



Recommendations for improving grid connections for community energy projects in the UK

15 October 2014

I Introduction

The need to place communities at the heart of energy policy has been recognised by the Department on Climate and Energy and Climate Change (DECC) and the UK Parliament.¹ Support for community energy will be critical to meeting nationally-binding greenhouse gas reduction targets for both 2020 and 2030, and more importantly 2050, where the UK has established an emissions reduction target of 80%. Community energy can also contribute strongly to the achievement of the UK's obligations under the Renewable Energy Sources Directive, which obliges the UK to see 15% of its energy provided from renewable sources by 2020.

In addition to helping achieve emissions reductions community energy enables communities to harness local natural resources to build social capital, create local and regional employment opportunities, create revenue to address local development needs and combat fuel poverty. Community ownership and participation can also help generate public support and acceptance of renewable energy projects. Furthermore, involvement in community projects has been shown to help stimulate citizen interest in other areas of energy such as energy conservation efficiency and demand side management.

However, there are a number of regulatory barriers that prevent communities from participating more widely in the generation of energy. In particular, there is a high degree of uncertainty and cost involved in connecting community projects – particularly larger ones – to the grid. This is largely due to insufficient infrastructure in Scotland and the rest of the UK. In particular, limited grid capacity affects the space available for additional projects to connect, increasing time and costs to establish a connection where additional capacity is needed. There are also a number of different Distribution Network Operators (DNOs), each with varying connection charges and procedures for making information available and for processing grid applications. Because these processes are long, complicated and costly they can prevent community projects, which often rely on volunteers or outside help, from going forward. Due to less capacity, community projects are also often unable to compete on par with large developers familiar with the process. Furthermore, because community groups often have little choice in where to site a project, they often do not have the luxury of choosing a connection point with available capacity, increasing connection costs.

¹ In August 2013, the Energy and Climate Change Select Committee called for more action to boost local energy generation in the 5MW-50MW band, including appropriate support measures, and the removal of market barriers.

Key Recommendations for enhancing grid access for community energy

There is a need for relevant network codes to provide for more equitable grid access for community projects. Under the general EU legal principle of equality and non-discrimination, Directive 2009/72/EC concerning common rules for the internal market in electricity, and Directive 2009/28/EC on the promotion of the use of energy from renewable sources, there is justification – and arguably a duty – to treat community projects differently in order to facilitate the continued deployment of renewable energy and distributed generation, and to promote effective competition.

In order to ensure that community projects are able to overcome particular barriers to grid access that they face and effectively compete on a more equal basis with other commercial developers:

1. The Electricity Act 1989 and/or the Standard Conditions of the Electricity Distribution Licence should be amended as appropriate to provide DNOs the liberty to develop and implement network codes that allow for proportionately different treatment between eligible community projects and other commercial renewable energy projects during the grid connection process. This should reflect the requirements to integrate small-scale production of renewable energy and distributed generation, promote competition and take into account the environment.

In line with its existing objectives under the Electricity Act, Ofgem should be directed to conduct a further review of how providing different treatment to eligible community projects under the Standard Conditions of the Electricity Distribution Licence could benefit consumers through enhanced competition in the generation of electricity.

2. Community groups should not be required to pay for the costs of reinforcing the grid. Reinforcement costs should fall on the DNO through a 'shallow' cost recovery structure as part of the DNO's continuing duty to ensure integration of renewable energy sources and ensure security of supply. Under this system, connection charges to the distribution grid should be capped either: (a) for community projects; or (b) for all new connections.
3. Network codes should provide community groups with the option to pay for connection costs through staged payments so that the majority of costs occur after the project is commissioned.
4. Community energy projects should be guaranteed connection and access to distribution grids. This should be achieved by the following:
 - a. Reservation of capacity for eligible community projects where there is a demonstrated need and/or demand for a connection;
 - b. Treatment of connections for community projects in a process separate from commercial projects; and/or
 - c. Creation of a continuing duty on the DNO to expand capacity in the long-term, and in the short-term to connect and provide access to either: 1) all eligible community projects; or 2) all eligible installations.

II Providing equitable grid connection opportunities for community projects: setting the context

Obtaining a grid connection is one of the major hurdles for realising community energy projects in the UK.² As has been identified by the Working group on Community Energy Grid Connections (Working Group), headed by the Office of Gas and Electricity Markets (Ofgem), community energy groups face a number of distinct challenges not faced by traditional commercial developers. These include the fact that community energy groups:

- Are unlikely to have significant finance available for the early stages of the project development;
- Are less likely to have expertise in grid connections; and
- Use governance models which mean that projects will typically take longer to develop and may therefore find it difficult to respond as quickly as commercial developers when capacity becomes available.³

Under the existing regulatory framework for establishing a grid connection, community projects face high costs and complicated and uncertain timelines in establishing a connection. Furthermore, there is a perception among community groups that Distribution Network Operators (DNOs) treat network users inconsistently and lack transparency. These issues are exacerbated in large part due to capacity constraints on distribution and transmission networks. Where there is not enough capacity, project proponents often face additional delays and costs in order to fund grid expansion or reinforcement. Furthermore, community groups are physically and financially constrained from relocating their projects to an area where the grid is not constrained. As renewable energy projects continue to be developed, constraint issues are likely to increase.

Without addressing the distinct issues community projects face, they will continue to be disadvantaged vis-à-vis large-scale commercial projects. While outside of the scope of this paper, in moving forward it will be necessary to ensure that DNOs invest in appropriate upgrades in a cost-efficient manner over time. In the meantime, it will be important to ensure that community projects are able to compete on a level playing field with other developers when it comes to obtaining a connection.

The following recommendations, which build upon some of the “transformational solutions” identified by the Working group and require DECC support, are intended to achieve this aim. In particular, they take the view that reducing connection hurdles for community projects are needed to enhance competition in the generation of renewable energy and will benefit final consumers.

We acknowledge upfront that the UK government has an obligation under both national and EU law to ensure that any solutions to the above problems respect the principle of equality and non-discrimination. We conclude that different treatment is not only justified but also needed to ensure an equal level of competition between community energy projects and other network users. Nevertheless, our recommendations attempt to achieve balance in order to provide solutions to the barriers community projects face while retaining equal treatment for network users.

² DECC (2014). *Community Energy Strategy*, p. 62.

³ Ofgem. *Community Energy Grid Connections Working Group report to the Secretary of State* (July 2014), p. 4.

III Recommendations

1 Community projects should be able to receive different treatment for purposes of connecting to the grid

In the Working Group's Report to the Secretary of State, Ofgem highlighted that a number of options that can help ameliorate distinct challenges faced by community energy groups could potentially amount to receiving preferential treatment compared to other connection customers. However, we are of the opinion that it is possible to adopt distinct narrowly-defined standards for community projects without discriminating against other customers in violation of UK or EU law. Indeed, differentiation between community projects and other network users will further promote equality within the market and competition, resulting in enhanced choice for consumers.

Different treatment of community projects would not violate the principle of non-discrimination

The principle of non-discrimination arguably justifies providing community projects with priority access to the distribution grid.

Under Directive 2009/72/EC (Third Internal Energy Market Directive on Electricity),⁴ third-party access to transmission infrastructure must be granted and managed "on a non-discriminatory basis between system users or classes of system users." Furthermore, distribution system operators (DSOs):

*"must not discriminate between system users or classes of system users. Access to the transmission and distribution systems ... has to be based on published tariffs, applicable to all eligible customers, including supply undertakings and applied objectively and without discrimination between system users."*⁵

There is both a general duty on system operators of non-discrimination,⁶ as well as specific non-discrimination duties.⁷ Everyone who falls under the concept of 'system user' as defined in relevant directives has the right to non-discriminatory access to an energy system, under the principle of equality or non-discrimination.⁸

Only similar network users should be treated similarly. The Court of Justice of the EU (CJEU) has ruled that under the general principle of 'equality', EU law prohibits "treating similar situations differently and treating different situations in the same way, unless there are objective reasons to do

⁴ Directive 2009/72/EC concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC (Third Internal Energy Market Directive on Electricity), OJ 2009 L211 p 55, Article 17 (2)(c); Article 18(5); Article 23; and Article 32.

⁵ Third Internal Energy Market Directive on Electricity, Article 25(2); Article 32.

⁶ Third Internal Energy Market Directive on Electricity, Article 12.

⁷ E.g. in specific areas such as capacity-allocation mechanisms and congestion management procedures, balancing rules and capacity trading.

⁸ Court of Justice of the EU (CJEU). *VEMW and Others* (Case C-17/03) [2005], ECR I-4983, paras. 41-48; and *Citiworks AG* (Case C-439/06) [2006] ECR I-3913, para. 42. The European Commission has described 'non-discrimination' as follows: "Non-discriminatory access implies, for example, that neither size, the relationships between suppliers and network operators, nor portfolio considerations in the case of large system users should affect the tariffs and other conditions. This implies that tariff systems should not contain structural elements, such as distance related charges, which tend to discriminate, for example, against companies with a small portfolio." European Commission (2005). *Technical Annex to the Report from the Commission to the Council and the European Parliament on Progress in Creating the Internal Gas and Electricity Market*. COM(2005) 568 final, section 2.

so.”⁹ In economic terms, equality is not necessarily a goal in itself, but instead “an instrument with the aim of establishing and making the internal market functional, and providing real and free choice for consumers.”¹⁰ It is meant to make sure groups or companies cannot block the entrance of competitors through indirect discrimination.

It follows that under the legal principle of non-discrimination, to treat different network users similarly could constitute discrimination in itself. Likewise, where actors are in sufficiently different positions or situations, different treatment is not discriminatory.¹¹

The national regulatory authority (NRA) has a duty to ensure that system operators comply with rules on non-discrimination. Nevertheless, NRAs also have other duties and objectives, such as with “integration of large and small-scale production of electricity from renewable energy sources and distributed generation in both transmission and distribution networks.”¹² Furthermore, NRAs have the authority to require transmission system operators (TSOs) and DSOs to modify terms and conditions of access “to ensure that they are proportionate and applied in a non-discriminatory manner.”¹³ Lastly, NRAs must facilitate access to networks for new generation capacity, in particular removing barriers that could prevent access for new market entrants of electricity from renewable energy sources.¹⁴ Therefore, where similar treatment of smaller network users in different positions would inhibit effective completion, NRAs have authority – and arguably a duty – to provide for different treatment.

Under the UK’s legal framework, electricity distributors have a general duty to facilitate competition in the supply and generation of electricity.¹⁵ The obligation of non-discrimination for distributors is established through the *Standard Conditions of Electricity Distribution Licence* (Standard Licence Conditions), which reflects UK legislation and govern licences for distributors and is overseen by Ofgem. Specifically, Condition 19 prohibits distributors from discriminating between any person or class or classes of person in providing a connection or use of the system.

Under their license, DNOs must establish and comply with a number of network codes, which cover all material technical, design and operational aspects relating to connection, operation and use of the relevant distribution system. DNOs have an obligation to implement and maintain these codes without undue preference or discrimination between any person or class or classes of persons. The codes may be amended by the DNO and the users together, according to specified criteria and procedures. Ofgem is authorised to approve amendments, which it does based on how the proposed changes affect the achievement of specific objectives. These objectives are:

- a) The efficient discharge of the obligations imposed by the Act and the Transmission License;
- b) Facilitating effective competition in the generation and supply of electricity, and (so far as is consistent therewith) facilitating such competition in the sale, distribution and purchase of electricity; and

⁹ C-17/03 VEMW [2005], paras 42-46, and C-439/06, para 42.

¹⁰ Kruimer, H (2014), *supra* note 9 at p. 68; and Tobler, C. (2005). *Indirect Discrimination. A case study into the development of the legal concept of indirect discrimination under EC law*, p. 35 (Intersentia: Antwerp).

¹¹ Kruimer, H (2014). *The Non-discrimination Obligation of Energy Network Operators: European Rules and Regulatory Practice*, p. 275 (Intersentia: Cambridge).

¹² Third Internal Energy Market Directive on Electricity, Article 36(1)(d).

¹³ Third Internal Energy Market Directive on Electricity, Article 37(10).

¹⁴ Third Internal Energy Market Directive on Electricity, Article 36(e).

¹⁵ UK Utilities Act 2000, Chapter 27, Part IV (Amendment of the Electricity Act 1989 – Duties of electricity distributors), section 50; and *Standard Conditions of the Electricity Distribution Licence* (Updated 22 April 2014) (hereinafter referred to as Standard Licence Conditions), Condition 4.1.

- c) Compliance with the Electricity Regulations and any relevant legally binding decision of the European Commission and/or Agency.¹⁶

There is precedent within Ofgem for acknowledging different situations of different parties in order to balance the objective of controlling risk to consumers and ensuring effective competition between network users. Specifically, Ofgem has been open to looking at the proportionality of equal treatment to see whether it has an inequitable result. For instance, under a proposal to reform the Uniform Network Code for gas networks, there was a suggestion to require every network user have credit rating allocated by Moody's or Standard and Poor's. However, the proposal was rejected by Ofgem due to its adverse impact on smaller parties and new entrants.¹⁷ In doing so, Ofgem determined that such parties would not be in a position to obtain a credit rating from one of these agencies, hence creating an unnecessary barrier to competition.

As such, we believe there is justification under EU law and precedent under the UK's legal framework for treating certain network users differently, particularly when similar treatment raises issues of equality and proportionality.

Community projects are sufficiently different to justify different treatment

There is a test as to whether different treatment of an individual or group of users over another is warranted:

- 1) Are system users similar?
- 2) Are the system users in an analogous situation?
- 3) Can the difference in treatment be objectively justified?¹⁸

There is an argument that community energy projects are distinct enough from other types of projects to warrant proportionately different treatment. Regarding the first question, it is important to point out that as a general rule community projects tend to be fairly small. According to DECC's Renewable Energy Planning Database (REPD), as of 2014 80.8% of projects in the pipeline were less than 5MW, while 19.2% of projects were less than or equal to 10MW.¹⁹ Furthermore, the aims of community projects are different from a traditional commercial enterprise. This is reflected in the use of a socially-oriented ownership model for community projects. Community projects also often combine behavioural initiatives with efficiency measures, usually build on local knowledge and networks to develop projects as solutions to local contexts, and go beyond financial benefits.²⁰ For instance, many community projects have established funds where a portion of the profits go towards addressing specific community needs such as enhancing demand side management, addressing energy poverty or providing local social programmes.²¹

It cannot be denied that community projects use similar services to other projects. However, for the same reasons cited above it can be argued that community projects are not in an analogous situation to other projects. As regards the final question, community energy projects face genuine and distinct hardships that are not experienced by other actors in the sector. As stated in Working

¹⁶ Standard Licence Condition 21.4.

¹⁷ Ofgem (2012). Decision on Uniform Network Code (UNC) 375: "Changes to how Unsecured Credit Limits are determined within UNC TPD Section 3.1.7 (Independent Assessments)".

¹⁸ House of Lords, *Ghaidan v Godin-Mendoza* (2 AC 557) [2004]. See also Kruimer, HT (2011). "Non-Discriminatory Energy System Operation: What Does it Mean?" *Competition and Regulation in Network Industries*, Vol 12(3), pp. 260-286, at p. 273.

¹⁹ DECC (2014). *Consultation on support for community energy projects under the Feed-in Tariffs Scheme*, p. 15.

²⁰ Seyfang, G et al (2012). *Community Energy in the UK*, 3S Working Paper 2012-11, University of East Anglia School of Environmental Science, p. 5.

²¹ See e.g. Brixton Energy in Roberts, J, Bodman, F and Rybski, R (2014). *Community Power: Model legal frameworks for citizen-owned renewable energy*, p. 20 (ClientEarth: London).

Group's Report, community projects suffer from 'postcode lottery' syndrome, whereby they do not have an option locate the project to the most suitable point where the grid is not constrained, increasing connection costs.²² They are also unlikely to have significant finance available at early stages of project development.²³ Furthermore, community projects often lack technical expertise in grid connections, and because of their democratic governance models they usually take longer to develop projects, making it difficult to respond as quickly as commercial developers when capacity becomes available.²⁴ Hence, there are objective reasons for treating them differently.

The above reasons are also supported by the recitals of the Renewables Directive, which states that:

*"electricity producers ... in island regions and regions of low population density, should, whenever feasible, benefit from reasonable connection costs in order to ensure that they are not unfairly disadvantaged in comparison with producers situated in more central, more industrialised and more densely populated areas."*²⁵

While the recitals to Directives are not hard or binding provisions, they still provide guidance and insight towards legislative intent. With regard to the issue of equal treatment, it was recognised in the drafting of the Renewables Directive that it may be more difficult for projects in more remote areas to connect to the grid because of costs.

From the foregoing, while community projects use the same service as other operators, they could be considered sufficiently different from other network users to justify different treatment in obtaining a grid connection. Therefore, DNOs should be justified in mitigating these challenges by providing certain priority treatment to community energy projects. To forbid such treatment would arguably result in an inequitable application of the principle of non-discrimination, stifle new entrants and prevent effective competition in renewable energy generation.

Under the current legal framework, there are already definitions for 'community energy installations'²⁶ and 'community organisations'. These definitions are helpful in that they recognise size and particular ownership and governance models that community projects embody. However, with regard to non-discrimination the Renewables Directive only relates to geographic regions. As such, in order to provide a narrow enough class for community projects for purposes of grid connections in a way that complies with EU law, there may be a need to further define the scope of differential treatment to community projects located in particular regions.

In conclusion, there is scope under EU and national law for DECC and/or Ofgem to provide a clear public policy statement that it is possible to provide distinct treatment to community energy projects, particularly around issues related to costs of grid connection. We would therefore recommend that DECC to provide a signal to Ofgem for the need to provide appropriate legislative clarity around the scope for which distinct treatment is allowed under relevant codes.

²² Cornwall Energy (2013). *Overcoming grid connection issues for community energy projects* research done for Co-operatives UK and the Co-operative Group, p. 8. Available at <http://www.cornwallenergy.com/Research/Our-experience/Community-energy>.

²³ See Ofgem (2014), *supra* note 3 at p. 4, which details why community energy is different than other projects.

²⁴ *Ibid.*

²⁵ Renewables Directive, Recital 63.

²⁶ A 'community energy installation' is defined as "an eligible installation which is wired to provide electricity to a building which is not a dwelling; and in relation to which the FIT generator is a community organisation." A 'community organisation' is defined as "(a) a community interest company; or (b) a community benefit or co-operative society, other than such a company or society with more than 50 employees."

Ofgem should assess the impact to consumers of special connection procedures for community energy projects

We recognise that the principle objective of DECC and Ofgem is to protect the interests of existing and future consumers, wherever appropriate by promoting effective competition.²⁷ Any changes to the standard conditions of licenses or existing codes that have the potential to differentiate between users must be assessed for their impact on competition, particularly with a view towards how it will affect consumers. Therefore, upon its own initiative or through direction by DECC, Ofgem should endeavour to study the implications of implementing the recommendations contained below, particularly with a view to how they would affect current and future consumers. Where legislative change may be required, DECC and Ofgem should review such opportunities together with participation from stakeholders.

2 Connection costs should be capped for community projects

The current approach for sharing the costs of grid connection among producers and grid operators has been identified as a significant hurdle for renewable energy projects in the UK.²⁸ Under the current legal framework, distribution operators have a duty to “make a connection between the distribution system of his and any premises, when required to do so by ... the owner or occupier of the premises ... for the purpose of enabling electricity to be conveyed to or from the premises.”²⁹ In return, the operator is entitled to recover any reasonable expenses from the user for providing the connection.³⁰

The payment of connection costs for new connections to the grid are determined by the DNO's network codes. Under the Standard Licence Conditions, when the DNO makes an offer to connect it must set out the charges to be paid,³¹ in accordance with the DNO's “Charging Methodology”.³² The Charging Methodology must also be in accordance with the “Distribution Connection and Use of System Agreement” (DCUSA).³³ Importantly, the development and implementation of these codes and agreements must be consistent with several objectives, including *inter alia*:

- a) Facilitation of the discharge of the obligations imposed on it under the Energy Supply Act and by the DNO's license;
- b) Development, maintenance and operation by the DNO of an efficient, co-ordinated, and economical Distribution System;
- c) Facilitation of effective competition in the generation and supply of electricity that does not restrict, distort, or prevent competition in the transmission or distribution of electricity; and
- d) Compliance with the Regulations and any relevant legally binding decision of the European Commission and/or the Agency for the Co-operation of Energy Regulators.³⁴

²⁷ Utilities Act 2000, Part II, section 9(1) (amending section 4 of the Gas Act 1986), and section 13(1) (amending section 3A of the Electricity Act 1989).

²⁸ Zane, EB, Bruckmann, R and Bauknecht, D (2012). *Integration of electricity from renewables to the electricity grid and to the electricity market – RES-Integration*, Final Report for DG Energy (eclareon, Oko-Institut: Berlin).

²⁹ Electricity Act 1989, Chapter 29, Part I, section 16.

³⁰ Electricity Act 1989, section 19.

³¹ Standard Licence Conditions (2014), *supra* note 15 at Condition 12.4

³² Standard Licence Conditions 13.1 and 12.4(a)(i).

³³ Standard Licence Conditions 13(1)(b) and 22.2.

³⁴ Standard Licence Conditions 13.3 and 22.2.

The existing legal framework needs to be amended to make it less difficult for community projects to finance the connection process. Specifically, DECC should propose an amendment to the Electricity Act to adopt a cost-capping cost recovery structure for either: 1) community projects; or 2) all new connections to the distribution grid. This would allow Ofgem to propose the development of a “shallow connection charging method” for community projects under the Standard Licence Conditions.³⁵

Under a shallow connection charging method, connection costs for the generator could either be capped at a certain level or limited to the costs of connecting their installation to the nearest available point in the grid. Under this approach, the DNO would pay for any costs related to reinforcing the network.

Connection costs are already capped for network users in several countries. In Denmark, which arguably has the best legal framework for connecting renewable energy projects, the network user is responsible for costs of connecting to the most technically suitable point, but no more than it would cost to connect to the 10-20 kV grid.³⁶ All other costs, including necessary reinforcements, are borne by the distribution grid operator.³⁷ This obligation sits beside the grid operator's continuing duty to expand grid capacity for renewables.³⁸ These costs are then passed on to consumers in the form of a public service obligation (PSO) tariff, which is based on how much the customer consumes.³⁹ In order to control costs, before investing in reinforcement the grid operator must receive permission from the Danish Energy Regulation Authority (DERA, or *Energitilsynet*). The Minister for Climate and Energy also has authority to establish more detailed regulations on the distribution of grid connection costs.⁴⁰

Capping the costs of grid connections for community projects would provide a number of benefits for distribution networks. First, it would have the immediate impact of reducing the cost burden for projects with less expertise and financial capacity. It would also provide community groups with certainty over project costs. This would lower the risk premium for capital and the cost of project realisation, as well as increase competition. It would also entail less individual connection costs being passed to consumers.

If costs are capped for all network users it would also be possible to avoid issues around non-discrimination. As long as the shallow cost threshold is not established too high, the risk of discriminating against users of the grid would be minimal because the threshold would be equally applied to all generators that request a connection. Ultimately, this would result in an increased level of competition while maintaining consistency in the treatment of all network users.

Such changes would place a higher burden on the DNOs. However, such a burden would be outweighed by the benefit of promoting further competition in the generation of renewable energy. Furthermore, such costs can be limited. For example, in order to ensure value to customers and to avoid runaway costs or risk, a tiered cost structure could be developed. Under this approach, the DNO would be automatically expected to invest in reinforcement up to a certain cost threshold, after which it would need to request permission from Ofgem. If such an approach were adopted, it would be necessary to establish procedures sufficient to provide certainty around timeframes for receiving approval.

³⁵ Ofgem has the authority to propose modifications to the Standard Licence Conditions, subject to specified procedures under the Electricity Act 1989, section 11A.

³⁶ Act No. 516 of 1 January 2010 on Energy Supply, section 67.

³⁷ *Ibid.*

³⁸ Act on Energy Supply, section 21.

³⁹ Act on Energy Supply, section 8(7).

⁴⁰ Promotion of Renewable Energy Act 2008, section 30.

3 Community projects should be allowed to pay for connections through staged payments

Requirements for projects to pay upfront for the connection process place a distinct burden on community groups. As highlighted above, most community projects do not have access to such finance. Given that community projects face this obstacle, requiring them to fund connection costs upfront prevents otherwise viable projects from competing for grid access, stifling competition. In order to alleviate this disparity, community groups should be able to defer at least a portion of these payments until further down the line, ideally when the development has become operational.

Determinations about when grid connection payments should be made are determined by the DNO's *Charging Methodology* and *DCUSA*. As mentioned above, the development and implementation of these codes and agreements must be consistent with a number of different objectives.

Amendments to the Standard Licence Conditions could achieve these changes without necessarily the need for amendment to primary legislation. Under the Electricity Act, the DNO 'may' recover any expenses reasonably incurred in making a connection. However, the statute is not specific with regard to 'when' costs may be recovered.⁴¹ Furthermore, while many charging methodologies require costs to be paid before the connection is completed, there is no corresponding language in the Standard Licence Conditions about when charges for connection should be applied. As such, DNOs are free to incorporate provisions into their relevant network codes and agreements that would allow for staged payments as long as they correspond with other relevant objectives contained within the Standard Licence Conditions, and modifications are passed according to proper procedures.

As the relevant authority, we would recommend that Ofgem work with DNOs and relevant user stakeholders to develop appropriate provisions under the Charging Methodology and DCUSA to allow for staged payments for connections.

These suggested amendments would provide similar benefits for distribution networks as the recommendation elaborated above, particularly in terms of enhanced competition. While it would require DNOs to take on a certain amount of risk, they could also be tailored in away to ensure exposure to risk to customers is minimised. Furthermore, the burden on the DNO is likely to be outweighed by the overall benefit to the market and the consumer through enhanced competition in the generation and supply of decentralised renewable energy.

It will be important to ensure that provisions allowing community projects to connect through staged payments do not discriminate against other network users. However, as we have concluded above if the scope for different treatment is defined narrowly it would not amount to discrimination. Nevertheless, Ofgem should further study the implications of allowing community projects to pay for connections through staged payment, particularly with a view to how it would affect current and future consumers.

4 Community projects should be guaranteed a connection to the grid

As identified by the Working Group, community projects face the distinct challenge of being geographically constrained from moving to the most suitable connection point. Moreover, due to their lower levels in expertise, alternative governance models and lack of access to upfront finance it

⁴¹ Electricity Act 1989, section 19(1).

is very difficult for community projects to compete with commercial developers for available connection points.

Capacity should be reserved for community projects

In order to even out the disparity in their positions vis-à-vis other commercial developers, eligible community projects should be able to receive a proportionate degree of priority in obtaining grid connections. This could be achieved by reserving pockets of capacity in areas where communities demonstrate interest in obtaining a connection. Where capacity is available or when additional capacity becomes available, these projects would then at least be guaranteed a connection.

A reservation requirement should also be accompanied by a requirement to notify potential projects in the area once upgrades or reinforcements have been planned. Relevant information would also need to be made available in a transparent, easily accessible and understandable form. In particular, early information about capacity becoming available would allow communities to design viable projects with certainty. Furthermore, proactive dialogue between DNOs and potential network users could assist DNOs determine demand for future connections in advance, decreasing the need for ad hoc upgrades and reinforcement works.

Alternatively, a separate process or application window could be established by DNOs so that eligible community projects could compete against each other as opposed to other commercial projects. Precedent for a separate connection process already exists. In Ireland, connection applications are currently processed through a Group Processing Approach (GPA). Under the GPA, grid connections are treated on a first-come-first-served basis until a capacity that has been pre-determined is met. Subsequent projects must then wait in a queue until new capacity becomes available. However, due to the complexity and the ever increasing queue of the GPA, it was determined that certain small generators of renewable energy sources should be exempt from participating. Therefore, micro-generation,⁴² which includes wind, photovoltaic and combined heat and power (CHP), is exempt from the GPA process. Furthermore, 'small plants'⁴³ may be treated outside the GPA as long as their connection is within the public interest and the regulatory authority agrees to grant an exemption. Several technology classes are presumed to exhibit public interest benefits, and are therefore preapproved for processing outside the GPA. This means that community projects related to solar, hydro and CHP, among others, with a maximum export capacity (MEC) below 5MW, are eligible to be considered outside the GPA, excluding projects over 500 kW. This approach is far from perfect, and in fact is overly restrictive on the size of wind projects that are exempted from the GPA. Nevertheless, it provides precedent, as well as a good example of how community projects, which tend to be smaller in size, could be treated separately from other commercial projects.

In line with Ofgem's request for policy direction in this area, we would recommend that DECC further explore the possibility of carving out a portion of capacity for community projects within the existing legislative framework. In particular, Ofgem should be directed to explore what level of reserved capacity for community projects would be proportionate for promoting competition without discriminating against other users.

⁴² Micro-generation covers small scale generators where customers produce their own electricity and export the surplus onto ESB Networks LV System. This is subject to a rated maximum output of 6kW when the connection is single phase, and 11kW when the connection is three phase. See Electric Ireland, "Micro-generation Scheme", available at <https://www.electricireland.ie/ei/residential/price-plans/micro-generation-scheme.jsp>.

⁴³ Commission for Energy Regulation (CER) (2009). *Decision Paper on Treatment of Small, Renewable and Low Carbon Generators outside the Group Processing Approach* (CER/09/099). Wind projects with a maximum export capacity of less than 0.5 MW, and non-wind renewable projects with a maximum export capacity less than or equal to 5 MW.

DNOs should have an ongoing duty to expand the grid and connect all eligible (community) projects

At present grid capacity issues result in project down-scaling to match capacity rather than the scaling up that the government is trying to achieve. This is dictated by the extreme risk-averse position of the DNOs. If DNOs were under an ongoing duty to undertake more strategic investment in the grid there would be less need to create a special category for community projects as capacity would be available. While the risk of stranded assets would exist, it is an unlikely scenario in most areas and evidence-based strategic planning could largely mitigate this risk.

In the short term, however, a duty should be imposed to connect all eligible community projects to the grid. Alternatively, in order to ensure there is no discrimination against other network users, such a duty to connect and provide access could be extended to all eligible installations, regardless of current capacity. This would need to be accompanied by a continuing legal duty on the DNO to:

- 1) take reasonable steps to address capacity; and
- 2) to cap connection costs in line with recommendation 2 (above).⁴⁴

In Denmark, along with a shallow cost-recovery model there is a general obligation for the grid operator to connect all installations to the grid without discrimination.⁴⁵ There is no priority of access for existing installations; new installations also have a right to connect to the grid.⁴⁶ The grid operator also has a duty to expand grid capacity, to the extent necessary, with special attention to be paid to renewable energy sources;⁴⁷ if the distribution system operator (DSO) is unable to do so, it is the responsibility of the transmission system operator (TSO), Energinet.dk.⁴⁸ The law in Germany imposes similar obligations on the network operator. Under the Energy Industry Act (*Energiewirtschaftsgesetz* – EnWG), the grid operator has a statutory duty to connect renewable energy plants to the closest technically suitable point.⁴⁹ The grid operator is also required to optimise, boost or expand the grid if necessary, as long as it is economically reasonable.⁵⁰

As this recommendation would entail additional duties for DNO's, DECC should explore the possibility for proposing relevant legislative changes under the Electricity Act.

⁴⁴ While it is outside the scope of these recommendations, to promote more long-term planning, an obligation to connect all installations, DNOs should be required to develop a broader set of measures to promote transformation and innovation in the grid system.

⁴⁵ Act No. 516 of 1 January 2010 on Electricity Supply, section 24.

⁴⁶ Act on Electricity Supply, section 26. See also Danish Ministry of Climate, Energy and Building (2010). *National Action Plan for Renewable Energy in Denmark*, p 58.

⁴⁷ Act on Energy Supply, section 21.

⁴⁸ Act on Energy Supply, section 20.

⁴⁹ Act about electricity and gas industries, amended from 7 July 2005 (*Energiewirtschaftsgesetz*, EnWG), section 5(1).

⁵⁰ EnWG, sections 5(4) and 9(3).

For more information, please contact:

Josh Roberts

Lawyer, Climate and Energy
274 Richmond Road
London E8 3QW
t 020 7749 5975
e jroberts@clientearth.org
www.clientearth.org

About the Community Power Project

These recommendations are a part of the Community Power project, a project in 12 European countries aiming to put people first at the heart of increased renewable energy. Check out the website of the project at www.communitypower.eu.

The partners in the Community Power project are:

Friends of the Earth Europe www.foeeurope.org

Amigos de la Tierra www.tierra.org

CEE Bankwatch Network www.bankwatch.org

ClientEarth www.clientearth.org

Ecopower www.ecopower.be

ICLEI www.iclei-europe.org

Friends of the Earth Ireland www.foe.ie

Friends of the Earth Scotland www.foe-scotland.org.uk

Hnutí Duha www.hnutiduha.cz

Magyar Természetvédők Szövetsége www.mtvsh.hu

NOAH <http://noah.dk/>

WIP-Renewable Energies www.wip-munich.de



Co-funded by the Intelligent Energy Europe
Programme of the European Union

The sole responsibility for the content of these recommendations lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither the EACI nor the European Commission are responsible for any use that may be made of the information contained therein.