

Price Control Review Workshop

7 November 2003

Presentation slides

Morning session

1. Opening remarks (David Gray – Managing Director, Regulation and Financial Affairs, Ofgem)
2. Update on progress (Cemil Altin – Head of Price Control Review, Ofgem)
3. DNO View (Jim Tame – Chair of ENA Regulation Group)
4. DG/RPZs/IFI (Gareth Evans – Technical Adviser, Ofgem)
5. Quality of Supply (Chris Watts – Senior Manager, Quality of Supply and Reporting, Ofgem)
6. Metering (David Howden – Deputy Head of Metering, Ofgem)
7. Cost assessment and financial issues (Carl Hetherington – Head of Regulatory Finance, Ofgem)

Afternoon sessions

1. RPZs/IFI/DG (Rob McDonald – Director of Regulation, Scottish and Southern Energy)
2. Metering (Andy Phelps – Regulation Director, Aquila Networks plc)
3. Quality of Supply (Paul Everleigh – East Midlands Electricity)
4. Cost assessment and financial issues (Paul Delamare – Head of Price Control Review, EDF Energy)

DNO Price Control Review Workshop

7 November 2003

David Gray
Managing Director
Regulation and Financial Affairs

The DNO price control review

- Key project for Ofgem and industry
 - Significant resources committed to deliver revised price controls by 1 April 2005
- Open and transparent process
 - Consultation documents, working groups and workshops
 - Important that transparency is maintained on all sides
- Project key to ensuring:
 - Customers protected in terms of price & quality
 - Companies have sufficient revenue and appropriate incentives and can finance their licensed activities

Purpose of today's event

- Bring together wide range of interested parties
- Provide update on project progress
- Opportunity to discuss key issues in open environment
- Series of presentations & break out groups
- Feed into development of policy and assessment of costs



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DNO Price Control Review Workshop

7 November 2003

Review of Progress

Cemil Altin
Head of Price Control Policy

Process so far

- Work began on DNO price control review in parallel with work on developing monopoly price controls – initial ‘full’ consultation July 2003
- Some new challenges – e.g. Distributed generation
- And some old questions – e.g. cost of capital
- Larger Ofgem team than last review – more work undertaken internally
- Process characterised by increased transparency and understanding
 - Broad consultation
 - Working groups
- Authority committee
- Good progress so far – policy issues and cost assessment but much left to do
- Development of initial Regulatory Impact Assessments (RIAs)

Project structure

- Project broken down into number of key workstrands
 - **Policy issues (Cemil Altin)** – including scope, form of price controls and incentives for efficiency & investment
 - **Cost assessment (Carl Hetherington)** – including assessment of companies' efficiency and future costs
 - **Quality of supply and other outputs (Chris Watts)** - including IIP & QoS targets, network resilience and Guaranteed and Overall Standards
 - **Distributed generation (Min Zhu)** – developing incentive arrangements for DNOs with respect to DG AND Power Zones & Innovation Funding (Gareth Evans)
 - **Financial (Carl Hetherington & Cemil Altin)** – including cost of capital, RAV and depreciation, financial model and pension costs
 - **Metering (David Howdon)** – development of price controls and associated arrangements for metering services
 - **Other (Cemil Altin)** – including development of RIAs and licence modifications

Milestones achieved

- **Policy issues**
 - Published initial thoughts on key policy issues and commitment to fixed retention periods for efficiency savings
- **Cost assessment**
 - Outlined approach to cost assessment; published/submission of historical BPQ; DNO visits; published forecast BPQ; published report from CEPA on benchmarking
- **Quality of supply**
 - Outlined approach to setting QoS targets and comparing performance; undertaken 1st stage of customer research
- **Distributed generation**
 - Outlined framework for incentives for DNOs; possible use of Power Zones & Innovation Funding; published/submission of DG BPQ; DNO visits
- **Financial issues**
 - Outlined general approach to financial issues including commitment to not re-opening RAV; broad approach to cost of capital published draft financial model; outlined principles and approach to pension costs
- **Metering**
 - Outlined approach/options for metering price controls

Overall project timetable

- **December 2003** – second consultation document
- **March 2004** - policy document
- **June 2004** - initial proposals (P0/Xs)
- **September 2004** - update document (P0/Xs, review of IIP, outline licence modifications)
- **November 2004** - FINAL PROPOSALS
- **February 2005** – final consultation on licence modifications
- **1 April 2005** - Price control implemented
- **Early summer 2005** – review of price control review process published
- **Autumn 2005** – final report on price control review process published



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Ofgem Workshop 7th November, 2003

**Presentation by Jim Tame,
Chair, ENA Regulation Group
Thistle City Hotel, Barbican**

DNO Environment 2005-2010

- **Increasing investment in replacement of aged assets and reinforcing “sweated” assets**
- **Meeting the challenge of UK Government targets for renewable generation and CHP by “rewiring Britain”**
- **At the same time, address the impending shortage of skilled engineers and craftsmen/women**
- **Rising frequency of severe storms and increasing public expectations regarding resilience**
- **Increasing cost of achieving further efficiency savings and increasing delivery risk**
- **Further streetworks legislation which could dramatically increase DNO costs, especially in urban areas**

DPCR Process

- **Ofgem commitment to transparency a welcome improvement on DPCR3**
- **Robust and informative debate in joint DNO/Ofgem working groups – but a need to create time for these**
- **A number of important commitments already, including rolling incentive mechanisms, Innovation and “Powerzone” incentives**

DPCR Process cont'd.

- **Size and complexity of BPQs unexpected – no time for DNOs to prepare/reconfigure information systems**
- **Regulatory accounts not providing comparable data despite RAGs – further adjustment needed before it could be considered robust for benchmarking**
- **Challenging timetable given the number, scope and complexity of unresolved issues “left” for the review (e.g. DG, losses)**
- **New Authority DPCR committee (and direct involvement of non-exec members) a welcome innovation**

Financial Challenges

- **Allowed cost of capital will need to compete on a global basis – or else jeopardise “Rewiring Britain” and other investments**
- **Funding will be needed for increased Corporation Tax charges**
- **Pensions obligations also need to be funded – but need to recognise important questions regarding use of past surpluses to support cost reduction programmes**
- **Cost of historic debt must be allowed unless the result of demonstrable mismanagement or inefficiency**

Metering Challenges

- **Ofgem are introducing a new (and some would say controversial) competitive market for metering**
- **Past DNO metering investments have been subject to low-risk rate of return reflecting the absence of significant competition**
- **Proposed separate metering price control will expose sunk costs to the new competitive market**
- **Ofgem's depreciated replacement cost methodology only partly addresses the risk of stranded costs (by leaving some historic costs in the distribution control)**
- **DNOs' proposals meet the needs of the new market and avoid unnecessary sunk costs**

Quality of Supply Challenges

- **Wide recognition that DPCR3 targets were not equally challenging**
- **Welcome discussion of long term targets – but these have to be realistic given current network designs, historic spend and condition**
- **Quality of supply “quick wins” have largely been taken and the marginal cost of improvement is increasing**
- **Significant improvements will require new approaches to network design, configuration and operation – requiring sustained funding**
- **Ofgem’s Willingness to Pay studies a useful contribution to the debate**



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DPCR 4 Workshop

7 November 2003

Distributed Generation/Registered Power Zones/Innovation Funding Incentive

Gareth Evans

Technical Directorate, Ofgem

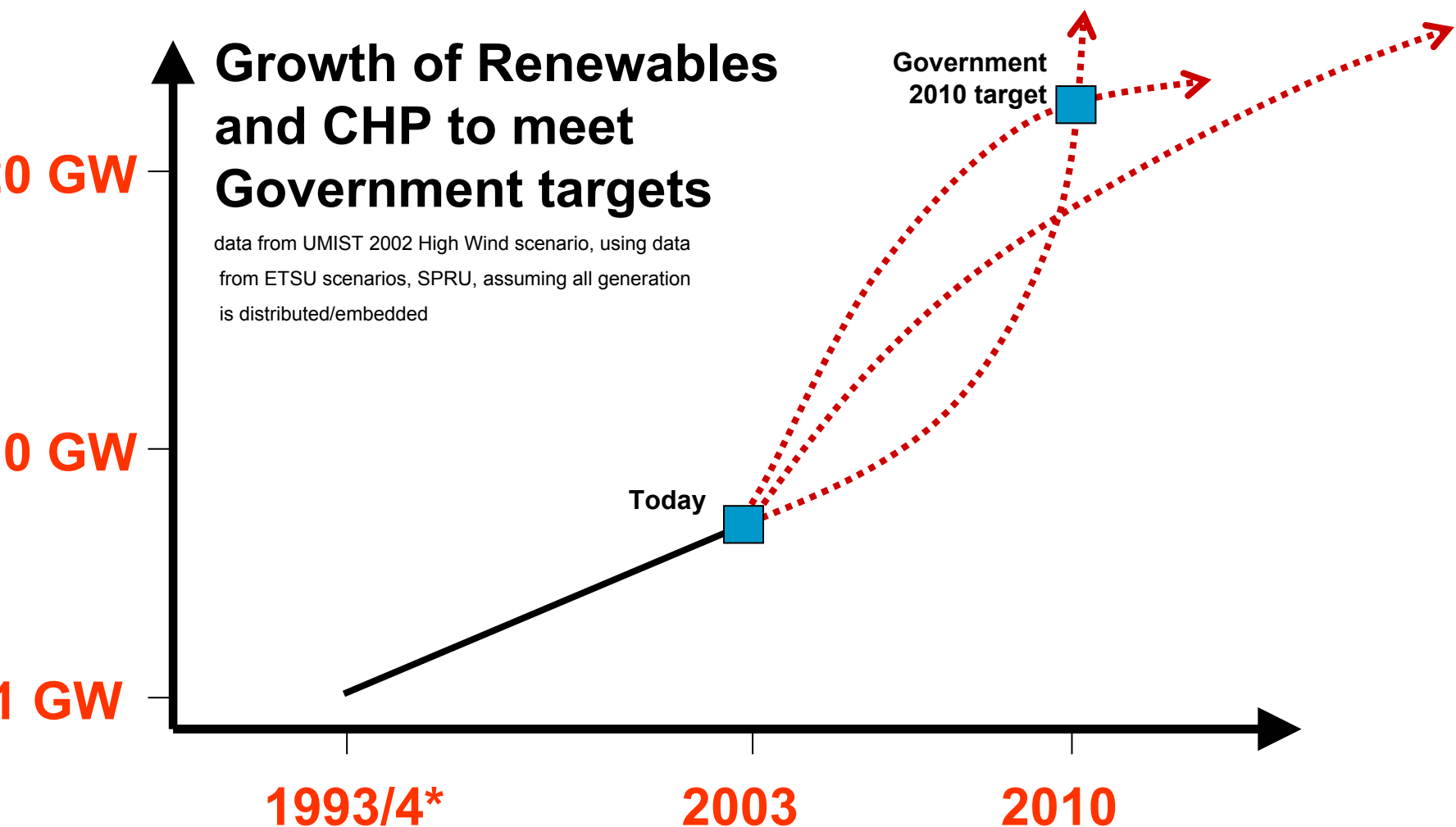
gareth.evans@ofgem.gov.uk

Content

- Based on the October DPCR Update
- Focus on:
 - DG and the DG Incentive
 - IFI & RPZ
- Key discussion points for break out sessions



DG & DG Incentive



* 1.2 GW embedded independent generation – NGC SYS, March 1994

Update of DG-BPQ information

- Quality of DG-BPQ data
- Regional variation in DG development and costs
- High level summary of forecast DG development and costs
 - Increase of DG volume and of cost
 - Uncertainty

Key drivers for DG related costs

- Providing connection
- Fault level
- Voltage control
- Power flow management
- System stability
- Strategic costs

Difficult to convert to cost drivers

Workshop discussion points - DG

- Hybrid mechanism combining incentives & pass-through
 - Mix of incentive and pass-through
 - Parameters & ranges of values
- Incentive for network operation
 - Treatment of network availability / constraints
- Re-openers
- Treatment of stranded assets
- Interaction with losses and quality of supply incentives

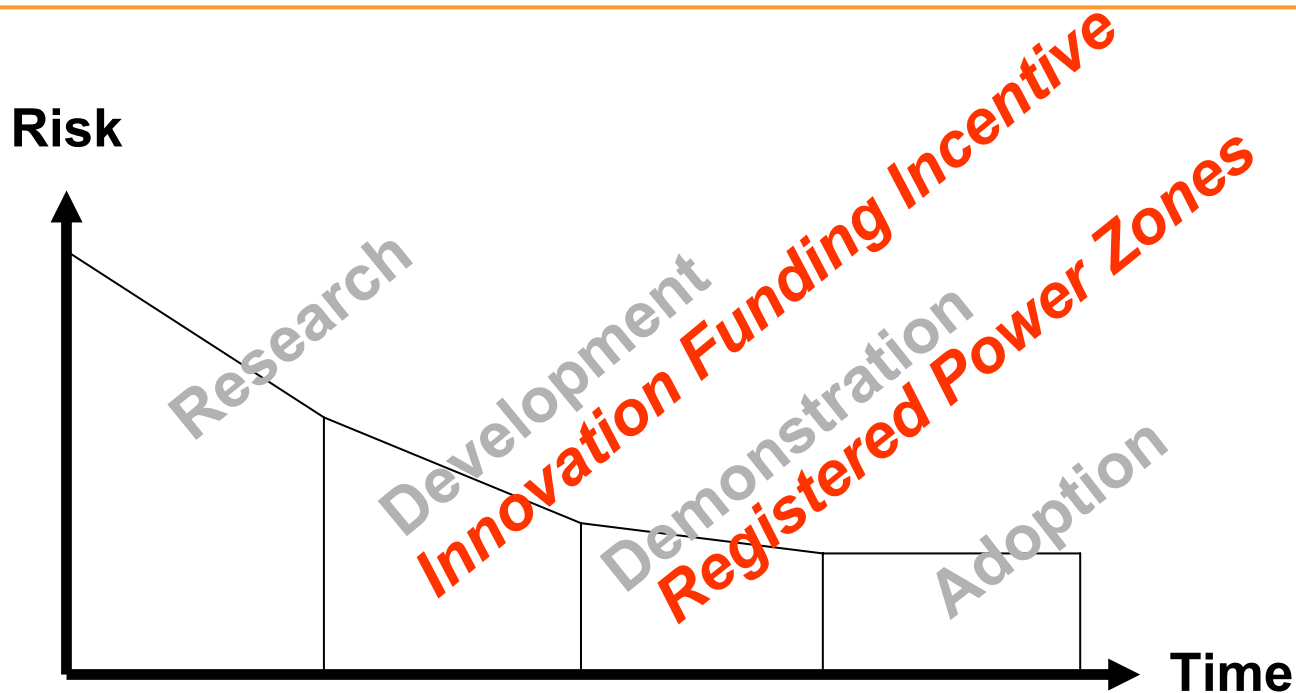
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IFI & RPZ

IFI & RPZ

- **IFI** – to encourage investment in research and development activities that will lay the foundations for future network developments
- **RPZ** – to encourage the demonstration of novel network designs, new equipment and operating techniques to efficiently integrate DG

IFI & RPZ



IFI & RPZ – Targeted incentives for DNOs

IFI headlines – current thoughts

- DNOs would be given an opex allowance for innovation
- Capped at ‘best practice’ level – ref DTI’s R&D scoreboard
- A proportion of each project would be funded by the DNO
- Companies must demonstrate efficient expenditure control
- Expenditure allowed on a ‘use it or lose it’ basis
- Annual, open, reporting of activities to share best practices

RPZ headlines – current thoughts

- Companies propose projects that Ofgem registers (but not approves). Regulator not best-placed to pick R&D winners.
- Enhanced financial incentives (a multiple of the price control DG incentive), that reflect the degree of innovation.
- Companies manage and are responsible for all project risks.
- Open reporting of RPZ projects to share good practices.
- Any additional grant funding obtained by DNO would not be recovered by Ofgem.

Discussion Paper – your views

- An appropriate and timely development
- Too complicated in their current form
- Support for IFI level, but greater pass-through sought
- Limited comments on RPZ incentive level
- Too many restrictions – please simplify
- Wide support for introduction before price control

Workshop discussion points - IFI

- What level of IFI spending represents ‘good practice’ for the DNOs?
- What is the case for increasing the IFI pass-through element?
- How can we simplify the mechanisms while properly protecting customers?
- What is the best way of ensuring good value and protecting customers?

Workshop discussion points - RPZ

- What is the DNO appetite for RPZs?
- What is a justifiable level of financial incentive to reward genuine innovation and manage its risks?
- Quality or quantity?
- Can we simplify the arrangements and if so how?

A large, central version of the ofgem logo is positioned in the middle of the slide. It features the word "ofgem" in white lowercase letters on a red rounded rectangle. The background of the slide is a light blue gradient with a faint, semi-transparent image of a woman sitting at a desk with a laptop, and a close-up of a power plug and outlet on the left side.

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Quality of service and other outputs

Chris Watts, Head of Quality of Supply Team

Progress to date - customer research

- First phase of customer research published in September
- Key findings include:
 - Customers generally satisfied with service they receive
 - Expect interruptions to supply when there is severe weather/other exceptional circumstances but not for other reasons
 - Low awareness of standards of performance
 - Business customers expect higher levels of compensation
 - Communications with customers a key concern

Comparing quality of supply performance

- Quality of supply performance significantly affected by network characteristics
- More detailed/ disaggregated comparisons have been carried out and used to:
 - Better understand differences in performance
 - Scope for improvement
 - Set benchmark levels of performance
 - Set targets levels of performance for DNOs to consider as part of their business plan
- Companies will provide information on the costs of quality of supply improvement as part of FBQ

Key issues (1)

- Deciding the scope of the quality of service scheme
 - Are additional outputs needed to monitor/incentive performance?
- Deciding the appropriate form of incentives, incentive rates & targets
 - E.g. incentives for telephony
 - Incentive scheme on interruptions
- Appropriate changes to the standards of performance arrangements
 - How to increase public awareness
 - Long-term arrangements for severe weather


Key Issues (2)

- Network resilience
 - Better understanding of the linkage between severe weather and impact on customers is needed
 - May need to develop measures to incentivise efficient management of network resilience

- Deciding main areas for second phase of research on willingness to pay



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Metering

David Howdon – Deputy Head of Metering

Initial Consultation

- Big question. Should we have a control
 - Competition Assessment (to be discussed later)
- If we are to have a control then there are three main questions to address:
 - Form
 - Price Cap, (Average) Revenue Cap.
 - Scope
 - Domestic, NHH, All
 - Duration
 - Fixed duration (2 years, 5 years), Fixed Market Reviews (2 years), Contingent Market Reviews (Criteria)

Decision – Competition Assessments

- Assessing competition
 - Quantitative Data
 - Number of service providers
 - Prices of incumbents and others
 - Levels of market entry/exit
 - Qualitative Data
 - Knowledge of ‘customers’
 - Barriers to entry
 - Ability to switch provider
 - Complaints/problems reported to Ofgem/Energywatch.



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Cost Assessment and Financial Issues

Carl Hetherington, Head of Regulatory Finance

Work done to date

- Cost assessment:
 - Information requests
 - Visits
- CEPA benchmarking report
- CEPA TFP study – due late Nov 03
- Pensions - principles
- Financial model – draft published Nov 03
- RAV Roll Forward – discussed with DNOs

Approach

- Review of actuals
- Top down
- Bottom up – opex and capex
- Review of forecasts

Key Issues – Cost Assessment

- Forecasts - Base case/Scenarios/Sensitivities
- Network expenditure:
 - Forecasting processes
 - Faults
- Benchmarking
- Mergers/Groups
- Outsourcing
- Overhead allocation
- Comparability

Key issues - Pensions

- Allowance compared to contributions
- Regulated – Unregulated split
- Severance
- Spreading period
- March 04 valuation

Other key issues

- Process/Transparency/Working Group
- Financial model
- Financial indicators
- RAV roll forward
- Total cost
- Tax
- Gearing
- Cost of capital

Breakout Themes

- **Transparency** – DNOs and Public
- **Pensions** – way forward on the 3 key issues
- **Network expenditure** – faults
- **Approach to cost assessment** – bottom up modelling, benchmarking, cost drivers, total cost and groups/fixed costs
- **Other suggestions?**



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Distributed Generation

Rob McDonald

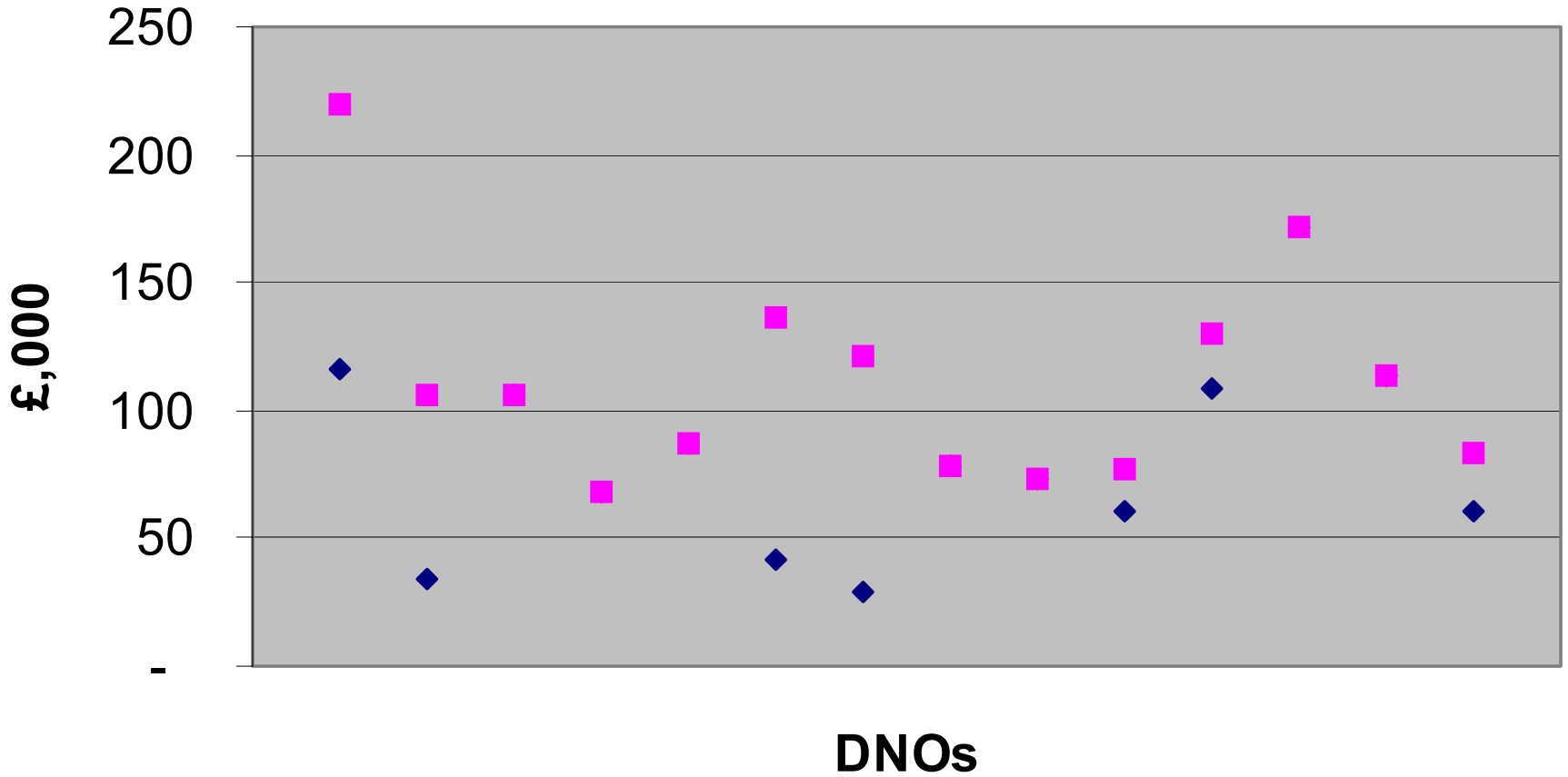
Director of Regulation

Scottish and Southern Energy

Proposed “Hybrid” Mechanism

- Potentially very complicated?
- DNOs need certainty of return on investment
- Risk reward balance therefore vital
- Could encourage delayed investment
- Implies relaxation of duty to connect

Ranges of £/MW future DG costs



An Alternative Approach?

- Retain broad framework: no “experiments”
- Anticipated schemes in RAV at price review
- “Rolling RAV” for unanticipated investments
- £/MW cost driver

Registered Power Zones

- Strongly support concept
- Ofgem should be applauded for encouraging innovation
- Risk that RPZ could be overly restrictive:
 - limit on size
 - derogation from standards should be allowed

Innovation Funding Incentive

- Currently little incentive to fund R&D
- New allowance could encourage more projects
- Full funding through price control
- Reporting to Ofgem and public
- Should avoid complex admin
- Alternative: capitalise approved R&D



Aquila

Regulatory Treatment of Metering - A DNO's Perspective

**Andy Phelps, Regulation Director,
Aquila Networks plc**

7 November 2003



DNO Preferred Alternative

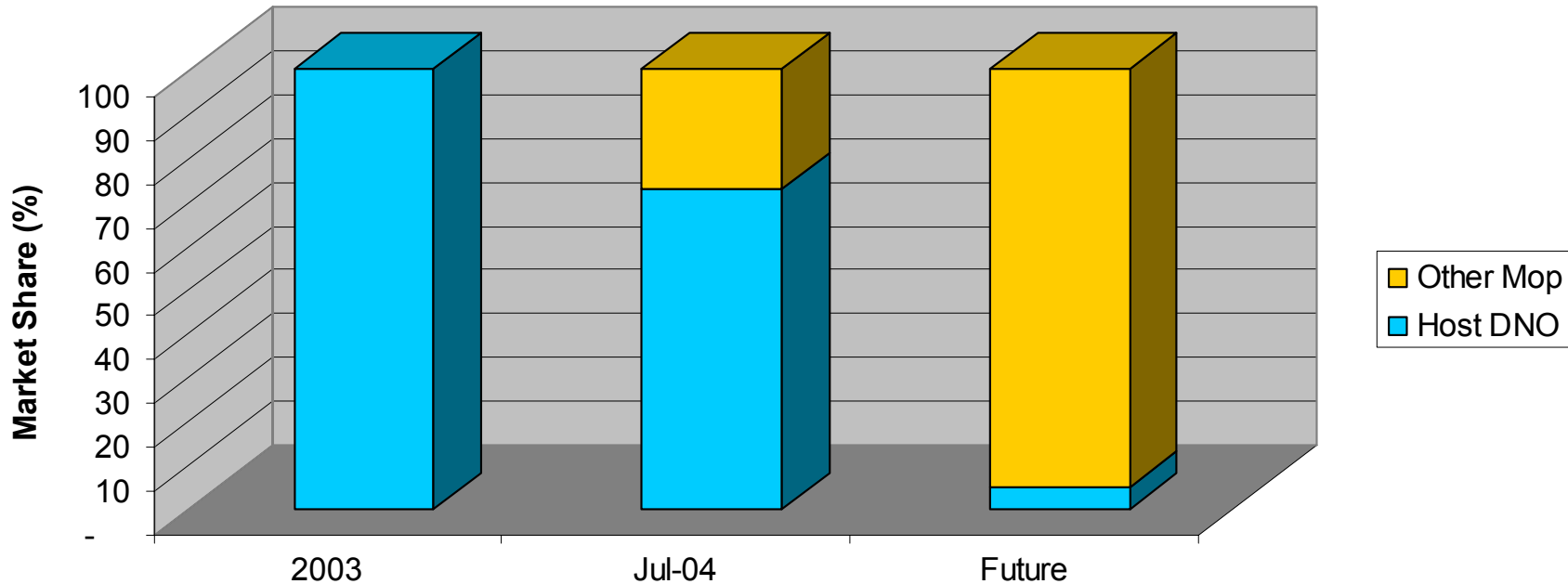
- Protection from stranded costs achieved by retaining existing price control arrangements;
- Remove obligation on DNOs to provide new meters and metering services;
- Remove price controls on meter operation;
- If necessary, specify pricing guidelines for existing meters.

Future Regulatory Framework - Concerns with Ofgem's Proposals

- Stranding of Costs
 - Operating Costs
 - Assets
- Future Obligations
- Need for a Price Control

Future Electricity Metering Market

Meter Operation Market Share



Different dynamic to retail competition;

•driven by suppliers, not customers

•By 2005 DNOs could be minority providers of meter operation services

Future Electricity Metering Market - Meter Provision

- Little premature replacement if meters cost £10 and installation £30?
- But metering is just one part of overall market for retail electricity services, so:
 - supplier could replace meter to entrench hold over customer?
 - meters changed as part of dual fuel arrangement?
 - other generic savings e.g. IT could dwarf installation costs?
- A real risk of a reduction in DNO market share?

Stranded Costs - Ofgem's Proposals

- Meter Operation
 - costs of discharging past, and any future, licence obligations (IT, Pensions etc.)
- Meter Assets
 - replacement cost valuation reduces stranding risk;
 - vulnerable to premature replacement through competition or technical progress.

⇒ **All such costs should be recoverable.**



Issues for Discussion

How serious is the risk of costs being stranded?

- operating costs
- assets

Should DNOs continue to receive total protection against these risks?

Are there alternatives:

- termination charges?
- higher cost of capital?
- re-opening of price control?
-???????

Need for a Price Control?

- Ofgem believes a Price Control is necessary to protect customers while competition develops
 - Concerned about:
 - cross subsidy of metering by DNOs;
 - barriers to the sale of metering businesses;
 - development of competition.
- > **Are these concerns well-founded?**

Need for a Price Control?

- Need for and structure of any control will depend upon how the market develops and who are the key players.
- How quickly will competition develop:
 - in MOp?
 - in MAP?
- Who needs protection:
 - customers from DNOs?
 - customers from suppliers?
 - anybody?
- Is Ofgem right to be concerned about cross subsidy and barriers to the sale of metering businesses?

Metering Price Control

- Other Issues

- What incentive is there for a DNO to cross-subsidise in this way?
- Is the lack of a metering RAB a real barrier to the sale of metering businesses?
- Should suppliers be subject to controls?
- Price control could complicate a sale:
 - should it apply to a non-DNO MAP or MOp?
 - would the obligations be retained by the purchaser of a DNO's assets?



Conclusion

- Competition is likely to develop rapidly;
- DNOs will inevitably lose market share;
- Protection is required from stranded costs during the transition;
- Removing licence obligations will crystallise existing out of market costs;
- The construction of a new metering price control in 2005 is unnecessary.

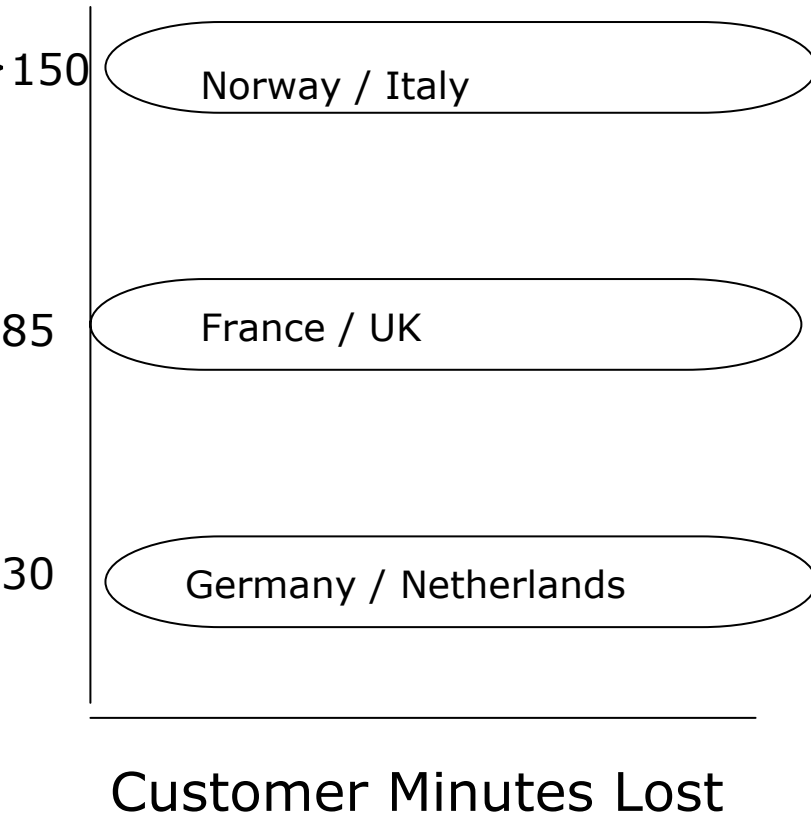
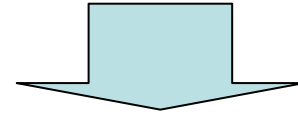
Quality of Supply

A Distributor View

Paul Eveleigh

East Midlands Electricity

Comparing Quality of Supply in the UK



UK Range
Circa
40 - 140

Many reasons why quality may differ between and within countries

Location , topography, climate, definition and measurement network design and investment, Government, regulation etc

Ofgem are trying to develop a comparison methodology

Don't believe that is currently statistically robust

Like most benchmarking tools maybe misleading for comparison but useful to inform target setting

Customer Requirements

- 80% of customers broadly satisfied with service they receive
- Customers value
 - lights staying on
 - If fail restored as soon as possible
 - If problems kept informed
- Customers understand that there will be Powercuts even from reliable networks
 - e.g. extreme storms

Successful Incentive Mechanism

- Successful incentive mechanism would encourage companies to change their behaviour to provide services that customers value
 - different customers may put different values on services, urban / rural, old / young , domestic / business
 - new or additional output measures V dilute focus or control
 - need both short term and long term drivers for reliable network
 - some outputs like” storm resilience” are not explicitly seen by customers until it is too late
 - accurate measurement and ability to control
 - generic or specific and tailored
 - appropriate cost / quality tradeoff

Reliability

- Quality of supply has naturally focussed on the things which are easiest to measure such as minutes lost
 - right that quick wins captured first
- Reliability traditionally measured as faults per kilometre much more difficult concept to have in an incentive scheme because may be a significant time lag before impact on performance is obvious or clear
 - danger that short term performance focus masks underlying deterioration
 - maybe treating the symptoms and not the cause
- Solutions
 - either use a proxy measure such as network impacted or volume impacted alongside reliability itself
 - or could overlay with using ten year averages

Resilience

- Resilience has two elements
 - ability of network to withstand an exceptional (storm)) event
 - ability of companies to respond to that event
- Companies working with Ofgem, DTi etc to scope out potential improvements in resilience
 - likely that additional investment will be required
- Communication is a key issue
 - in storms and other pressure situations hardest for it to be done properly
 - most important for customer that it is done properly
- Specific rather than generic approach to resilience may be most appropriate

What Quality?

- Ideally wholly a product of customer choice
- Customer willingness to pay survey will help
- But constrained by a common network to all in particular region
- Therefore a societal view of quality will be required
- Companies can inform choices with appropriate cost estimates
- But difficult for DTI, Ofgem and energywatch to avoid significant involvement and influence
- Cost quality tradeoff will need to be linked to appropriate and realistic cost allowances



**Ofgem Workshop
7th November, 2003**

**Presentation by Paul Delamare,
Head of Price Control Review
EDF Energy
Thistle City Hotel, Barbican**

Financial Issues

- **Financing Obligations**
- **Cost of Capital**
- **Taxation**
- **Historic Debt***
- **Regulatory Depreciation**
- **Pension fund costs ***

Assessing Costs

- **Periodicity of Incentives***
- **Opex / Capex distortion/trade-offs**
- **Retention period for efficiency savings**
- **Treatment of non-op capex**
- **Dealing with uncertainty***
- **Historic BPQ**
- **Forecast BPQ**
- **Benchmarking ***

Benchmarking

- **Bottom-up and top-down benchmarking a feature of DR3 but many cost adjustments necessary**
- **Despite draft Regulatory Accounting Guidelines company data is not comparable – e.g. capitalisation, activity analysis, etc...**
- **Frontier approach used to “inform” opex at DR3**
- **DR4 approach is uncertain?**
- **Ex ante capture of ex post discovery of efficiencies – what is the rationale for this?**

Benchmarking cont'd..

- **Benchmarking can ignore trade-off between cost and risk – use of cost frontiers can “ratchet up” risk**
- **Case for frontier rests on detailed understanding of the real reasons for low costs**
- **Fifteen years after privatisation, case for average costs with long term total factor productivity glide path**
- **Post review – sustained work needed by all to improve data quality**

Pensions

- **Treatment of pension costs opaque in past reviews – e.g. we now know that one DR3 “frontier” company had a contributions holiday**
- **Pension schemes are now in deficit and need additional funding**
- **Welcome the level of engagement from Ofgem on this complex issue**
- **Redundancy costs have been supported by surpluses in the past – customers are already benefiting from low prices as a result**
- **Use of “competitive” benchmark costs must recognise costs of statutory protection of “privatised” employees/pensioners**

Pensions cont'd..

- **Cost attributable to PES employees (i.e. prior to October 2000) should be recoverable through the distribution price recognising the past cost allocation and current legal obligations**
- **Placing historic PES obligations into competitive supply business would not create a level playing field or ensure cost recovery**
- **Cost savings may arise from out-performing regulator's assumptions, but Ofgem also asserts savings ex ante through use of efficiency frontiers**

Cost of historic debt

- **Companies take efficient financing decisions without the benefit of hindsight regarding market movements**
- **Ofgem not minded to provide allowances for “out of the market” debt because of “stable recent trends in real interest rates”**
- **Assumes that historic debt can be refinanced at today’s rates without penalty**
- **In any case, the average debt premium for UK utilities (with DNO interests) has proved unstable since 1999**
- **Ofgem can legitimately disallow demonstrable inefficient financing decisions, but should allow all other costs**

Dealing with uncertainty

- **DNOs operating in increasingly uncertain environment – distributed generation, streetworks legislation, condition of underground assets, competition in metering and connections, development areas, etc.**
- **Past reviews have generally not made allowance for one-off costs**
- **DNOs/Ofgem have developed an uncertainty-decision tool to help identify the appropriate regulatory response**
- **Some uncertainties may be addressed through price control mechanism, e.g. DG incentives**
- **Some “re-openers” for supplier bad debt and license fee costs; but at Ofgem’s discretion**
- **There is a need for clear and enforceable “uncertainty” rules**

Periodicity of incentives

- **Efficiency incentives tended to weaken towards the end of price control period**
- **Introduction of rolling incentive mechanisms is a welcome innovation**
- **Constructive debate with Ofgem about the details – some more work to be done**
- **Capex from 2000, Opex from 2003 – non-op capex and tax also?**
- **Opex incentives stronger than capex for historical reasons**

Periodicity of incentives cont'd..

- **Customer benefit may not be optimal at current incentive rates – particularly as further efficiencies to harder to achieve and cost of change may not be funded**
- **Powerful cost cutting incentives need to be balanced with appropriate incentives on outputs**

Conclusion

Ofgem should be congratulated for tackling new and complex issues

Important to preserve incentives

Complex issues probably deserve complex answers

Challenge to produce robust methodology

New effort required to tackle data issues post the review



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