Electricity Privatisation and Restructuring in Ontario and Abroad:

Lessons from the UK and elsewhere

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Why Privatise?

- ▶ 1980s Thatcher Gov't privatisation agenda: Why?
 - Controversial Selling family silver? Just for proceeds?
- There Is No Alternative economic survival
 - British Telecoms customer service & innovation
 - Water sector funding for massive investments (quality stds)
 - Coal & steel stem losses, reduce costs for rest of UK industry
 - Electricity seemed well run, not loss-making, so why?
- ▶ 1988 White Paper on Electricity privatisation
 - "Decisions should be driven by needs of customers" Hmm
 - Restructuring monopoly to enable competition more efficient
 - Regulation: to promote competition and protect customers
- Lesson 1: Efficiency central reason to privatise

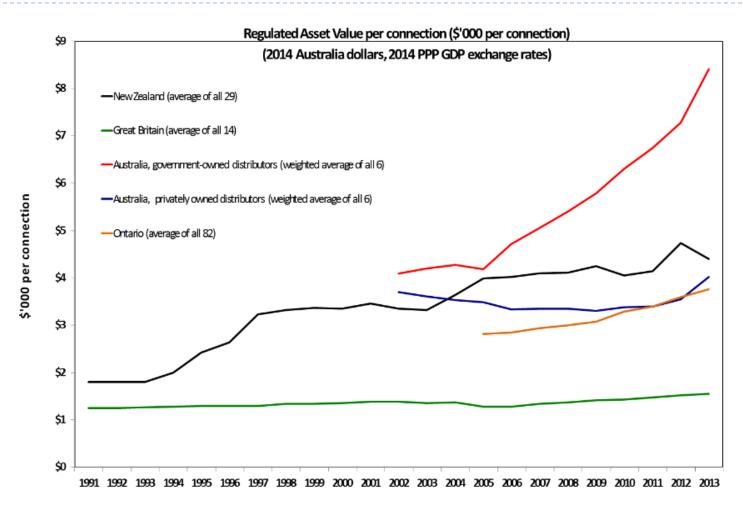


Does Ownership Matter?

- Yes, for competition (in generation & later retail)
- Ownership affects incentives (efficient monopoly)
 - Incentive regulation only works if co's respond
 - Example 1 Contrast energy & water networks v Royal Mail
- Gov't ownership compromises regulation
 - Ex 2 Guernsey, N Ireland lack of due process, appeal to Gov
- Private cos more innovative & flexible
 - Example 3 National Grid Co (later)
- Do majority/minority holdings ever work?
 - Best of both worlds? Or worst of both?
 - Partial ownership seen as risk only temporary in UK
- Lesson 2: Regulation of govt co's is less effective



Ownership & Regulation: Examples



Source: Bruce Mountain



Regulation

- ▶ Key Q: How to reassure customers & investors?
- ▶ 1983 Privatisation British Telecom: RPI-X
 - ▶ This means tangible benefits for customers & investors
 - But what about the future? Is asset expropriation a risk?
- Regulation independent of government
 - Duty to promote competition & protect customers
- Company obligations (eg price control) in licence and licence changes only by agreement with Co
 - Regulator can refer to Competition Commission fresh review
- This has worked privatisation forced a regulatory system that protects both customers & investors
 - Too cosy regulation? Too few appeals? Some recent changes
- Lesson 3: Privatisation has forced form of regulation to protect both customers & investors



Creating Competition

- Privatisation is an opportunity to restructure
- UK initial plan duopoly Big G 70%, Little G 30%
 - ▶ Distorted aim to hide nuclear (15%) in Big G flotation
 - ▶ At last minute nuclear pulled, so 55%, 30%, 15% shares
- New entry (Dash for Gas) but still market power
 - Increasing regulatory & public concern about 'duopoly'
- Forcing private co's to divest plant is not easy
 - Mixture of carrots and sticks eg allow vertical integration
- Better to restructure at privatisation
 - Eg Argentina, Victoria (Australia)
- Lesson 4: Restructure while you have the chance



Is Transmission Boring?

- National Grid Company (NGC)
 - Initially owned by 12 dist co's, later floated as separate company
- NGC then bought national gas trans & dist networks
 - NGC more efficient? But concern about single owner Elec & Gas
 - Required to sell off some regional gas distribution networks
 - ▶ Enabled comparative regulation NGC now selling those it kept
- ▶ Plan: New trans invs (>£100m) put out to tender
- NGC has invested in US & interconnectors to UK
- Conflict: separate trans operator & system operator?
- Lesson 5: Trans co's too can be major players in fast changing world, but need flexibility & control (private)



Distribution & Retail Companies

- What to do with 12+2 local dist/retail companies?
 - Merge to 1 strong rival? No, keep many decision-makers
- Separate distribution & retail supply businesses
 - Specialisation: engineering (distribution) v markets (retail)
 - Importance of a capital market with going price
- Incentive regulation uses comparative competition
- Led to numerous takeovers & mergers
 - Ownership evolved, as in other markets. Scale econs? Some. Now 4
 Distcos (with 3-4 networks each) & Big 6 Retail suppliers
- Same in successful markets Victoria, NZ, Texas
- Lesson 6: Let market determine industry structure



Overall Impact of Privatisation

- Distco's: National Audit Office Pipes & Wires 2002
 - Price cap regulation of networks has delivered substantial benefits
 strong incentives to increase efficiency
 - Opex cuts 25% 1994/5-1997/8, Transco 50% (controllable) 1990+
 - Other benefits including improved reliability
- Generation/transmission: Cost-Benefit Analyses
 - ▶ 1997 study: £4 £10 bn NPV, all to investors
 - 2004 study (later, with alternative counterfactual):
 £23bn NPV, half to customers
- Evidence of manpower reductions across sector
- Lesson 7: privatisation can be good for customers & investors



UK Energy Price Control Reviews

(RPI-X@20: Energy Regulator's Review of Network Regulation 2008)

Achievements

Efficiency, 30% lower network prices, 30% greater reliability, more investment, rewards shareholders

Weaknesses

- Reviews are time-consuming, costly, complex
- Innovation good but narrow (opex efficiency, finance)
- Not good in network design, operation & pricing latter will be more important in future (low carbon techs)
- No incentive for good business plans: same process
- Companies focus on regulator instead of customers
- Lesson 8: Regulation may need refreshing



New Regulatory Approach

- Need innovative, flexible networks to work with & respond to customers
- More incentives, more innovation
 - Eg Funding competitions for innovations
- Focus on Outputs not Inputs
 - Eg capacity & reliability not expenses & investment
 - Focus on Totex not on Opex & Capex separately
- Fast-track price control review for well-evidenced business plans with good customer engagement:
 - Complete in 6 mos instead of 18 mos
- Lesson 9: Regulation can evolve significantly. And there are precedents for this in North America



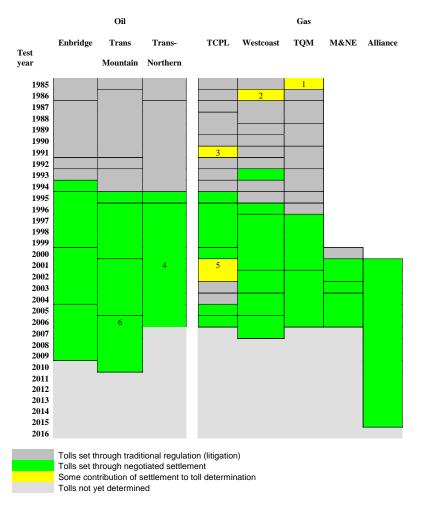
Negotiated Settlements in North America

- US Negotiated Settlements
 - ▶ To reduce time, cost, risk, parties agree proposal to regulator
 - ▶ Florida 1990s: Public Counsel & el cos agreed \$4bn cuts
 - ▶ FERC 2000s leads discussions, parties often settle in 6 mos
- National Energy Board (NEB) Canada
 - NEB set cost of capital formula to avoid long hearings
 - Since 1997 almost all rate cases settled
 - Introduced multi-year incentive systems
 - Also provision of info, quality of service provisions
 - Better information & customer relationships in industry
- NEB Policy: If process sound, accept outcome
 - Don't substitute own view of public interest
- Ontario, Australia & Germany: Used settlements
- Lesson 10: Regulation can work by "holding the ring" and allowing parties to negotiate



NEB Canada Settlement Activity Since 1985

(as of 2006)



Source: NEB toll decisions



First UK "Constructive Engagement"

- UK price control reviews more complex than NAm
 - Not test year actual costs assess 5 yr opex & capex plans
- ▶ 2005 CAA (airport regulator) changed approach
 - ▶ 2003 review confrontational CAA had to take all decisions
 - Airport & its airlines to try to agree traffic forecasts, quality of performance standards and future investment programme
 - CAA set opex, cost of capital, financing and final price control
- By 2007 aims largely achieved (at 2 airports)
 - Plus improved relationships and understanding
 - ▶ 2009 onwards, continued use, with CAA giving more structure to negotiating process, learning how best to facilitate
- Lesson 11: Regulation can be adjusted to enable informed customers to play a greater role



Latest UK Customer Engagement

- Can process work with 2m residential customers?
- Energy &water regulators offered fast-track reviews
 - Co's & customer representatives keen, engaged strongly, business plans much revised & customers supported them
- But regulators fast-tracked only 1 co each sector
 - Other companies offered insufficient cost reductions Failure?
- Contrast Customer Forum in Scotland
 - Created by Scottish water regulator, WaterCo & Customer Body
 - Invited to negotiate business plan subject to regulatory guidance achieved – formed basis of price control – Success
- Lesson 12: Again, regulators may achieve more by guidance rather than taking all decisions



UK Government & Regulation

- ▶ 1989 Privatisation: Gov't energy policy = No policy
 - Gov't & regulator duty: promote competition & protect customers
- ▶ 1997-2008 Gov't slightly modified regulatory duties
 - Promote competition "wherever appropriate"
 - Gov't can issue guidance on social/environmental policies
 - Duty to contribute to achieving sustainable development
- ▶ 2008 2010 Govt further modified duties
 - Interests of customers include lower greenhouse gas emissions
 - Before promoting competition, consider other ways of regulation
 - Supported Ofgem intervention in retail market (re "unfair prices")
- 2013 Gov't Strategy & Policy statement
 - New Ofgem duty to further delivery of this Gov't policy
 - Explain how, whether succeeded & if fail how remedy
- Lesson 13: Govt's will find ways to use regulation, but regulation probably not main means of action



UK Government Energy Policy

- ▶ 2008 Complete rewrite of Gov't energy policy
 - "important decisions cannot be left to the market"
- 2010 Energy Market Reform policy
 - Targets for renewable energy
 - Contracts for low-carbon energy
 - Contract for nuclear generation (at twice market price)
 - Capacity mechanism
- 2015 What is present energy policy?
 - Cuts to some subsidies but support nuclear & offshore wind
- Increased risk, is unsubsidised investment viable?
- Lesson 14: Gov't cannot be controlled & will change policy. But privatisation means it has to act explicitly, so Parliament can hold it to account.



Lessons for Other Jurisdictions

- Privatisation has many potential efficiency benefits important beginning, but not the end of the story
- Chance to restructure for competition & comparison
- Competition is possible in generation & retail supply
- Also need to find efficient transmission & distribution
 - So allow market to continue to evolve with takeovers
- Initially aim at payoff from improving efficiency but increasingly focus on finding what customers want
- Design regulatory role to protect customers & investors but also flexible, innovative, responsive
- Accept that political concerns will have an impact
- But intervention worse in absence of privatisation

