

Keeping low carbon in focus

At UK Power Networks we are leading the way towards the low carbon future. Renewable energy installations, such as wind and solar farms, are on the rise and we are well positioned to shape and respond to these developments. We are leading innovation in electricity storage technology with our state-of-the-art Smarter Network Storage facility. We are also closely involved in preparations for the likely increase in the use of electric vehicles and the completion of the smart meter roll out by 2020.

Flexible distributed generation

Flexible distributed generation is a cutting-edge service that connects power sources such as wind or solar (otherwise known as distributed

generation) to constrained areas of the network. It delivers cheaper and faster connections, and enables previously unviable schemes to become feasible.

3.7 GW

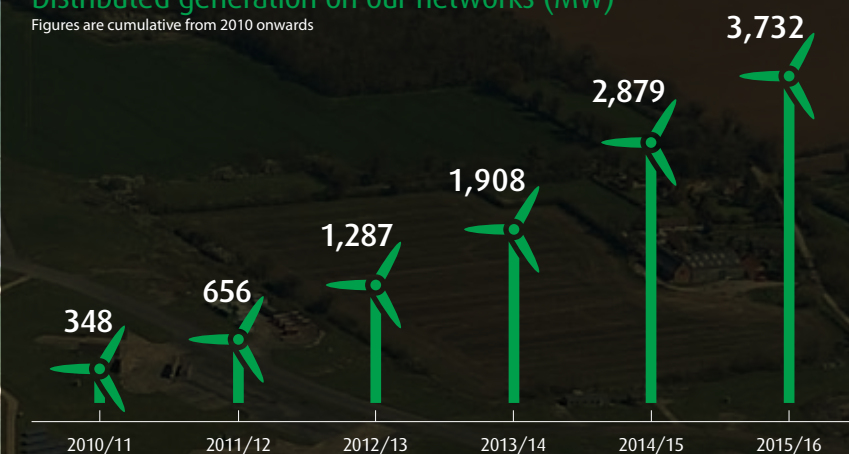
Distributed generation capacity connected to our network

£62m

We have reduced distributed generation connection quotes by over £62m in 2015/16

Distributed generation on our networks (MW)

Figures are cumulative from 2010 onwards



Lightsource



“ Lightsource would like to thank UK Power Networks for their support and hard work in connecting all of our sites, from March to December 2015, on their target connection dates. Together we connected eight solar farms in the region, totalling 38MWp. This is an outstanding achievement and we very much look forward to working together in 2016. ”

Low carbon readiness

continued


The year from April 2015 to March 2016 was a period of tremendous achievement for UK Power Networks. Customer satisfaction reached an all-time high. Reliability, as measured by the frequency and duration of power cuts, was our best ever. Safety measures, too, showed that we are continuing to accelerate improvements in this vital area.

We have achieved this success by keeping a laser-like focus on the following areas: safety, customer service and costs. We pride ourselves on leading innovation in our sector, and all the technology and new ways of working that we develop are designed to make the experience of our customers better, cheaper, greener, faster or easier, or to help us take better care of the safety and well-being of our employees and the general public. And sometimes they do more than one of these.


We are diligent about our role as a respected corporate citizen. We are working hard to earn our place at the heart of the society and the business community that we serve. That commitment includes the individuals and businesses that we support, the environment where we live and work, and the people who work for us, and their families.

Summary of our performance


Improvement since 2010/11




Lost time incidents improved by **80%**



Customer interruptions improved by **42%**



Customer minutes lost improved by **53%**



Customer satisfaction increased by **15%***

* Since 2011/12

Low carbon readiness

Government policy has led to an unprecedented growth in renewable energy installations, such as wind and solar farms. Electricity storage technology is advancing and is expected to play a major role in the next few years. A potential increase in the use of electric vehicles is also foreseen along with the completion of the smart meter roll out by 2020.

3.7 GW

We have 3.7 GW of distributed generation connected to our network

UK Power Networks is leading the way to respond to and shape these changes, and the Low Carbon Readiness project aims to ensure that we are organised and ready to deliver low carbon services in the next few years. The move towards a low carbon economy will inevitably present UK Power Networks and our customers with challenges. For example, the significant increase in the deployment of renewable generation can lead to increased connection costs for generation customers because of the need for network reinforcement.

One of our responses to this is to deploy, as business-as-usual, a recent innovation project: Flexible Plug and Play. This cutting edge service connects distributed generation (DG), such as wind or solar power, to constrained areas of the electricity distribution network. It delivers greater commercial flexibility in accommodating cheaper and faster DG connections, as well as enabling previously unviable DG schemes become feasible.

We have led the engagement with Transport for London to discuss their needs for the projected uptake of electric vehicles and electrification of public buses in London. Through delivering our Low Carbon Networks Fund energy storage project, we now have the best experience in the UK in this technology and have become storage experts. As a response to the increased interest in storage, we hosted a workshop with over 25 developers on the subject and have facilitated more than 30 visits to our battery storage site in Leighton Buzzard, to share what we know.

