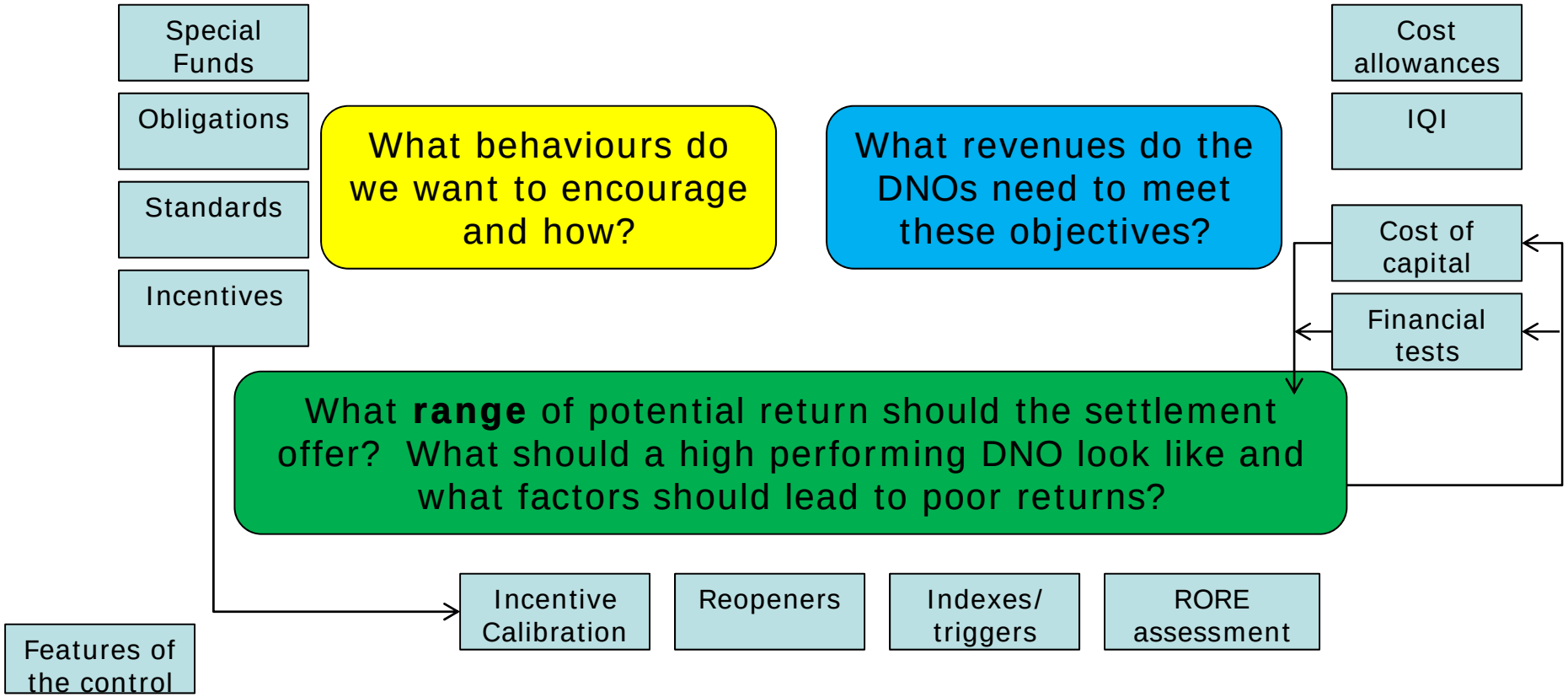
ofgem Promoting choice and value
for all gas and electricity customers

DPCR5
Initial Proposals

Analyst & Investor presentation

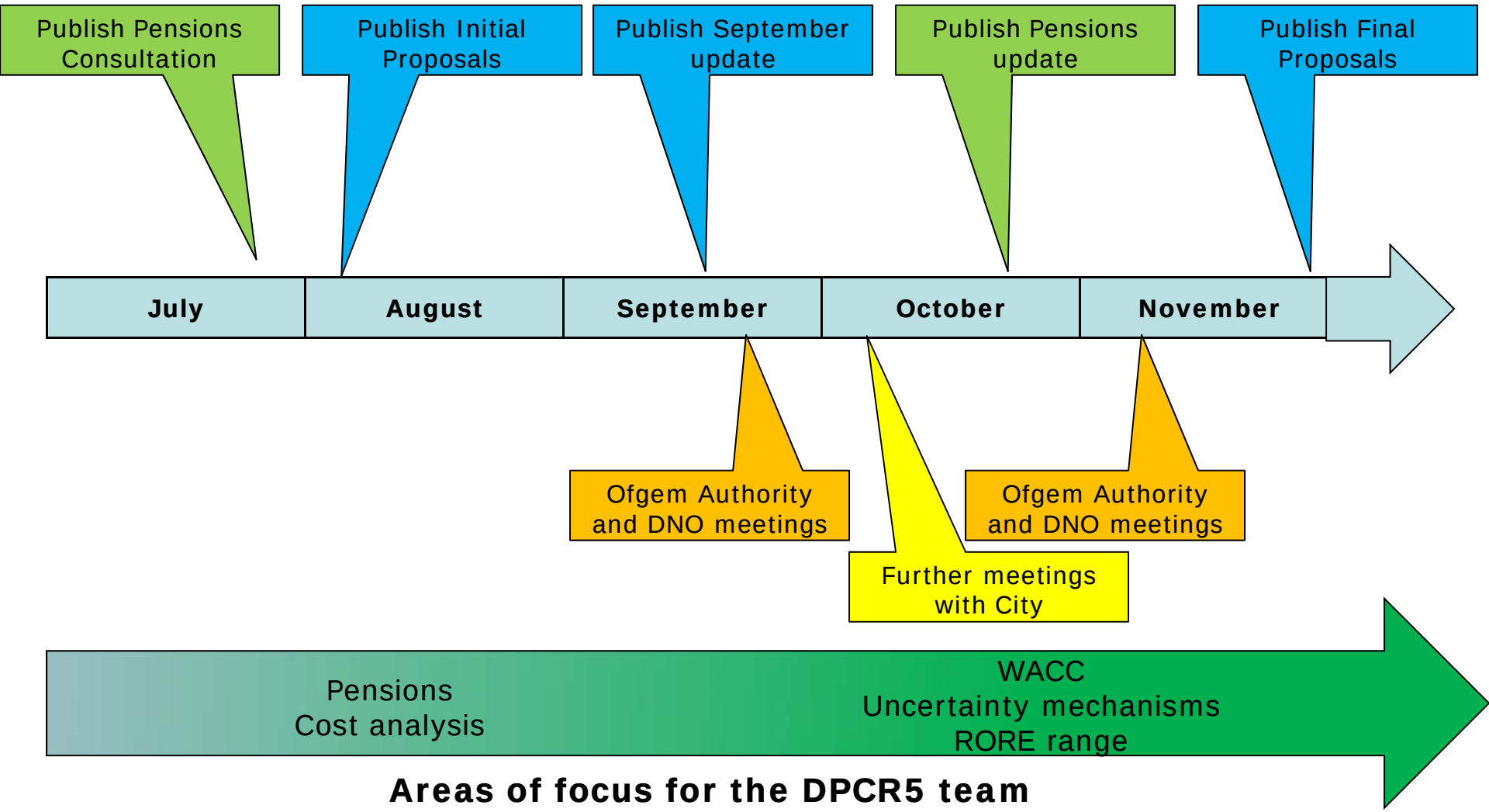
3 August 2009

Our price control work falls into 3 core areas



Our Initial Proposals set out our draft revenue allowances and the full package of incentives, standards and obligations. Modelling assumptions used for cost of capital and the treatment of pension costs. Final Proposals will determine cost of capital based on risks and opportunities for additional returns built into the settlement.

Process to Final Proposals



Areas of focus for the DPCR5 team

Contents

1. COST ASSESSMENT

Approach to analysing the DNOs' Business Plans

Network Investment Modelling

Do asset replacement volumes match age or condition of asset data?

Are assumed unit costs efficient?

Do they have a credible business plan?

Does reinforcement spend match forecast growth in electricity demand?

Operating Activity Benchmarking

Benchmarking with 4 years of historic data collected through the Annual Reporting Process

- vastly improved data set
- still some inconsistencies across DNOs

Roll forward of benchmark figures (08/09) for 2010 to 2015

- real price effects
- on going efficiency
- impact of increased volume of work on operating costs

We have robust methodologies (consulted on in May). We do not expect to amend them ahead of Final Proposals. We have some minor cost items to assess and we are taking a closer look at DNO operating cost data. We will publish the results of this work in September.

Key findings

- 20 years after privatisation, still wide range of efficiency levels across the DNOs
  - Efficient DNOs at DPCR4 still largely the most efficient
- DNO business plans vastly improved from previous reviews
  - Especially on the volume of network investment – some difficult to fault
  - Much of our cut to network investment is to the ***unit cost*** rather than the ***volume*** of investment
- Wide range of unit cost assumptions used by DNOs
  - And the lowest cost on investment tend also to be lowest operating costs
  - We have assumed efficiencies in network investment offset any increase in real price of network equipment
- Wide range of assumptions used by DNOs on how their operating costs will move over the 2010-2015 period
  - Our draft allowances are based on ongoing efficiency improvements of 1% and real price effects of c0.9% p.a.
  - Some of the more efficient companies are forecasting high RPEs over the period and this accounts for some of the cuts in this area
  - Looking for DNOs to provide further evidence before Final Proposals.

Cost allowances – overall headlines

- DNOs asked for total costs of **£15.4bn** for the DPCR5 period, which is a 31% increase on DPCR4 actual expenditure. We have cut their bids by 14% to **£13.3bn**
  - Cuts range from 5% to 19% across the DNOs
- Overall DNOs asked for a 48% increase in network investment from **£5.3bn** to **£7.8bn** from DPCR4 to DPCR5
  - We propose to cut this by 17% to £6.5bn
  - Cuts range from 8% to 22%
- They asked for a 18% increase in network operating costs and indirect costs from **£6.4bn** to **£7.6bn**
  - We propose to cut this by 10% to £6.8bn
  - Adjustments range from additional 4% to cuts of 17%
- As an indication, using DPCR4 WACC and applying our current approach to pension costs, this would result in average annual price increases of 5.3%. But this figure varies considerably across the country.

We have equalised capex and opex incentives (see later), so every £1 is of equal importance – key figure for management is total expenditure allowance. All cuts are after applying our IQI mechanism.

Initial Proposals draft cost allowances

CE NEDL	272	453	363	-20%	340	375	346	-8%	612	828	709	16%	-14%
CE Y EDL	355	591	460	-22%	426	489	469	-4%	781	1080	928	19%	-14%
WPD S Wales	155	234	202	-14%	260	333	315	-5%	415	567	517	25%	-9%
WPD S West	249	360	307	-15%	380	484	426	-12%	629	845	733	17%	-13%
EDFE LPN	401	622	514	-17%	484	551	510	-8%	885	1173	1023	16%	-13%
EDFE SPN	424	650	518	-20%	503	564	509	-10%	927	1214	1027	11%	-15%
EDFE EPN	637	834	657	-21%	806	942	792	-16%	1444	1777	1449	0%	-18%
SPD	348	450	412	-8%	429	499	420	-16%	776	949	832	7%	-12%
SP Manw eb	381	630	565	-10%	436	523	453	-13%	818	1153	1018	24%	-12%
SSE Hydro	174	229	210	-8%	286	338	313	-7%	460	567	523	14%	-8%
SSE Distribution	515	707	611	-14%	578	670	698	4%	1093	1377	1309	20%	-5%
Total	5320	7853	6520	-17%	6423	7562	6806	-10%	11743	15415	13326	13%	-14%
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Improved mechanisms for managing expenditure uncertainty

DPCR4	DPCR5
• All costs within the IQI (regulatory capex) subject to a sharing factor through the capex incentive	• Larger basket of costs to be included within the IQI and subject to its sharing factor

• Revenue drivers for demand risks – customer numbers and units distributed
  • Units distributed revenue may have distorted incentives to engage in DSM
  • Customer numbers driver not strongly linked to costs
	• Replacing volume drivers for units distributed and number of customers with
	  • Excluded service treatment for sole-use connections
	  • Volume driver on number of low-cost connections involving shared assets
	  • Combined reopener for general reinforcement and high-cost connections expenditure

• Reopeners for TMA and ESQCR costs	• Retaining the reopener for TMA costs
• Remaining risks for the DNOs to manage	• Mechanistic reopener for material changes in tax legislation

Our proposals provide better protection for volume risk than in DPCR4.

2. COST OF CAPITAL – HANDLING UNCERTAINTY

Cost of capital

Component	PwC for Ofgem		NERA for DNOs		DPCR4	GDPCR
	low	high	low	high		
Debt Cost real (pre tax)	3.1%	4.0%	3.6%	3.7%	4.10%	3.55%
Equity Cost real (post tax)	4.0%	8.5%	7.6%	9.5%	7.50%	7.25%
Debt Gearing	55%	65%	60%	60%	57.5%	62.5%
Vanilla WACC	3.5%	5.6%	5.2%	6.0%	5.55%	4.94%

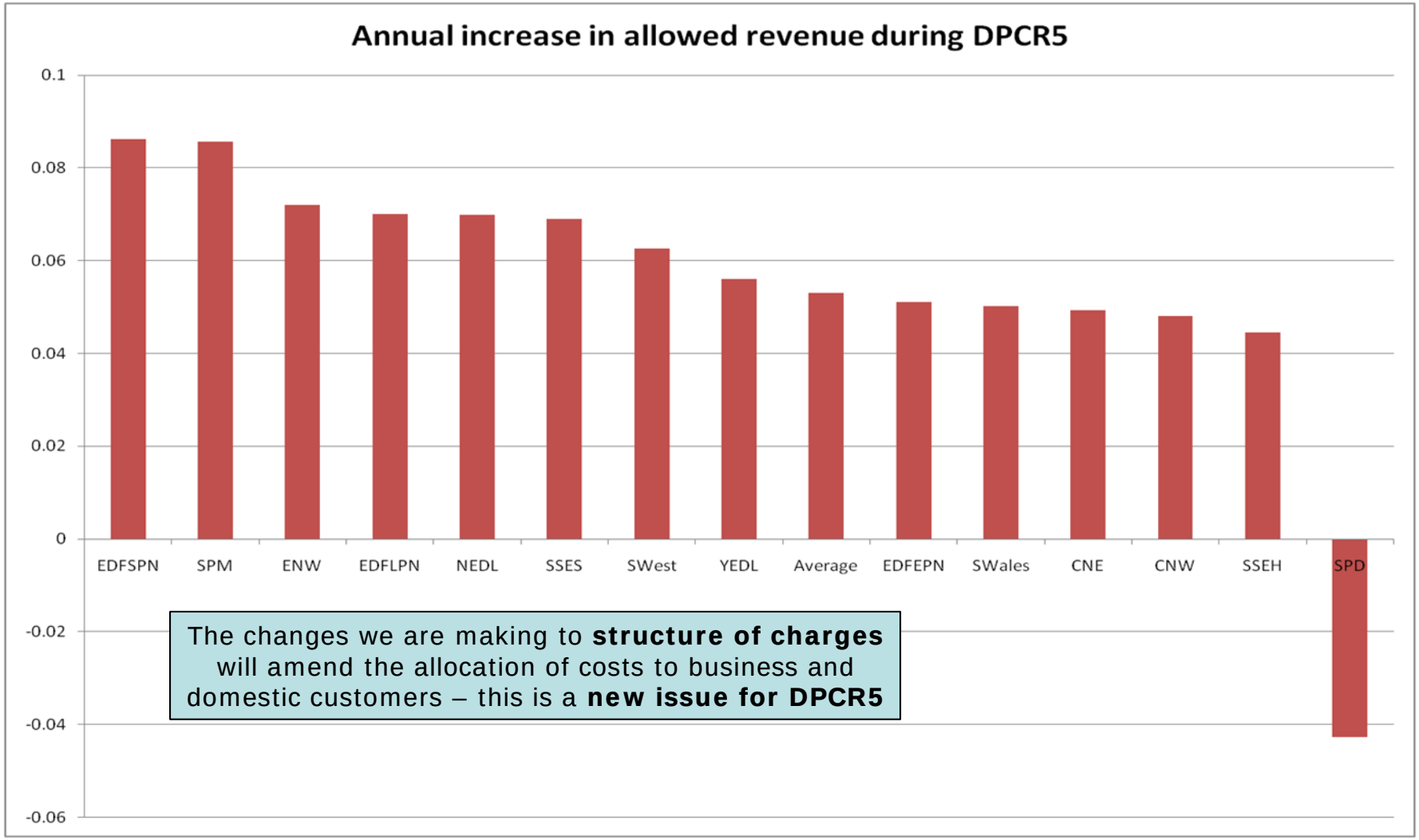
We have retained the DPCR4 WACC for modelling impact of IP on revenue allowances and published PwC's report. PwC's methodology focuses on long-tem evidence for both cost of debt and cost of equity – we think remains appropriate to put more weight on this evidence but will look at more recent developments in reaching decision for FP

PwC's assessment of options for managing cost of debt uncertainty

Option	Does the mechanism benefit the consumer (risk v. prices)?	Does the mechanism preserve the DNOs' incentives?	Simple and user friendly approach?	Clear when/how the regulator is likely to intervene?	Does the mechanism apply when an intervention is needed?	Is intervention proportionate to the issue?	Does the mechanism align with the broader reg. framework and its previous application?
Option 1: Continue with the existing approach	✓✓	✓✓	✓✓	××	~	~	✓✓
Option 1a: Option 1 + disapplication clause review	✓✓	✓✓	✓✓	✓	✓✓	✓	✓✓
Option 1b: Introduce Cost of debt headroom	××	✓	✓✓	××	~	×	××
Option 2: Cost of debt trigger mechanism	✓	~	××	✓✓	✓	✓	~
Option 3: Substantial effect clause	✓✓	✓✓	✓	✓	✓✓	✓✓	✓✓

We are not minded to introduce a trigger in DPCR5. Option 1 preferred but we will take final decision in light of consultation responses and market circumstances

3. REVENUE ALLOWANCES & IMPACT ON PRICES


Annual increase in allowed revenue during DPCR5
0.1
0.08
0.06
0.04
0.02
0
-0.02
-0.04
-0.06
EDFSPN
SPM
ENW
EDFLPN
NEDL
SSES
SWest
YEDL
Average
EDFEPN
SWales
CNE
CNW
SSEH
SPD
The changes we are making to **structure of charges** will amend the allocation of costs to business and domestic customers – this is a **new issue for DPCR5**

DPCR5 initial proposals revenues vs. DPCR4

£m 07/08	DPCR4	DPCRR5	Annual increase
CN West	1,423	1,659	4.8%
CN East	1,447	1,706	4.9%
ENW	1,318	1,634	7.2%
CE NEDL	922	1,156	7.0%
CE YEDL	1,205	1,444	5.6%
WPD-South Wales	863	1,013	5.0%
WPD-South West	1,058	1,286	6.3%
EDFE LPN	1,348	1,697	7.0%
EDFE SPN	1,008	1,348	8.6%
EDFE EPN	1,721	2,036	5.1%
SP Distribution	1,731	1,540	-4.3%
SP Manweb	1,031	1,336	8.6%
SSE Hydro	1,002	1,163	4.5%
SSE Southern	2,003	2,496	6.9%
Average	**18,081**	**21,515**	**5.3%**

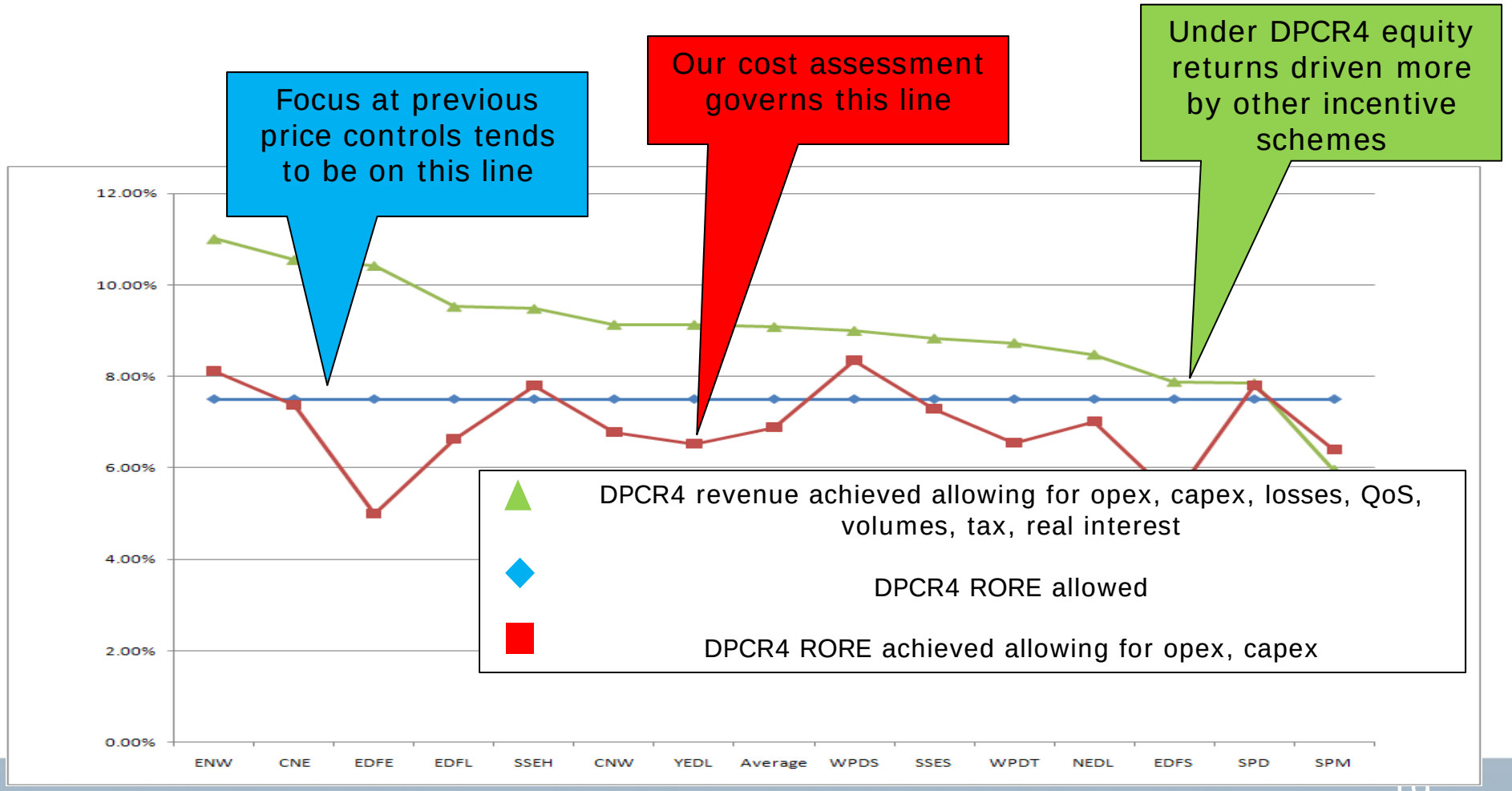
DPCR5 RAV roll forward

RAV roll forward £m 07/08	Opening RAV @ 01/04/2010	Additions	Depreciation	Closing RAV @ 31/03/2015
CN West	1,359	882	- 643	1,598
CN East	1,309	896	- 630	1,574
ENW	1,227	750	- 604	1,373
CE NEDL	831	526	- 400	957
CE YEDL	1,062	695	- 515	1,242
WPD-South Wales	671	375	- 355	691
WPD-South West	914	545	- 442	1,017
EDFE LPN	1,217	751	- 590	1,377
EDFE SPN	1,003	749	- 467	1,285
EDFE EPN	1,676	1,085	- 780	1,981
SP Distribution	1,322	620	- 622	1,319
SP Manweb	1,124	773	- 528	1,370
SSE Hydro	848	365	- 381	831
SSE Southern	1,674	957	- 831	1,800
Total	**16,237**	**9,970**	**- 7,790**	**18,416**

4. PRICE CONTROL MECHANISM - WHAT'S NEW?

1. Using return on regulatory equity to calibrate the package

Forecast RORE for each DNO in DPCR4



1. Using return on regulatory equity to calibrate the package

We have already decided to take a "tough but fair" line on cost allowances. Only the best performing DNOs earn RORE from start

If we relaxed our position on costs after IP we would need to revisit these options

Possible package options

	Cost allowance	WACC	Opportunities to earn / lose bps	Impact on Prices
A	Tough	Low end of range	High upside opportunities, less downside	Low "steady state" Po but prices likely to go higher in areas with good performing DNOs
B	Tough	Mid range	Narrower range of opportunities and more symmetric opportunities	Midrange Po but less fluctuation in prices from DNO performance
C	Tough	High end of range	Opportunities skewed on the downside for DNOs	Higher "steady state" Po but prices likely to go down if companies underperform significantly

Cost allowances + WACC decision = "steady state" allowed revenues

Incentive earnings can also (but not all do) feed through to customer prices in the price control period

1. Using return on regulatory equity to calibrate the package

Illustration of possible opportunities for outperformance (95th percentile confidence intervals)

	Range of bps	Impact on DPCR5 prices (% change on baseline revenues)
Environment - Losses	-51 to 50 bps	-3.4% to 3.4%
Customers - Interruptions, Minutes, Telephony, Connection margin, guaranteed standards	-25 to 27 bps	-1.7% to 1.9%
Networks - Cost over/underspend	-32 to 31 bps	None
Combined expected impact of Environment, Customers and Networks	**-58 to 57 bps**	**-4% to 3.9%**

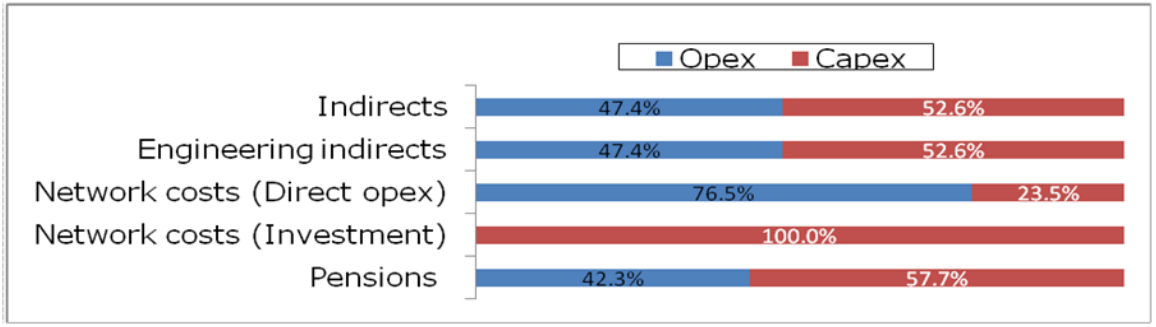
- The table shows the max/min range across all DNOs – there are variations between them. figures are indicative based on a Monte Carlo simulation tool which is driven by assumptions about future uncertainty
- The figures do not include the impact of external factors such as real interest rates, and inflation, which have a potentially significant impact on RoRE

We will develop our views on the total range and the split across incentives

2. Equalising Incentives

Behaviours	Mechanisms
Make business decisions based on what is right for the network	• Equalisation of incentives for operating and capital costs

Capitalisation of costs for different activities at DPCR4



For DPCR5 we propose to capitalise 85% of all network related costs (including ongoing pensions), but no business support costs or pension deficit costs

Our objectives are to:

- ensure that economic trade-offs are not distorted between capex and opex solutions
- ensure that DNOs are not discouraged from applying non-network solutions which are compatible with tackling climate change, such as contracting with DG and DSM
- avoid incentives for reclassifying costs (boundary issues)

Achieved by applying the IQI to all network related costs (which exclude business costs)

This change strongly supported by all DNOs bar one

3. Network Output Measures

Behaviours	Mechanisms
Clarify what customers received in return for their bill Understand the impact of any over/underspend on network health and utilisation	• Output measures: • Networks measures relate to asset condition ('Health Indices') and substation utilisation ('Load Indices')

We are consulting on the approach we should take at DPCR6 where DNOs have failed to deliver on the agreed network outputs:

> For example, if a DNO has under-spent its capex allowance while allowing network health to deteriorate, the revenue from out-performance may be removed.

Any potential revenue adjustment **will not** be applied mechanistically based on the outturn outputs data:

> There will be a detailed qualitative discussion at DPCR6, in which DNOs will be given the opportunity to explain changes (both external and internal) which may impact the level of outputs delivered over DPCR5.

We will conduct annual monitoring of companies' performance and hold discussions with them on issues as they arise

4. Low carbon networks fund

Purpose	Allows DNOs to **trial new technologies and commercial arrangements** to prepare for low carbon economy.
Requirements	Fund will be available where DNOs: • **Define a network problem** arising from the move to a low carbon economy and **identify a possible solution** that has not been tested in GB networks • Identify **techniques to improve the speed at which networks respond to new u**ses of the network, or • Identify a **role they might be able to play in helping network users tackle climate change** and where they are unsure of recovering upfront costs associated with the role from other parties.
Example projects	• **Manage network impact** of increased renewables, demand side management, electric vehicles etc • Explore **active network management**, **smart grids** and other **commercial services** • Explore **mechanisms to facilitate** district heating, ground source heat pumps, energy efficiency measures etc

We propose that £500m be available for this fund. During DPCR5 a total of £100m will be available as a reward to DNOs who do particularly well in trying out new arrangements

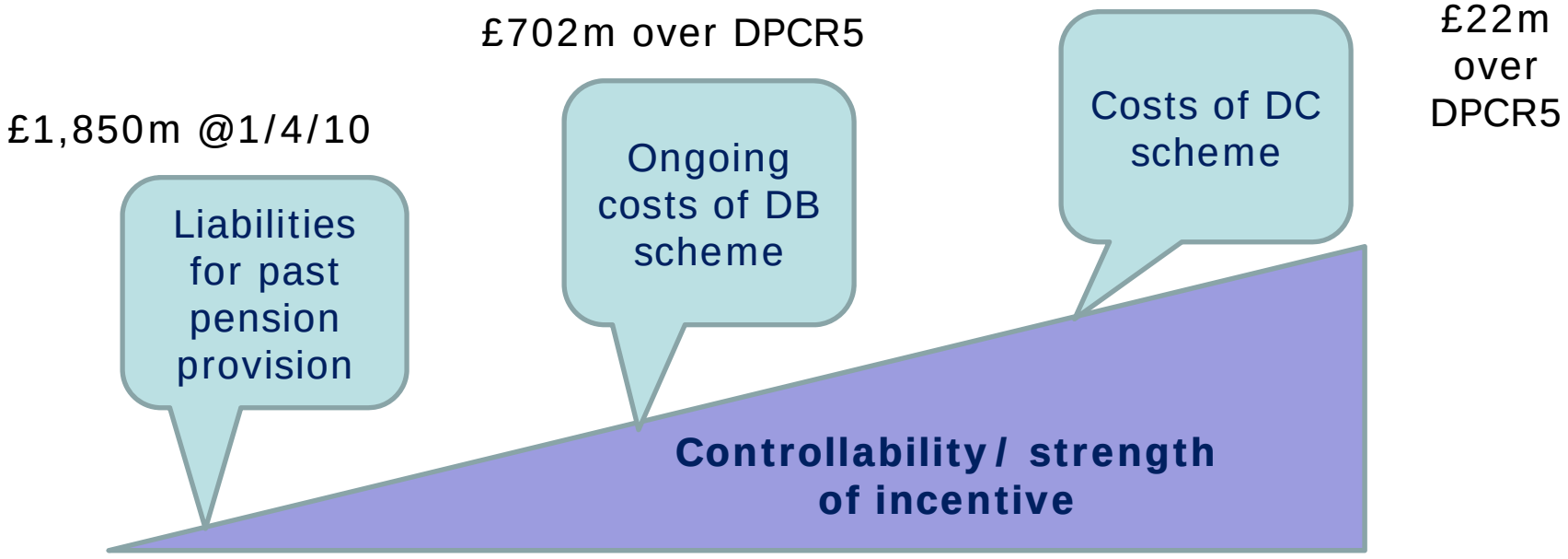
5. PENSIONS

Pensions - the issue

- Pensions principles established 2003
- Intended to be genuine economic/efficient test
- Difficult to apply if onus on us to prove inefficiency
- Result – close to pass-through (recovery ex post) for regulated portion of scheme costs, subject to ERDCs for some companies
- Concern that incentives to manage costs eroded
- Consulted in 2008 on application of principles
- Further consultation last week with new incentivisation options
- Current approach may still be appropriate, but de-risking should be recognised in costs of capital debate

Pension costs – 3 elements

1. Liabilities for past pension provision
2. The ongoing costs (and then any incremental deficit that subsequently arises) of defined benefit scheme
3. The cost of servicing a defined contribution scheme



The more scope a company has to control/influence the costs, the stronger the incentive

Incentivisation options

Pension costs element	Potential incentivisation	
	Ex ante	Ex post
1. Liabilities for past pension provision @ 2010	Fund deficit @ 31/3/10 based on conformed valuations Option (A) Use repair period as chosen by trustees Option (B) Use average deficit repair period of all schemes	Modest symmetric sharing factor – shareholders bear or gain 2-10% of any difference between actual contributions and allowed contributions
2. The ongoing costs (and then any incremental deficit that subsequently arises) of a defined benefit scheme	Allow DNOS a fixed allowance. Two options (A) Allow companies their own FBPQ submissions (B) Benchmark and make fixed allowance based on total employment costs	We could use the same incentive rate as all other costs or a lower rate accepting they have less control because of legislation
3. The cost of servicing a defined contribution scheme		Same incentive rate as all other costs including wage costs (30-47% in DPCR5)

6. MERGERS & ACQUISITIONS

Our policy

- Current policy set in 2002:
- Merger tax where number of comparator groups reduces: £32m (2001/02) prices revenue reduction across combined group for each loss of comparator
- We will have to assess any potential takeovers on a case-by-case basis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