



# ScottishPower

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Dear Ms Kulhavy,

## **DISTRIBUTED ENERGY – INITIAL PROPOSALS FOR MORE FLEXIBLE MARKET AND LICENSING ARRANGEMENTS**

Thank you for the opportunity to provide our views on Ofgem and BERR's initial proposals for introducing greater flexibility to the market, regulatory and licensing arrangements for distributed low-carbon electricity, as signalled in the Energy White paper. This response is submitted on behalf of the ScottishPower Group and ScottishPower Renewable Energy Ltd. I apologise for the delay in getting back to you.

We believe that Distributed Energy (DE) can play a useful role within the UK energy mix, and that in the right applications it can help meet carbon dioxide reduction targets. However, it is important to emphasise that these benefits only arise in good quality applications; for example, a poor quality CHP installation (where the heat and power needs are not properly matched) may not have carbon benefits compared to dedicated electricity and heat units.

We also acknowledge that existing regulatory and market arrangements were principally designed to benefit customers through promoting competition between the large centralised generators. It is therefore right to review these arrangements to ensure that the playing field is level as respects distributed energy, and to ensure that smaller players are not unfairly disadvantaged.

There are a number of points which we would like to draw to your attention in particular:

- To adequately address the barriers to DE, and lower carbon emissions, we believe that low carbon heat and the current 'Heat Call for Evidence' must be considered alongside this consultation, as this will be critical to building the economic case for many DE projects.
- We agree that increasing the licence exemption limits does not seem to be the right way forward for the reasons given in the consultation document. In

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particular, it would seem to move the problem to a different volume threshold rather than solve it, and could increase the number of customers excluded from the competitive market. We think the focus should be on identifying any undue disadvantage faced by DE schemes in the market and remedying it.

- We believe that current political and policy drivers will result in a marked increase in the deployment of DE with or without the creation of a separate wholesale market in this area. We do not see this option as either desirable or necessary.
- We do not believe that there should be an obligation placed on suppliers to offer exempt supplier services. Instead, we believe that these services would be best offered on a competitive basis and that increasing demand will, in itself, drive the most appropriate solution.
- Before any proposals are taken forward, we would urge Ofgem and BERR to ensure that a full impact assessment is undertaken and any potentially perverse outcomes are fully understood to ensure that there is no long term detrimental impact on the wider energy market.

I have attached two supplementary Annexes. Annex A provides a more in-depth response on the matters noted above and provides our thoughts on the issues raised by the questions contained within the consultation document. Annex B provides in tabular format our views on the 16 proposed options for reform.

If you would like to discuss these or any other issues in further detail, please do not hesitate to contact me.

Yours sincerely,

A handwritten signature in blue ink that reads "R. P. Steele". The signature is written in a cursive style with a long horizontal stroke at the end.

**Rupert Steele**  
Director of Regulation

**DISTRIBUTED ENERGY**  
**INITIAL PROPOSALS FOR MORE FLEXIBLE MARKET AND LICENCING**  
**ARRANGEMENTS**

**ANNEX A**

## **1. INTRODUCTION**

We believe that there has to be a role for Distributed Energy (DE) within the future energy mix alongside centralised generation, particularly given the recently proposed EU Renewables and Greenhouse Gas emission reduction targets, as well as some of the current key drivers of UK energy policy, including:

- The Planning Policy Statement on Climate Change
- The Department for Communities and Local Government's (CLG's) Zero Carbon Homes policy
- The Office for Climate Change's (OCC's) Heat Project
- The Carbon Emission Reduction Target (CERT)/The Supplier Obligation

We also acknowledge that existing regulatory and market arrangements were principally designed to benefit customers through promoting competition between the large centralised generators. It is therefore right to review these arrangements to ensure that the playing field is level as respects distributed energy, and to ensure that smaller players are not unfairly disadvantaged. However, we remain concerned that genuine market and consumer protection considerations may be presented as barriers to DE. In consideration of any new proposals for change, we believe it is vital that such considerations are given due weight.

We welcome the fact that Ofgem and BERR will be looking at all forms of DE and agree that the focus of this initial consultation i.e. medium sized generation for communities and larger businesses is right as a first step, as we believe that it is in this sector that most work can be done to move us quickly forward in the short term. However, we also believe that to adequately address the barriers to DE, and lower carbon emissions, low carbon heat and the current 'Heat Call for Evidence' must be considered alongside this consultation, as this will be critical to building the economic case for many DE projects.

Furthermore, before any proposals are taken forward, we would urge Ofgem and BERR to ensure that a full impact assessment is undertaken and that the real costs and benefits and any potentially perverse outcomes are fully understood to ensure that there is no long term detrimental impact on the wider energy market. It will be important that this analysis is transparent and in the public domain.

## **2. EXEMPTION LIMITS**

We agree with Ofgem and BERR that the focus should be on accommodating DE within the existing licensing framework and that increasing the licence exemption limits is not the right course of action to take. We believe that increasing the thresholds would be merely moving the boundary; it would be much better to work to ensure that DE can work fairly within the mainstream, so that all generators, distributors and suppliers can be treated fairly. We believe that Ofgem and BERR should focus on simplifying the current regime rather than allowing more unlicensed activities.

Increasing the limits would result in more schemes being able to operate without a licence, which will lead to more and more people moving outside of the protections which a licence provides to customers, particularly to those who are vulnerable. We believe that this would distort the competitive market, as a far greater number of customers would be unable or find it extremely difficult to switch supplier and so this would leave the door open for those customers to be misled and treated unfairly in terms of price and service, with no means of recourse. It would also provide an opportunity to avoid contributions to the RO and other levies.

Furthermore, if the limits were to be increased, there is no rationale as to what these limits could or should be changed to and so we believe they should stay as they are, apart from possibly some simplification and clarification.

We believe that removing the per company maximum exemption limit would merely result in companies developing a greater number of sites in order to avoid being licensed. This would lead to an increased number of fragmented suppliers causing a significant administrative burden, particularly as a result of the 'supplier of last resort' being used more frequently, which we believe would be a natural consequence. We await the pending decision of the German Citiworks case in relation to licence exemptions, which is likely to have a significant impact on this particular issue.

### **3. WHOLESALE MARKET TRADING**

The provisions of the Balancing and Settlement Code (BSC) could be used to increase representation of DE schemes in BSC Governance. If this was done in a way which allowed DE issues to be better understood, this could be a constructive development. However, it is important that any DE representative understands that the task is to dispassionately assess proposals against the code objectives and not simply act for a particular interest. It would also be appropriate for any such representation to be broadly proportionate to the role of DE in the electricity mix.

As the Ofgem/BERR paper notes, it would be for the DE community to pay the salary costs for the time any representative spent on BSC business.

### **4. SELLING TO THIRD PARTIES**

We do not believe that third party purchasers currently undervalue exports from DE schemes. There exists a very competitive Power Purchase Agreement market in the UK for large and small generator output. However, the product offered in relation to exports from DE schemes is different by its very nature. It is more unpredictable and un-firm, it comes in smaller volumes, it has higher transaction and management costs and smaller DE players are not able to offer the services that larger generators offer e.g. BSC Bids/NG ancillary services etc, and so these exports are therefore of lower overall value.

In our experience, we are finding it increasingly difficult to win third party generation, particularly for renewables, and almost impossible to purchase CHP output. There is a demand for this output and it is not undervalued against the value we see in purchasing it. The issue is that some generators are not getting the value they would like to see and would prefer to get payment in line with the same output from larger, more predictable plant. As stated previously, there is significantly more risk associated with DE purchases which the market rightly reflects in the value they can obtain.

It is for this reason that we believe there is a need for further research in this area to aid understanding and forecasting capability for each DE technology and therefore improve the predictability of its output. We believe National Grid should take a leading role in educating the DE market as they have the requisite knowledge at their fingertips. Furthermore, more use could be made of Met Office data by smaller schemes to aid forecasting of e.g. expected wind and PV output. Research of this nature would benefit all players in the market.

We believe that the current political and policy drivers will result in a marked increase in the deployment of DE with or without the creation of a separate wholesale market in this area. We see this option as neither desirable nor necessary and against one of Ofgem and BERR's original objectives as set out in this consultation i.e. to find a solution which allows DE to grow within the existing framework.

## **5. OPERATING AS AN EXEMPT SUPPLIER ON THE LICENSED DISTRIBUTION NETWORK**

During last year's supply licence review, a decision was made to remove the obligation placed on suppliers to offer exempt supplier services from the supply licence. We believe Ofgem made the right decision to do this, and that the competitive market will provide the services. In our experience, there has been limited interest in purchasing the services, but the removal of the obligation has not affected our approach, should a request be made.

In relation to private wires or virtual private networks (VPNs), we agree that there should not be duplication of infrastructure unless there are offsetting benefits. Our distribution business has traditionally adopted a 'net' approach to charging for use of the distribution system for customers with their own generation and the virtual private network approach is an extension of this concept. Similar proposals have been put forward in relation to the use of the transmission system by distributed generation, which more easily lends itself to this type of charging. However, we understand that Ofgem does not support such an approach at present. In relation to any new proposed arrangements in this area, we believe that a full regulatory impact assessment is vital in order to quantify the actual costs and benefits.

ScottishPower EnergyNetworks is a member of the "G3" group of DNOs that has been working to develop a robust cost-reflective charging methodology. This has been discussed informally with Ofgem and has also been the subject of a public consultation. In developing our proposals, we have sought to develop a comprehensive approach which Ofgem identified at the outset of the process. Whilst progress has been slower than we had hoped, this is a complex issue and we have undertaken widespread consultation with stakeholders as we have developed our ideas. We expect that we will be formally submitting modification proposals to our distribution charging methodologies in the next three months.

We believe that development of charging methodologies would benefit from clearer guidance on the criteria that Ofgem uses in considering DNO methodology proposals. It is not clear to us that the long term methodology for another DNO that has already been approved fully meets licence requirements e.g. it appears to use arbitrary assumptions for load growth.

## **6. BECOMING A LICENSED SUPPLIER**

The energy market is extremely complex, but there is good reason for this complexity and it is vital that new entrants fully understand the market before they are able to operate in it, particularly for reasons of safety and customer protection.

We believe that as many domestic customers in the UK as possible should be supplied by a licensed supplier to ensure that the necessary controls are in place, to obtain the social and other protections offered by the supplier licence and to be able to shop around for the best deal and switch supplier should they wish to do so.

In relation to contracts where the customer is locked in, we believe these should only exist in circumstances whereby a supplier has made a significant capital investment in the customer's property and those costs have to be recovered from the customer. In these instances, anyone moving into that property prior to the full costs being paid back should be aware of this before they purchase the property and the supply contract should be a condition of the sale. However, care must be taken in these circumstances to ensure that these customers are not offered an unfair deal and energy prices should remain in line with that supplier's market rate at any given time.

In terms of granting a limited number of supply licences to new entrant DE schemes that restrict customers switching for a period of say 5 years, we do not believe this to be an appropriate solution. This is against the principles of free competition and is unfair to those customers involved, unless they were guaranteed to be offered cheaper prices, which in effect would mean payback would take even longer. In our view, artificial barriers to competition such as these, are neither appropriate or sustainable.

We agree that there is a significant amount of information and advice which DE schemes need in order to start up and interact with the wider electricity system. As stated previously, the system is very complex and small schemes often don't have the skills or resource to adequately understand all the issues. We believe Ofgem is best placed to educate in this area.

Ideally, we believe there should be one licence and that all players in the market should have to be licensed to operate. However, understanding the costs and complexities, we acknowledge this may not be possible in a climate where we need to see increasing numbers of DE schemes coming forward to meet energy policy goals and wider emission reduction targets. As such, instead of exemptions being granted, a temporary two tier licence scheme may be appropriate to ensure the necessary customer protection measures are in place and that competition exists. However, we would see this as a short term measure to encourage growth and would emphasise the need to move to a single licensed approach in the UK as quickly as possible.

## **7. CONCLUSION**

ScottishPower is keen to continue to work with Ofgem and BERR to consider how best to adapt the market and licensing arrangements to encourage the development of commercially viable DE projects.

We agree that there needs to be a level playing field in Great Britain as between DE and large scale electricity production. However, decisions taken in order to achieve this must be sustainable and not amount to cross subsidies or distortions of competition. Ofgem must endeavour to ensure that consumer protection and competition considerations remain at forefront of any changes to our existing regulatory and market arrangements.

**ANNEX B - Ofgem's Options for Reform – ScottishPower comments**

WHOLESALE MARKET TRADING		
OPTION 1	SUPPORT	COMMENT
<b>Consider the needs of small intermittent generators as part of the ongoing cash-out review</b>	Yes	<ul style="list-style-type: none"> <li>- The cash-out review is already considering the needs of small intermittent generators.</li> <li>- Cash out prices should be cost reflective i.e. reflect the cost to the system operator of balancing.</li> <li>- All parties should share the burden i.e. no two tier or de-minimis approach.</li> </ul>
OPTION 2	SUPPORT	COMMENT
<b>Consider appointing a DE representative to the Balancing and Settlements Code (BSC) modifications panel</b>	Maybe	<ul style="list-style-type: none"> <li>- Could be a constructive development if this was done in a way which enabled DE issues to be better understood.</li> <li>- It is important that any DE representative understands that the task is to dispassionately assess proposals against the code objectives and not simply act for a particular interest.</li> <li>- It would also be appropriate for any such representation to be broadly proportionate to the role of DE in the electricity mix.</li> <li>- As the Ofgem/BERR paper notes, it would be for the DE community to pay the salary costs for the time any representative spent on BSC business.</li> </ul>
SELLING TO A THIRD PARTY		
OPTION 1	SUPPORT	COMMENT
<b>Consider whether any further steps can be taken to improve market access for consolidators</b>	No	<ul style="list-style-type: none"> <li>- The growth/maturity of the market itself will drive this.</li> <li>- There is only room for one firm to operate economically at the moment (Smartest Energy) as the market is not large enough.</li> </ul>

<b>OPTION 2</b>	<b>SUPPORT</b>	<b>COMMENT</b>
<b>Introduce a specialist energy trader into the market to make purchases (and sales) of zero carbon output from small distributed generators</b>	No (until such times are the market demands it)	<ul style="list-style-type: none"> <li>- See answer to Option 1 above.</li> <li>- At the moment, the market scale does not exist to necessitate this role.</li> </ul>
<b>OPTION 3</b>	<b>SUPPORT</b>	<b>COMMENT</b>
<b>Improve forecasting capability for small scale renewable and low carbon plant</b>	Yes	<ul style="list-style-type: none"> <li>- Load research would be very useful and it would help the whole market, DE generators and larger players.</li> <li>- This should be referred to the BSC and the system operator to investigate as additional benefit could be achieved for volume in market.</li> </ul>
<b>OPTION 4</b>	<b>SUPPORT</b>	<b>COMMENT</b>
<b>Assess the economic case for and explore feasibility of a dedicated wholesale market for DE</b>	No	<ul style="list-style-type: none"> <li>- Ofgem/BERR's original objectives included finding a solution which enabled DE to grow within the existing licensed market framework. This does not seem in keeping with that objective as it creates an entirely new framework.</li> <li>- A single market solution is required.</li> <li>- A two tier system would further complicate the market.</li> <li>- It would result in two pricing mechanisms for the same raw product.</li> <li>- Overall this is not a sustainable solution.</li> </ul>



<b>OPERATING AS AN EXEMPT SUPPLIER ON THE LICENSED DISTRIBUTION NETWORK</b>		
<b>OPTION 1</b>	<b>SUPPORT</b>	<b>COMMENT</b>
<b>Impose an Exempt Supply Services obligation on suppliers</b>	No	<ul style="list-style-type: none"> <li>- There is no evidence to support re-introducing this into the supply licence. This would be a retrograde step.</li> <li>- A competitive market based approach should deliver a solution if there is sufficient demand.</li> <li>- ScottishPower’s approach to any requests has not been altered by removal of the obligation.</li> </ul>
<b>OPTION 2</b>	<b>SUPPORT</b>	<b>COMMENT</b>
<b>Create innovative arrangements for DE schemes to supply electricity to local customers over licensed networks (sometimes termed a “Virtual Private Network”)</b>	Maybe	<ul style="list-style-type: none"> <li>- There should not be duplication of infrastructure unless there are offsetting benefits.</li> <li>- Our distribution business has traditionally adopted a ‘net’ approach to charging for use of the distribution system for customers with their own generation and the virtual private network approach is an extension of this concept.</li> <li>- Similar proposals have been put forward in relation to the use of the transmission system by distributed generation, which more easily lends itself to this type of charging.</li> <li>- We understand that Ofgem does not support such an approach at present.</li> <li>- A regulatory impact assessment would need to be done in relation to any new proposed arrangements - at present there is no quantification of costs and benefits.</li> <li>- Any arrangements must be economic, simple and above all equitable.</li> <li>- We await clarification from CLG on the definition of a Zero Carbon Home. In the current definition, to achieve Code 6 within the Code for Sustainable Homes, DE is allowable off-site only in cases where there is a physical link to the development i.e. via a private wire</li> </ul>
<b>OPTION 3</b>	<b>SUPPORT</b>	<b>COMMENT</b>
<b>Request Suppliers and Distributors to come forward with proposals to trial ideas that benefit distributed generators, networks and customers</b>	Yes	<ul style="list-style-type: none"> <li>- We welcomed the introduction of Registered Power Zones as part of the DPCR4 package in 2004.</li> <li>- One practical difficulty is that a project and location-specific approach is required in each case to adapt the technology concerned and develop a bespoke connection solution.</li> <li>- At the same time, the distributor must secure the agreement of both the generator and Ofgem and meet licence timescale requirements for issuing the connection offer.</li> <li>- We have for a number of years applied innovative techniques to facilitate connection of renewable generation.</li> <li>- We are working with a number of industry and academic partners to achieve technological solutions to accommodate expected growth in distributed generation.</li> </ul>

<b>OPTION 4</b>	<b>SUPPORT</b>	<b>COMMENT</b>
<b>Encourage licensed networks to develop a methodology for calculating Line Loss Factors for DE that reflects the close location of demand and generation within 12 months</b>	No	<ul style="list-style-type: none"> <li>- We would not necessarily expect generation and demand at the same site to have the same impact on distribution losses e.g. incremental generation at a location where there is little or no load may increase network losses, while generation in a load-dominated area is more likely to have the opposite effect.</li> <li>- Therefore developing a generic methodology would be extremely difficult.</li> </ul>
<b>OPTION 5</b>	<b>SUPPORT</b>	<b>COMMENT</b>
<b>Encourage licensed networks to develop cost-reflective DUoS charges for distributed generation, within 12 months</b>	Yes	<ul style="list-style-type: none"> <li>- We and other DNOs have been working to develop longer term charging methodologies for both demand and generation since 2006.</li> <li>- ScottishPower EnergyNetworks is a member of the “G3” group of DNOs that has working to develop a robust cost-reflective charging methodology.</li> <li>- This has been discussed informally with Ofgem and has also been the subject of a public consultation.</li> <li>- We would find it helpful, though, if clearer guidance was available from Ofgem on the criteria for approval.</li> <li>- We note the comment in paragraph 5.25 that “only one DNO now offers negative charges for DE”.</li> <li>- It should be borne in mind that the “DG” price control mechanism is such that negative charges for one generator are effectively offset by charges to other generators, rather than via demand customers.</li> </ul>
<b>OPTION 6</b>	<b>SUPPORT</b>	<b>COMMENT</b>
<b>Ofgem to monitor development and review of technical standards for connection to the distribution network</b>	No	<ul style="list-style-type: none"> <li>- As the paper notes, the existing standards, in particular G75 and G59 are currently under review by an ENA working group and as such, if Ofgem were to undertake this option it would result in a possible duplication of effort.</li> <li>- The purpose of G75 and G59 is to ensure that the connection of DG is safe, does not cause a disturbance to other network users and generally does not place undue risk or costs on the distributor (such as increased risk of damage to equipment).</li> <li>- However, we are not aware of requirements that can be singled out as excessive barriers to a DG connection.</li> </ul>

<b>BECOMING A LICENSED SUPPLIER</b>		
<b>OPTION 1</b>	<b>SUPPORT</b>	<b>COMMENT</b>
<b>Allow for the delegation of the high-cost high-competency aspects of the supply licence to third party agents, who can spread the costs of compliance across a number of schemes</b>	Maybe	<ul style="list-style-type: none"> <li>- This warrants further thought.</li> <li>- Governance and costs are key.</li> <li>- This will open up new Governance mechanisms for third party agents unless that agent is already a licensed supplier.</li> <li>- This would give DE schemes some form of power in the market.</li> <li>- This may be possible given Governance is not skewed resulting in bad decisions for the industry as a whole.</li> <li>- There needs to be equity in decision making or else decisions will be biased in favour of DE schemes (niche) against the majority of customers.</li> <li>- Ability to influence decision making must be proportionate to customer numbers.</li> </ul>
<b>OPTION 2</b>	<b>SUPPORT</b>	<b>COMMENT</b>
<b>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</b>	Maybe	<ul style="list-style-type: none"> <li>- Must ensure that customers are not segmented out of the competitive market by such means.</li> <li>- Cost/impacts need to be carefully considered.</li> <li>- Likely benefit is that DE providers will have easier access to the market and will be able to spread the costs of set up across a number of sites.</li> <li>- Agent would also be able to provide information and advice services to aid set-up.</li> </ul>
<b>OPTION 3</b>	<b>SUPPORT</b>	<b>COMMENT</b>
<b>Review the BSC and MRA to determine if there are any disproportionate or unfair costs being levied on DE</b>	Yes	<ul style="list-style-type: none"> <li>- We see no harm in reviewing both the BSC and MRA to establish if this is the case but would encourage Ofgem/BERR to consider the wider industry repercussions of any subsequent changes.</li> </ul>

OPTION 4	SUPPORT	COMMENT
<b>Consider the case for new DE specific licence conditions</b>	Maybe	<ul style="list-style-type: none"> <li>- A separate DE Licence or specific DE licence conditions would be better option than a proliferation of additional licence exempt operators – particularly for the customers as it will enable customer protection through the appropriate monitoring and enforcement.</li> <li>- It could be difficult to assess the requirements of such conditions without a vision of what would be included/ excluded within the scope.</li> <li>- We must ensure that suppliers are not left to cover off any gaps by means of further regulation.</li> <li>- Must ensure that customers are not segmented out of the competitive market by such means.</li> </ul>