

Substitutes & complements for  
traditional economic regulation of  
monopoly infrastructure

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Tenth ACCC Regulatory Conference  
Gold Coast, Qld 30-31 July 2009

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Outline

- Does utility regulation need reform?
- Ofgem's RPI-X@20 review
- Argentina: the public contest method
- US and Canada: negotiated settlements
- UK airport regulation: constructive engagement
- Australia and NZ: monitoring & light-handed regulation
- A way forward?

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Does utility regulation need reform?

- Privatisation, competition and regulation have often been controversial in the UK
- But generally quite successful in delivering greater efficiency and value for customers
- In particular, RPI-X network regulation is impressive, thorough and effective, But ...
- Increasingly complex & burdensome
  - Cf Prod Comm AER to reduce cost & complexity

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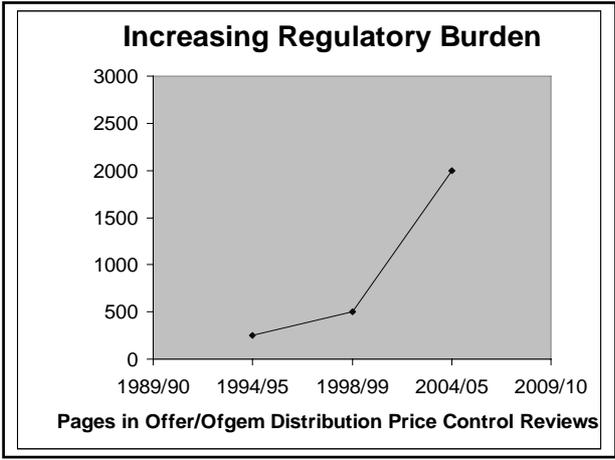
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- ### Some concerns
- Does it lead to efficient investment?
  - Customers give views, not take decisions
    - So regulators have to try to justify their decisions instead of customers deciding for themselves
    - Adverse effect on industry relationships
    - puts premium on media and political pressure
  - Tendency to regulatory uniformity
    - less tailoring to local needs
    - less innovation
    - less comparison
    - less learning from experience

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- ### Ofgem's RPI-X@20 review
- Ofgem is also examining regulatory approach
    - For example, in electricity distribution
  - Prices down
    - Distribution charges halved since 1990
    - Opex reduced 7.7% per annum 1992-2003
  - Quality up
    - 11% fewer power cuts 1990-2005
  - Interruptions 30% shorter
  - Investment up (figures per 5 year period)
    - £3.8 bn 1986-1990 pre-privatisation
    - £5.2 bn 1990-2004 post-privatisation (average early periods)
    - £7.4 bn 2004-2009 current period

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## Ofgem's evaluation (continued)

- Cost of capital down (partially less risky)
  - ~ 8.5% pretax WACC 1990
  - ~ 6% pretax WACC 2005
- Has accommodated changes in demand and supply on networks
  - 30 GW gas CCGTs replacing 24 GW coal & nuclear
- Ofgem supportive descriptions of RPI-X
  - "A trusty servant ... hugely successful"
  - "A faithful and sturdy workhorse in delivering efficiency and investment"

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## Then why review RPI-X?

- RPI-X has delivered well but now time to review
  - Complexity, financial issues and 20 year routine check-up
  - Suggestions by companies and academics
- Most important - the world is changing
  - Renewables, carbon reduction, nuclear, distributed energy, smart meters & grids
  - Networks efficient but risk-averse, reactive, not innovative
- Two main questions
- How to get innovation & efficient networks against backdrop of hugely uncertain future?
- How to engage consumers & users, improve company focus & improve legitimacy of process?

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## Some other approaches

- What other approaches more involve users?
- Argentina Public Contest method
- US negotiated settlements at FERC
- And as applied in Florida
- And at National Energy Board, Canada
- Constructive engagement as applied by CAA to UK airports
- Ofgem: apply to UK energy networks?

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## Public Contest method

- Argentina electricity privatisation 1992 – govt sceptical of companies and regulator
- Existing transmission grid RPI-X price cap
- New investment proposals had to be proposed, voted for and paid for by users
- Construction, operation, maintenance put out to competitive tender to determine cost

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## Experience

- Initial problem but generally worked well
- Bidding competitive
  - Generally won by new independent cos
  - Introduced innovative technologies
- Cost reductions over time
  - cost/km about halved
- Users did in fact work together
- PC method resisted political pressure
  - More economic outcomes than regulation

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## US energy regulation: FERC

- US federal energy regulators encouraged parties to settle
  - Initially to cope with backlog at Federal Power Commission
- 1994-2000: 41 gas pipeline cases, 34 settled in full, 5 in part, only 2 litigated
  - (Wang 2004)
- Different approach: look at situation as a whole
- This process led to innovative rate freezes and better efficiency incentives than regulation could
  - FERC could accept but not legally impose these

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## Consumer advocate in Florida

- Public Service Commission is regulator
- But consumer advocate (Public Counsel) has negotiated settlements with utilities
- Customers got rate reductions worth \$3bn
- Utilities got greater accounting flexibility
- And revenue-sharing price freezes (pro-efficiency) instead of rate of return control

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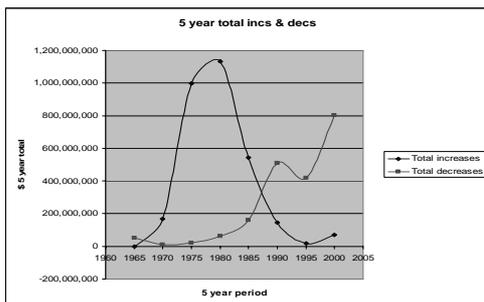


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## FPSC base rate cases




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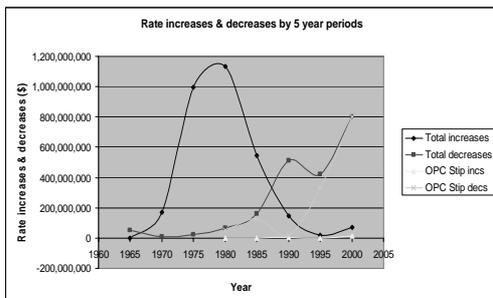


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## FPSC rate cases and OPC stipulations




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## National Energy Board Canada

Pipeline toll (tariff) hearings	Average annual number	Average duration (days)	Average hearing days/year
1985-1994	4.0	16.6	66.3
1995-2005	2.3	7.4	16.9

Toll hearing days one quarter of previous level  
 What caused this change?

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## Pipelines in Canada

- Before: National Energy Board long hearings
- Since 1997 almost all rate cases settled
  - Especially multi-year incentive systems
  - Also provision of info, quality of service provisions
  - Better info and customer relationships in industry
- National Energy Board policy
  - Encouraged settlements
  - Refrained from cherry-picking and giving directions
  - Set generic cost of capital to aid negotiation
- Policy: if process sound, accept outcome
  - Don't substitute own view of public interest

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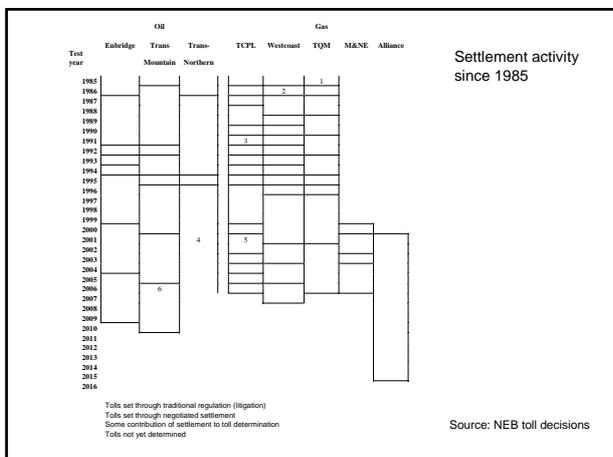
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## Emerging principles?

- Regulatory responsibility does not mean that the regulator has to take all the decisions
- Role of regulation is to facilitate market discovery process not replace it
- If regulator removes monopoly power, market participants can determine outcome
  - But regulatory responsibility to any parties not at table
- Parties are in fact willing & able to participate
  - Transactions cost not a problem in practice

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## Constructive engagement

- Civil Aviation Authority (CAA) had concerns about previous price control process
- Asked airlines & airports to try to agree
  - Quality of performance standards, traffic forecasts and investment programme
  - CAA retained responsibility for opex, cost of capital, financing and final price control
- Largely achieved at Heathrow & Gatwick
  - Plus improved relationships and understanding
  - Initially unsuccessful at Stansted

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## Constructive engagement cont'd

- Competition Commission critical of some aspects
  - Limited availability of information by BAA, capex growth during & after process, CAA should be arbiter
- But supported principle of constructive engagement
- Faced with Stansted, CC restarted constructive engagement process – capex agreement reached
  - With strict rules, & recognising delay to second terminal & runway
  - "airline customers generally in much better position than regulator to suggest needed development"
  - future airlines' & passengers' interests don't deviate from present
  - Made recommendations to improve process (more information by BAA, and CAA to appoint facilitator) – now implemented

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## Lessons from NZ?

- J Small in Network Issue 32, June 2009
- History of regulation has been problematic
- 1984-1999 Light-handed regulation
  - Ineffective at protecting customers
- 1999-2008 First attempts at regulation
  - More credible threat (thresholds) but often arbitrary
- 2009 The new model
  - Input methodologies systematic - but inflexible?
  - Negotiate/arbitrate – only for few users?
  - Default price quality paths – no role for customers
- Too soon to use as model for elsewhere

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## Lessons from Australia?

- Monitoring of airports in lieu of control
  - 2002 Productivity Commission recommendations
- 2006 Productivity Commission review
  - Benefits re investment, not excessive prices, but
  - market constraints not strong & lack of regulatory clarity
- 2007 policy continued & valuation principles set
  - Commercial negotiations encouraged
  - But Forsyth: light-handed cost-plus regln hence inefficiency?
- Will follow experience – will monitoring principles allow longer term contract market to develop?

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## Which approach best to explore?

- Will depend on circumstances
- Public contest method would require changes in UK law, & added complexity of voting
- NZ and Australian experience as yet limited
- Constructive engagement is consistent with UK law & develops existing regulatory practice
- CE offers benefits of negotiated settlements if
  - It reflects wishes of participants re scope for engagement
  - Parties consider total price of package
  - Doesn't unduly constrain form & discourage innovation

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## CE still has role for regulator

- Eg set timetable and process
- Enforce rules on information disclosure
- Specify constraints eg government policy
- Continue aspects of existing approach
  - opex assessment and comparative benchmarking?
  - set cost of capital?
- Satisfy itself on who represents customers
- Fallback process in event failure to agree

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## Who would take part?

- How to identify consumer groups?
  - Large users, public bodies, poverty lobby groups
- Are they interested and able to participate?
  - Some precedent in UK 1995 - Consumer committee supported company on capex, not Offer
- Consumer groups might need support?
  - Regulator could require networks to provide info
  - Consultancy advice charged to customers?
  - Or to companies via price control (eg Alberta, US)
- How to use consumer research evidence?
  - Which is increasingly used in present approach

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## Advantages of this process

- Regulation more responsive to users
  - More legitimacy – customers themselves decide
  - Better tailored to local conditions
  - Better local monitoring of 'capex contract'
  - Better relationship customers & companies
- Better resolution of future uncertainty
- More flexibility on price control settlements
- More innovation, more lessons learned

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## Conclusions

- RPI-X regulation generally successful in UK
- But concerns at limited role of customers
  - And Ofgem concern about meeting future uncertainty
- Other approaches involve customers more
- Constructive engagement seems worth exploring & extending in UK (energy, water)
- Benefits in terms of customer preferences, legitimacy, innovation & meeting uncertainty

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