

Wales & West Utilities 2016 Long Term Development Statement



REPORTS



The 2016 Long Term Development Statement is published in accordance with Standard Special Condition D3 of our Gas Transporters Licence and Section O4.1 of the Uniform Network Code (UNC) Transportation Principal Document (TPD).

These require that a Long Term Development Statement is published annually.

The Statement provides an indication of the usage for our pipeline system and likely developments. Companies that are contemplating connecting to our system or entering into



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transportation arrangements can use the statement to help identify and evaluate opportunities. It has been published at the end of the 2016 planning process following a reappraisal of our analysis of the market and demands on our Network within the South West (SW), Wales North (WN) and Wales South (WS) Local Distribution Zones (LDZs).

The Statement contains information on actual volumes, the process for planning the development of the system, including demand and supply forecasts, system reinforcement projects and associated investment.

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Disclaimer

This Long Term Development Statement is produced for the purpose of and in accordance with Wales & West Utilities' obligations under the Standard Special Condition D3 of the Gas Transporters Licence and Section O 4.1 of the Uniform Network Code in reliance on information provided pursuant to Section O of the Uniform Network Code. Section O 1.3 applies to any estimate, forecast or other information contained in this Statement. Wales & West Utilities' Long Term Development Statement is not intended to have any legal force or to imply any legal obligations as regards capacity planning, future investment and the resulting capacity.





Executive Summary

The purpose of this document is to outline our assessment of the future use of our gas distribution network and highlight any investment requirements. The assessment is based on our annual and peak supply and demand forecasts for gas usage in Wales and the South West of England.

Data and analysis is provided for the three local distribution zones (LDZs) that constitute the Wales & West Distribution Network (WWU). The three LDZs are:

- South West
- Wales South
- Wales North

The Wales & West gas distribution network is supplied by seventeen National Transmission System (NTS) Offtakes and fifteen biomethane supplies.

1.1 Context

This document contains the Wales & West Utilities annual and peak demand and supply forecasts which have been developed in conjunction with National Grid UK Transmission (UKT) and WWU local knowledge.







1.2 Demand and Supply Outlook

Our current demand forecast shows little variation from the forecasts in 2015. As such WWU's position on peak demands remains unchanged from last year with just a slight reduction in annual demand. The 2016 Forecasted demands show a slight fluctuation over the years ending with a small decrease of 3.77% by 2025. The decrease is mainly due to a reduction in the large daily metered (DM) industrial sector.

- South West LDZ is predicted to decrease in annual demand by 2.19% from 2015 to 2025.
- Wales South LDZ is predicted to decrease in annual demand by 5.27% from 2015 to 2025.
- Wales North LDZ is predicted to decrease in annual demand by 4.39% from 2015 to 2025.

Despite the slight forecasted decrease in annual demand, peak demand is considered to remain flat for the 10 year horizon and remains at the same level to that predicted last year.

1.3 Investment Implications

Even when we experience small overall increases in demand, this does not necessarily mean investment in the network is required. Conversely, when we experience small reductions in overall forecast demand we can often see localised growth in some areas across the network and there is an annual below 7 bar investment plan to accommodate this.

We have seen an increase in enquiries for embedded power generation which is providing a quick response alternative to renewable energy sources. We currently have 10 (8 new, 2 existing) stations connected to our below 7 bar network mainly in South Wales where it has taken the place of old industry. An additional 15 plants have accepted and are due to connect over the next 12 months and with over 100 additional enquiries in since April this year, this connected number has a real potential to grow.

Using an average daily volume and profile; if a further 100 sites connected then this would mean an additional 4.7 million cubic meters per day (mcm/d) on our peak day demand which is roughly 10% of total network demand and would trigger the need for reinforcement post 2020 and into GD2.



The immediate impact that these sites are having is on our storage rather than peak demand due to the way in which they take gas to cover the breakfast and tea time peaks. We are in storage deficit at a number of our Offtakes and because of this; we have identified a placeholder in 2021 and 2022 for £140k in each of the years in our 8 year plan to increase our line pack storage (costs associated with operating differently rather than installing pipe).

What if most commercial sites move to combined heat and power (CHP) increasing the demand for gas to produce power? Our commercial sector accounts for 17% of total network demand and if this demand was to increase by 20% to account for this move then an additional 1.637 mcm/d gas demand would be required adding to our peaks and driving reinforcement.

This drive towards fast acting renewable backup coupled with a move towards CHP in the commercial sector means we could well see an upsurge in gas demand. Will backup generation equal renewable demand by 2025? Will these power generation enquiries start to die down for WWU with planning being made more difficult for > 10MW sites in Wales and Hinckley Point C getting the go ahead?

There is still a lot of uncertainty about what gas demand will look like but confidence is growing that gas network will provide a crucial part of an integrated credible future energy scenario, supported by results from WWU projects; Bridgend Study & Cornwall Energy Island. Support for this view is spreading amongst DNs, industry and government.

The key point is that this area is not impacting peak demand at the moment but a flag is needed for potential reinforcement in GD2 for increases in peak demand and storage. So even though we are not currently investing in the network, we are still investing in resources and process developments to manage these enquiries and new loads.



1.4 Industry Development

The UK is now committed to legally binding environmental targets to deliver a sustainable future. We have environmental targets to achieve by 2020 and 2050. We must achieve these targets but we must also recognise the requirements to ensure security of supply within an uncertain economic climate and rising fuel poverty.

There are a number of key industry developments to note:

- The eight year price control period (RIIO GD1) began in April 2013. This includes some significant changes to networks allowances and network requirements such as:
 - o Networks to engage more with stakeholders
 - o Networks to be rewarded for delivery of Outputs
 - Networks to deliver innovative solutions to promote a sustainable energy sector
- There is a growing requirement to facilitate Renewable and other forms of gas into the Gas Network.
- The increase in renewable generation on the electricity system is leading to more variable flows at Gas Fired Power Stations embedded within the LDZ.

Our work to develop the network and to support development of industry arrangements must therefore incorporate these important developments. More information on these key developments can be found on the <u>WWU</u>, <u>Joint Office</u> and <u>Ofgem</u> websites

1.5 Next Steps

This Long Term Development Statement will be published on the WWU website (<u>WWU - Long Term Development Statement</u>). WWU actively solicit views and comments from interested parties.

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