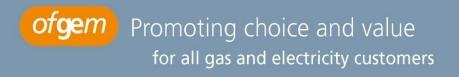


RIIO Incentive Framework

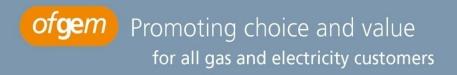
10th EU-US Energy Regulators Roundtable

Hannah Nixon 8 April 2013





Introducing the RIIO framework





The industry is facing unprecedented change

De-carbonisation

Security of Supply

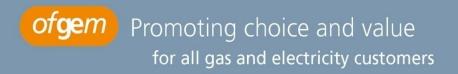
Ageing Assets

Affordability

ELECTRICITY NETWORKS

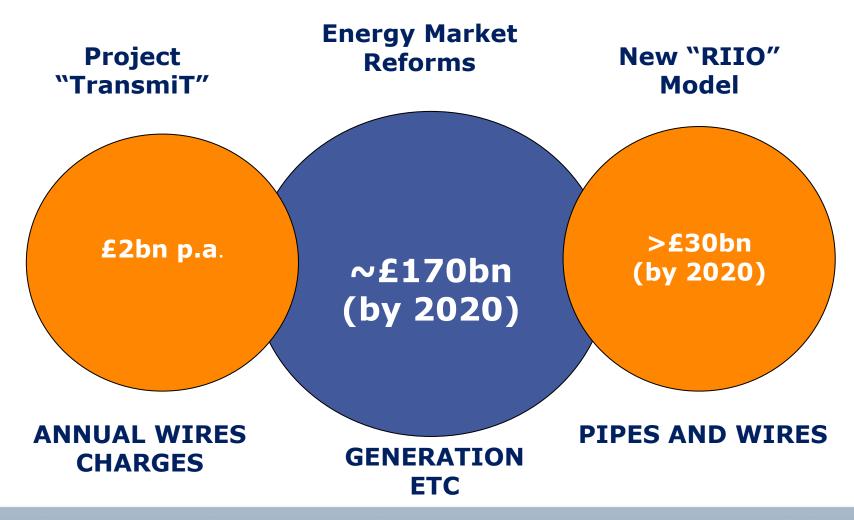
GAS NETWORKS

- Renewables / new generation
- Smart Grids
- · Electricity storage
- Electric vehicles
- Different network patterns
- Electrification of heat
- · Energy efficiency
- Local generation
- Demand Side Management
- Carbon Capture and Storage
- Biomethane
- HVDC
- Skills shortages





The scale of the challenge







What are we seeking to achieve?

Desired outcomes

Play a full role in the delivery of a sustainable energy sector

Deliver long-term value for money network services for existing and future consumers

What is required to achieve this?

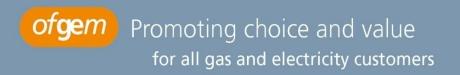
Long-term focus on value for money

Innovation

Optionality and flexibility

Working with others to identify best delivery solutions

Understanding and responding to needs of existing and future consumers

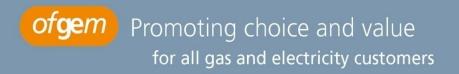




RIIO: A new approach to network regulation

Constraint set up front to ensure: Timely and Balance between costs Network Transparency Revenue efficient companies are faced by current and and financeable future consumers delivery predictability **Deliver outputs efficiently over time with: Incentives** 8 yr control Rewards/penalties for delivery Upfront efficiency rate Technical and commercial innovation encouraged through: **Innovation Innovation** Core price control Option to give third parties stimulus package incentives a greater role in delivery + Outputs set out in clear 'compact', reflecting expectations of Outputs

current and future consumers





Financeability: Our duty

Our financeability duty

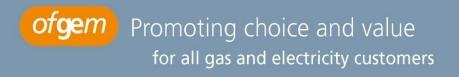
Ofgem's Principal objective: to protect the interests of existing and future consumers

Must also "have regard to the need to secure that licence holders are able to finance the activities which are the subject of obligations on them"

- ➤In the interest of consumers that efficient network companies can secure finance in a timely way and at reasonable cost to facilitate their regulatory obligations
 - ➤ No bail-out if financial distress is due to own behaviour
 - ➤ No reward of inefficiency or unwarranted returns
 - ➤ Capital structure remains the responsibility of network companies' management

Regulatory commitment provided through transparency and predictability

Transitional arrangements to avoid sudden impact on earnings and cash flows





Implementing RIIO





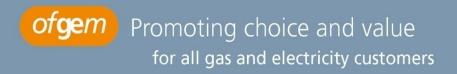
RIIO-T1: Key challenges

Level of required investment

 The need for significant investment in the networks. Challenge of facilitating required investment while ensuing that both existing and future consumers get value for money.

Addressing uncertainty

 Significant uncertainty over basis on which some investment would come forward and the associated costs. The need to put in place mechanisms that allow for flexibility to address the uncertainty during the RIIO-T1 period.

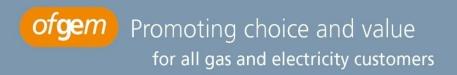




RIIO-T1 Final Proposals (i)

Summary Proposals

	SHETPLC	SPTL	NGET	NGGT	
	(Fast-tracked)		ТО	ТО	
Totex Base View	£1bn	£1.6bn	£12.0bn	£2.9bn	
Totex Best View	£4.2bn	£2.1bn	£14.5bn	£4.9bn	
Cost of Equity	7.0%	7.0%	7.0%	6.8%	
Cost of Debt	iBoxx 10yr trailing avg. Bespoke weightings	iBoxx 10yr trailing avg.	iBoxx 10yr trailing avg.	iBoxx 10yr trailing avg.	
Gearing	55%	55%	60%	62.5%	
Asset lives transition	16 yrs	8 yrs	8 yrs	na	
Capitalisation rate	90%	90%	85%	Base: 64% Increm: 90%	

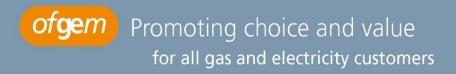




RIIO-T1 Final Proposals (ii)

Financial Parameters

	NGET TO			NGGT TO		
	Business Plan	Ofgem IP	Ofgem FP	Business Plan	Ofgem IP	Ofgem FP
Cost of Equity (real post-tax)	7.5%	7.0%	7.0%	7.5%	6.8%	6.8%
Cost of Debt (real pre-tax)	iBoxx 10 year trailing average					
Notional gearing	55%	60%	60%	55%	62.5%	62.5%
Asset lives transition (20 to 45 yrs)	16 yrs	8 yrs	8 yrs	na	na	na
Capitalisation rate TO	Base: 86% UM: 100%	All: 85%	All: 85%	Base: 57% Increm: 90%	Base: 53% Increm: 90%	Base: 64% Increm: 90%
Revenues growth		25.1%	30.5%		31.4%	28%
RAV growth		63%	69%		45%	42%





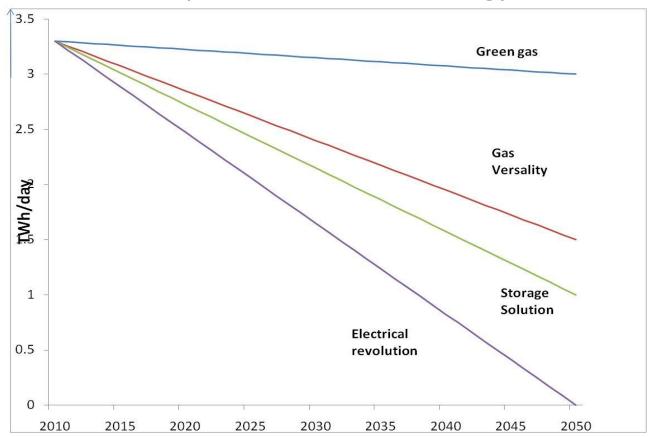
Two key challenges for GDNs for RIIO-GD1: First, responding to new repex policy..

- Current HSE policy requires GDNs to decommission all iron mains within 30 metres of buildings over 30 year period ("30/30")
 - Repex constituted 70% of GDNs capex at GDPCR1 (or £3.5bn)
- New policy requires GDNs to justify expenditure based on CBA (but subject to mandated length for smaller diameter pipes)
 - Greater flexibility in prioritising mains replacement, not only based on safety but environmental/opex benefits
- GDNs estimate that change to policy will deliver cost savings to customers of c. £1.5bn over the RIIO-GD1 period (eg around 10% of costs)



.. and dealing with uncertain future gas flows1

Need to consider optimal investment strategy under uncertainty



Source: Redpoint (October 2010) Gas Future Scenarios Project, page 32



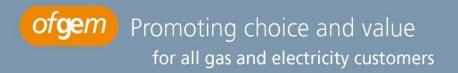


RIIO-GD1 Final Proposals (i)

Financial Parameters

	Business Plans				Ofgen ID	Of row ED
	NGGD	NGN	SGN	WWU	Ofgem IP	Ofgem FP
Cost of Equity (real post-tax)	7.2%	7.0%	7.2%	7.2%	6.7%	6.7%
Cost of Debt (real pre-tax)	10yr trailing avg	10yr trailing avg	10 year `BBB' index	10yr avg +35bps, cap & collar	iBoxx 10yr trailing average	iBoxx 10yr trailing average
Notional gearing	55-60%	62.5%	60%	62.5%	65%	65%
Repex transition (50% to 100%)	8 yrs, 75% all	Applied to totex	Applied to totex	8 yrs, stepped	8 yrs stepped (75% avg)	8 yrs stepped (75% avg)
Totex capitalisation rate	46-53.4%	52.6%	50.7% - 51.5%	45.6- 60.2%	Stepped capitalisation ¹ 35-64% (depending on GDN)	Stepped capitalisation ¹ 36-66% (depending on GDN)
Revenue growth					3.9%	4.7%
RAV growth					1.0%	6.7%

¹Capitalisation rates varied by year in IP following the repex transition. In FP we have set two rates, one for repex and one for other totex. Using the FP allowances the stepped rates are virtually the same as at IP, but will vary with actual expenditure.





RIIO-GD1 Final Proposals (ii)

Totex

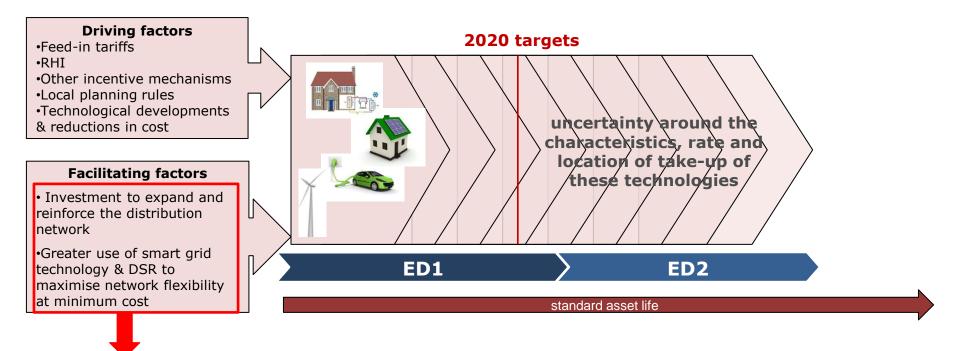
2009/10 prices (£bn)	First Business Plan	Revised Business Plan	Ofgem IP	Ofgem FP	% Diff. FP v IP
NGGD	8.7	7.7	6.2	6.9	12%
NGN	2.0	1.8	1.6	1.7	5%
SGN	4.9	4.2	3.7	4.1	12%
wwu	2.1	1.9	1.5	1.7	16%
Total Totex	17.7	15.6	12.9	14.4	12%
Capex + Repex only	10.8	9.6	7.6	8.7	14%

Excluding £4.2bn and £4.7bn of non-controllable costs for IP and FP respectively





RIIO-ED1 Key Challenge



Issues to consider for ED1

DNO approach to developing business plans – scenarios and investment justification Outputs DNOs are required to deliver – longer term? Barriers to DNOs adopting commercial arrangements to manage demand and generation output Incentives and uncertainty mechanisms

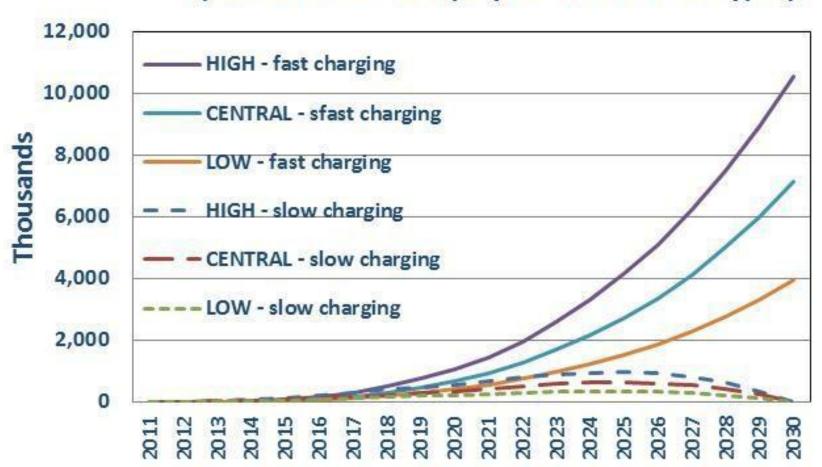
Ensure low carbon technologies can connect in appropriate time at appropriate cost





EV : GB uptake scenarios by charging type

(number of units deployed - all sizes and types)

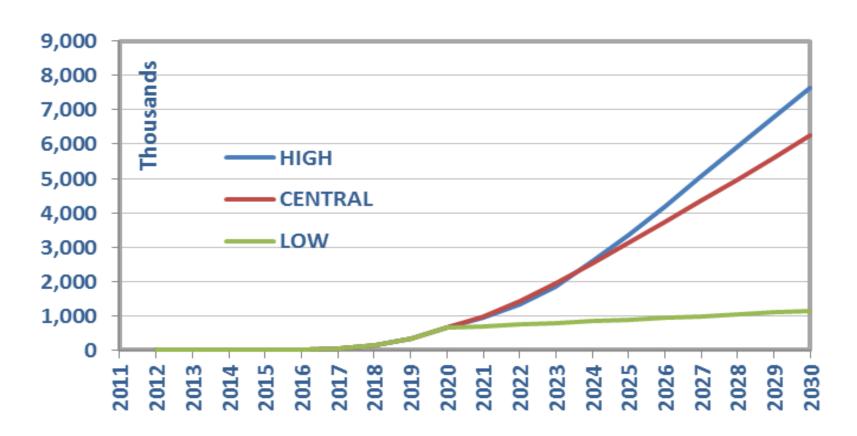






Residential HP: GB uptake scenarios

(number of units deployed - all sizes and types)







RIIO-ED1

Key Issues:

- Timely & cost-effective connection of new lowcarbon technologies
- New types of generation
- New and unusual demand
- Uncertainty of take up of new technologies (e.g. local generation, heat pumps, electric vehicles)
- Consider tools like smart grids

Timing				
Date	RIIO-ED1			
Feb 2012	Launch consultation			
Sept 2012	Strategy consultation			
Feb 2013	Strategy decision			
July 2013	Business Plans			
Oct 2013	Initial Assessment; Fast-Track decision (& Initial Proposals)			
Feb 2014	Fast-Track Final Proposals			
Mar 2014	Non-Fast-Track Business Plans resubmitted			
July 2014	Non-Fast-Track Initial Proposals			
Nov 2014	Non-Fast-Track Final Proposals			
April 2015	Implementation			



• CoE: 6.0-7.2%

· CoD: Indexed

- Gearing: will be based on assessment of cash flow volatility, business plans, CoE, and RoRE
- Asset lives: 20 to 45 years, transition as required
- RoRE: upside to provide potential for double-digit returns on notional equity; downside at or below CoD



RIIO - So far so good

First price controls under RIIO have achieved:

- ✓ Fundamentally changed behaviour and Board discussions at companies
- ✓ Significant step-up in stakeholder engagement to present well thoughtout, detailed and better justified business plans
- ✓ Ofgem staying true to RIIO principles:
 - ✓ Framework and key parameters clearly set out early on
 - ✓ Transparency of approach from early on- No 'black box' dates
 - ✓ Increased stakeholder engagement including investors
 - ✓ Proportionate treatment
 - ✓ Higher level of scrutiny focused on areas not well justified
 - ✓ Two Scottish TOs fast-tracked
 - ✓ Flexibility in allowed costs ensure customers pay only for necessary expenditure
 - ✓ Financeability not compromised transition where needed

Balancing huge investment needs and costs to consumers



Promoting choice and value for all gas and electricity customers