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System Operator Incentives – a longer term view

Philip Davies

Director, GB Markets

1 November 2007

Update on incentive schemes from 1 April 2008

This year we have decided to experiment with a different SO incentives process

- **Traditional process:**
  - National Grid provides its forecasts for the costs that it will incur in its roles as gas and electricity SO
  - Ofgem then scrutinises these forecasts and publishes its Initial Proposals consultation
  - Based on the responses received to this consultation, Ofgem then produces Final Proposals
- ***This year, we have requested that National Grid provide and consult upon its own set of initial proposals in early December***
- **Ofgem will publish a short covering letter but will not present detailed analysis of Grid's proposals**

Roles of all stakeholders will need to change if this experiment is to be successful

- **Grid will need to go further in explaining the options they are offering to customers**
  - Grid needs to articulate the risk/reward trade off it faces and reflect this in the incentive schemes' structures it proposes
- **Customers and industry participants will need to provide more feedback and input than usual if National Grid is to play its part**
  - Industry will need provide detailed scrutiny of Grid's proposals
- **Ofgem will act as facilitator**

Ofgem will make Final Proposals in February

- In reaching its view on the way forward, Ofgem will take into account the success of the new process and the information it has revealed
- The process should shed light on Grid's and Customers' preferences to inform Final Proposals

Today

- **Open discussion**
  - Need to understand accessibility of solutions & appetite for change
  - To move forward need to set direction and priorities
- **Presentations to stimulate debate**
- **Agenda**
  - 09:30 Coffee and registration
  - 09:45 Ofgem - Welcome and introduction
  - 09:55 Ofgem's view - Electricity and gas SO incentives
  - 10:15 National Grid Electricity Transmission
  - 10:45 Nigel Cornwall - An independent view
  - 11:15 Malcolm Taylor – An industry view
  - *11:30 Coffee and Q&A session*
  - 12:15 National Grid Gas
  - *12:45 Lunch and Q&A session*
  - 13:45 Closing remarks

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System Operator Incentives – a longer term view

Matthew Buffey

1 November 2007

Broad review kicked-off in 2007/08

- **SO incentives longer term review started May 2007**
  - Objective to "examine the effectiveness and appropriateness of existing SO arrangements, which will also assist in developing more enduring SO incentive schemes…"
- **Wide ranging scope**
  - Role and function of the SOs
  - Feasibility and benefits of multi-year schemes
  - Bundling vs unbundling of components
  - Income Adjusting Events and information transparency
- **Grid and industry encouraged to think creatively**
- **Intention is to aim for enduring schemes starting 1 April 2009**
- **But this is dependent on a number of factors**
  - Would enduring schemes be likely to yield significant benefits?
  - Is it possible from a practical point of view?
  - Do we have the time/resources to progress such a project?

Key areas for consideration

- **Ofgem highlighted 3 key areas for consideration**
  - Do emerging policy directions in European Union & GB potentially impact the roles & functions of the SO? How could these be built into broader schemes?
  - In principle, would broader (in scope, duration, etc) SO incentive schemes provide greater opportunities for investment that ought to result in greater net efficiencies in SO costs?
  - In practice, what are the key drivers of SO costs that would need to be considered under enduring schemes?
- **Also, how do we ensure interactions with transmission price controls are appropriately captured?**

Are enduring schemes feasible given the challenges ahead?

- **Many significant industry initiatives progressing in near future**
- **Cash out review**
  - A clearer system/energy split could alter Grid's SO costs significantly
- **Transmission access review**
  - Could lead to more intermittent generation at network extremities
- **Transfer and trade**
  - Changes to gas entry capacity regime could lead to challenges for the SO in managing a more flexible system
- **Initiatives on unbundling in the European 3rd Package**
  - Could lead to a deeper SO
  - Ownership unbundling would split Grid's combined SO/TO roles

Critical that we need to factor in links to these initiatives in any enduring scheme

Will enduring schemes encourage forward looking investment?

- **Consultation responses: longer payback period would in principle be more conducive to investment**
  - Even with a high sharing factor, the cost reductions required under a one year payback scheme would have to be substantial to justify investment
- **Longer term contracting could reduce costs**
- **Potential for greater certainty for industry as to the costs they will face through BSUoS**

- **Consultation responses: in practice it would be too difficult to forecast costs out further than one year**
  - Longer term forecasts would be inaccurate, particularly further out
  - Devising drivers to ‘flex’ the cost targets mid-scheme would be difficult
  - Increased likelihood of re-openers and/or IAEs

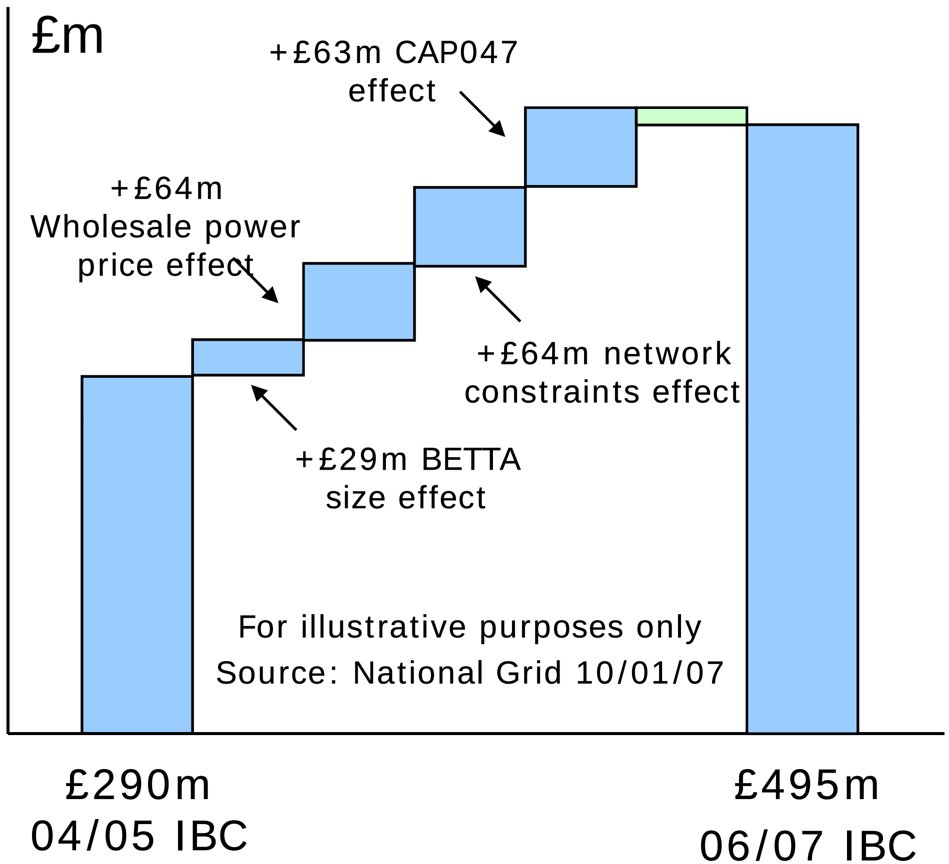
theoretical benefits but practical difficulties

Can the practical difficulties be overcome?

- **Under any enduring scheme, the principle risk is in accurately forecasting longer term costs**
- **'Baseload' costs incurred each year**
  - Some electricity cost components have been stable over time
  - Can these be easily forecast over the longer term?
- **Foreseeable but variable costs could be linked to cost drivers**
  - Cost-adjusters be derived to 'flex' costs to reduce windfall gains/losses?
  - e.g. the St Fergus flow link to own use gas; wholesale price indexation
  - However forecasts would still need to be relied upon

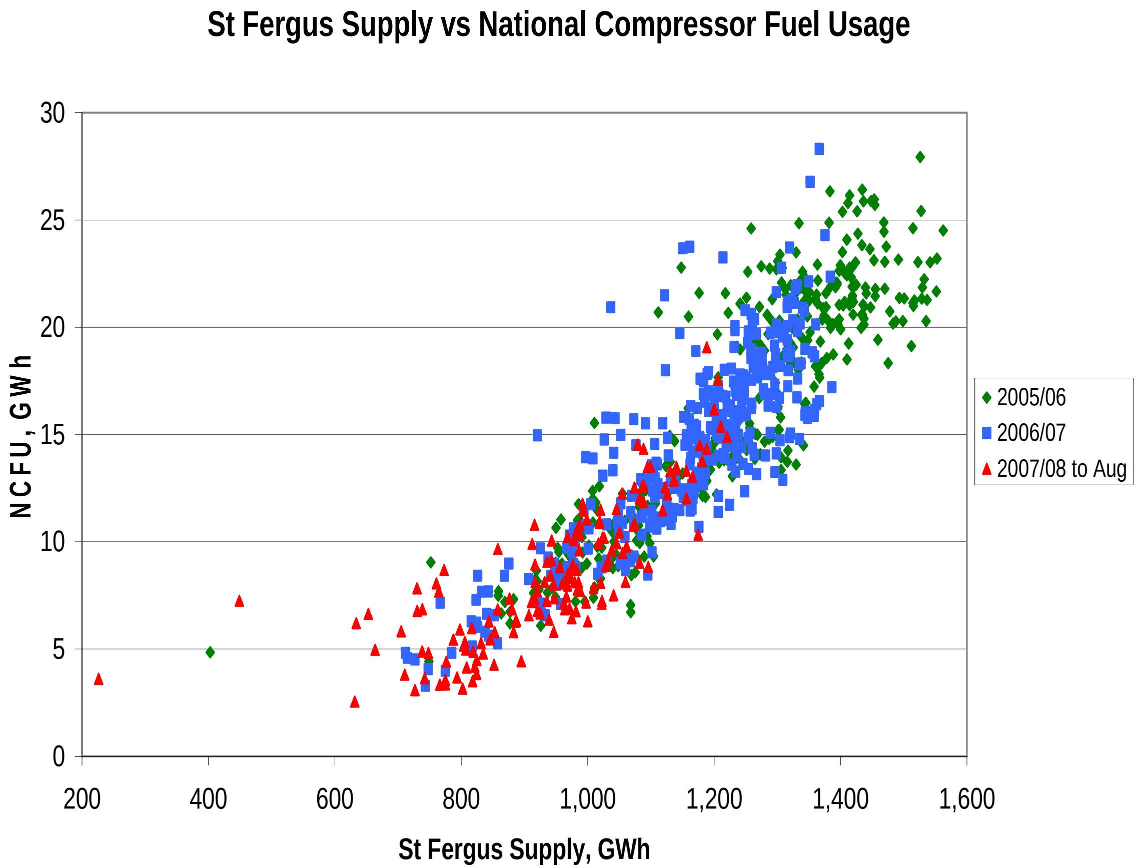
There is a well understood baseload of costs that are incurred each year

- Recent changes to incentivised costs driven by exogenous factors
- Is it be possible to forecast baseload costs over the longer term?
- Consultation response: if there is a baseload of costs, should they be incentivised at all?
- Under an enduring scheme, could these costs be brought down through efficiency gains?



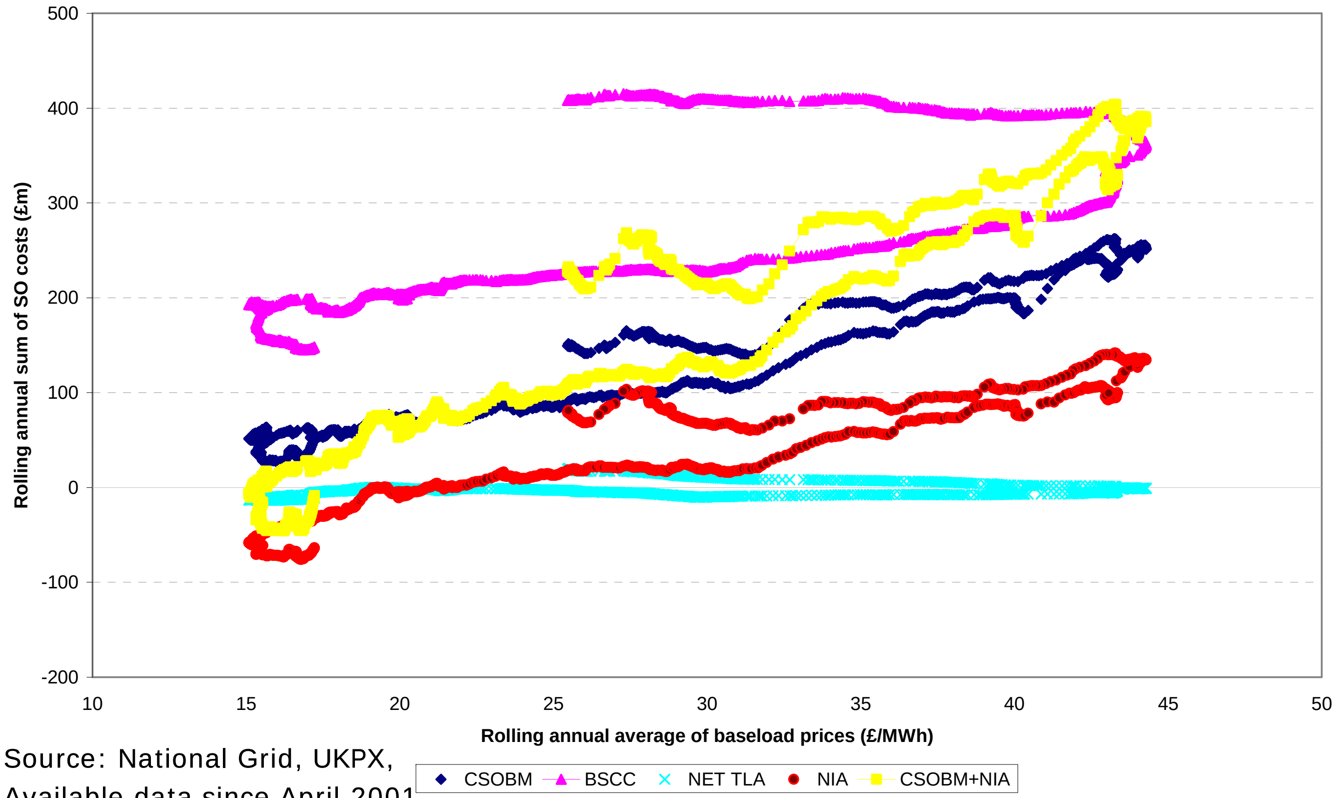
Where there are costs outside Grid's control these could be linked to cost drivers

- **For example, the correlation between own use gas (OUG) and St Fergus flows is strong**
- **However, shippers' flows at St Fergus are not within Grid's control**
- **But, OUG costs can be managed indirectly**
  - Management of network
  - Efficient procurement
- **2007/08 scheme introduced an explicit link between own use gas and flows at St Fergus**
- **OUG volume target derived ex-post using this link**
- **Scope for windfall gains/losses reduced**
- **Incentive to decrease volumes of OUG still in place**



Source: National Grid Gas

SO costs driven significantly by wholesale prices



Source: National Grid, UKPX,
Available data since April 2001

- **To what extent could wholesale price indexation be factored in?**

Options to deal with significant unknowns

- **Could an enduring scheme be developed to take into account the significant unknowns?**
  - 3rd package, cash out, network reforms, etc
- **Three options to deal with significant unknowns:**
  - Use IAEs – ex-post recovery of additional unforseen costs incurred mid-scheme
  - Use re-openers – forward looking adjustments to scheme options as they arise
  - Ignore them – Grid could be left neutral to such exogenous factors over a longer period (ie factors increasing costs cancel out factors decreasing costs)
- **Consultation responses: customers' concerns with IAEs:**
  - Can IAEs be rebalanced so that they become an option for customers
  - If this is an information problem, what additional information would be required?

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