CHPA Response to the BERR/Ofgem Distributed Energy Consultation

Distributed Energy:

Initial Proposals For More Flexible Market & Licence Arrangements

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Executive Summary

The key points from this response are:

- DE and local electricity and heat markets have a potentially key role to play in the attainment of the government's low carbon policies and targets. Policy should reflect this and appropriate targets should be adopted;
- A range of specific measures are required if we are to be set on a track where existing barriers, which the Government acknowledges are real, can be tackled and this potential can be realised. Action to address these matters is overdue and early progress is required;
- Hoping that "something better" emerges out of the cash-out review or from organic supplier offerings in the DE market under current rules also falls short of the stated objectives of the BERR/Ofgem initiative given the real distortions already inherent in obtaining market access;
- A key barrier to progress is the current reach of the central trading arrangements, which are premised on the large-scale production and supply of electricity and were not designed to accommodate development of local markets, including heat. At present all routes to market other than for on-site supply for even small levels of decentralised trading has to be routed through the central trading arrangements and the scale players who dominate them, which imposes significant and unnecessary cost and complexity;
- In the first instance the rectification measures should focus on steps targeted on enabling development but without mandating involvement in the central trading processes, and at the same time ensuring that agency services develop that ensure orderly physical integration and settlement across the total system. The key measures that should be scoped and pursued as a priority are (i) the use of virtual private networks and the use of embedded trading sites, whose interaction with the centralised system should be measured on a net basis, (ii) a requirement on distributors to offer cost-reflective short-haul tariffs and (iii) the imposition of a requirement on existing supply licensees above a defined limit to offer exempt supplier services.
- The trading arrangements should recognise that local energy providers would not ordinarily balance and that this is a reasonable characteristic of an efficient low-carbon system. Because of the cash-out mechanism needs urgent reform;
- If these steps cannot be properly defined or do not deliver the hoped for development, further steps should be pursued, including the establishment of bespoke agents that can provide a route to market. At this stage we consider that establishment of a dedicated trading structure for local producers should be seen as a last resort; and
- While there is a need to update and tidy up the current licence exemptions regime, these changes should be assessed independently of the market measures outlined. They should not be considered to be an alternative.

Introduction

The Combined Heat and Power Association (CHPA) welcomes the opportunity to comment on the consultation, and strongly supports the intent behind the initiative to introduce greater flexibility in the market and licensing regimes to promote distributed energy (DE). The challenge is now how to translate the good thinking into tangible actions given the current concentrated state of the power market and the disconnections with the heat market.

- The CHPA is a not-for-profit trade association, we act as a focus for the CHP industry in the UK, providing support across our membership and working to establish and maintain the strong and stable market conditions necessary to grow the application of CHP technology
- The CHPA is widely recognised as the voice of CHP and district heating in the UK, bringing together key players on common issues and providing a vital avenue for communication with government at all levels
- The CHPA enjoys a strong influence as a lobby group through its strong relations with government, parliament and opposition parties, through an extensive network of contacts in the public policy arena
- The CHPA works to actively promote the CHP industry, with a particular emphasis on emerging market sectors and customer groups where a limited understanding of CHP and the procurement process can hamper market development.

In addition, the Association is concerned that whilst this consultation could formalise significant progress in this areas, the announcement on Thursday 6th March of a “Review Regulatory Regime for Energy Networks, that will investigate the 20-year old regime governing the regulation of the gas and electricity networks, could stall the natural momentum that DE has gathered.

Part 1: Creating an Appropriate Market Environment for Distributed Energy

In this part we discuss the extent of current barriers to development of the DE and the factors that should inform the next stages of this consultation.

The potential and the barriers must be quantified…

The Governments' energy policy framework acknowledges the potential contribution of local markets and DE to wider policy goals. However, a specific volume target has not been set. Consequently there is no sense of the scale of impact presented by a failure to facilitate wide-scale market entry for decentralised energy sources, despite the fact that many of the technologies are proven and reliable. The May 2007 report on barriers to distributed generation commented on the sub-optimal deployment and attributed this to an uneven playing field for investment.

The benefits of a distributed pattern of energy supply are manifold…

The CHPA believes that the potential contribution is significant and will deliver benefits across a range of policy objectives, but only if current barriers and market distortions can be addressed:

- Most DE schemes deliver carbon reductions from fossil fuel cogeneration applications to renewable technologies. CHP is saving some 5 million tonnes of CO2 emissions annually. The electricity generated by CHP schemes in 2006 was 27,973 GWh. This represents 7 per cent of the total electricity generated in the UK. Across the commercial and industrial sectors (including the fuel industries other than electricity generation) electrical output from CHP accounted for around 12 per cent of electricity consumption. CHP schemes in total supplied 53,631 GWh of heat in 2006.[1]
- In summary, by 2010, new (i.e. additional) generation of electricity is estimated to be around 61TWh, and by 2015 is likely to be abut 81 TWh, giving primary energy savings of about 44 TWh and 57TWh respectively. This generation potential is equivalent to about 17% of the projected total for electricity generation in 2010. In terms of additional capacity, this corresponds to about 8.2 GWe by 2010 and 10.6 GWe by 2015[2]
- DE systems can provide efficiency benefits. These benefits derive from avoiding transmission losses (typically 2%) reduced or avoided distribution losses (5-8%) and, with CHP, increased conversion efficiency.
- Local generation offers the opportunity of matching supply to demand patterns as well as the use of local energy sources. These combine to present an alternative to existing centralised patterns of energy supply, increasing competitive pressure in the market and improving security of supply both nationally and locally;
- Local development can help forego the need for or deferral of network reinforcement, thus saving the economy considerable capital expenditure, and helping more efficient network utilisation;
- Local developments could embrace solutions that utilise the otherwise wasteful production of heat at large power stations. This heat is currently emitted into the atmosphere. Central power stations could, thereby, to some extent gain the efficiency benefits of the combined heat and power model;

[1] Based on figures from DTI Digest of UK Energy Stats 06 & BERR Call for Evidence on Heat 08

[2] DEFRA's Analysis of the UK potential for Combined Heat and Power, October 2007

- Local developments also engage local communities and businesses in low carbon development and can help other energy service solutions that would otherwise struggle to achieve penetration.
- Key technologies are already proven so scale deployment should reduce costs; where applications are immature, active promotion should bring these to market sooner.

The May 2007 document notes various initiatives and policies but these are mainly targeted on micro-generation or domestic applications. While important, this focus overlooks the significant potential that exists above 50kw and below (typically) 50MW in terms of stimulating community schemes and in exploiting local, renewable and combined heat schemes.

Significant obstacles to a distributed pattern of generation and supply are already apparent in the electricity market…

The problems faced by operators with regard to accessing the market for power already exist and are significant. They are best summarised as follows:

- There are significant difficulties to buying and selling small packets of power in a market designed for bulk, centralised supply. The costs, risks and complexities of the electricity market systems also present real and significant barriers;
- Anecdotal evidence suggests prices (where these are offered to local schemes) for power are depressed and often discounted heavily by suppliers to reflect balancing risks that they usually avoid because of their diversified portfolios. The Association would continue to encourage BERR/Ofgem to gather hard evidence of current arrangements in this area so they can assess the extent of the mismatch between the value of the product and the terms on offer;
- The structure of the wholesale market and its central trading arrangements impose costs on local generation and also systematically discriminate against inflexible and intermittent technologies and those that will routinely spill. Current incentive structures actually discourage the system operator from valuing the security and supply benefit of local sources of power;
- For many smaller generators there are few routes to market other than through the suppliers and consolidators primarily because:
    1. There are no guaranteed avenues for DE operators to obtain top-up and back-up services and the agency services necessitated by the complex central trading arrangements;
    2. There is skewed access to local networks, as distributors' tariff structures are not designed to accommodate local point-to-point transactions on a cost-reflective basis;
    3. Where an operator makes anything more than an immaterial supply of electricity off-site it takes on complex and costly requirements with regard to the central trading arrangements, including compliance with burdensome industry codes; and
    4. To a lesser extent the licensing regime imposes a number of compliance requirements that are not appropriate or proportionate to small-scale operators. While customer protection is important, the licences also impose overbearing obligations on developers whose primary purpose is not the supply of electricity to customers.

The impact of these constraints will only increase as incentives drive towards greater levels of decentralised energy supply…

Taking London as an example, the targets presented in London's Climate Change Action Plan calls for 25% of London's total energy to be supplied by DE by 2025 with an anticipated annual saving of 7.2MtC.3

On a national basis there are various estimates of the scale of potential DE rollout. Work across Government suggests the contribution could be significant. For instance, the Energy Savings Trust found that the cost-effective potential for CHP in community heating alone is estimated to be around 2.3GWe in 2010. Measures already adopted by Government, outside of the RO, including the Partnership for Renewables' programme and the micro-generation strategy, will help form a more joined up approach that should enable more of the potential to be tapped, but they are a start, not the end.

The scale of these anticipated benefits demands an appropriate and significant scale of response from Government, the regulator and the industry. This response should take the form of clearly set, stretching capacity targets supported by both prescriptive regulation and market incentives operating across all relevant policy areas.

Interventions already implemented by the government, whether regulatory or market-based, should continue to encourage the development of decentralised forms of power generation and a decentralised pattern of supply. These include the Renewables Obligation, the EUETS, the Carbon Reduction Commitment and planning policy, as well as several policies and programmes focussed on micro-generation.

However, the effectiveness of these measures is undermined by the barriers and costs identified in the consultation, which impact increasingly upon CHP generation of less than 50MW. Further, as DE continues to develop, the effect of the existing barriers will increase, whilst also increasing cost and inevitably hindering the rate of development that would otherwise occur. As we have noted there are no measures targeted specifically at generators above 50kW to create compensating incentives.

For this reason simple further interventions, such as changes to governance arrangements on their own or development of pilot schemes similar to the RPZs facilitated by licensees will be insufficient to deliver the objectives set out by Government and Ofgem in the consultation document. Similarly, hoping that "something better" emerges out of the cash-out review or from organic supplier offerings under current rules would also fall significantly short of the stated objectives given the real distortions inherent in obtaining market access for Distributed Generators.

There is a significant risk that developing a limited work programme to meet the objectives will serve only to present an illusion of change whilst allowing fundamental tensions that have been well-documented to remain unabated, creating inefficiency and unnecessary cost without crystallising the benefits.

[3] London Climate Change Action Plan, February 2007

The reality of the present heavily centralised market-place must be recognised and reflected in a workable approach…

It is necessary to adopt a range of structured, targeted, inter-related and practical measures in order to realise the specific outcomes that will be necessary to support or reinforce the development of a healthy distributed energy services market. The complexity of the current regulatory and market framework means that it is unrealistic to expect that the market will develop comprehensive solutions of its own accord given the breadth of the challenge that is faced.

It is also important that practical measures should be pursued, rather than some of the more speculative measures canvassed in the consultation. For example, while the establishment of a dedicated pool or the creation of a specialist energy trader role are both possible, they would represent significant restructuring and upheaval that may be disproportionate when other, simpler measures are available. Dependence upon such approaches could also risk compromising early and sustainable growth in the nascent DE market.

As a competitive alternative, decentralised energy must be open to competition…

The priority facing BERR and Ofgem is to introduce measures targeted at eliminating barriers and unnecessary costs to enable both existing operators and developers to improve access to the market. This is the best guarantee that over time competitive access and long-term price pressure will develop.

Furthermore, while the CHPA considers that the existing licence exemptions provide a valuable purpose, any revised, thresholds are likely to become quickly overtaken in respect of the scale of demand for decentralised patterns of supply. They may also present perverse incentives for the development of sub-optimal schemes given their reliance on arbitrary thresholds.

Decentralised energy should not become a rationale for duplication of natural monopolies…

DE must be afforded the scope to develop on the existing distribution infrastructure without facing distorting network charging arrangements and without artificial cost pressures to bypass the public system. In the past a number of schemes have developed “off-market” and taken advantage of opportunities under the licence exemptions regime. This has led to the development of the dual concepts of on-site supply and the private network. On site supply will always occur for certain energy intensive users, but expansion of this sector should not on its own be considered a measure of success of the DE arrangements.

Similarly, while private networks can provide a valuable role and might be an appropriate local solution in some cases, we believe a much more organic and efficient route to progress is to better enable the development of virtual private networks within the mainstream DNO area across existing networks.

Any case where a duplicate private-wire network emerges as a preferred solution to utilising existing, fully- or partly-depreciated assets must be considered as a failure of the existing regulatory and market framework.

Transparent arrangements must be preferred to arbitrary restrictions in promoting decentralised energy competition…

The current licence exemption regime, while in need of rationalisation, fulfils a useful purpose. Whilst it should remain a feature of the market landscape, the issue remains as to whether existing restrictions on development of exempt developments by licensed entities should be relaxed.

As a rule, if generic market-based solutions can be found that encourage DE roll-out on public networks, it would be counter-productive to limit artificially the ability of joint venture solutions involving, for instance, established licensed utility players and local authorities, to develop.

Conversely, BERR/Ofgem need to be alert to a situation whereby a lack of transparency or appropriate market mechanisms act as a barrier to entry or enable existing incumbents to saturate the market, to "cherry pick" developments or to exploit any information asymmetry in respect of the traded market. Such situations would further skew competitive opportunities to exploit DE for the benefit of established players. Such an outcome could give rise to shorter-term gains, but would cloud the longer-term health of the sector as it would be much less competitive and diverse.

Decentralised energy must be considered holistically, as a coordinated pattern of supply for thermal and electrical services…

An effective assessment of the measures necessary to develop a decentralised pattern of energy supply cannot be delivered through an approach that considers the supply of heat or cooling independently from the supply of electricity. In this context the CHPA was welcomed the recent call for evidence by BERR on heat and supports the early development of a coherent strategy in this area.

In many situations it is the opportunity to meet a local demand for heat or cooling that establishes the primary commercial case for the development of related, low-carbon electricity supply from cogeneration or trigeneration. The market for conventional supply of gas and electricity has already demonstrated the economies that can be achieved through retail 'dual-fuel' offerings. Decentralised energy presents an obvious opportunity to encourage the development of a pattern of supply that exploits the fundamental, physical opportunity to generate heat and power simultaneously. The approach adopted by the Government and its agencies should not be permitted to compromise this opportunity by defining the problem, or the solution, in terms of existing, inappropriate market and regulatory frameworks.

Part 2: Significant Issues and Priority Solutions

In this part we discuss the various measures identified in the consultation and develop a clear ranking that should form the basis of a strategy for stimulating DE.

1. Summary of Market Routes to Realising Objectives

We consider that the various measures and proposals in the BERR/Ofgem document—most of which are summarised at Table 2 of the consultation document and which in turn represents a useful summary of the main options for change—can be grouped into four categories. The four groups are essentially linked actions that if appropriately applied should allow development of an holistic approach for the promotion of distributed energy.

The four groupings are laid out below:

Stand-alone measures	These measures are enhancements that stand on their own merits and should be taken independently of the current initiative by BERR/Ofgem, and they would improve market efficiency and the contribution of distributed energy irrespective of other actions taken. There is no reason why specific consideration and definition of these measures should not be started immediately.
Minimum market model	For the reasons we have set out in Part 1 of this response, the current structure of the centralised trading arrangements discriminates against distributed energy production and supply. Specific steps are required to address the barriers. The specific steps that should be taken to tackle the market access barriers in this grouping broadly fit within the framework provided by the present centralised market structures. This group comprises the minimum necessary measures to constitute an appropriate policy and regulatory response.
Active market maker role	In the first instance the measures outlined in the section on the minimum market model should be trialled and assessed. Defined success criteria should be established, and the views of key stakeholders such as the CHPA sought after a period of say two years. If the criteria are not met or progress is significantly less than hoped for, more proactive steps should be contemplated.
Dedicated market	We consider this the default option, which should be contemplated for implementation only at some future point if all other approaches are considered to have failed and steps to allow DE fail.

The Table below groups the measures set out in the consultation under these headings and sets out our comment on each. The emphases of these comments are geared towards making the existing market system work to accommodate DE. In preferring this approach we do not underestimate the barriers and costs that need to be addressed. Ultimately centralised and decentralised systems need to be crafted in parallel, to avoid artificial seams and perverse incentives.

	Option	Comment
Stand-alone measures "Do it anyway"		
A1	Consider the needs of small intermittent generators as part of the ongoing cash-out review	The cash out system in the current settlement mechanism is not fit for purpose in a world where decentralised energy should be able to compete on a level playing field with centralised energy providers. It should be fundamentally revised so as to make price negotiations for the import / export of power to DE sites less open to downward valuation due to imbalance risk. Current modification proposal already address aspects of this issue, especially the distorting issue of price pollution, and the CHPA has indicated its support for implementation of P211. However we would suggest that some form of tolerance band should urgently be considered for small quantities that are less than the quantities routinely traded on the central power exchange or by the main brokers. The trading arrangements should recognise that local energy providers would not ordinarily balance and that this is a reasonable characteristic of an efficient low-carbon system. A fundamental revision to the cash-out arrangements should mitigate imbalance exposure; both reducing balancing costs and mitigating the opportunity for suppliers to arbitrarily discount DE revenues.
A2	Consider BSC governance	While we think code governance is very important, it is not clear what direct representation on the BSC panel would achieve beyond symbolic value. Rather we would wish to see key stakeholder groups such as the CHPA given a right to bring forward code change proposals where necessary under the BSC and other relevant codes. At the same time code administrators such as Elexon need to provide clearer, simpler dissemination of relevant information to stakeholders who are not wholesale participants. More generally code structures need to be reviewed to establish how they can be made more accountable and accessible to stakeholder groups such as those involved with CHP, renewables and DE.
B1	Consider if any further measures can be introduced to improve market access for consolidators	Consideration of improving the scope for consolidation within the BSC is an area that could usefully be reopened more than four years on from the implementation of P100, especially for the providers of smaller quantities of power, and this area should be referred to a BSC issues group.
B3	Improve forecasting capability for small-scale renewable and low carbon plant	Current data flows under the BSC are complex and disaggregated. The views of small-scale operators on both the inputs and outputs from the forecasting process, including their usefulness, should be addressed, especially given the magnitude of imbalance penalties currently applied through direct access under the BSC but also indirectly through contract premia applied by direct trading parties. The whole area of information dissemination under the BSC and related codes is a concern to the CHPA, and there is a pressing need to consolidate reports in a similar way to the enhancements recently achieved in the gas market.

C3	Request suppliers and distributors to come forward with proposals to trial ideas that benefit distributed generators, networks and customers	There is clearly scope for market participants to develop proposals, perhaps building on the RPZ and IFI arrangements currently applying to distributors. However such arrangements should not be exclusively limited to distributors and progressed through incentives on them.
C6	Ofgem to monitor development and review of technical standards for connection to the distribution network	We are surprised Ofgem does not already carry out such monitoring of technical codes; it should be part and parcel of routine code governance and "better regulation". If Ofgem does not already take impacts on smaller parties and potential new entrants specifically into account in its decision-making processes, it should.
D3	Review the BSC and MRA to determine if there are any disproportionate or unfair costs being levied on DE	Again monitoring the effect of cost recovery from small players and developers of low-carbon technologies should be an on-going facet of good governance.
Minimum market model		
C1	Impose an exempt supply services obligation on suppliers	**One of three key steps needed.** Few suppliers are offering exempt services that are affordable, but they control the route to market for all DE operators and terms of access. They should be required to offer these services, and the terms on which offers are made should be published and subject to Ofgem scrutiny. Ofgem should also exercise a determination role in the event of disputes.
C2	Explore the validity and feasibility of innovative arrangements (such as "virtual private network") for DE schemes to supply electricity to local customers over the licensed network	**This step is also key.** It is essential that developments are encouraged across the existing system, which means that mechanisms need to be developed to accommodate virtual private networks. This type of arrangement should be structured to effectively enable establishment of an exempt trading unit where only net exports are deemed to be entering the central settlement processes.
C4	Consider encouraging DNOs to develop a methodology for calculating line loss factors for DE that reflects the close location of demand and generation within 12 months	Line loss factors applied by all DNOs need to reflect consistent principles. They also should signal the benefit of contiguous production and consumption on technical losses.
C5	Encourage DNOs to develop cost-reflective DUoS charges for distributed generation within	**Combined with C1 and C2, this step is key.** DNOs should be required to offer point-to-point short-haul tariffs for use of the electricity distribution system. Arguably this should already occur given existing obligations on

	12 months	licensees to offer cost-reflective tariffs, and Ofgem should progress this matter urgently through DCMF.
D1	Allow for the delegation of the high-cost high-competency aspects of the supply licence to third parties	There should be a formal requirement under licence on large suppliers with say over 100,000 customers to offer agency services "on request" and it could be administered and regulated in the same way as C1. As with other "exempt" services, these terms should be offered on reasonable terms and disputes should be referable to Ofgem..
D4	Consider case for new supply licence conditions	Both the proposals at C1 and D1 should be underpinned by licence conditions. Further thought should also be directed at circumstances where a licensed supplier is above the current exemption threshold but whose main activity is primarily not the supply of electricity or where it is making limited supplies off-site.

Active market maker facilitation

B2	Introduce a specialist energy trader into the market to make purchases (and sales) of zero and low carbon output from small distributed generators	A market agent could be introduced, to consolidate DE operators' imports and exports from sites into larger packets of power, capable of being traded more effectively in the electricity market system. They would also exercise the agency roles (see D2). There are various options for establishing this role. It could be tendered on a national basis or combined with the activities already carried out by National Grid (whose own imbalances are already cashed-out at zero, and which could provide an appropriate approach for dealing with BE surpluses and deficits) . Alternatively a regional role could be tendered. Care would be needed to ensure that the Market agent or aggregator's sphere of operation extended to the smaller end of the market recognising the current and beneficial activities of consolidators in the market.
D2	Ensure the provision of a licensed supplier agency in the market that can spread the costs of licensing over a large number of DE schemes	As noted, the trader and the agent roles could be carried out separately or combined. The agent role should be to manage the interface between DE operators and the electricity supply market system (notably BSC and MRA). If the roles were separated, it would be possible to tender for either or both on a national or a GSP group basis. If the rules are structured correctly it is likely the same entity/entities would seek to carry out both roles.

Dedicated market

B4	Assess the strength of economic case for, and explore feasibility of, a dedicated wholesale market for DE	While this proposal should be further tested, it should be considered to be a last resort, if other measures demonstrably do not work.

2. Licence Conditions and Exemptions

In the CHPA's view the alternative approach to addressing certain of these barriers, by using the Class Exemptions Order to exempt schemes from holding electricity supply and distribution licences and so avoid exposure to the electricity market systems, presents limited scope for isolating DE from excessive electricity market costs and risks. It should be seen as the exception, not the rule.

Any role for raising Class Exemption limits should be to provide a short-term relief to the pressure to develop decentralised supply systems, whilst recognising that this extension is likely to be modest and cannot represent an enduring solution. Any policy consideration of these matters should not dissipate the need for the wide-ranging market measures we have commented on above.

Not withstanding the above, the scope for any party to establish conditions for viable and cost-competitive trading and energy supply through the provisions of the Class Exemption order should not be compromised by present reforms. Class Exemptions should remain an important facet of decentralised energy, and in many respects reflect the fundamental need to frame energy supply arrangements to reflect local conditions. At the same time, it would be impractical to assume that the wholesale expansion of decentralised energy that is implicit in the Government's vision for a diverse, competitive pattern of the low-carbon energy supply could be achieved simply through the class exemptions approach.

Part 3: Response to the Questions Presented in the Consultation Document

In this part we address the specific questions raised in the consultation document.

Question 1 **If the exemption limits for supply and distribution to domestic customers were to be raised, what measures would be required to ensure ongoing and effective protection of energy customers, and how would this be enforced or monitored?**

The CHPA sees the priority as being to tackle market barriers rather than raise exemption limits.

Question 2 **Should the existing per company maximum exemption limit be removed allowing one company to develop a number of different sites?**

Probably. As a rule, if generic market-based solutions can be found that encourage DE roll-out on public networks, it would be counter-productive to limit artificially the ability of joint venture solutions involving, for instance, established licensed utility players and local authorities, to develop.

Conversely, BERR/Ofgem need to be alert to a situation whereby a lack of transparency or appropriate market mechanisms act as a barrier to entry or enable existing incumbents to saturate the market, to "cherry pick" developments or to exploit any information asymmetry in respect of the traded market. Such situations would further skew competitive opportunities to exploit DE for the benefit of established players. Such an outcome could give rise to shorter-term gains but would cloud the longer-term health of the sector as it would be much less competitive and diverse.

Question 3 **We welcome evidence on the size of DE scheme that would be considered economic and efficient in different settings if exemption thresholds were not an issue. We also seek views on what the appropriate exemption limits should be across generation, supply and distribution.**

There is a great diversity of types of scheme that makes it impossible to answer this question properly in consultation timescales.

Question 4 **(chapter 2): We welcome views on the 2001 Class Exemption Order, and areas where there could be more clarity in particular.**

Irrespective of any changes that might be contemplated to the order, it is disjointed and out of date and requires review.

Question 4 **(chapter 3): Do you consider it appropriate to use the provisions of the BSC to increase the representation of DE schemes in BSC governance processes?**

Associations such as CHPA should be able to raise change proposals. We so no immediate need to have direct representation. See Table 1, A2.

Question 5: **Do you consider that there is a case for allocating funding for DE representation in BSC governance? If so, do you have views on where the funding should come from?**

As above. If funding is needed it should be provided from the BSC trading parties.

Question 6 **Have we considered all the options to address the risk DE schemes are exposed to if trading in the wholesale markets? We welcome any other proposals to accommodate the needs of DE schemes selling their electricity in this way.**

Broadly yes, but the extent and effect of imbalance risk is greatly understated (e.g. there is no assessment of contract premia and benefit sharing). Cash-out reform and perhaps use of tolerance bands within cash-out should be seen as a key element of the remedial package.

Question 7 **Do you consider that third party purchasers undervalue exports from DE schemes? We would welcome information from both generators and purchasers on prices that have been agreed for electricity from small generators. If necessary, the information can be provided in confidence.**

Yes. There is an urgent need for analysis and field-work in this area. The Association would be pleased to offer whatever support it can in this area. However it is considered that BERR/OFGEM are much better placed to undertake an objective and comprehensive survey and analysis.

Question 8 **We would welcome views on whether there is a lack of competition in the market for small generator output?**

Empirical evidence suggests little real competition in offtake offers outside of ROCs/LECs etc.. As we note at Table 1, C1, there needs to be an obligation to offer terms as a minimum, probably at published prices.

Question 9 **Have we considered all the reasons for the lack of development of consolidation services in the market? We welcome views on whether further changes to the market rules may be warranted to remove any barriers to entry that continue to exist for consolidators.**

Consolidation has developed but typically at levels involving tens of MWs. The majority of DE schemes are likely to exist at rather less than this. As we indicate at Table 1, B1, there is a need to consider this matter within the BSC.

Question 10 **Do you think there is a case for a specialist Energy Trader? What are your views on the scope and functions the specialist agency could perform as an interface between DE generators and the current trading arrangements?**

Yes if obligations on existing participants were considered not to be workable. See Table 1, B2.

Question 11 **An Energy Trader option could be implemented by allowing the market to deliver, placing an obligation on suppliers or by tendering for the role. We welcome views on these suggested routes and any others we have not considered in this consultation document.**

As above.

Question 12 **Do you have any views on how the understanding and forecasting capability for DE technology could be improved?**

Nothing specific.

Question 14 **Have we considered all the options to address the lack of competition in the market for small generator output?**

Probably but to validate this, BERR/Ofgem need to gather hard data from the market on prices and services. See Question 7.

Question 16 **DE schemes face a trade-off between carrying the cost and ongoing maintenance of a private wire network linking their sites, and the direct and indirect costs of using the licensed distribution network. We are keen to better understand circumstances that lead a scheme to favour the private wire option and how incentives vary depending on the distance of the second (or multiple) sites?**

For the reasons set out in part 1, the objective should be to facilitate DE schemes on public networks.

Question 17 **Is there adequate availability of Exempt Supplier Services in the market place? If the demand for such services is likely to increase with expected development of DE, we welcome views on whether the market will respond appropriately or whether intervention is required to ensure the availability of these services.**

No. Terms are invariably poor. See Table 1, C1 and D4 above.

Question 18 **We welcome views on whether an Exempt Supplier Services obligation (similar to the former Standard Condition 53) should be imposed on all suppliers and whether any specific additional requirements are now necessary.**

Yes, there is a need for a replacement obligation. Again see Table 1, C4. The decision to remove the previous obligation was taken in the context of a lower demand and a considerably less optimistic market outlook for DE, than exist today.

Question 19 **We welcome views on the feasibility of Exempt Supplier Services being provided at system cost - i.e., merely the costs incurred by suppliers from third parties in registering meters, using the network, etc. Are there ways of integrating with supply systems such that Exempt Suppliers do not create any overhead on Supplier operations?**

The CHPA agrees these terms should be provided at cost, possibly with addition of a reasonable transaction fee.

Question 20 **Is there a case for DE representation at the Energy Network Association working group examining the technical standards for connection? If so, do you have views on how representation might be funded?**

Yes. The funding should come from licensed distributors.

Question 21 **We welcome examples of where technical standards may be unduly onerous and discourage connection to the network for small generators.**

Connecting Distributed Generation: Cutting Costs of Neutral Voltage Displacement

The Engineering Recommendations for connection and operation of generation – colloquially known as G75 and G59/1, are currently being revised. The CHPA has picked up a serious problem, in certain network operators interpretation of protection settings to detect 'Loss of Mains', which could make mid-sized CHP installations uneconomic. An informative generator and DNO workshop was held in early January, which examined the legal situation, the likelihood of such 'island' operation being sustained and then detected by existing protection and the prohibitive costs of installing

In the case of Neutral Voltage Displacement (NVD), the negative effects have been robustly stated by Cogenco, ENER-G and Yorkshire Forward, The experience of engagement with the DNOs on this specific aspect of the revision of these Engineering Recommendations suggests that there is real scope to deliver substantive, wider progress through effective dialogue between network operators and distributed generators. Members of the CHPA who have been affected by this problem have been encouraged to contact the Director. The CHPA can provide further details.

Question 22 **We welcome views on the proposed options to improve the accessibility of the licensed network to DE schemes, and whether there are any other relevant options we have not considered.**

See Table 1, C2 and C5.

Question 23 **What are the costs of start-up for small suppliers? What is the break even point for small suppliers?**

It depends on their business model and target customers. But basically it is high owing to the complexity and risks inherent in the market. BERR/OFGEM should perhaps consider the following parameters in addressing this question: the extent of consolidation in the supply market, the scale distribution and profitability of existing supply businesses, the trading duration and commercial fate of smaller supply businesses outside of the big six.

Question 24 **Do economics of CHP justify the additional investment over and above that of a boiler based system? What are the contexts where CHP might be chosen over heat-only schemes?**

The CHPA will be addressing this issue as part of its response to the call for evidence on Heat. In general terms this will depend on the circumstances of individual schemes, upon market fundamentals and upon the availability of effective fiscal, market and regulatory incentives.

Question 25 **Is there a case for granting a limited number of supply licences to new entrant DE schemes that restrict customers switching to an alternative supplier for a period of, say, 5 years?**

Yes but much further thought is needed on how this might work.

Question 26 **We welcome views on what types of advice and information would usefully help DE schemes start up and interact with the wider electricity system, and who should provide this?**

Trade associations such as the CHP have a natural role to play in this area, not least to properly target their members.

Question 27 **Do you consider that there is a case for a new DE supply licence? If so, do you have views on its key terms? Please explain your reasoning in detail.**

The important thing is to focus on the market changes outlined in this response.

There are important synergies that exist between the reform of licensing arrangements and the increasing shift towards low- and zero- carbon developments.

This aspect of development will create a fundamental demand for distributed energy supplies and it is imperative that the licensing and regulatory regime can support the development of effective supply. This does not, however, create a requirement for a Distributed Energy licence per se; any licensing and regulatory regime should embrace the approaches set out previously, irrespective of nomenclature.

It may, however, simplify a number of considerations if a consistent and robust definition of Distributed Energy could be developed and applied universally in Government and regulatory initiatives.

Question 28 **We welcome views on the proposed options for reducing the costs of becoming a licensed supplier and any other options that we have not considered in this consultation document.**

It is not the costs of licensing that are significant, but the associated compliance requirements that accompany supplier status.