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How can we encourage networks to efficiently facilitate delivery of a sustainable energy sector?
Some Thoughts

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2 July 2009

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Some starting economic principles

- Not about investment *or* networks per se.
- It *is* about the provision of energy services.
- Incentives work but targets which are incentivised must not conflict or undermine non-incentivised but desirable activity.
- We must find an institutional arrangement appropriate for the UK (not necessarily import one wholesale from somewhere else).
- Thus principles of least cost per quality adjusted unit and competition where appropriate are relevant.

How do we deliver security of supply and environmental targets while providing value for money?

- Security of supply:
  - Identify market failure(s) clearly
  - Use output incentives not input incentives
- Environmental targets:
  - Need to think seriously about prioritisation of ‘targets’ rather than actions
  - CO_2>>>Renewables>[Energy Efficiency]
  - Apply incentives to parties to achieve ‘targets’

Do we need a new definition of efficiency when considering network behaviour?

- Yes, but old tools may be appropriate.
- We need to move to a more holistic definition of the ‘output’ of the energy sector (Yu et al., 2009).
- We should reward provision of ‘security’ where it has added value.
- We should reward the achievement of government climate targets and align incentives with these. May require interaction with CCC. Joined up government!
- For example, reward on efficiency of process of ensuring connection of renewable and distributed generation.

Is the five-year framework a help or a hindrance in an uncertain world?

- Difficult to avoid a significant multi-year review.
- Now has consistency with CCC budgets.
- Possibly Transmission Price Control Review needs to be moved (CCC: 2013-17, TPCR 2012-17)
- However need some flexibility in pathway to 2050, otherwise a substantial benefit of timetable is lost.

- Therefore need a streamlined process for approving new investments as capacity requires it between periods.

How do we assess and reward network performance?

- Distinguish new and replacement investment.
- Replacement investment can be rewarded via *menu regulation* regime.
- New investment needs to a process for decision *and* a method of ensuring least cost.
- *Constructive engagement* process with *auctions* would seem to be a way forward.

Are there lessons from other sectors?

- Telecoms (see Pollitt, 2009, EPRG WP 0914):
  - Unbundled access in distribution networks
  - More competition in energy services
  - Utility convergence
- Railways (see ORR, 2008):
  - High level output specifications defined
  - Specified investments by government OK
- Airports (see Pollitt, 2008, Littlechild and Cornwall, 2009):
  - Constructive engagement process
  - Transmission – yes
  - Distribution – could be

- Is energy much different?
  - Key elements would seem to be in place, but careful application required.

References

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