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**Ecotricity Response to Consultation on  
Getting an Electricity Connection when the Network is Constrained**

Dear Mr Veaney,

Ecotricity is an independent renewable energy generator and supplier, with around 180,000 gas and electricity customers and 81.6MW of renewable capacity including 71 turbines and the country's first large scale solar park. We currently have over 74MW of consented capacity and 240MW in the planning process.

The issue of constrained grid capacity and connection is therefore of significant relevance to us and we welcome this opportunity to respond. Grid connections are a considerable part of our development process and take up a considerable portion of the cost. We have interactions with all DNOs except Electricity Northwest and our response below refers to all DNOs that we interact with. Where there is variation in their performance, we have made this clear.

***1. Do you consider there are constraints on the network in this DNO's region?***

Yes, in our experience there are significant constraints in all DNO regions.

***2. What impact have these constraints had on your ability to get connected to the network?***

Up until recently, Western Power Distribution (WPD) have claimed that the Southwest region is "full". They have recently removed this statement and it is our understanding that they are working on new solutions.

In all regions, including the Southwest, we have always received an offer in response to a request; however, the cost of these offers is frequently prohibitive. For example, we received

a quote for £18m for a 4.2MW solar park from UKPN and a quote for £8.2M for a 20MW solar park from SSE. .

**3. To what extent has the DNO tried to find ways to help you get connected in constrained areas? For example:**

**a. To what extent has the DNO offered you more flexible and alternative connection arrangements alongside conventional firm connections? If not, then have they explained why not?**

Our experience with all DNOs is that they will only ever respond to specific requests with individual quotes for precisely what has been asked. They do not take a problem solving approach to their customer requests or present alternative options unless a separate request is made for each alternative. This makes the process slow and frustrating for developers as we do not know what the most affordable or quickest option might be unless and until we specifically request the right combination of location, capacity and flexibility.

Through conversations with engineers we have learnt that the reason for this is that the software which DNOs use only responds to specific requests and does not enable them to carry out broad searches on options. If this is indeed the case then it would appear that investment in technology that can respond to open queries on feasibility, rather than simply specific closed requests.

We acknowledge that DNOs do offer feasibility studies, which do allow for multiple options to be assessed. However, this is not a good option for developers as they cost around £3,800.00, which is a significant amount to simply find out if a project is viable. Furthermore, they take 28 days to create and unlike grid offers it does not enable you to reserve a particular connection capacity. In addition, the fact that other developers may be applying for grid connections at the same time means that the feasibility study is effectively out of date as soon as it is published.

We are also aware that both UKPN and WPD are proactively trialling managed connections. However, these are not available in all areas at all times. We are generally informed of these trials by email and have a limited time, typically a month, in which to apply for a managed connection.

**b. If the DNO does offer alternative arrangements, is the information provided sufficient to decide whether or not to go forward with the connection?**

Whether the alternatives provided are sufficient to make a decision depends entirely on whether we happened to ask for an option that was feasible and if not, how confident we are that a feasible option does not exist.

**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?**

There is significant variation in this. Although we have never accepted a constrained offer, in general our experience is that DNOs do try to be helpful with respect to this and offer reasonable and fixed curtailment levels. However, there have been instances of unacceptably low levels such as SSE offering us a connection with a curtailment of 100%.



**4. What information has the DNO shared with you on its work plan of activities designed to help enable connections in these areas?**

**a. How comprehensive has this information been?**

This varies between DNOs. None of the DNOs provide a level of information that would be sufficient for us to base business decisions on. We find that UKPN have made the most effort with respect to keeping stakeholders updated and have held a number of forums to gather views and present their plans. WPD make similar efforts and are not far behind UKPN. Northern Power Grid is by far the least communicative in our experience.

**b. To what extent has the DNO provided information on associated delivery dates of its work plan of activities?**

As far as DNOs work plans are concerned, the level of information is poor. The DNOs do publish Long Term Development Strategies; however, these quickly go out of date and contain very little detail.

We note that plans for transmission network developments published by National Grid are a much better model. These contain specific dates and identify precise locations on specific lines where work will take place. Although these reports also go out of date quickly, they are significantly more useful than anything that the DNO publishes.

**c. Are you aware if the DNO is forecasting future levels of growth in the type of connections you require?**

DNOs do forecast future increase in renewable energy connection at least by looking at their grid connection queues but that does not appear to translate into investments on grid reinforcement.

**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?**

We receive general update from DNOs, but these are not necessarily directed at specific areas where we are seeking a grid connection.

We are aware of work being undertaken by WPD to lift the F route capacity restriction. This will help renewable generators with accepted offers and connection dates delayed due to the F route and is to be welcomed. It will not, however, solve the grid capacity issues on the 33kV and 11 kV networks which are more appropriate for small projects (<5MW).

**5. Please give details of any other activities you would expect the DNO to be undertaking to deal with constraints on their network.**

It would be very helpful if developers were able to see a live update of the network showing which areas it is possible to connect to and what the available capacity is. This is currently done to a limited extent by some DNOs; however, these maps are not sufficiently comprehensive and their engineers have told us that they are not kept up to date. It would save both DNOs and developers a significant amount of time if such maps were comprehensive, available on line and updated daily. For example WPD heat map only shows the 11 kV network and is not trusted even by WPD design engineers. SSE heat map doesn't



give possibility to search by postcode and here also we've been advised by design engineers not to rely on it.

With respect to the question of improving network availability more generally, we believe that there is a fundamental problem in the approach to network upgrades in the UK. Upgrades are not driven by a long term overall strategy, which accounts for the future energy needs of the UK. Rather, they are done reactively in response to individual requests from developers. This means that potential economies of scale and the benefits of forward planning are missed. Our understanding is that this reactive approach is not the fault of the DNOs themselves, but is a predictable response to the regulatory framework and funding regime within which they operate.

We would strongly recommend that Ofgem examine the approach to network capacity that is taken in France, where there is a long term national strategy for distribution network connections. This strategy is based on long term forecasts of the future energy mix required and determines the upgrades that are required in each region. The result is a system that is much more efficient than that of the UK as whole areas of the network are upgraded together ahead of the point at which a connection is required. We realise that there are significant differences between the networks of the two countries, however, there is still a lot which could be learnt from the French approach.

## Conclusion

Ecotricity welcomes Ofgem's open letter on DNO performance when connections are restrained. As a renewable developer, grid connections are a core part of our development process. Unfortunately our experience has been broadly negative: DNOs do give quotes for specific options requested but, where connections are not feasible, DNOs do not offer alternatives or present us with different options. In addition, tools such as network maps are not kept up to date and are therefore of limited.

Our understanding is that the poor customer service provided by DNOs is largely due to inappropriate processes and limitations of their software. We urge Ofgem to look into this and explore ways that this can be improved.

We also urge Ofgem to re-examine the whole approach to network upgrading. Our experience shows that reactive upgrades are not fit for purpose and we urge Ofgem to investigate how the regulatory and incentive framework for DNOs could be amended to increase the level of forward planning. We would suggest an examination of the French approach could aid this investigation.

Ecotricity welcomes the opportunity to respond and hope you take our comments on board. We also welcome any further contact in response to this submission. Please contact Holly Tomlinson on 01453 769366 or [holly.tomlinson@ecotricity.co.uk](mailto:holly.tomlinson@ecotricity.co.uk).

Yours sincerely,

  
PP- Alan Chambers  
Acting Compliance Officer