



RIIO-GD1 Business Plan 2013-2021

Part B8

**Business Plan Assumptions**

This paper forms part of Wales & West Utilities Limited Regulatory Business Plan 2013 - 2021. Your attention is specifically drawn to the legal notice relating to the whole of the Business Plan, set out on the inside cover of The Executive Overview (Part A) of the Business Plan. This is applicable in full to this paper, as though set out in full here.

Except where stated to the contrary, all financial values within this paper are stated in 2009/10 prices, inclusive of 1% efficiency and prior to real price effects. This is in order that they match the figures used within the detail of the Business Plan Data Template.

This is a redacted copy. We do not indicate where material has been redacted.

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## **1. Introduction**

This document sets out the key assumptions used in preparing Wales & West Utilities business plan covering the RIIO-GD1 period from April 2013 to March 2021.

Regulatory discussions that alter the assumptions contained within this paper may change the risk profile of the business plan and hence require modification of proposals to achieve an acceptable level of risk and financial return.

Implementation of the plan is dependent on the Health and Safety Executive (HSE) approving amendments to the Safety Case under which we operate. We expect to submit changes to the HSE for approval in the first quarter of 2012. If approval is withheld the plan will require modification.

## 2. Overview

In preparing our business plan we have made a number of assumptions which are documented in this paper. This paper should also be read in conjunction with Part B4 - Business Plan Uncertainties.

In common with Part B4 - Business Plan Uncertainties, the key principles that underpin the assumptions used within our plan are:

- We accept that we will bear the appropriate level of operational risk that is largely within our control.
- We want our business plan to be transparent for people who have to pay the charges.
- We will be entitled to recover the efficient costs incurred to meet our Licence and Legal obligations, as well as the stakeholder required Outputs.
- Appropriate risk sharing arrangements between bill payers and investors.
- To avoid the requirement for a disproportionately high rate of return and hence cost on network users, we have included appropriate protection mechanisms for material uncertainties beyond our control in Part B4 – Business Plan Uncertainties.
- We have an objective to minimise the impact on customer bills whilst delivering outputs required by stakeholders, and this is balanced with achieving a reasonable return for investors and lenders.
- A longer review period will require more flexibility in funding mechanisms to deal with increased uncertainty.

In preparing this plan we have considered a wide range of views and have commissioned independent assessments where we consider third party evidence to be appropriate.

### 3. High Level Assumptions

There are a number of high level key assumptions that relate to a broad spectrum of activities. These are summarised below.

#### 3.1. Future of Gas

In determining investment needs we have taken into account the findings of several industry studies, these include:

- Redpoint Gas Future Scenarios<sup>1</sup>.
- The Golden Age of Gas 2011<sup>2</sup>.
- Project Discovery.
- DECC Pathways.

We have therefore assumed gas will be required on a broadly similar demand mix to current levels until at least 2030. Beyond 2030, there are a number of scenarios which accommodate a future use for gas at various demand mixes<sup>1</sup>. In line with this, our plan does not incur significant investment spend that would result in asset stranding should gas demand fall in the longer term.

#### 3.2. Demand Forecasts

Peak demand forecasts show a low level of general growth until 2013, with flat demand thereafter. The impact of interruption reform (and interruptible loads becoming firm) has been incorporated in these forecasts<sup>3</sup> as has the impact of meeting localised peak demands driven by specific circumstances.

#### 3.3. Capacity

In-day demand peaks (diurnal demand) will continue to be met by Wales & West Utilities assets comprising LTS pipes, high pressure vessels and low pressure holders, with support from National Transmission System flex<sup>4</sup>.

We have assumed that existing system pressures, National Transmission System<sup>5</sup> flat and flex capacity will be available throughout the period from 2013 to 2021. Introduction of biomethane will not materially change National Transmission System Offtake requirements. No charges for flat or flex overruns have been included.

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<sup>1</sup> Available at;  
[http://www.redpointenergy.co.uk/images/uploads/ENA\\_gas\\_future\\_scenarios\\_report\\_v1.1\\_FINAL.PDF](http://www.redpointenergy.co.uk/images/uploads/ENA_gas_future_scenarios_report_v1.1_FINAL.PDF)

<sup>2</sup> International Energy Association – The Golden Age of Gas

<sup>3</sup> Based on latest published WWU Long Term Development Statement dated October 2011

<sup>4</sup> Flex capacity - Flex capacity is the volume of gas which is required to support our local storage to manage the anticipated hourly profile of gas demand

<sup>5</sup> Flat capacity - Flat capacity represents the daily volume of gas taken through the National Transmission System / Local Distribution Zone Off-take for the whole gas day.

### **3.4. Demand Side Management**

Where it is an efficient solution we will continue to auction capacity to enable deferral of investment in additional capacity.

### **3.5. Uniform Network Code Obligations**

We do not assume a major change to the existing contractual arrangements with shippers or National Grid Transmission. Arrangements are applied through the Uniform Network Code and ancillary documents.

### **3.6. Large Load Connections**

We have not included the costs associated with any large load connections in the period from 2013 to 2021. We do anticipate that a large load will connect, but we propose an uncertainty mechanism is invoked to fund spend following a signed Advanced Reservation Capacity Agreement with the connectee. We explain this further in Part B4 - Business Plan Uncertainties.

### **3.7. Pass Through Items**

We have assumed that the following costs will remain as pass through items:-

- Ofgem licence fee.
- Business rates.
- National Transmission Pension deficit payments.
- Shrinkage gas prices.
- National Transmission System Capacity Payments.

### **3.8. Wales & West Utilities Pension Deficits**

Negotiations remain ongoing with the WWU Pension Fund Trustees over the 31 March 2009 deficit valuation. Until such valuation and the associated deficit funding plan have been formally agreed between the Trustee and the Company, WWU has included within its business plan the latest proposal offered by the Company to the Trustee on the deficit and recovery plan. Dependant on the final agreement with the Trustee this may change.

### **3.9. GDPCR1 Workloads**

The plan as submitted, assumes completion of certain capital and replacement workloads in the GDPCR1 period. However, there may be situations beyond our control, (for instance the granting of planning permission, environmental approvals etc.) that may result in projects being carried forward to the RIIO-GD1 period. Should such delays occur, we would expect an adjustment to the timing of recovery of income to match the costs.

As a specific example, the North Wales local transmission system pipeline replacement project (HN037) has been deferred into the RIIO-GD1 period due to the recent introduction by Countryside Commission for Wales of a further consultation period and post works monitoring.

## Part B8 – Business Plan Assumptions

It should be noted that in some instances tables may include rounding errors, i.e. there is a difference between the calculated approximation of a number and its exact mathematical value.

## 4. Real Price Effects

### 4.1. Key Financing Assumptions

The following key high level financing assumptions are used to underpin our business plan.

#### 4.1.1. Notional Gearing

We have retained the notional gearing assumed by Ofgem in GDPCR1 of 62.5% of RAV and this is a level that WWU consider appropriate and sustainable for the longer term.

#### 4.1.2. Cost of Debt

The Business Plan assumes that the allowed cost of debt will be set in line with the indexation mechanism outlined by Ofgem in the March 2011 decision document.

WWU has used the Ofgem modelling assumption of 3.2% (real) as the basis of the index value for future years, and modified the Ofgem formula so as to give explicit recognition to the inflation-risk premium and other debt costs (including fees). The adjustments are 25bps and 10bps respectively.

#### 4.1.3. Cost of Equity

We assume a real post-tax cost of equity of 7.5%. This assumes that the uncertainty mechanisms as outlined in Part B4 - Business Plan Uncertainties are implemented as envisaged

#### 4.1.4. Weighted Average Cost of Capital

The above assumptions give a range for Vanilla Weighted Average Cost of Capital over the 8-year RIIO-GD1 period of 4.93% to 5.05%. The Weighted Average Cost of Capital outcome is a range due to the changing 10 year trailing average in the cost of debt index, as the underlying index moves.

#### 4.1.5. Transitional Arrangements

Our business plan adopts transitional arrangements for capitalised replacement expenditure and accelerated depreciation as outlined in the Ofgem March 2011 decision document. These arrangements are essential for WWU to be appropriately financeable during the RIIO-GD1 period.

#### 4.2. Real Price Effects

WWU has commissioned a detailed 10 year forecast based upon global macroeconomic and industry models. The report includes forecasts for various inputs to the business plan. The main findings include:

##### Real price forecasts - % change year on year

	2013	2014	2015	2016	2017	2018	2019	2020	2021
Wages per person in the utility sector	0.4	0.1	0.9	1.2	1.2	1.2	1.1	1.1	1.1
PPI for aggregates	-0.6	-1.5	-0.5	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3
PPI for coated macadam	-0.4	-1.2	-0.2	0.0	0.0	0.0	0.0	0.0	-0.1
Wages per person – road operatives	0.6	0.1	1.0	1.2	1.2	1.1	1.1	1.1	1.1
PPI for steel tube and steel tube fittings	1.9	0.7	1.5	1.3	0.7	0.7	0.6	0.1	-0.2
Diesel	0.6	0.9	0.8	2.1	3.0	3.3	3.1	3.2	2.8
Electricity – non-domestic consumers in the UK	5.3	1.4	1.4	1.5	1.5	1.5	1.4	1.4	1.4
Gas- non-domestic consumers in the UK	3.9	1.1	1.6	1.7	1.7	1.7	1.6	1.6	1.6

## 5. Safety & Reliability

Our stakeholders have told us that they want us to continue providing a safe and reliable network at levels similar to those delivered historically. In order to meet this expectation we have used the following assumptions:

### 5.1. Safety Legislation & Regulations

Safety legislation will continue in its current form (e.g. Gas Safety Management Regulations, Pipeline Safety Regulations, and Pressurised System Safety Regulations). Costs associated with any potential changes have not been included due to their uncertainties.

### 5.2. Emergency Service

Fixed costs of running our emergency service based on the respective 1 and 2 hour response times against a 97% standard are included. We have also assumed that our current metering contracts will not be renewed when they expire. The estimated impact of smart metering has been included within our business plan.

### 5.3. Reinforcement for Localised Peak Demand Increase

We propose to respond to localised increases in peak demands by investing to maintain current levels of reliability whilst achieving our licence obligation to meet 1 in 20 winter demands.

### 5.4. Low Pressure Holders

Demolition of 4 operational low pressure holders on 3 Control of Major Accident Hazards (COMAH) sites has been included along with the associated pipeline reinforcement costs to facilitate removal. This is in response to the Health & Safety Executive's strategy of avoiding catastrophic events.

### 5.5. Local Transmission System Pipelines

Following the outputs from our Condition Based Risk Management models, third party integrity investigations have been undertaken to confirm the level of replacement, reconditioning and ongoing risk management. It is assumed that the findings of these integrity studies are representative of the wider population of similar aged assets.

### 5.6. Below 7 bar Metallic Mains

There are now three tiers within the policy mains replacement programme, our assumptions for each are as follows:

- Tier 1 pipes ( $\leq 8''$ ) -All tier 1 pipes ( $\leq 8''$ ) will be replaced by 2032, in line with the Health & Safety Executive's current 30:30 programme. Each year 20% of the programme length will be the pipes with the highest risk score. The remaining 80% will be selected after considering a number of outputs including, safety, environment and cost to the consumer.

- Tier 2 pipes (>8" up to 18") - Tier 2 pipes (>8" up to 18") comprising mandatory and non mandatory pipes, the mandatory pipes are selected based on the risk they pose and the non mandatory pipes are selected because there is a positive cost benefit to the consumer and society.
- Tier 3 pipes (>=18") - Tier 3 pipes (>=18") are selected on an individual pipe by pipe justification that considers safety, the environment and cost to the consumer and society.

The workload also includes a forecast length for pipes which will qualify for policy replacement in the RIIO-GD1 period i.e. they are not currently considered a risk pipe but either due to records updates or encroachment will qualify during the period. This forecast has been based on historical trends.

Non policy mains are selected due to their poor condition and therefore the associated risk that they pose.

### **5.7. Security**

The classification of our sites by the Department of Energy and Climate Change will remain the same. The threat level is also not anticipated to change.

## 6. Environment

In line with feedback from our stakeholders we propose to continue to work to reduce the impact we have on the environment and reduce our carbon footprint. In delivering this we have made the following assumptions (as set out below). Section 6:4 refers to changing environmental policies. The uncertainties here are much greater than in other areas and range from £5m to £22m. These are dealt with under a separate uncertainty mechanism, further details of which can be found in Part B4 – Business Plan Uncertainties.

### 6.1. Environmental Primary Legislation

Obligations under current legislation have been included in the plan, however the impact of future changes with respect to Environmental Damage, the Water Framework Directive and the Department for Environment, Food and Rural Affairs Contaminated Land Statutory Guidance are excluded, as there is insufficient information available to determine the impact at this time.

Environmental legislation is an area of significant change, with 80% of such new legislation emanating from Europe.

Further changes are anticipated in relation to climate change and achievement of international targets on emissions reductions, waste management and the protection of controlled waters but associated costs are currently unknown and have not been included in our business plan.

### 6.2. Welsh Government Environmental Legislation

No costs have been included in relation to further differences in legislation between England and Wales. However the cost of dealing with current differences in legislation, although not significant, has been included to the extent incurred to date.

### 6.3. Adaptation to Climate Change

In adapting to climate change, areas identified for potential future investment have been included in our business plan.

### 6.4. Energy / Environmental Policy / Strategy

Any potential cost impact of changing environmental policies has been excluded. If we had to pay for the cost of carbon relating to emissions this could range from £5m<sup>6</sup> to £22m<sup>7</sup> per annum, which is not within our plan submission<sup>8</sup>. Further reference is included in Part B4 - Business Plan Uncertainties.

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<sup>6</sup> £12 per tonne (current published traded cost of carbon)

<sup>7</sup> £54 per tonne (current published abatement cost of carbon)

<sup>8</sup> See Part B4 – Business Plan Uncertainties for information on separate uncertainty mechanism included

### **6.5. Carbon Reduction Commitment Energy Efficiency Scheme**

WWU currently falls below the threshold for this scheme and therefore no cost of carbon has been included in our plan. Revisions to the qualifying thresholds for full participation are already being forecast which could impact the cost to WWU.

### **6.6. Statutory Remediation/Land Management Spend**

Local Authorities are charged with identifying and reporting on contaminated land within their devolved area of responsibility. According to published reports by the Department for Environment, Food and Rural Affairs the performance of Local Authorities has been variable and below the expectations of the Government.

Consequently based on our own experience since 2005 and feedback from other organisations, we have assumed a potential for increasing activity by both Local Authorities and the Environment Agency as they seek to further discharge their current statutory obligations.

### **6.7. Landfill Tax**

No increase has been assumed in tax rates above those currently published by Her Majesty's Revenue and Customs. In relation to statutory remediation spend, our plan assumes active waste at £48 plus VAT per tonne in 2010/11, rising by £8 per tonne per annum up to and including 2014/15. However, it is likely that costs of well over £125 per tonne will be seen in the foreseeable future for active waste. Also, costs associated with recycling and waste management/disposal are already increasing. However these additional taxes have not been included as they are not certain.

## 7. Connections

### 7.1. Distributed Gas

We have assumed investment resulting from the connection of gas from renewable sources will be funded by the connectee with no net cost to be borne by consumers in general.

### 7.2. Connections - timing and impact of economic recovery

A small growth of 2-3% per annum for new housing and non domestic activities is assumed in line with demand forecast publication.

It is assumed that the cost of connections, service alterations, isolations and mains diversions is fully chargeable to the customer with the exception of the items below:

- 10 metre Allowance or Domestic Load Connection Allowance<sup>9</sup>.
- Fuel poor scheme funding.
- Specific reinforcement funded by WWU subject to economic test.
- Enhancements of design to develop an economic and efficient gas network.
- Allowances applicable under the New Roads and Street Works Act 1991<sup>10</sup> which result in a small net repex cost each year.
- Workload resulting from the smart metering programme.

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<sup>9</sup> Gas Transporters Licence [Section 4B] available at; [http://www.ofgem.gov.uk/Networks/GasDistr/otherwork/Documents1/8355-Attachment\\_1\\_Standard\\_Conditions\\_for\\_GT\\_s.pdf](http://www.ofgem.gov.uk/Networks/GasDistr/otherwork/Documents1/8355-Attachment_1_Standard_Conditions_for_GT_s.pdf)

<sup>10</sup> New Roads and Street Works Act 1991 available at; <http://www.legislation.gov.uk/ukpga/1991/22/contents>

## 8. Meters

### 8.1. Metering Contracts

We have assumed that meter work will continue to decline, resulting in no metering contracts work being undertaken after the expiry of our current contracts.

### 8.2. Smart Metering

The Government has mandated a supplier led replacement of all domestic gas and electricity meters by 2020 with "smart meters". Following substantial survey work, workshops and one to one meetings with suppliers, we have included costs in our business plan that we expect to incur as a consequence of the supplier led rollout.

We also recommend an annual, symmetrical adjustment mechanism to adjust the forecast to our efficiently incurred costs. We assume the introduction of a tipping point type allowance, where the GDNs can access additional allowances for each additional smart metering call out that they attend above a minimum threshold.

Further detail is included in Part B4 - Business Plan Uncertainties.

Where appropriate, the business plan utilises the otherwise non-productive First Call Operative (Emergency) time to perform smart metering work.

### 8.3. WWU Meter Obligations

We assume removal of the Meter Provider of Last Resort Obligation.

If the obligation remains, we assume there will be an increase in the tariff caps to reflect the efficient cost of providing this service.

## 9. Other Legislation

Changes to existing legislation and the proposed implementation of future legislation have been included where sufficient certainty exists.

### 9.1. Street Works Legislation

We assume continued political focus on all aspects of street works. In respect of future costs we have engaged with the 44 Highway Authorities that operate within our network and our plan reflects their views on implementation of permit and lane rental schemes.

### 9.2. Human Resources Legislation

The costs of complying with new employment legislation have been included, specifically for:

- **Removal of the Compulsory Retirement Age** – (October 2011). The Compulsory Retirement Age has been removed, demanding more focus on older workers and their physical ability to undertake their role. The new legislation presents increased risks and cost for WWU.
- **Agency Workers Regulations** – (October 2011). This legislation determines that agency workers are entitled to the same pay and holidays (and some other conditions of employment such as bonus) as permanent staff after 12 weeks of employment.
- **National Employment Savings Trust (NEST)** – (September 2013) NEST will be a consideration for all businesses as an outcome of the Automatic Enrolment legislation which is being introduced in the UK from 2012. This legislation will require employers to automatically enrol their employees into a pension scheme that meets minimum contribution requirements. This legislation requires WWU to update its DC Pension Scheme to ensure that it complies with this legislation by September 2013 (WWU's staging date). The anticipated costs of these changes have been incorporated into our business plan.

### 9.3. Welsh Language

No costs have been included to comply with any changes to the current Welsh Language Act.