ofgem Promoting choice and value
for all gas and electricity customers

Cost Assessment Working Group (CAWG)

Meeting 7

18 September 2012

Today's agenda

Morning session

- Update on actions

- Business Support Cost – Martin Rodgers and Neill Guha

- IQI – James Hope

- Totex update – Julian Rudd UKPN

Afternoon session

- Connections – Thomas Johns

- Whole life Costs – Mick Watson

Assessment Areas to Discuss

- Benchmarks used – Hackett and Networks and differences between them
- Hackett - peer / reference group
- Metrics / Measures (**not** cost drivers)
- Adjustments – pre and post benchmarking
- Upward efficiency evidence adjustment
- Other principles / methodology

Brief Overview of RIIO-T1 /GD1 Assessment (1)

- Assessment carried out based on gross costs and at an overall group level
- T1 / GD1 assessment carried out as a single process
- Assessment at an individual activity level, but adjustments made at a total business support level
- Benchmarks used (upper quartile)
  - External from the Hackett Group
  - Internally across all network companies
  - Cost drivers based on information and advice from Hackett
- Substantial analysis has gone into the development of these benchmarks to ensure comparisons are fair

Brief Overview of RIIO-T1 /GD1 Assessment (2)

- Pre- benchmarking adjustments to add/subtract costs that would/would not continue in RIIO

- Licensees' individual figure for each activity was
  - The benchmark where actual costs were higher
  - The benchmark figure where actual costs were lower

- Exceptional costs applied as a post benchmarking adjustment

- Upward efficiency evidence adjustment

- CEO & Group Management benchmark – use of a hybrid benchmark, additional regulatory costs

Outline of proposed approach

- Efficiency incentive rate range of 50 to 70 per cent
  - i.e. maximum rate would be 70 per cent, matrix calibrated accordingly
- Additional income:
  - Fast-tracked 2.5 per cent
  - Non fast-tracked 1.5 per cent
- For non fast-tracked DNOs proposing to take a weighted average of proposals to determine position within the matrix

- Equalise across DNOs within a group based on proposed totex allowances
  - E.g. where DNO A has a proposed totex allowance of £750million and DNO B £250 million, with proposed efficiency incentive rates of 70 per cent and 50 per cent respectively, then the equalised rate across the group would be 65 per cent

Illustrative matrix

IQI MATRIX (For information only)									
DNO:Ofgem Ratio	90	95	100	105	110	115	120	125	130
Efficiency Incentive	70%	68%	65%	63%	60%	58%	55%	53%	50%
Additional income (£/100m)	1.5	0.7	0.0	-0.9	-1.8	-2.8	-3.8	-4.9	-6.1
Rewards & Penalties									
Allowed expenditure	97.50	98.75	100.00	101.25	102.50	103.75	105.00	106.25	107.50
Actual Exp									
90	6.7	6.6	6.5	6.1	5.7	5.1	4.5	3.6	2.7
95	3.2	3.3	3.2	3.0	2.7	2.3	1.7	1.0	0.2
100	-0.3	-0.1	0.0	-0.1	-0.3	-0.6	-1.1	-1.6	-2.3
105	-3.8	-3.5	-3.3	-3.2	-3.3	-3.5	-3.8	-4.2	-4.8
110	-7.3	-6.9	-6.6	-6.4	-6.3	-6.4	-6.6	-6.9	-7.3
115	-10.8	-10.2	-9.8	-9.5	-9.3	-9.2	-9.3	-9.5	-9.8
120	-14.3	-13.6	-13.1	-12.6	-12.3	-12.1	-12.1	-12.1	-12.3
125	-17.8	-17.0	-16.3	-15.7	-15.3	-15.0	-14.8	-14.7	-14.8
130	-21.3	-20.4	-19.6	-18.9	-18.3	-17.9	-17.6	-17.4	-17.3
135	-24.8	-23.7	-22.8	-22.0	-21.3	-20.7	-20.3	-20.0	-19.8
140	-28.3	-27.1	-26.1	-25.1	-24.3	-23.6	-23.1	-22.6	-22.3
145	-31.8	-30.5	-29.3	-28.2	-27.3	-26.5	-25.8	-25.2	-24.8
150	-35.3	-33.9	-32.6	-31.4	-30.3	-29.4	-28.6	-27.9	-27.3

9

Customer-specific load-related expenditure - Connections

DPCR5 APPROACH:

High Volume Low Cost connections:

- Small-scale LV and other LV only: DNO forecast volumes x lowest of industry median/ DNO own gross unit cost of each subset
- LV w/ HV: DNO forecast volumes x lowest of industry UQ/ DNO own gross unit cost
- Net to gross ratio set based lowest of industry UQ/ DNO own ratio
- Baseline based on DNO volumes: volume driver true-up will amend DNO revenue
- Ex-post assessment of net to gross ratio could amend baselines

Low volume High Cost connections

- All connection expenditure forecast at EHV+: ex-ante allowance set based on projects in progress/ projects in planning stage for DPCR5 and projects forecast to be carried out by ICPs/ IDNOs
- Net to gross ratio set based lowest of industry UQ/ DNO own ratio

Customer-specific load-related expenditure - Connections

DEVELOPMENT FOR RIIO-ED1:

- Where possible, the intention is to carry out analysis and set baselines from volume of projects delivered per market segment, rather than per MPAN

- Include DUoS-funded work carried out by third parties within volume driver/ uncertainty mechanism

FURTHER WORK REQUIRED BEFORE APPROACH TO ANALYSIS IS DEVELOPED:

- Details of incentive for quicker connection times

- Policy details on anticipated reinforcement investment

- Policy details on any further movement in the contestable/ non-contestable boundaries

Customer-specific load-related expenditure - Connections

1. Still believe that volume driver is an appropriate tool for setting baselines for this area
   – Logical that more connections = more overall costs
   – But: If we are only dealing with reinforcement element: is number of mpans the correct "volume" to use in volume driver?
2. Detailed DPCR5 reporting should be helpful guide to setting gross unit costs
   – Hopeful that reporting will deliver important steers on the costs of specific connection types/ LCT types in time to inform our analysis
   – If possible, minded to look at whether connection project rather than mpan is a better "volume" to use as the driver
3. Cost of Customer-specific reinforcement should be broadly aligned with general reinforcement (albeit, customer will fund part of reinforcement as part of a connection)
   – Essentially same sorts of work but with different driver
   – Appropriate to maintain the primary and secondary network split that currently exists between HVLC and LVHC

September paper - connections

- **Option 1:** DPCR5 approach
- HVLC connections operate within volume driver against exit points provided
  - small-scale LV and other LV benchmark unit cost set using lowest of DNO own or industry median due to relative uniformity of project specification
  - LV involving HV benchmark unit cost set using lowest of DNO own or industry lower quartile (LQ) due to greater variance in project specification
- LVHC connections operate as an ex ante allowance based on detailed review of proposals

- **Option 2:** connection projects within each of the metered market segments operate as the volume in volume driver against a benchmarked unit cost of reinforcement by market segment

- **Option 3:** combination of approaches:
- connection projects involving primary network reinforcement based on £ per mega volt-ampere (MVA) of capacity added as benchmarked through general reinforcement modelling
- remaining connection projects operate in volume driver as detailed in either option 1 or 2 above.

Anything missing?

Cost Benefit Analysis (CBA)– RIIO-GD1

Mick Watson

CBA

- Introduction
- Identification of options
- Identification and quantification of costs and benefits
- Period for discounting costs and benefits
- Assessing risks and uncertainties, and sensitivity analysis
- Decision rule
- Affordability
- Links to business plan
- Ofgem CBA output model
- Initial Proposals

Introduction

- Justify investment
- Common approach to investment appraisal
  - facilitate comparison
  - consistent with investment appraisal in a regulated context
- Customer/revenue focused
- Repex programme

Identification of options

- Consistent with HMT Greenbook
- Base case/do nothing/minimum
- Replace/refurbish/maintain

Identification and quantification of costs and benefits

- Discounting and the cost of capital
- Financial costs and benefits
- Treatment of non-marketed goods
- Base year
- Assumptions

Period for discounting costs and benefits

- Useful economic life??

Assessing risks and uncertainties, and sensitivity analysis

- Economic life
  - use of gas
- Current assumed performance of asset
  - repairs, maintenance, emergencies, environmental
- Deterioration
- Payback
- Sensitivity

Decision rule

- Positive NPV
- Payback
- Part of the toolkit approach

Affordability/Link to business plan

- Impact on customer bills

- Impact on allowances

- Clear links within BP to movements in outputs, costs and workloads

Ofgem CBA output model

- What it isn't?
- What it does?

RIIO-GD1 Initial Proposals

- Presenting CBAs at a population level
- 24 year payback for repex projects
- Not justifying investment with CBA
- Not using the Ofgem CBA output model
- Flexibility of models

Questions