LICENCE-  
EXEMPT GENERATION UNDER NETA

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## 1. INTRODUCTION

- 1.1 ILEX has been asked by Slough Heat and Power to provide a paper on the key issues preventing equal participation of Licence-exempt generators (LEGs) in the NETA market environment. This paper identifies such issues in the following areas:
- illiquidity/granularity of markets;
  - disproportionate administrative burdens on LEGs;
  - unavailability of usable market data; and
  - trading and commercial aspects of the above.
- 1.2 This paper goes on to:
- describe the issues in detail;
  - identify the extent to which changes could be made to the market structure, short of major structural change or a change in BSC objectives, to achieve the removal or reduction of the barriers identified; and
  - identify in outline what modifications within the Balancing and Settlement Code (or outside) would need to be prepared and introduced in order to achieve the removal or reduction of these barriers.
- 1.3 We have been asked to make proposals for draft BSC modifications that would address the administrative and data access problems identified in the report, so that LEGs can more effectively participate in the NETA market.

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## 2. ISSUES FACINGS LEGS

- 2.1 We have identified the following areas of concern affecting LEGs' ability to participate on an equal basis with larger players in the NETA markets:
- poor levels of market liquidity (for products and in timescales that are relevant to LEGs);
  - high administrative and overhead costs that deliver economies of scale for larger participants to the detriment of smaller participants such as LEGs; and
  - reduced access to market information.
- 2.2 Prior to discussing these three, we provide some relevant background concerning the ways in which LEGs can participate in the current market.

### Market participation

- 2.3 LEGs have the option of direct participation in the NETA markets as BSC Parties, or indirect participation whereby a BSC Party (typically a supplier) registers their meter and takes delivery of their generation directly. Broadly, this is similar to the choice faced under the Pool environment.
- 2.4 The main contracting routes to market for LEGs may be characterised as follows:
- direct participation in the NETA markets as BSC signatories<sup>1</sup>;
  - 'indirect' participation by selling export volumes to a BSC signatory but taking imbalance exposure through contractual arrangements<sup>2</sup>; and
  - 'passive' participation by selling export to a BSC signatory without imbalance exposure<sup>3</sup>.
- 2.5 The contracting options listed above are not the same as trading routes under NETA. The choice of trading route encompasses a number of dimensions that will also be relevant to the contracting strategy. These include:
- whether to trade in CVA (central volume allocation) or SVA (supplier volume allocation);

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<sup>1</sup> Those LEGs who choose this route may then pass imbalance risk to a counterparty, through 100% metered volume reallocation notifications (MVRN). However, it is not clear why a LEG would choose this option in preference to remaining a non-BSC Party and trading directly with a supplier.

<sup>2</sup> Typically, the LEG will be responsible for notifying volumes in advance to the power purchaser, with deviations from these notified volumes settled at imbalance prices.

<sup>3</sup> Although the export price within the contract is likely to be lower to reflect the increased imbalance risk for the supplier. See paragraph 2.9 below.

- if trading in CVA, a LEG can:
  - sign the BSC or not;
  - if signing the BSC, a LEG can then choose whether to register within CVA in its own name or through an agent (the agent must be a BSC signatory);
  - if registering in its own name, trade (sell the generation) in its own right or have a third-party trade on its behalf;
  - manage imbalances directly (through the LEG's own BSC accounts) or through a third-party, such as a supplier or specialist consolidator.
- 2.6 SVA (formerly known as Stage 2 settlement) is a bilateral trading option open only to LEGs contracting with licensed suppliers. This is the preferred route by most small generators under NETA (as with the Pool).
- 2.7 Under this route, the plant's export is netted off the supplier's demand prior to the NETA settlements process. This has the advantage of reducing costs but may restrict access to some of the NETA markets and balancing (ancillary) services. Though the supplier should still be able to access the Balancing Mechanism, this is somewhat more complicated than if the generator had traded through CVA.
- 2.8 All the embedded benefits can be realised under this trading route, though as many of these accrue to the supplier in the first instance, a generator's share of such benefits will be a matter for negotiation. Embedded benefits can only be realised where the generation offsets the supplier's demand in the generator's GSP Group. If the generator's export exceeds the supplier's demand, only that proportion of the export directly offsetting the supplier's demand in the GSP Group will be able to capture the embedded benefits – although the entire export will retain an energy value.
- 2.9 Imbalance risk falls to the supplier, who may pass it back to the generator or price the risk into any contract offered to the generator. Uncertainty over imbalance prices and the performance of the generator, plus the supplier's lack of influence over the operation of the generator, may lead the supplier to price the imbalance risk more highly than would the generator. Our experience of negotiating export contracts on behalf of small generators has led us to conclude that suppliers may over-value the cost of imbalance and hence offer a lower export price than could be offered (on a cost-reflective basis).
- 2.10 The barriers that we have identified could affect LEGs in different ways, depending on which route to market they choose. Some barriers adversely impact LEGs whichever route to market is chosen. Others impact on their power purchasers, and the costs are passed back to LEGs – for example, the prices paid by the power purchaser will include some discount for any anticipated imbalance costs.



- 2.11 Most LEGs choose not to participate directly in the central trading arrangements. Despite this, any issues that limit the LEGs' ability to participate directly in the markets have an adverse impact on LEGs, whichever route they choose. This is an important point – under the Pool, although few LEGs chose to participate directly, the Pool provided a clear alternative market with well-publicised prices. This gave small generators a firm basis for their contractual negotiations. Under NETA, the fallback position (becoming a BSC Party) is far less attractive to smaller players, and consequently their negotiating position (compared with larger competitors) has been weakened. Under NETA, there is no commercially acceptable default market if LEGs are not offered reasonable terms by suppliers.
- 2.12 As a consequence, those issues that limit the ability of LEGs to compete on an equal footing in the central markets also adversely impact the competitive position of the majority of LEGs that sell directly to suppliers.

### **Market liquidity**

- 2.13 This issue has been discussed extensively in a separate paper provided by ILEX to Slough Heat & Power<sup>4</sup>. We start by summarising the main issues raised in that paper:
- liquidity in the forward NETA markets under the Grid Trade Master Agreement (GTMA) continues to grow;
  - bilateral trading of small volumes appears to be extremely illiquid, with a very small number of reported trades below 5MW;
  - trading within the power exchanges close to real-time is illiquid – in the last twelve months these volumes have decreased;
  - non-BSC Parties are prevented from trading in the main NETA markets – both the GTMA and the two power exchanges require participants to be BSC signatories; and
  - financial trading (for example contracts-for-differences (CfDs)) has effectively ceased.
- 2.14 Overall, while market liquidity is at reasonable levels (and growing), there is little scope for small participants to match their desired export patterns by trading in the conventional markets. The unpalatable alternative for a BSC-Party LEG would be to face imbalance prices for a significant proportion of its output – imbalance prices are widely recognised as not being cost reflective<sup>5, 6</sup>.

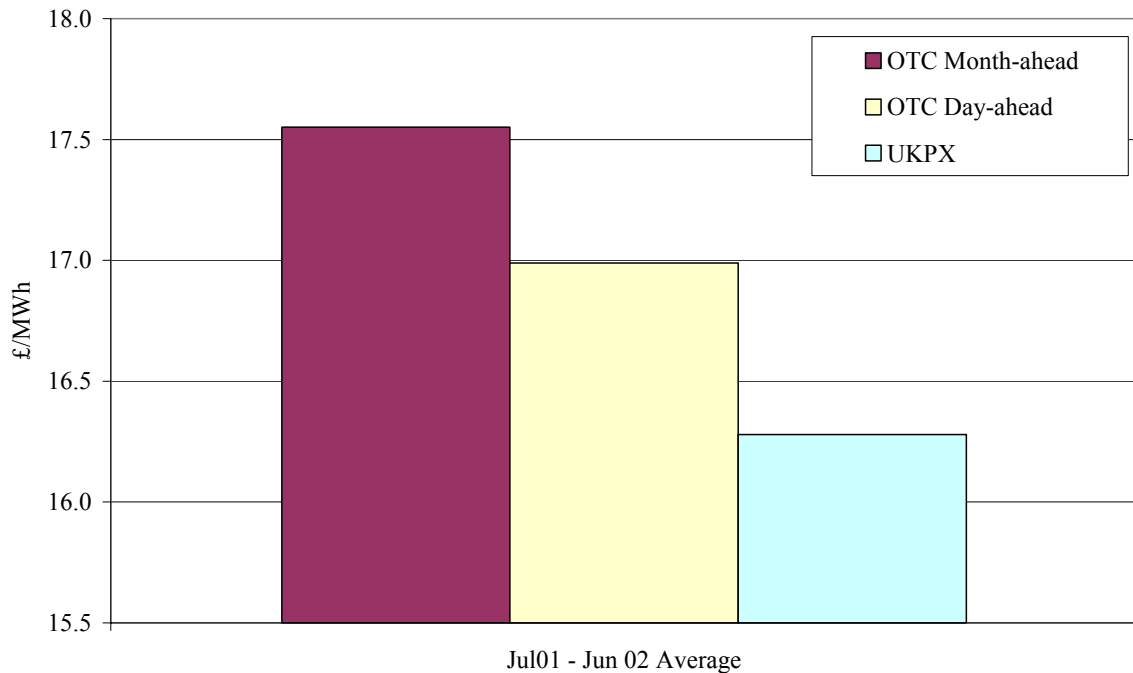
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<sup>4</sup> “An objective assessment of the impact of NETA on small generators”, September 2002.

<sup>5</sup> Ofgem has authorised modification P78, under which imbalances in the reverse direction to the net system imbalance would be settled at a neutral market price. This is scheduled for implementation on 25 February 2003. The effect will be to reduce but not to eliminate the spread on imbalance prices.

2.15 We have considered market prices from the month-ahead, day-ahead and UKPX markets. There is a consistent pattern of forward prices exceeding short-term prices, as shown in Figure 1 below<sup>7</sup>.

**Figure 1 – Annual average prices across different markets**



Source: Heren and UKPX

2.16 We interpret this pattern as apparently showing that the short-term markets are adversely affected by the asymmetric imbalance risks – we note that the penalty associated with being short has typically been double that of being long.

2.17 Generally, market participants (especially suppliers) have tended to contract conservatively in advance, leaving a surplus that can be released to the markets as real-time approaches. This has tended to depress short-term market prices. In a liquid market we would expect these patterns to be removed by arbitrage, and the

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<sup>6</sup> As noted in footnote 1 above, BSC parties may transfer risk to counterparties using MVRNs but it is not clear why a LEG would choose this option instead of trading directly, outside the NETA arrangements.

<sup>7</sup> It is interesting to note that month-ahead prices are closely related to average spot prices in the month of trade implying that market sentiment for next month's forward is driven by this month's spot prices. The annual average absolute difference between the month-ahead and day-ahead prices decreases from £1.9/MWh measured against the month of settlement to £0.7/MWh measured against the month of trade.

fact that the patterns have remained indicate a lack of liquidity in the short-term markets.

- 2.18 We conclude, based on the available information on the number of small trades and on liquidity close to delivery, that the liquidity of the markets is not sufficient to meet the trading needs of LEGs, were they to become BSC Signatories.

### **Administrative overheads**

- 2.19 This section deals with the administrative burdens on LEGs by virtue of participating in the NETA environment. We have identified the following areas:

- cost and complexity of becoming a Party to the BSC;
- cost and complexity of BM and Balancing Services participation;
- NETA market access and costs; and
- cost and complexity associated with suppliers contracting with LEGs.

- 2.20 LEGs note that NETA has imposed new costs and complexity for little or no reward. The process imposes a regulatory burden, including the substantial costs in understanding NETA, keeping up with consultations and contracting for services. Pay-as-bid markets (for BSC Parties) are more resource-intensive than once-daily Pool bidding (where generators had the additional option of price-taking through zero bids or inflexibility flags). Small generators are not well placed to absorb these costs when revenues are falling and, for gas plant, when costs are rising.

- 2.21 The impact of these additional burdens (financial and in terms of resource) must be understood in the context of typical small generator economics, with low absolute income. A 100kW generator will have income of approximately £8k-£15k per annum, whilst a 10MW generator would have income of £0.8m to £1.5m per annum. Set against this will be all the costs incurred by the small generator. The resourcing costs for understanding NETA are likely to have been extremely high for many of these generators. We examine some of these costs in more detail in the following paragraphs.

#### ***The costs of direct participation in NETA markets are prohibitive***

- 2.22 There are substantial costs in becoming a BSC Party associated with understanding and meeting the obligations imposed under NETA. This has occurred despite the original intention for NETA to be a simple and transparent market.
- 2.23 LEGs have commented that the costs of establishing and maintaining a trading function are beyond the means of small generators. Whilst the direct financial cost (fees etc.), of becoming a BSC Party is relatively small, the associated obligations on managing imbalance, contract notification, communication and, for

plant over 50MW, the provision of physical notifications to NGC can be very high – prohibitively so for smaller generators.

- 2.24 ILEX has been able to verify costs of direct NETA participation from a number of sources. These confirm the high costs involved. Absolute minimum costs for physical participation are an initial £50k outlay to permit communication with NETA and NGC systems. To access data flows and manage plant, costs are about £100k-£250k. Ongoing costs are a minimum of £50k per annum. This excludes any trading activities.
- 2.25 Membership and connection to UKPX is approximately £12k per annum, plus trading and settlement fees of up to 6.5p/MWh. To establish a fully fledged trading desk will cost £1m-£5m with on-going costs of £750k-£1m per annum, plus brokerage and settlement fees, credit costs etc.
- 2.26 It should be noted that smaller generators do not need to trade directly in NETA or become a BSC Party. Exemptable generators can sell to a supplier in SVA (in a similar manner to the way many traded pre-NETA). However, this may restrict the generator's access to the BM and its ability to manage its own imbalance risk. In our previous report to Slough Heat & Power<sup>8</sup>, we highlighted the problem of suppliers passing administrative costs (not related to imbalance) through to small generators. We gave the example of a recent export contract that ILEX helped to negotiate for a 30MW small generator. The contract included an administrative charge of £4,000 per month not related to imbalance costs.
- 2.27 Alternatively, the generator can trade in CVA and subcontract registration, trading and imbalance to a BSC Party. However, there are costs associated with this route. Trading functions tend to charge upfront fees of £50k-£100k per annum to smaller generators (no doubt to recover the fixed costs of establishing their own systems and integrating the generator) and take commission on trades undertaken on the generator's behalf. There are also significant contracting costs involved with such a route.

#### *Access to NETA markets*

- 2.28 LEGs have limited access to NETA markets – OTC forwards, power exchanges and the Balancing Mechanism. Power exchanges require participants to be BSC Parties; OTC counter-parties in the forwards markets and power exchanges have onerous credit requirements. The costs of entering the markets and managing trading risk can be very high (see paragraph 2.24).
- 2.29 The Balancing Mechanism favours large-scale participants. NGC will only deal with small sites on an aggregated basis, but this can be commercially difficult to arrange. Active participation is complex and involves high set-up costs for

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<sup>8</sup> “An objective assessment of the impact of NETA on small generators”, September 2002.

EDT/EDL<sup>9</sup> communications with NGC along with the generator's resourcing requirements.

- 2.30 Similar problems can exist in the provision of balancing services outside the BM. The fast reserve balancing service, created to increase competition in the provision of energy and system balancing, requires 50MWe of capacity (through a single control point) and a ramp rate of 25MW/min. LEGs argue that smaller generators could provide valuable services to the system operator. However, there are a number of reasons for LEG access to this market being impeded. These include communication, complexity and costs, as well as NGC's requirements being too large generator focused.
- 2.31 The costs of access to the Balancing Mechanism and balancing services are difficult to assess. Undoubtedly the communication, IT, and market monitoring required to participate are onerous for smaller players. Market rules may be overly complex, designed to ensure that the limited number of vertically integrated large players available to provide some services do not abuse their position – but in turn are acting as a barrier to introducing new competition, particularly from LEGs.
- 2.32 NGC has attempted to recruit new participants to balancing services and not to exclude small players per se. However, at times of system stress, it would appear reasonable for its control room staff to select BM bids or offers from a few larger, more expensive participants rather than a greater number of much smaller, cheaper participants. At these times, system security may over-ride normal least-cost objectives. NGC also has to be mindful of a need to ensure that smaller generators can provide a meaningful service to the system and not simply be awarded contracts for Bid or Offer Acceptances (BOAs) in the interests of inclusion.
- 2.33 The Fast Reserve balancing service was introduced in Autumn 2001 to encourage wider participation in system operation. Two mechanisms are permitted, within and outside the BM. Participation outside the BM was designed to assist small generators and demand sites to provide services. However, the first firm contract for service outside the BM was only awarded for February 2002 (to a demand site), due to delays in monitoring and communication systems and contracting difficulties.

***Costs and complexity of contracting with LEGs***

- 2.34 Small generators have highlighted their inability to negotiate fair contracts with suppliers in the NETA world. This phenomenon has often been attributed to the

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<sup>9</sup> EDT communications relate to information flows between the trading point and NGC with respect to PNs and bid-offer data. This function can be conducted by an agent. EDL communications relate to real-time bid-offer acceptances as well as the submission of availability and dynamics data. This must be conducted by the generator itself.

smaller number of suppliers, given recent trends towards consolidation in the supply market. The argument is that, as there are a limited number of suppliers with sufficient demand under a given GSP Group, these suppliers have a stronger hand in negotiations and can offer less attractive terms to LEGs. This is enhanced by the fact that suppliers recognise LEGs as being distressed sellers, given that there are limited alternative contracting opportunities open to them.

- 2.35 However, there is one additional factor that could play a part in this situation. The costs and complexity for suppliers in striking deals with LEGs, can itself be a disincentive for suppliers. This is particularly true given typical generation volumes and the ease with which suppliers can contract for generation via other routes (e.g. power exchanges).
- 2.36 In order to help identify which of these two factors is dominant, we have conducted a simple analysis to establish the extent to which new embedded generator connections are able to contract with a number of alternative suppliers in the different GSP Groups.
- 2.37 To determine how many suppliers have sufficient demand to contemplate contracting with a small generator, one can look at the number of suppliers with demand under a GSP Group greater than a given threshold during the lowest demand periods<sup>10</sup>.
- 2.38 In these low demand periods, the number of parties with demands greater than 10MWh, 20MWh and 50MWh were determined, by GSP group. In effect, the analysis is looking at the situation that would be faced by a new generator connection, for different capacity levels. The number of parties was very similar for each of the 3 periods considered, so the average values were taken.

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<sup>10</sup> From the published BSUoS data, one can determine the demand for each period. The three periods with the lowest demand between March 2001 and May 2002 are Period 11 and 12 on 27 May 2001 and Period 11 on 28 May 2001.

**Table 1 – Number of suppliers by GSP Group with sufficient demand to contract with small generators**

Threshold Level (MW)	10	20	50
<b>East Midlands</b>	8	7	5
<b>Eastern</b>	9	7	5
<b>London</b>	8	7	4
<b>Merseyside and North Wales</b>	6	6	4
<b>Midlands</b>	7	6	5
<b>North Western</b>	9	7	4
<b>Northern</b>	7	5	2
<b>South Eastern</b>	7	5	3
<b>South Wales</b>	7	4	3
<b>South Western</b>	8	5	2
<b>Southern</b>	10	7	7
<b>Yorkshire</b>	7	7	3

Source – ILEX analysis of BMRS data

Note – The supplier demands are net of embedded generation

- 2.39 From these results, it is possible to surmise that, in most cases, in theory, there appears to be sufficient numbers of suppliers, with adequate demand, to create a competitive market for small generators. For some GSP Groups (Northern, South Eastern, South Wales and South Western), at the 50MW threshold, supplier concentration limits the available suppliers (with whom contacts could be struck) to less than four.
- 2.40 Hence, it is likely that, in many cases, contracting complexity is the dominant factor in terms of restricting the number of supplier offers that LEGs receive to less than might otherwise be the case. This is consistent with anecdotal evidence of contracting negotiations that ILEX has handled on behalf of small generators.
- 2.41 We also note that should BSC modification P100 be approved, LEGs will be able to unbundle embedded benefits from the wholesale value of their export. This would mean that LEGs will be free to contract with a wider range of parties, rather than just suppliers with sufficient demand under a given GSP Group.
- 2.42 We conclude that there are potentially significant cost and administrative barriers to LEG participation in the NETA markets.

## **Access to market data**

### ***Price transparency***

- 2.43 One key issue affecting LEGs is that, under NETA, there is no widely accepted market reference price. This causes a number of problems for LEGs, whether they are BSC Parties or not.
- 2.44 For BSC Parties, the markets trade on a pay-as-bid basis. For smaller participants to compete directly in such markets on an equal basis, they would need market intelligence and trading services<sup>11</sup>, the cost of which would be disproportionate to their size.
- 2.45 For non-BSC Parties, the contracting options have been limited by the lack of a generally accepted reference price. Under the Pool, LEGs had a choice of negotiating a price that was fixed in advance (whereby the supplier accepted the price risk) or a price related to Pool prices (whereby the LEG accepted the price risk). If they chose the latter, Pool Purchase Price provided a universally recognised basis for the contract price (with allowance for embedded benefits as appropriate).
- 2.46 Under NETA, no such reference price has emerged. As mentioned in paragraph 2.11, under NETA there is therefore no economically available default market for LEGs. Thus, the option of an LEG accepting spot market prices for its output has effectively been removed. As a consequence, a LEG's negotiating position is weakened.

### ***Other market information***

- 2.47 With the advent of NETA, some consideration was given to how market data could be made publicly available. The Balancing Market Reporting System (BMRS) provides, free-of-charge, a range of information. This includes final physical notifications, imbalance price data and the anticipated net system imbalance for each half-hour.
- 2.48 The BMRS provides information in advance of and shortly after real-time. However, out-turn information (such as actual system imbalance and actual generation) is not published, which creates some gaps in transparency for non-BSC LEGs.

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<sup>11</sup> Under the Pool, this was less of an issue since Pooled generators could simply price-take, using zero-price bids or inflexibility flags. For non-Pooled generators on Pool-price related contracts, operation under the Pool was even more straightforward since prices were published at the day-ahead stage, allowing for fuel to be purchased and production plans to be determined with prior knowledge of the prices.



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- 2.49 Other data of relevance to LEGs, including the half-hourly transmission loss and ‘beer fund’ values, and the net metered and imbalance position of market participants, is restricted to BSC Parties. Such data is not deemed commercially confidential, as information relating to every BSC Party is available to every other BSC Party (in the form of a report labelled “SO142”, which is distributed by email). However, non-Parties have no access to such data. This is in contrast with the Pool, where ESIS provided a similar set of data (including generator bid prices) to all paying subscribers. Once again, this creates gaps in transparency for non-BSC LEGs.
- 2.50 The NETA architects have suggested consolidation (sharing of imbalance risks) as a way of allowing LEGs to access the NETA markets. However, to allow LEGs to independently verify the benefits of consolidation, the participating generators would need access to information on the net imbalance position of the consolidator. Again, while such information is available (via the SO142 report) to all BSC Parties, it is not available to non-parties. Furthermore, specialist consolidation services have not happened to any significant extent, seemingly due to the cost and complexity of making consolidation happen.
- 2.51 A further issue relates to the accessibility of market data. The BMRS provides raw data without any tools for interpretation and not in the most user-friendly formats. Similarly, for those BSC Parties who receive the SO142 report, the information is in a format that is extremely difficult to interpret (the volume of data sent daily is in excess of 40MB).
- 2.52 At the start of NETA, one company offered to provide a data-packaging service for the public-domain information already available over the BMRS. However, we understand that this was not launched due to data copyright restrictions.
- 2.53 As a consequence, market participants are effectively prevented from buying processed market data from service providers, except on a bespoke basis. For the information held in the SO142 report, potential service providers, who are not themselves BSC Parties, are denied access to the data entirely. These factors add to the administrative burden faced by small generators.

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### 3. POTENTIAL REMEDIES

- 3.1 In section 2, we highlighted a number of areas where small generators face administrative burdens. These were:
- costs of direct participation in NETA;
  - access to NETA markets;
  - costs and complexities of contracting with LEGs; and
  - access to market data.
- 3.2 We also highlighted the three contracting options available to LEGs. These were:
- direct participation in the NETA markets as BSC signatories;
  - ‘indirect’ participation by selling export volumes to a BSC signatory but taking imbalance exposure through contractual arrangements; and
  - ‘passive’ participation by selling export to a BSC signatory without imbalance exposure.
- 3.3 Many of the barriers relate to the first option – direct participation as a BSC signatory. It is likely that, even if some of the barriers to direct participation were reduced, the vast majority of LEGs, as was the case under the Pool, would choose not to employ this route to market. Hence, we primarily focus on changes that will assist LEGs contracting “indirectly” or “passively”. This allows us to concentrate on a reduced scope of issues.
- 3.4 However, despite the fact that very few LEGs will choose to directly participate in the NETA markets as BSC signatories, it is still important that the option of direct participation is made as simple and cost-effective as possible for LEGs. As mentioned in paragraph 2.11, this is because direct participation in NETA, as with joining the Pool prior to NETA, is the fall-back, or default position for most small generators. The easier the option of direct participation becomes for LEGs, the stronger the bargaining position with respect to negotiating contracts with BSC signatories under the “indirect” or “passive” contracting options. This combined strategy will maximise the potential for providing LEGs with a more ‘level playing field’.
- 3.5 Based on the above argument, Table 2 lists the barriers identified in section 2 and notes their relevance to the three contracting routes for LEGs.

**Table 2 – Barriers to LEGs’ participation, under alternative routes to market**

Issue	Direct participation (BSC Party)	Indirect participation (non-Party)	Passive participation (non-Party)
High cost of BSC participation <sup>12</sup>	x		
Access to NETA markets		x	x
Complexity of contracting with LEGs (lack of standard contracts)	x	x	x
Restricted access to market information		x	x
High cost of processing market information	x	x	x
Lack of transparency in market prices	x	x	x

**Key:**  
x LEG is directly affected

- 3.6 In the paragraphs that follow, we make suggestions as to how these barriers can be addressed, short of structural change or a change in BSC objectives. We first address the barriers faced by LEGs that choose to participate in the NETA markets directly as BSC signatories. Following this, we identify which barriers are relevant to the other two contracting routes and other barriers that do not impact on BSC signatories.

### **Direct participation in the NETA markets as BSC signatories**

#### ***Direct costs of BSC participation***

- 3.7 This barrier is only directly relevant for LEGs which choose to become BSC participants. In section 2, we highlighted a number of specific barriers under this heading. These were split between:

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<sup>12</sup> Costs may not increase as a function of contracting with LEGs, but suppliers may often push some of these costs back to the small generator.

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- minimal requirements for becoming a BSC party and communicating with the central systems; and
- minimal requirements for trading.

3.8 Table 3 summarises these barriers and comments on incremental changes that can be made to reduce the extent of the barrier.

**Table 3 – Direct costs of BSC participation**

	<b>Extent of barrier</b>	<b>Potential action / remedy</b>
<b>Non-trading related</b>		
Becoming a BSC Party	Minimal cost (credit risk?)	None
Communication with NETA and NGC systems	Low grade link ~ £50k	None - fixed charge
Access data flows and manage plant	Off the shelf software packages ~ £100-250k	Agency services for LEGs?
Ongoing costs	Minimum of ~£50k p.a.	Agency services for LEGs?
<b>Trading-related</b>		
Membership and connection to exchanges	UKPX charges £12k p.a.	None - market determined
Trading and settlement fees	~ 6.5p/MWh	None - market determined
Trading desk set-up	~ £1m-5m	None - market determined
Ongoing trading costs	£750k-£1m p.a.	None - market determined
Brokerage and settlement fees	?	None - market determined

Source – ILEX research.

3.9 As can be seen from Table 3, most of the costs of direct participation are unavoidable, without significant change to the market mechanics and trading arrangements, or market determined. As all of the trading-related costs are determined by the market providers of such functions, it is difficult to imagine any non-market-based remedies to reduce these costs to LEGs.

3.10 With regards to the non-trading related costs, it is currently possible for LEGs that choose to become BSC Parties to avoid some of the fixed costs. Primarily:

- purchasing a system for communication of PNs and bid notifications;

- accessing and managing data flows; and
  - ongoing costs.
- 3.11 Current rules stipulate that a BSC Party that does not participate in the BM and exports less than 50MW<sup>13</sup> onto the system does not need to make PNs. Hence, such generators are exempt from having to make investments in software systems and resources to submit PNs and bid-offer data.
- 3.12 Generators that export more than 50MW onto the system and do not participate in the BM, must submit PNs. However, this can be undertaken by a third-party (who is also a BSC Party). If the generator wishes to participate in the BM, regardless of the extent of export, it must submit bid-offer data itself.
- 3.13 For a LEG which exports more than 50MW onto the system (but does not participate in the BM), there is therefore the option of having PNs submitted on its behalf by an agent. Although this is feasible under the current BSC rules, this is certainly not a straight-forward option as many complications require attention. It is also an option that is not being utilised at present. There are very few LEGs in this category who have chosen to become BSC signatories. Similar agency services exist and are being utilised for non-BSC Party LEGs.

*Access to market data*

- 3.14 In section 2, we identified the following barriers with regards to data access:
- restricted access to market information;
  - high cost for processing market information; and
  - lack of transparency in market prices.
- 3.15 These three barriers are relevant to all LEGs, regardless of trading route, with the exception of the first barrier which is not applicable to BSC signatories. We propose ways of reducing these barriers in the following paragraphs.

*Restricted access to market information*

- 3.16 In section 2, we argued that LEGs (that are not BSC signatories) are at a disadvantage due to not having access to important market information. This is a barrier that did not exist under the Pool.
- 3.17 All of the relevant information is contained within the S0142 daily report currently circulated by e-mail to all BSC parties.

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<sup>13</sup> The 50MW limit is stated in the Grid Code. The BSC requires compliance with the Grid Code.

- 3.18 We propose that the existing SO142 report be made publicly available by email to any requesting person. Since there is already an email distribution of this report to requesting BSC Parties, this would appear to be possible at zero incremental cost, immediately, would provide more information to non-BSC Parties than the summary reports proposed by BSC modification P50 (rejected on the basis of excessive costs - September 2002) and would not require new charging and credit mechanisms for non-BSC Parties to be devised.
- 3.19 The reality is that under NETA, some data transparency has been reduced for non BSC-parties, with specific items of data (see paragraph 2.49) being restricted to BSC parties, resulting in non-BSC parties not being able to independently verify their contractual positions. Where this has occurred, it should be possible to redress the current situation without resorting to lengthy and costly solutions. We remain to be convinced about the logic of restricting data access on the basis of confidentiality of the data. All BSC Parties already have access to all data on their own competitors and those sites that have dedicated BM Units.
- 3.20 We understand that the email circulation of SO142 is an interim solution, and the longer-term solution is to use a download facility on a website. Again, it would appear to be a zero-cost solution to allow wider access to the SO142 report.
- 3.21 Although we see no reason why non-BSC signatories should not be allowed full access to market data, there exists another potential option. Currently, any company can apply to become a BSC Party. However, if after 6 months, none of the following actions have been taken by the Party, then the Party status is withdrawn:
- apply to register a metering system; or
  - apply to register a BM unit; or
  - submit an ECVN or a MVRN.
- 3.22 These are the terms as expressed in 2.6 of Section A of the BSC, 'Withdrawal of a Party which does not commence trading'. By changing this condition, it should be possible to allow a form of "junior Party" status whereby an entity can become a BSC Party, gain access to market data, and remain inactive indefinitely.

*High costs for processing market information*

- 3.23 Even if the S0142 report was made publicly available, there are still issues with regards to the processing of this data. In section 2, we argued that small generators do not have the resources to cost-effectively extract desired information from the raw data sets. Such data packaging is required in order to allow interpretation of the data.
- 3.24 The main obstacle preventing the commercial provision of such services is the Elxon copyright restrictions that apply to the BRMS (and presumably S0142) data. Given that the BRMS data is in the public domain, the copyright restriction prevents the provision of data packaging services that can reduce the costs for

LEGs of accessing the available data. Should the S0142 data be made available to non-BSC parties (as proposed above), the same argument would apply.

- 3.25 As the alternative to the market provision of data packaging services is a bespoke service (at considerable cost) or self-provision (at considerable resource commitment), continuation of the copyright requires justification.

*Lack of transparency in market prices*

- 3.26 In section 2, we addressed the contracting problems caused by the absence of a market reference price, in order for small generators to take price-risk as part of a contractual negotiation.
- 3.27 Although half-hourly prices are published based on trades done on the UKPX, power purchasers are currently reluctant to accept this as a price reference in a contract for LEG export. They argue that the UKPX price is not actually accessible for them because it is based on an average and the half-hourly price includes the price of 4-hour blocks in a rather simplistic fashion<sup>14</sup>. This is consistent with the findings of the P78 modification group, which, when discussing options for a market-based reverse price, argued that ‘none of the currently available indices were reflective of short-term energy costs as they include trades taken up to 48 hours in advance of the relevant settlement period’<sup>15</sup>.
- 3.28 As a result, for the reverse price to be based on actual reported market prices, it was deemed necessary for the reverse price to be derived from further analysis of market data, provided by an external body (Market Data Index Provider).
- 3.29 The establishment of a half-hourly market price for the purposes of the NGC System Operator Incentive Scheme further reinforces the difficulty in arriving at a transparent half-hourly market price. The half-hourly price (Net Imbalance Reference Price – NIRP) is based on a basket of UKPX prices and UK APX EFA block prices. Once again, this is not an accessible ‘market price’ around which contracts could be struck.
- 3.30 The question of price transparency for LEGs is highly related to market liquidity. Should market confidence in the UKPX half-hourly price increase, this should facilitate financial trading around the UKPX price.

### **Indirect or passive participation**

- 3.31 In the following paragraphs, we discuss barriers that wholly (or mainly) impact on LEGs that choose not to directly participate in the NETA markets as BSC parties.

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<sup>14</sup> The price of a 4-hour block is included within each relevant half-hourly price with no consideration of shape within the 4-hour period.

<sup>15</sup> Ofgem decision document for P78.



We have already highlighted areas where such generators are impeded by barriers associated with data access issues.

*Access to NETA markets*

- 3.32 In section 2, we commented on the difficulties encountered by LEGs in accessing the NETA markets. This included the forward markets (OTC and power exchanges) as well as the BM and balancing services outside of the BM.

*Forwards markets*

- 3.33 Requirements to participate in the forwards markets have been established by the market providers of such facilities. It is therefore difficult to argue for the reduction in these requirements to facilitate smaller generators. We have commented on this in paragraph 3.9 above.

*Balancing Mechanism and balancing services*

- 3.34 The high fixed costs for participation in the BM and balancing services are prohibitive for small generators. However, due to the nature of submitting and accepting bids and offers, often under extreme time pressure, these costs are largely unavoidable. Indeed, under the Pool, similar requirements existed for participation in ancillary services.
- 3.35 It should be noted that, in the vast majority of cases, small generators did not take part in the provision of ancillary services under the Pool. Hence, we are not looking at the imposition of a new barrier that did not exist prior to NETA. NGC is incentivised to arrive at a least cost solution to managing the system in real time. It will always be challenging for LEGs to be actively involved in this process. Even aggregation of small generator sites introduces complexities that NGC may not wish to deal with, particularly under conditions of system stress.
- 3.36 There are also difficulties and costs associated with NGC dealing with small generators acting through an intermediate distribution network. It may be more likely that small generators can achieve credit for system support activities through changes to the way that Distribution Network Operators (DNOs) operate and procure support services for their networks (active management of distribution networks). This would require a proper economic assessment of the costs and benefits that embedded generators bring to the distribution and transmission networks.

*Complexity of contracting with LEGs*

- 3.37 In section 2, we identified a number of cost barriers associated with contracting with LEGs. Such costs are created because of the need for individual contracts to be negotiated with regards to the price base and issues such as imbalance risk and embedded benefits. We commented that this often results in suppliers charging LEGs significant administration fees, independently from imbalance costs.

3.38 In order to reduce these costs and complexities, the creation of standard contracts for LEG export may be beneficial. These could either include or exclude imbalance risk. This would be similar to existing standard contracts for over-the-counter trading (e.g. GTMA). The introduction of standard contracts should reduce the administrative burden of contracting with LEGs. This would benefit small generators by:

- encouraging suppliers to contract with them: and
- reducing the costs that suppliers face which, as we discussed in paragraph 2.26, are often passed back to the small generator through an administration charge.

3.39 However, there are also many issues that will require attention. This mainly stems from the inherent complications of NETA and the significant differences between the various LEGs operating in the market. Standard contracts would have to deal with, amongst other things:

- variability of LEGs in terms of operation, size and requirements;
- information notifications;
- credit risk; and
- embedded benefits.

3.40 We do not consider that these problems are insurmountable. However, it may be difficult to resolve all of these issues in one standard contract. The introduction of standard contracts for LEGs is probably not an issue that can be addressed via a BSC modification, but might be more appropriately pursued via a proposal to Ofgem/DTI. Alternatively, industry participants can formulate and agree upon standard terms and conditions.

## 4. POTENTIAL BSC MODIFICATIONS

4.1 In section 2, we identified a number of cost and administrative barriers to LEG participation in NETA. In section 3, we presented potential remedies to these problems and highlighted where removal of a barrier would require structural change to the market or changes in BSC objectives. Based on our earlier analysis, we have identified three possible BSC modifications that could help to reduce these administrative barriers. These are all related to data access issues:

- allowing open access to the S0142 report (via e-mail or web access);
- creating an 'associate' BSC status and removing the conditions related to "Withdrawal of a Party which does not commence trading" (2.6 of BSC) to allow full data access; and
- removing Elexon copyright from available NETA data (e.g. BRMS / S0142).

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CONTRACTUAL AND ADMINISTRATIVE BARRIERS FACING LICENCE-  
EXEMPT GENERATION UNDER NETA

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Quality Control Check Sheet

ADMINISTRATIVE BARRIERS FACING LICENCE-EXEMPT GENERATION  
UNDER NETA

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