



Promoting choice and value
for all gas and electricity customers

EDCM Consultation Demand Workshop

6 June 2011

The EDCM objective

The objective of the EDCM is to introduce a common charging methodology across the country which is cost reflective and which accounts for key developments in the DNO networks (such as the emergence of DGs and IDNOs).

Where are we in the process?

- 1 April 2011: The DNOs submitted their EDCM proposal to Ofgem
- 20 May 2011: Ofgem published a consultation on the EDCM proposals

Consultation overview

Structure:

- Chapter 2: Overview
- **Chapter 3: Charging proposals for demand customers**
- Chapter 4: Charging proposals for generation customers
- Chapter 5: Charging proposals for LDNOs
- **Chapter 6: Common issues**

What do we discuss in the consultation?

- We discuss:
 - core principles
 - issues where the DNOs have moved since their last consultation
 - issues where we consider that conditions may be necessary for us to approve the methodology

In chapters 3 and 6 our consultation highlights 12 issues

- We provide an overview of the methodology for demand, generation and IDNOs and a more high level overview in chapter 2
- We discuss options around implementation of the methodology (ie phasing/delay)

EDCM consultation issues

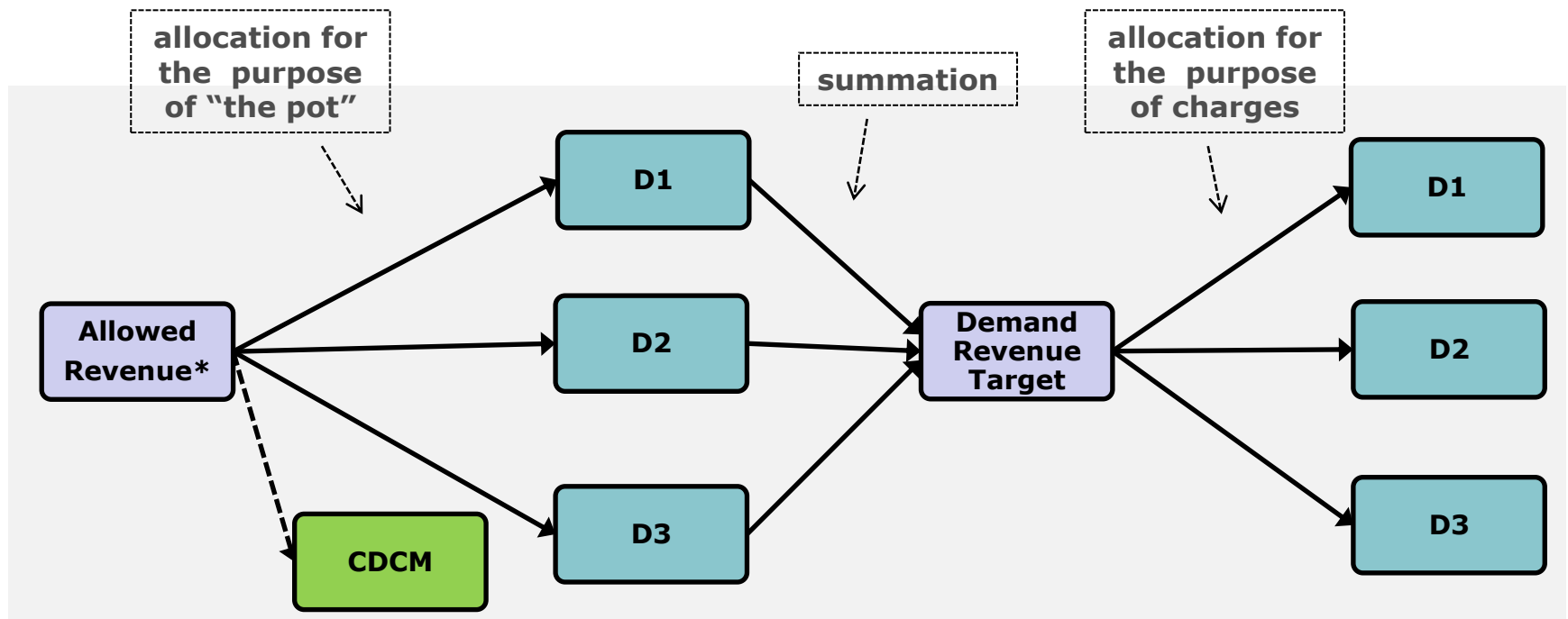
Demand issues

✓	Issue 1: the demand revenue target
	Issue 2: principles guiding the use of capacity as a cost driver
✓	Issue 3: allocation of indirects and a portion of the residual based on capacity
✓	Issue 4: allocation of direct operating costs, network rates and a proportion of the residual based on notional shared asset value
	Issue 5: calculation of network use factors
	Issue 6: allocation of the residual
	Issue 7: customer categories

Common issues

	Issue 17: sole use asset charge
✓	Issue 18: demand/generation side management
	Issue 19: reactive power charges
	Issue 20: sense checking of branch incremental costs in LRIC
✓	Issue 21: volatility

Overview of the methodology



D1, D2 and D3 are EDCM demand customers

•Allowed revenue is net of exit charges and DG revenue target

Overview of the methodology

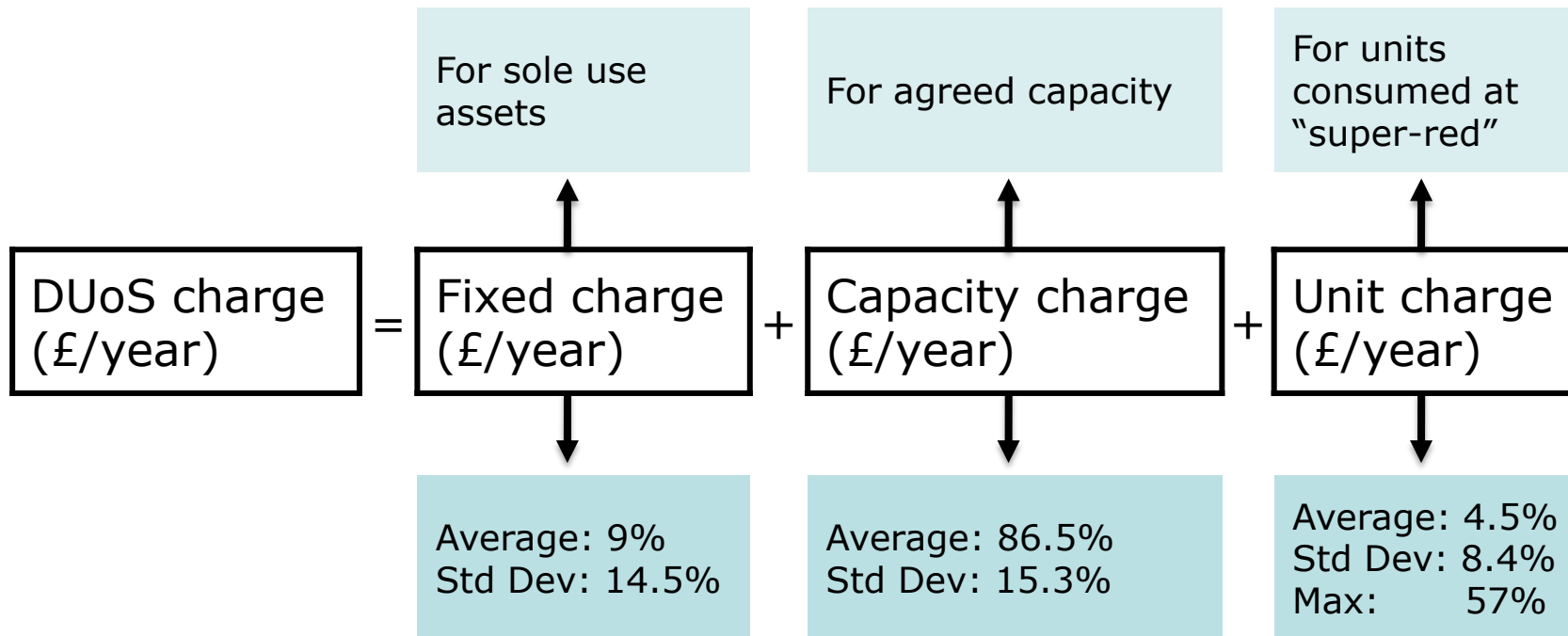
Allocation for the purpose of “the pot”

Each customer is notionally allocated a proportion equal to its proportion of asset value out of total asset value in the DNO area.

Allocation for the purpose of charges

Each customer is allocated its LRIC/FCP charge. The rest of the pot is allocated as a “fixed adder” or as above (ie based on the proportion of asset value), depending on the source.

The tariff structure



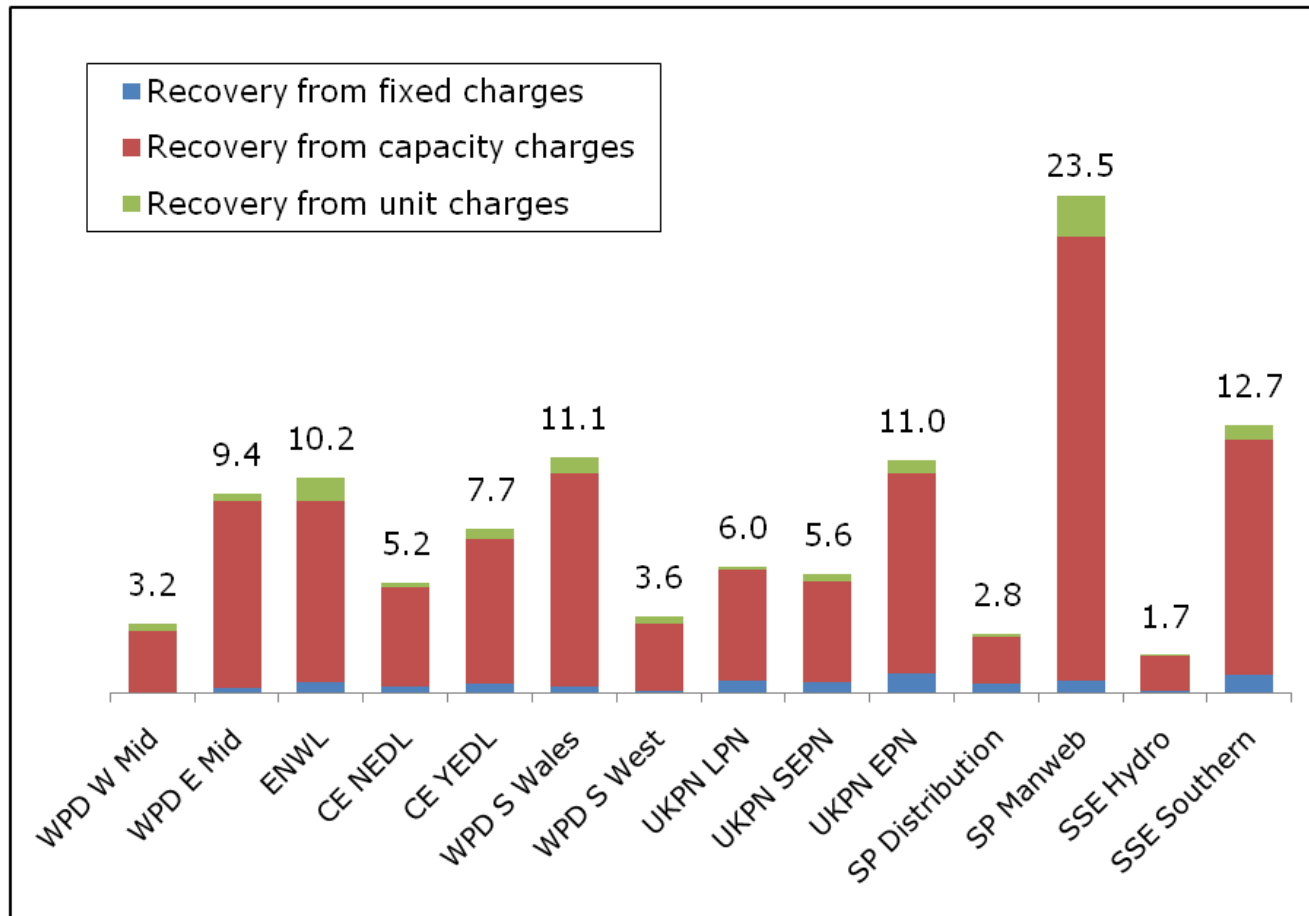
DUoS charge (£) = [Fixed charge (£)]

+ [Capacity charge rate (£/kVA)] * [kVA agreed capacity]

+ [Super-red unit rate (£/kWh)] * [kWh import at "super-red"]

The tariff structure

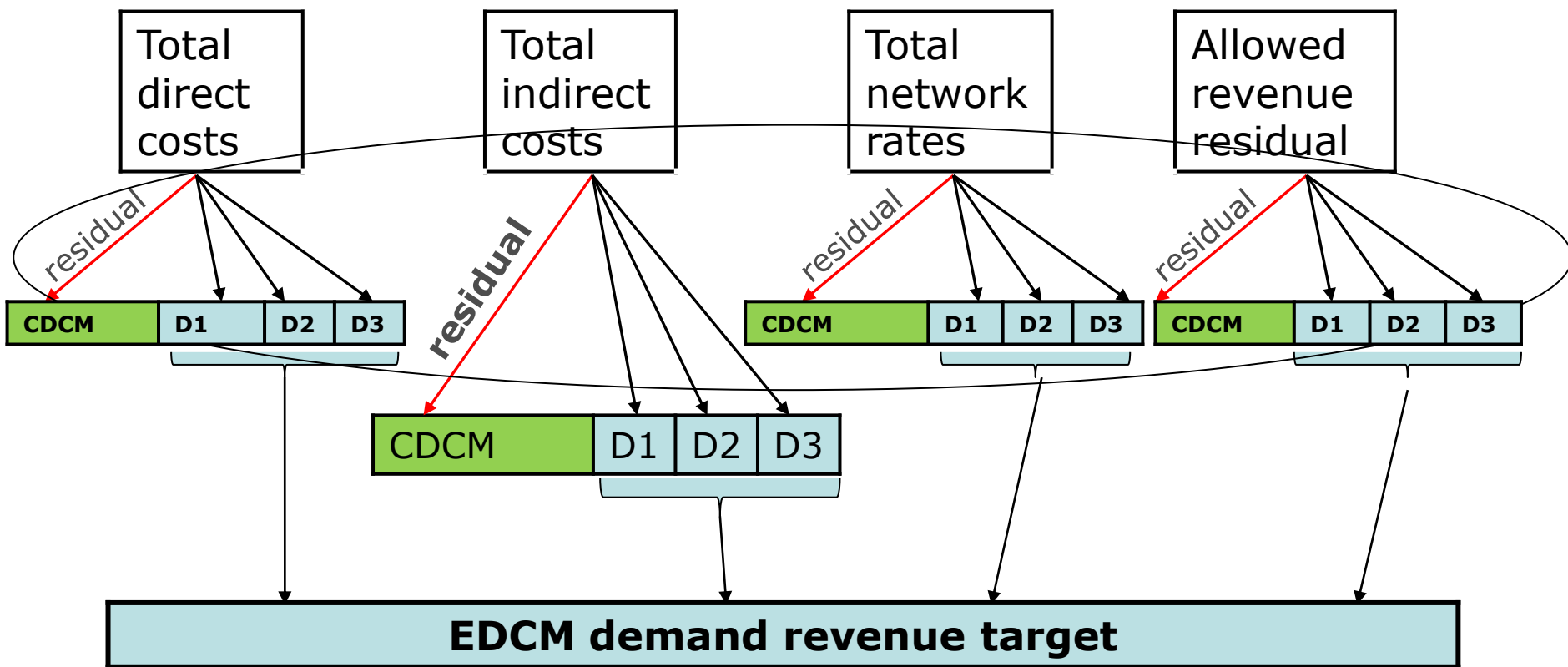
Recovery from EDCM demand by tariff component (£m)



Source: Figure 3.2 of Ofgem's consultation on EDCM proposals, 20 May 2011

Issue 1: the demand revenue target

The demand revenue target is a sum of money that each DNO sets out to recover from its EDCM demand customers as a whole through use of system charges.



Issue 1: the demand revenue target

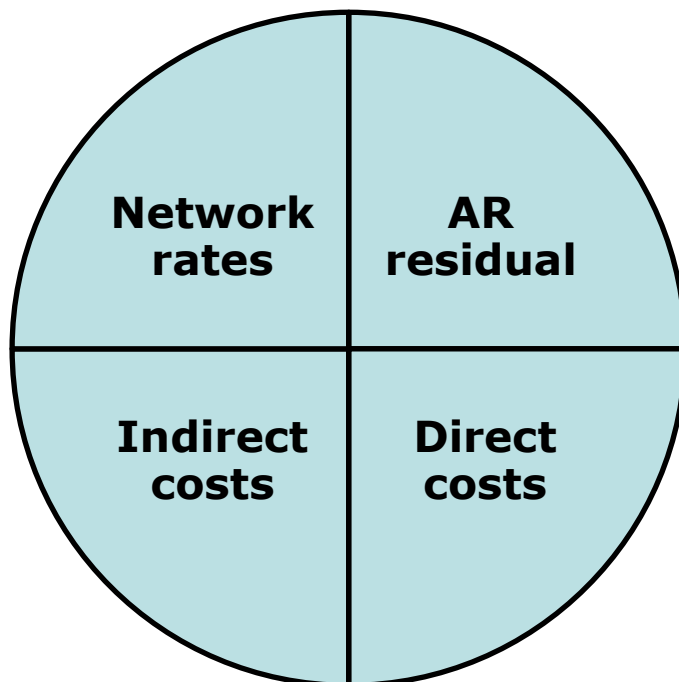
Allocation of costs and allowed revenue residual to individual EDCM demand customers

Component	Amount allocated per EDCM demand customer
Direct costs	$\left[\frac{\text{Customer total asset value (£)}}{\text{DNO total adjusted asset value (£)}} \right] * [\text{DNO total direct costs (£)}]$
Indirect costs	$\left[\frac{\text{Customer total asset value (£)}}{\text{DNO total adjusted asset value (£)}} \right] * [\text{DNO total indirect costs (£)}]$
Network rates	$\left[\frac{\text{Customer total asset value (£)}}{\text{DNO total asset value (£)}} \right] * [\text{DNO total network rates (£)}]$
Allowed revenue residual	$\left[\frac{\text{Customer notional shared asset value (£)}}{\text{DNO total shared asset value (£)}} \right] * [\text{Allowed revenue residual (£)}]$

Source: Table 3.4 of Ofgem's consultation on EDCM proposals, 20 May 2011

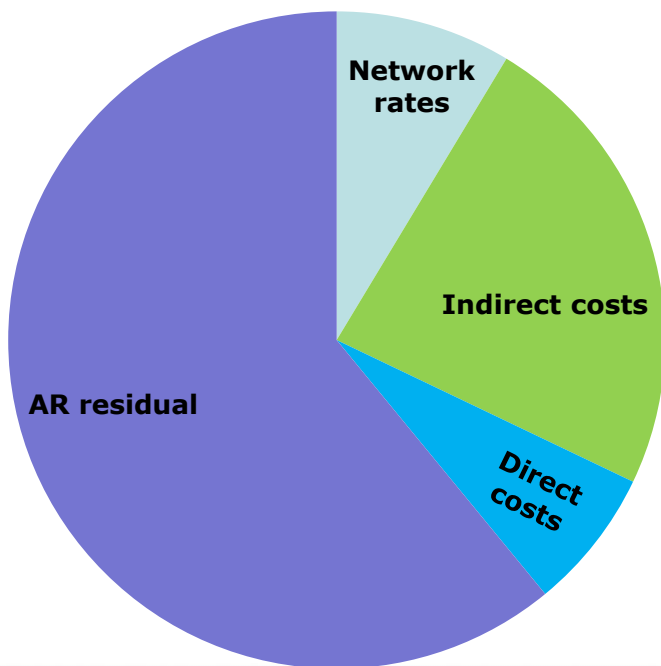
Issue 1: the demand revenue target

EDCM demand revenue target

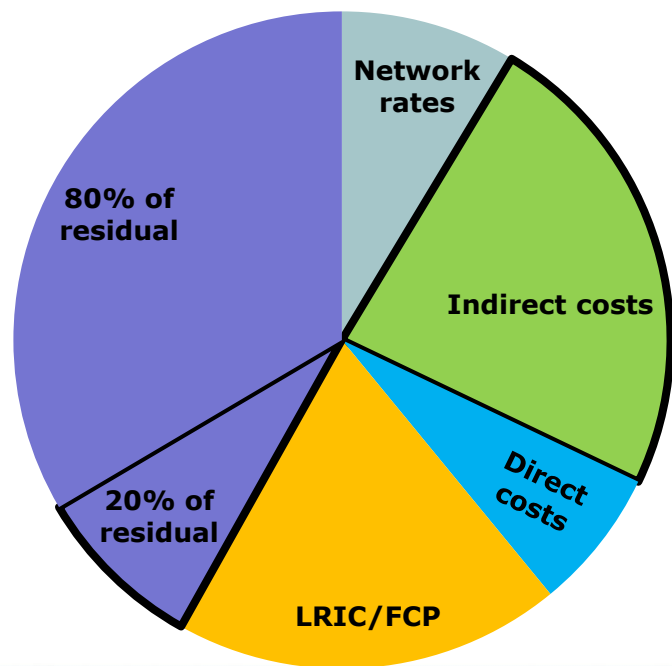


Issue 3: allocation of indirects and a portion of the residual based on capacity

**EDCM demand revenue
target by source**



**EDCM demand revenue
target by recovery**



Issue 3: allocation of indirects and a portion of the residual based on capacity

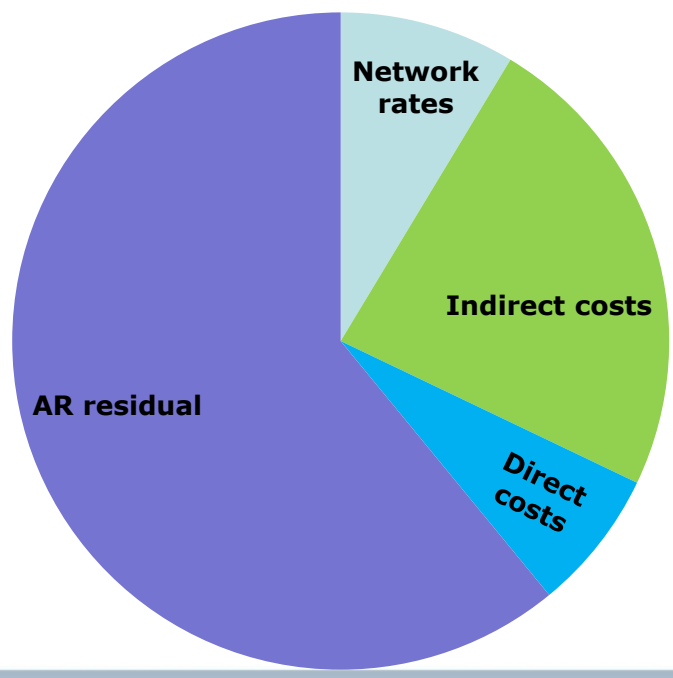
$$\frac{\text{Indirect costs within the revenue target (£)} + \text{20\% of the residual (£)}}{\text{Sum of customer capacities (kVA)}} = \text{£/kVA fixed adder}$$

Customer = EDCM demand customers

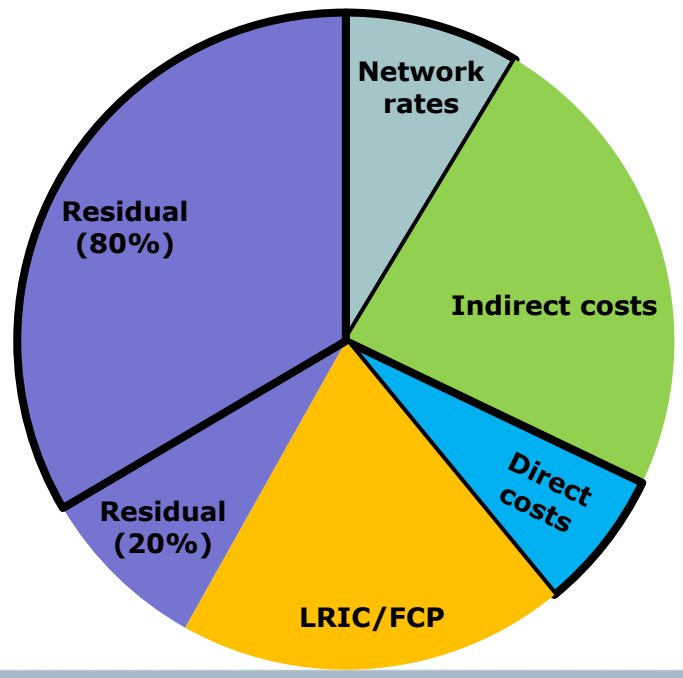
Capacities = 50% * [Agreed capacity] + [Capacity at system peak]

Issue 4: allocation of direct operating costs, network rates and a proportion of the residual based on notional shared asset value

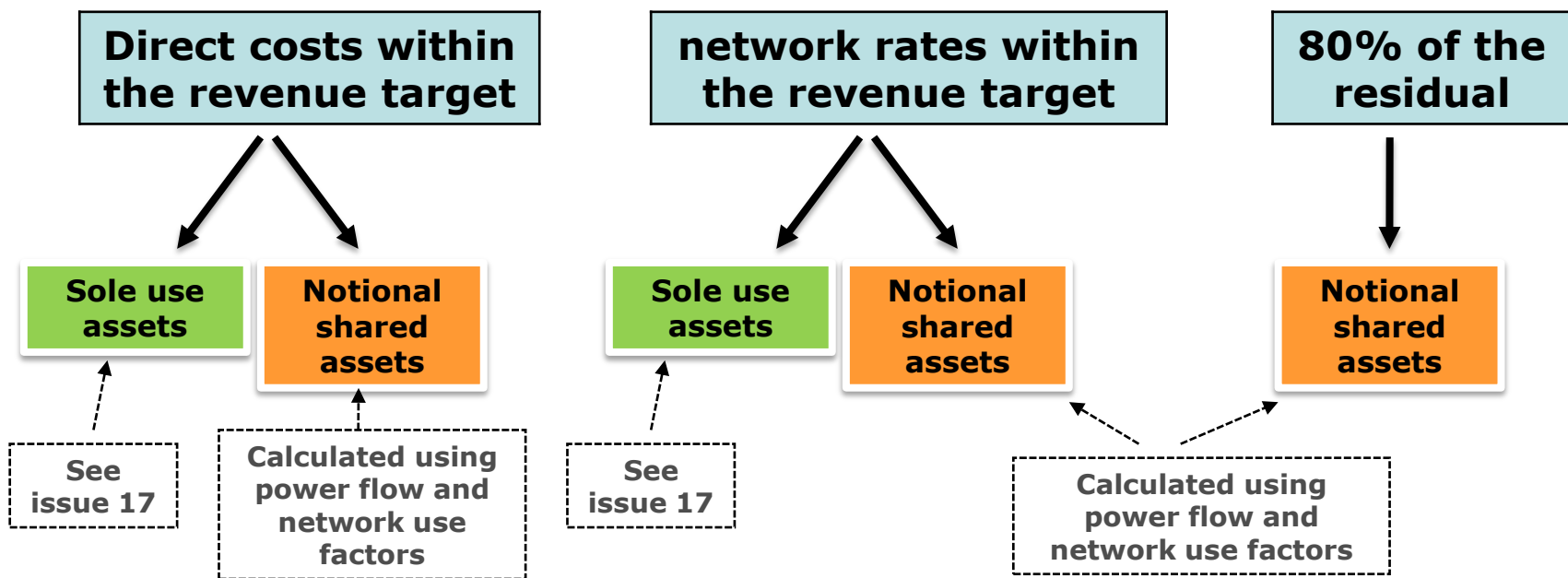
EDCM demand revenue target by source



EDCM demand revenue target by recovery



Issue 4: allocation of direct operating costs, network rates and a proportion of the residual based on notional shared asset value



Direct costs within the revenue target, not allocated to SUA (£) + 20% of the residual (£)	* $\frac{\text{Customer's NSA (£)}}{\text{Sum of EDCM NSAa (£)}}$ =	allocation to a customer charge
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Issue 18: demand side management

Firm capacity: not constrained by the agreement

Interruptible capacity: constrained by the agreement

**Proposals: for the application of LRIC/FCP components,
only the firm capacity will be taken into consideration**

Example: "Fixed time-band agreement" of 10 MW firm capacity and 5 MW interruptible capacity

$$\text{Agreed import capacity} = \begin{cases} 10 \text{ MW at peak} \\ 15 \text{ MW at off-peak} \end{cases}$$

DUoS Charge = Fixed charge + 10MW*LRIC/FCP 'local' + 15MW*[capacity charge rate - 'local'] + (10MW/15MW)*[kWh in super red] * [unit rate]

Issue 18: demand side management

'Local' LRIC/FCP (p/kW/day)	Annual per 1 MW	Annual per 5 mW
1p	£3,650	£18,250
2p	£7,300	£36,500
4p	£14,600	£73,000

Savings per interruptible MW

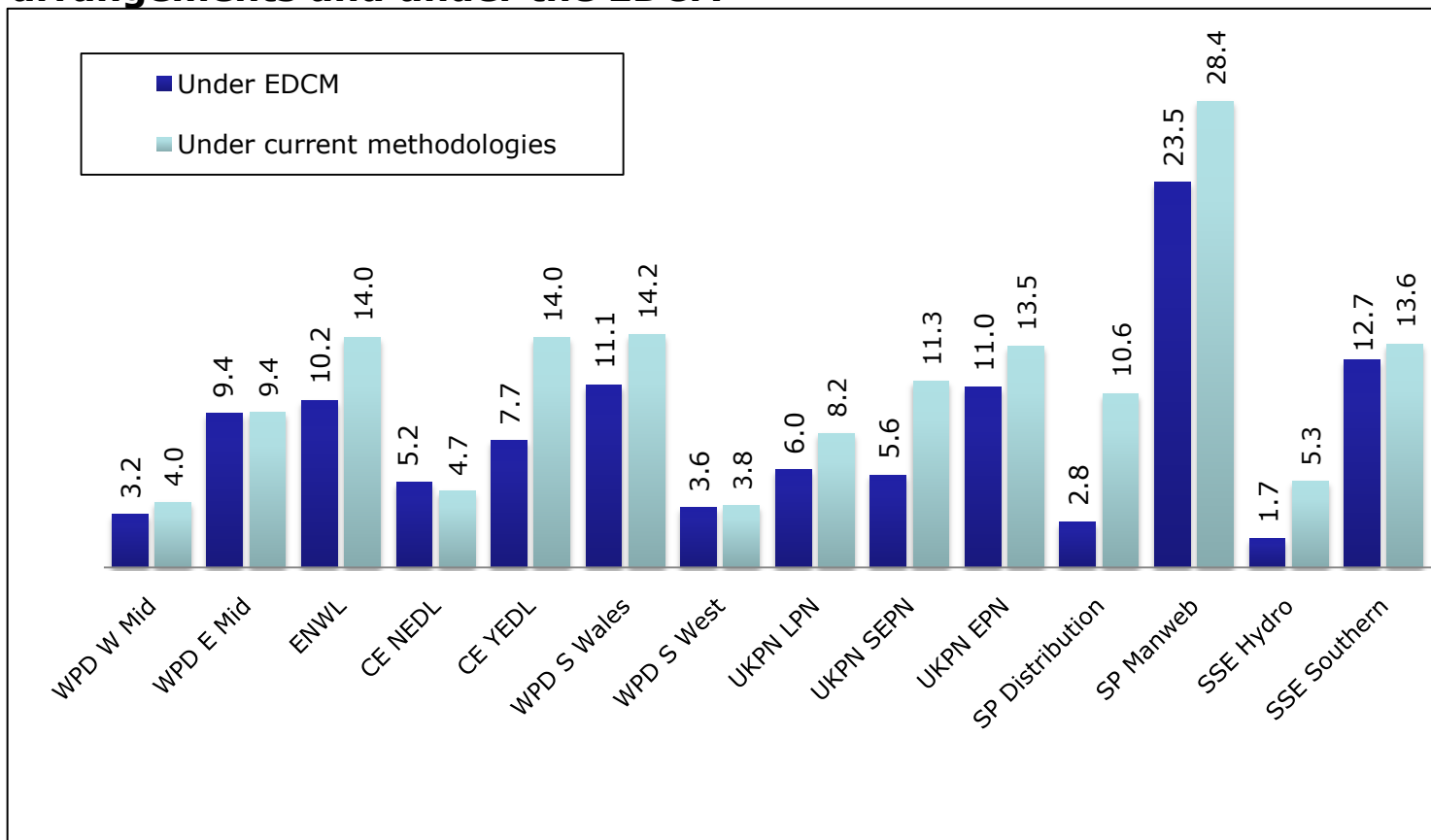
'Remote' LRIC/FCP (p/kW/day)	Annual saving per example (CF=.25)
1p	£3,750
2p	£7,500
4p	£15,000

Q&A on demand issues

Coffee Break

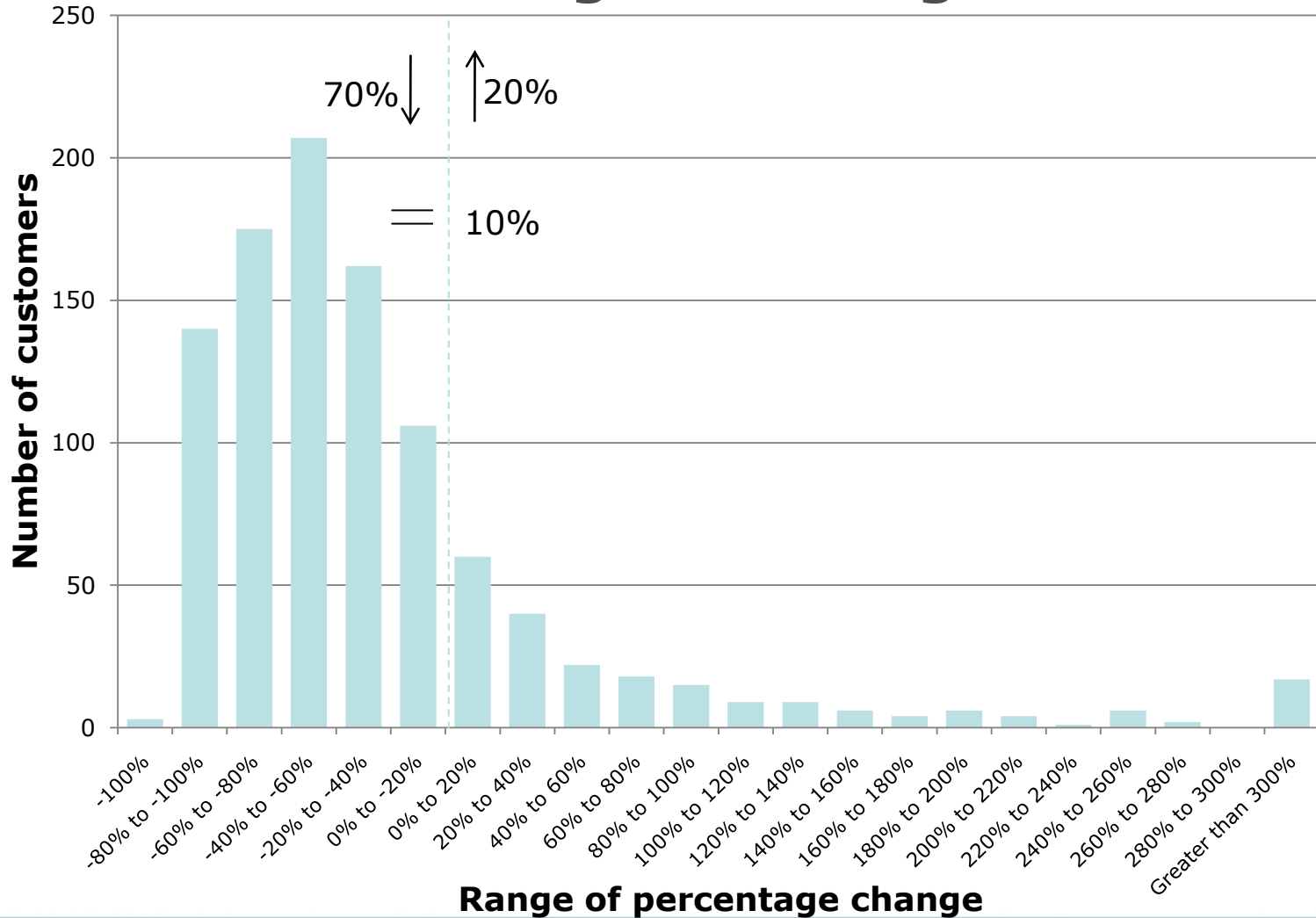
Implementation

Total revenue (£m) from EDCM demand customers under current charging arrangements and under the EDCM



Source: Figure 3.1 of Ofgem's consultation on EDCM proposals, 20 May 2011

Changes in charges



Management of charge changes

- Previous chart is based on *current* behaviour
- EDCM offers opportunities to manage charge
 - demand side management agreement
 - reduce consumption during super-red hours
 - reduce agreed import capacity
 - employ on-site generation (may be partially offset by GDUs)
- We expect some customers will adjust their behaviour in response
- We are considering placing requirement on DNOs to provide specific assistance to most affected customers

Managing charges over time (Issue 21)

- Beyond one-off change, there may be ongoing volatility in charges
 - internal volatility, eg super red consumption
 - external volatility, eg allowed revenue, NUFs
- Measures to manage volatility
 - five year projections of potential variances
 - long term products
 - modification to model inputs, eg NUFs
- Role of Workstream C

What measures would be most useful in helping you manage your charge over time?

Implementation of new charges – as planned

Default option – new charges start 1 April 2012 as planned

Pros

- benefits of methodology realised asap
- significant notice charges will change

Cons

- significant impact on some customers, could affect viability
- may not give sufficient time to adjust behaviour where possible

Implementation of new charges

Delay – new charges start 2013, 2014 or at RIIO-ED1 (2015)

Pros

- 'cleaner' method than phasing
- time to mitigate/adjust to increase where possible

Cons

- EDCM benefits deferred, especially more cost reflective charges
- customers with charges reducing are disadvantaged

Implementation of new charges - Phasing

Pros

- time to mitigate/adjust to increase where possible

Cons

- benefits of methodology deferred, including cost-reflectivity
- makes mods difficult
- difficulty adjusting tariffs and licence

Phasing for some or all?

For all customers:

- delays benefits to those with reductions

For those with significant increases:

- targets those most affected, minimising impact on others
- but, arbitrary decision on who to phase

Questions on implementation

Question 2.2

- *Should we approve the methodology, do you agree with our proposal to implement it in full from 1 April 2012?*
- *If not, why is phasing-in charges or delaying implementation appropriate?*

Appreciate responses to this question by 24 June 2011

- *although we will still consider responses submitted after*

Are there any other implementation issues we should consider?

Q&A session and feedback

Next steps

Consultation responses.....	4 July 2011
➤ Responses on phasing.....	24 June 2011
Ofgem's decision.....	Aug/Sep 2011
Indicative charges for 2012/13	December 2011
Final charges for 2012/13	February 2012
EDCM implementation (if approved)	1 April 2012

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The background of the slide is a composite image. On the left, there are rows of solar panels under a bright sun. On the right, a hand is shown holding a white document. In the bottom left corner, a blue gas burner is visible. The overall theme is energy and customer service.

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