

Annex 1 – Consultation on getting an electricity connection responses and questions

- 1.1. We would like to hear the views of interested parties in relation to any of the issues set out in our consultation.
- 1.2. We would especially welcome responses to the specific questions which we have set out in our consultation and are replicated below.
- 1.3. If you have any questions on this document please contact:

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0207 901 1861
Connections@Ofgem.gov.uk

- 1.4. **Responses should be sent, preferably by e-mail by 29 April 2016 to the address above.**
- 1.5. Unless marked confidential, all responses will be published by placing them in Ofgem's library and on its website www.ofgem.gov.uk. Respondents may request that their response is kept confidential. Ofgem shall respect this request, subject to any obligations to disclose information, for example, under the Freedom of Information Act 2000 or the Environmental Information Regulations 2004.
- 1.6. Respondents who wish to have their responses kept confidential should clearly mark the document/s to that effect and include the reasons for confidentiality. Respondents are asked to put any confidential material in the appendices to their responses.
- 1.7. Next steps: We will consider the responses to this consultation and these will be used alongside other evidence for our assessment of the ICE plans.
- 1.8. *Each of the questions asked by this consultation is set out in the template below.*
Note that an editable version of this response template is available on our website as an associated document to this consultation.
- 1.9. *Please ensure that you indicate the DNO to which your experiences relate.*
- 1.10. *When considering your responses to these questions, please consider your experiences, the actions that the DNO has undertaken or committed to undertake, and the actions that you consider it could reasonably undertake.*

Response template

Question	Response																											
About you and your work																												
1. What is the name of your company?	PRIMROSE SOLAR MANAGEMENT LIMITED																											
2. In which DNO's region do you generally operate (see Annex 2 for DNO map)? If you operate in more than one DNO's region please indicate which DNO your responses to the following questions refer to.	SSE, WPD, UKPN, ENW. This response identifies which comment applies to each DNO in [] at the end of each sentence																											
3. What type of connection do you generally require? And for each type of connection, how many connection applications, including total MVA (Mega Volt Ampere) of connections have you made in the past year?	<table border="1"> <thead> <tr> <th>Type of connection</th> <th>Total number of connections</th> <th>Total MVA of connections</th> </tr> </thead> <tbody> <tr> <td rowspan="4">Metered Demand Connections</td> <td>Low Voltage (LV) Work</td> <td></td> </tr> <tr> <td>High Voltage (HV) Work</td> <td></td> </tr> <tr> <td>HV and Extra High Voltage (EHV) Work</td> <td></td> </tr> <tr> <td>EHV work and above</td> <td></td> </tr> <tr> <td rowspan="3">Metered Distributed Generation (DG)</td> <td>LV work</td> <td></td> </tr> <tr> <td>HV and EHV work</td> <td>6 [SSE] 1 [ENW] 4 [UKPN] 4 [WPD]</td> <td>124 [SSE] 4 [ENW] 55 [UKPN] 52 [WPD]</td> </tr> <tr> <td>Unmetered Connections</td> <td>Local Authority (LA) work</td> <td></td> </tr> <tr> <td></td> <td>Private finance initiatives (PFI) Work</td> <td></td> </tr> <tr> <td></td> <td>Other work</td> <td></td> </tr> </tbody> </table>	Type of connection	Total number of connections	Total MVA of connections	Metered Demand Connections	Low Voltage (LV) Work		High Voltage (HV) Work		HV and Extra High Voltage (EHV) Work		EHV work and above		Metered Distributed Generation (DG)	LV work		HV and EHV work	6 [SSE] 1 [ENW] 4 [UKPN] 4 [WPD]	124 [SSE] 4 [ENW] 55 [UKPN] 52 [WPD]	Unmetered Connections	Local Authority (LA) work			Private finance initiatives (PFI) Work			Other work	
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Consultation questions																												
1. Do you consider there are constraints on the network in this DNO's region?	Yes [SSE, WPD, UKPN]																											

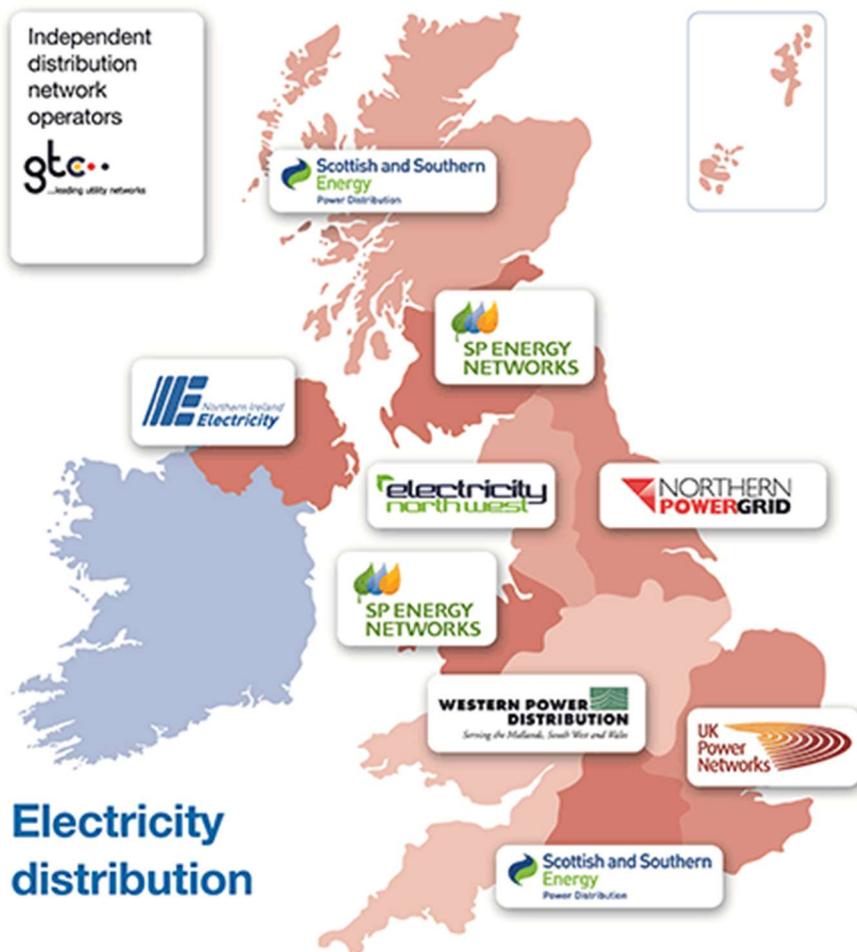
<p>If there are no constraints please do not answer the following questions.</p>	
<p>2. What impact have these constraints had on your ability to get connected to the network?</p>	<p>Primrose does not submit applications to DNOs to secure grid capacity. Primrose acquires projects once they are ready to build from Developers. Primrose is in a good position to respond to this consultation as we work with a large number of Developers across the sector and play an active role in engaging with grid issues via the ENA and other trade associations (Solar Trade Association).</p> <p>Network constraints have made it harder for Developers to secure grid capacity that is acceptable to a project buyer like Primrose. Ultimately, this has meant we have invested less than we would have liked. We cannot invest in projects where frequency of outages and/or export curtailment is unknown, or where curtailment estimates are not underwritten (this happens in other European countries).</p> <p>Many of the grid offers we have reviewed in the last 12 months have not been supported by sufficient information for organisations to make financial decisions. As investors became more concerned by unknown curtailment levels, this impacted the speed at which Developers accepted offers as they needed to understand whether the project would indeed be viable.</p> <p>Many Developers that we work with have struggled to get the grid connections they need- by this, we mean: points of connection that are located close by enough to the project, for a reasonable cost, or within a timeframe that means the project is financially worthwhile. [SSE, WPD, UKPN]</p>
<p>3. To what extent has the DNO tried to find ways to help you get connected in constrained areas? For example:</p>	
<p>a. To what extent has the DNO offered you more flexible and alternative connection arrangements alongside conventional firm connections? If</p>	<p>Lots of alternative connection offers are available, in particular, Active Network Management (ANM) offers are popular amongst Developers. ANM offers are available from all the DNOs listed in Q1. One of the issues with the way these offers are given to customers is that the offer only represents 1 connection option. There has been a lot of talk about improving the form of</p>

<p>not, then have they explained why not?</p>	<p>offers- for example, standardising the information provided to describe connection types across all DNOs and ensuring terminology is used consistently. Displaying multiple connection options within a single offer has also been discussed. Apparently, some DNOs are now giving out these offers, we are yet to see one.</p> <p>Some alternatives to ANM can be found- inter-tripping schemes, and installing export limitation devices are 2 examples. These are less wide spread, especially on smaller projects (<1MW) where the cost of implementation is limiting. Process and compliance can also be a challenge. DNOs do not have a consistent approach when it comes to approving export limitation devices- technical specifications are now being consulted on. The specifications need to be technology agnostic, but provide the industry with a clear description of what is acceptable.</p> <p>It's also important to mention co-location: this is where 2 or more technology types are connected at the same site and in some way share the capacity allocated to a connection. WPD and UKPN have been known to do trials with some customers, whilst outright refusing that it is possible to other customers. This type of alternative connection could be very beneficial if it became widely recognised. For example- a solar park does not use all of its export capacity during the whole year, even during a whole day, so when there is "spare" or excess capacity it could be used by something else.</p> <p>The concept of co-location could be considered on a much wider scale, "capacity-sharing", as the excess capacity doesn't always need to be used by a technology in the same location. There could be an aggregated benefit available for higher voltage levels on the network. No DNOs are actively engaging with customers to discuss this.</p> <p>[SSE, WPD, UKPN]</p>
<p>b. If the DNO does offer alternative arrangements, is the information provided sufficient to decide whether or not to go forward with the connection?</p>	<p>[SSE, DNO, WPD] The information provided by a DNO will include:</p> <ul style="list-style-type: none"> -Scenarios for outages and export curtailment (certain faults and for certain maintenance activities) -Known infrastructure improvement work in future that will impact your connection- often by requiring export curtailment

	<p>-Statement of work requirements</p> <p>-ANM offers provided by UKPN (£8k cost) and WPD (no fee) will come with a third party (smarter networks) report estimating export curtailment</p> <p>This information is hard to translate into downtime (when your site will be completely turned off) because you do not understand the likelihood of the faults occurring and you are not presented with a maintenance schedule or a description with where the DNO is in any given maintenance cycle. Customers need access to this information. You can push a DNO for this detail, but it's hard work and you have to have a very good understanding of the network to know which questions to ask.</p> <p>National Grid maintenance cycles are not represented by DNOs, so if customers want to chase for a full and clear picture on outages and curtailment they also have to get in touch with National Grid- again, getting this information is difficult. Reliable estimates need to be available.</p> <p>The estimates provided alongside ANM offers are comprehensive but they are only estimates, not underwritten or guaranteed in anyway. The ranges sometimes stated are often very broad (e.g. 0 days – 200 days). These estimates should be offered with some level of guarantee.</p> <p>When a DNO offer makes reference to infrastructure improvements that may impact a connection, very little information is given to the customer. This needs to be improved- project timelines and estimated downtime for a customer's asset need to be provided as a minimum.</p>
<p>c. If the DNO does offer alternative arrangements, do you find the associated terms (eg. level of potential curtailment and certainty around maximum curtailment levels) acceptable?</p>	<p>See answer above- it's difficult to know</p>

4. What information has the DNO shared with you on its work plan of activities designed to help enable connections in these areas?	All [SSE, WPD, UKPN, ENW]. Each DNO has a lot of information on work plans- LTDs, ICE plans, workshops, heat maps.
a. How comprehensive has this information been?	It's very comprehensive, but customers are unsure how reliable it is- is it up to date, have plans changed? The amount of information available has significantly improved over the last 12 months, however, it hasn't helped customers identify opportunities for new connections. Plans don't always clearly explain how much free capacity works will create or how changes will benefit assets that are already connected but are subjected to significant curtailment and export limitations. Often long capacity queues often mean that all new connection applications wouldn't get a piece of the extra capacity created anyway. All [SSE, WPD, UKPN, ENW]
b. To what extent has the DNO provided information on associated delivery dates of its work plan of activities?	As above
c. Are you aware if the DNO is forecasting future levels of growth in the type of connections you require?	UKPN- Actively engages with some of the larger DG stakeholders to understand likely volume of future network connection requests. This info is not shared with wider DG community or translated into usable forecasts for DG connections.
d. Are you aware of any plans the DNO has to invest in new network capacity where the network is constrained, to enable further customer connections? Have you been consulted on these plans? Has the DNO explored with you ways in which this could be funded?	Ofgem's quicker and more efficient connections consultation will hopefully mean DNOs reinforce the network by trying out new funding mechanisms- we have not been actively involved in any of this work, yet. We have offered our support to WPD for reinforcement needed in the SW area. We are aware of the work WPD is doing to alleviate the constraints on the F-route. WPD have not explored this with us and we have not been consulted on the plans.
5. Please give details of any other activities you would expect the DNO to be undertaking to deal with constraints on their network.	DNOs need to build on the "consortium approach" that was endorsed by ofgem via the quicker and more efficient connections consultation. Progress and openness to assist customers needs improvement- this may help more customers connect by sharing the burden of high connection costs.

Annex 2 - Map showing DNO licensee areas¹



¹ Image from Electricity Networks Association (ENA)