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for all gas and electricity customers

Charging Workshop

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DG customer concerns

- Why are connection costs so high?
- Should I have to pay for a connection?
- Why is there disparity of connection cost between DNOs even where the projects appear comparable?
- Why do I have to use the DNO?

Charging policies

- Apply to all connections customers, not specific to DG customers
- One-off connection costs
- Reinforcement costs
- Non-contestable vs contestable works
- Ofgem’s efforts to open up the market to competition
- Disputes and determinations

Charging arrangements

Policy: The same charging arrangements apply to all customers

- An up-front charge (commensurate with the cost of making that connection) is made to any customer connecting to the network.
  - principle is applied to energy users AND energy producers.
  - to meet our energy needs and carbon reduction targets at the lowest possible cost to consumers.

- In 2005 we introduced shallow-ish connection boundaries
  - connecting customer pays full cost of sole-use connection assets.
  - connection charge includes share of network reinforcement costs

- Connecting DG also pay for use of the distribution system reflecting the cost impact they cause.
  - customers contribute towards reinforcement up to one voltage level above the voltage at which they connect to the existing network
  - for lower voltage DG customers this results in 'credits' where they defer the need for investment

Reinforcement of the network

- In areas where there is limited capacity the network may need to be reinforce to accommodate a customer' requirement
- Reinforcement can be triggered by an individual customer or undertaken in advance by the DNO in anticipation of future network reliability issues
- If undertaken by a DNO in advance, these costs are recovered from all users through Use of System charges (assuming approval from Ofgem)
- More upfront reinforcement may reduce connection costs for individual customers, but increase bills for everyone

Smart-grid solutions to reinforcement

- Smart grid solutions have the potential to lower the cost (and potentially timescales) of all connections – particularly DG
- Some Low Carbon Network Fund projects are exploring connecting DG through innovative means to avoid reinforcement for new connections

  (i) Low Carbon Hub
  (ii) Capacity to Customers
  (iii) FALCON

- Better information might also allow opportunities for customers to avoid triggering reinforcement

Contestable vs non-contestable costs

- Installation of new connection assets is not a natural monopoly
- Ofgem believe that competition in the connections market will lead to improved service delivery
- Independent Connection Providers (ICPs) and Independent Distribution Network Operators (IDNOs) can also provide connections

Contestable activities	Non-contestable activities
Design	Determination of the point of connection to distribution system
Procurement	Approval of ICP/IDNO connection design
Construction of the sole use connection assets	Reinforcement/diversionary work on the upstream distribution system
(live jointing to LV mains)	Inspection and monitoring of work

Incentivising competition in connections

- We set out arrangements to facilitate the development of competition for connection services
- The market was split into segments and DG is considered to be a market segment where competition can exist
- In 2010 we introduced arrangements for DNOs to charge a 4% margin on contestable services in potentially competitive market segments – to create headroom for competition to develop
- DNOs have been asked to come forward with evidence that competition exists in these Relevant Market Segments before December 2013 – the 'Competition Test'
- If a DNO passes the Competition Test Ofgem will lift price regulation on contestable connection services in the relevant market segment

What indicates effective competition?

- Actual and potential levels of competition
- Customer awareness/ability to choose alternate providers
- Price/transparency of pricing
- DNO policies and processes
- Barriers to competition

How do DNOs set their charges?

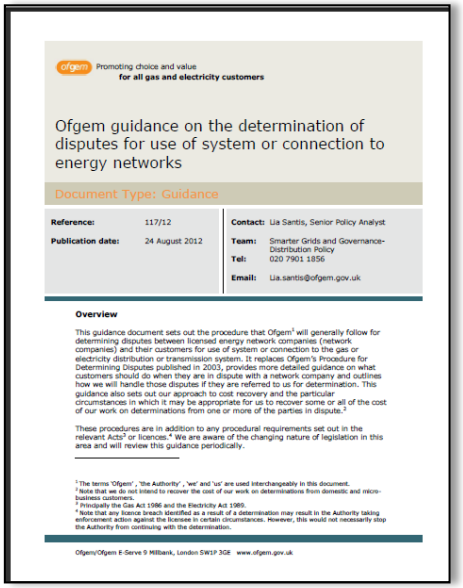
- DNOs have to provide customers with a minimum scheme design
  - *If* a DNO chooses to carry out reinforcement works in excess of the minimum required to make the connection, the DNO bears the additional costs and passes this onto all other customers

- Recover efficient costs +
  - A 4% margin allowed for contestable services in certain market segments
  - OR an unregulated margin where there is proven and effective competition

- Charging methodologies set out the scope of contestable activities and how the rates are calculated
  - We approve methodologies – not the charges themselves
  - We can only review charges in the context of a determination

Disputes and determinations

- If a DG customer is in dispute with a DNO they should seek to resolve it directly with the DNO, if necessary using the complaints system
- If this is unsatisfactory, they can pursue with the Ombudsman (domestic, micro-business customers)
- DNOs have financial incentives to resolve complaints to the satisfaction of customers
- If a customer or DNO feels there is still a problem, they can ask Ofgem to determine the dispute
- Ofgem has recently published guidance on what customers should do when they are in dispute with a network company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Ofgem guidance on the determination of disputes for use of system or connection to energy networks

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Overview

This guidance document sets out the procedure that Ofgem[1] will generally follow for determining disputes between licensed energy network companies (network companies) and their customers for use of system or connection to the gas or electricity distribution or transmission system. It replaces Ofgem's Procedure for Determining Disputes published in 2003, provides more detailed guidance on what customers should do when they are in dispute with a network company and outlines how we will handle those disputes if they are referred to us for determination. This guidance also sets out our approach to cost recovery and the particular circumstances in which it may be appropriate for us to recover some or all of the cost of our work on determinations from one or more of the parties in dispute.[2]

These procedures are in addition to any procedural requirements set out in the relevant Acts[3] or licences.[4] We are aware of the changing nature of legislation in this area and will review this guidance periodically.

[1] The terms 'Ofgem', 'the Authority', 'we' and 'us' are used interchangeably in this document.
[2] Note that we do not intend to recover the cost of our work on determinations from domestic and micro-business customers.
[3] Principally the Gas Act 1986 and the Electricity Act 1989.
[4] Note that any licence breach identified as a result of a determination may result in the Authority taking enforcement action against the licensee in certain circumstances. However, this would not necessarily stop the Authority from continuing with the determination.

Ofgem/Ofgem E-Serve 9 Millbank, London SW1P 3GE www.ofgem.gov.uk

http://www.ofgem.gov.uk/domestic-consumers/ncamm/Documents1/DeterminationsguidanceAug2012.pdf

Questions?


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Calculating connection costs

Connection Costs = extension costs + reinforcement costs (where necessary)

Calculating reinforcement costs

Reinforcement costs = costs (same as any demand connection) x cost apportionment factor (CAF)

$$CAF = \frac{\text{customers' required capacity}}{\text{new network capacity after reinforcement}}$$

Costs are subject to 'high cost threshold' of £200/kVA (above which customer bears the full costs)

In other words… all reinforcement costs over £200,000 (ie. 1000kVA x £200) are borne by the connectee and the rest are apportioned based on the CAF.

▪ **DG customer required capacity:**	**1MVA**
▪ **DNO carried out minimum cost reinforcement scheme which Increases network capacity from 2 MVA to 5MVA**	**£500,000**
▪ **Reinforcement costs borne by the customer: (£500,000 - £200,000 'high cost threshold')**	**£300,000**
▪ **Remaining costs apportioned by the CAF £200,000 x 0.2 1MVA/5MVA = 0.2)**	**£40,000**
TOTAL CUSTOMER CHARGE	**£340,000**