

# **Distributed generation in GB**

The role of regulation in the development of DG

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ofgem

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# Who are Ofgem?

- We are the **Office of Gas and Electricity Markets**. Our primary duty is to protect consumers
- We achieve this by promoting competition and regulating the monopoly companies which run the gas and electricity networks
- Regulation involves granting licences, monitoring performance, developing incentives to drive behaviours, approving charging methodologies to ensure common cost structures, determining in disputes between networks and customers
- ..... and we set revenues networks can recover (through the energy bill) to run their business. These are set periodically through a price control process. RIIO-ED1 will run from April 2015-March 2023

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# Connecting to the network

- Network operators have a duty to connect any customer seeking a connection on request (section 16 of the Act)
- To ensure connection is provided efficiently we have developed policies in relation to:
  - Charging for network connections & use of the distribution system
  - Incentivising networks to provide a good service to customers seeking a connection

# Our interest in DG

- Distributed generation is now a key component of the energy industry – significant growth in recent years in response to government incentives
- Creates challenges and opportunities for networks in accommodating new DG customers
- We have sought to ensure that DG does not encounter any unnecessary barriers when seeking to connect

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# Our work

- In the current electricity distribution price control (**DPCR5, 2010-2015**) we introduced -
  - **Guaranteed Standards of Performance (GSOP) in connections.** Minimum timescales for stages in the connection process, from issuing quotations through to energisation. Where a DNO fails to meet the standard it must make a payment to the affected customer.
  - **A broad measure of customer service** that includes a customer satisfaction survey with connections customers. A DNO stands to receive financial penalties or rewards based on their performance.
  - **Obligations on the DNOs** to produce a connection guide for distributed generation customers and publish Long Term Development Statements
  - Incentives to open up connections market to **Competition**

# An ongoing interest

- Concern that some customers continued to experience difficulties when connecting
- Gap remained in understanding. In 2011 & 2012 we set up and hosted DG Forum events – customers/DNOs to discuss issues and how to improve arrangements
- Held in Cardiff, Glasgow and London each year.
- After last year we expected DNOs to take the lead in these events – their customers, their services. We'll continue to play an active role in monitoring progress and impact of our policies

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# Type of issues encountered

## **Application Process**

- Lengthy and requires a lot of information upfront
- Recognition of heavy workload on DNOs

## **Provision of Information**

- Feasibility studies not detailed or reliable enough
- Provision of network data would help developers know where to connect

## **DNO customer service and transparency**

- Not designed around customer needs

## **Charges**

- Connection costs can be high
- Not transparent

## **Innovation**

- Lack of creative thinking and willingness to explore alternative approaches

# Outcomes

- Each DNO committed to developing, publishing and delivering a workplan.
- Welcome commitment to addressing issues. Already yielding results:
  - DNOs focussing more on specific needs of DG
  - Better information/guidance
  - Dedicated resource
  - Online database of wind turbines
  - Online capacity maps
  - Access to network diagrams & design standards
  - ‘Fair’ terms for deposits
  - More detail in connection offers
  - Simplified & standardised processes
- Still more to do & some may have gone further than others. Starting to understand what’s possible. This is an ongoing process



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# Looking ahead

- For the next price control (**RIIO-ED1, 2015-2023**) we will strengthen DPCR5 arrangements. Introduce new mechanism to address customer issues -

**Incentive of Connections Engagement.** This will require DNOs to -

- submit evidence of how they have identified, engaged with and responded to the needs of their customers.
  - develop a forward-looking work plan of actions to improve performance (with associated delivery dates).
  - demonstrate performance against their relevant performance indicators and progress against their work plan of actions.
  - A DNO that does not engage or respond to the needs of its customers will be subject to **financial penalties**
- Sound familiar? Formalises DG Forum approach – but with focus on outcomes

# The cost of connection

- Recognise that for many the most significant issue is cost. New customers pay an up-front charge for the cost of making their connection. This applies to users as well as to energy producers.
- Connecting DG pays the full cost of sole-use connection assets and share of reinforcement costs (up to one voltage level above point of connection)
- Customers also pay ongoing use of system charges - this should reflect the cost impact they cause. For many DG this results in 'credits' where they defer the need for investment
- Helps meet our energy needs and our targets for renewable generation at the lowest possible cost to consumers.
  - Price signals to use existing spare capacity
  - Reduces risk of stranded assets
  - Provides incentive to reduce costs through alternative connection arrangements
  - Other customers don't pay for infrastructure they don't require

# Costs and Innovation

- Those tied to a location may face prohibitively high costs.
- No silver bullet. Someone has to pay for the work & our role is to protect interests of all customers – moving costs (and risks) around can lead to customer bills increasing for no added benefit
- There are options – we expect DNOs to consider alternate commercial arrangements – non-firm offers, customers forming consortia, coupling demand and generation schemes
- We've invested over £44m of customer money funding innovative projects to release capacity/improve connections for
  - Flexible Plug and Play (UKPN)
  - Low carbon hub (WPD)
  - Active Network Management (SSE)
  - Real time thermal rating (NPG)
  - Flexible Urban Networks – LV (UKPN)
  - Accelerating Renewable Connections (ARC) (SP)
  - FlexDGrid (WPD)
  - Capacity to Customers (ENWL)
  - Smart Street (ENWL)

# Summary

- Want to hear if there have been improvements in –
  - Engagement
  - Processes
  - Information
  - Service
  - Procedures
- What represents best practice?
- What more can be done by the DNOs? How can Ofgem help in this process?

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**Our priority is to protect and to make a positive difference for all energy consumers. We work to promote value for money, security of supply and sustainability for present and future generations. We do this through the supervision and development of markets, regulation and the delivery of government schemes.**

**We work effectively with, but independently of, government, the energy industry and other stakeholders. We do so within a legal framework determined by the UK government and the European Union.**