Integrating and liberalizing the market for services

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Building a more dynamic Europe IESE Conference, Barcelona 27/11/01

www.econ.cam.ac.uk/dae/research/regulate.htm

Create a single market in services

- in financial services, energy, telecoms, transport
- liberalise network utilities
 - competition to increase efficiency
 - to grant access across borders
 - to admit private finance for investment
- while ensuring efficient network regulation

Reforming network utilities

- Regulation
- Restructuring
- Risk management
- Ensuring effective sustainable competition

Main regulatory problems

- no national regulatory authority (NRA)
 - Germany for gas, electricity
- NRA not sufficiently independent
 - problematic where state is also owner (France)
- powers may be inadequate
 - licence conditions useful but often lacking

Other regulatory concerns

- credibility
 - Railtrack example salutory
- predictability
 - about future environmental policies
- ⇒ agree sensible environmental policy
 - energy diversity hinders progress (nuclear in FR, gas in NL, hydro in SW, coal in UK, DE)

Restructuring

- logically unbundle with separate owners
- lose synergies of vertical integration
- gain bias against entry
- gain efficiency of competitive pressure

⇒what is the optimal structure?

Desirable network structures

- electricity: legal separation
- gas: separate on-shore transmission
- telecoms: is it a natural monopoly?
 - Facilities-based competition or LLU?
 - Does call termination require regulation?
- Rail: separate trains from infrastructure?
- Water: retain vertical structure?

Unbundling, risk and contracts

- unbundling creates intermediate markets
- price risks here can be large
- deregulation permits price volatility
- ⇒contracts to hedge risk
- also against regulatory opportunism
- liberalisation shortens contract length
- will these contracts sustain investment?

Sustaining efficient competition

- acceptable to voting consumers
- ⇒ avoid sudden large price rises
- avoid market dominance
- regulate for efficient free entry and investment
- adequate ex ante competition powers

These challenges remain in EU

Reforming Gas

- Opportunity cost of gas in situ unclear
- Long-term contracts obscure values
 - pipeline access limits competition
 - results in discriminatory prices
 - gas prices in UK halved with competition

Large gains from competition

⇒ liberalise to create gas-on-gas competition



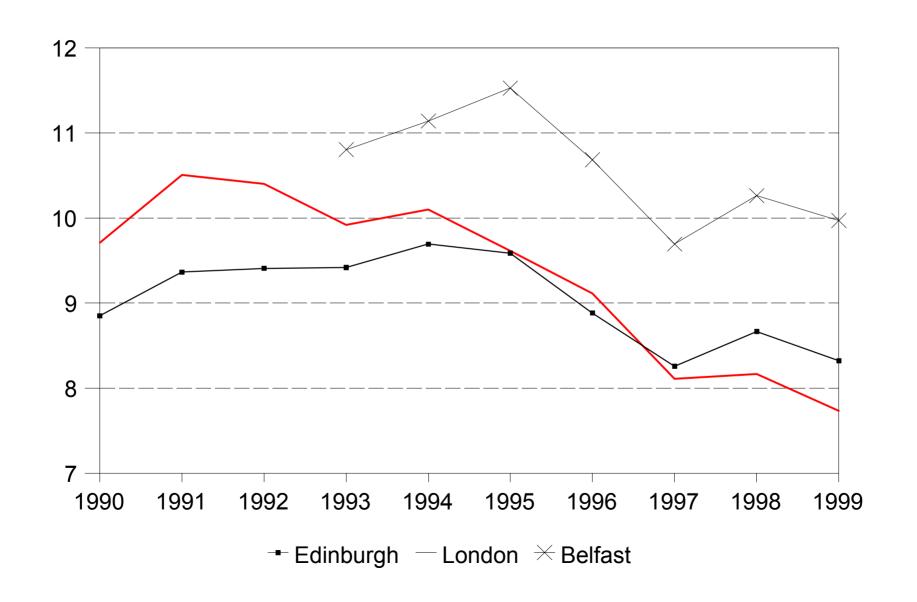


A Single European Electricity Market?

- •authorisation preferable to tendering
- •access is key to creating single market

 —press for rTPA
- •require ownership separation of G & T/D
- strong sector-specific regulation needed

Electricity prices by town 3,300 kWh at 2000 prices excl VAT



Proposed New Directive

- for electricity and gas
- only rTPA, tariffs published ex ante
- sector-specific regulator
- legal (but not ownership) unbundling G&T
- no SBM, no tendering (except reserve)
- 1.1.2005 all gas + elec markets fully open

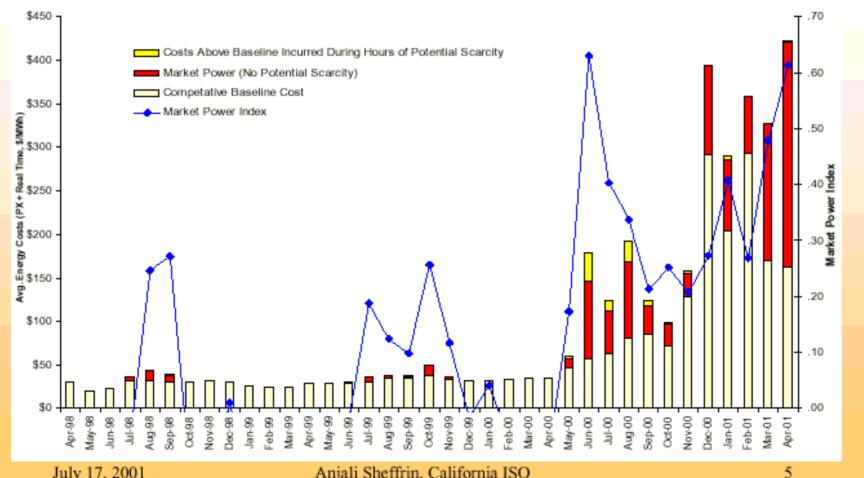
Stockholm, March 2001

- CEC claims reforms will avoid California problems caused by "inadequate legal framework and .. capacity"
- France opposes new Directive: not convinced of liberalisation
- Germany opposes need for regulator
 - also has nTPA and vertical integration

CALIFORNIA ISO What Explains the High Prices?

California Independent System Operator

Prices above competitive levels were due to both higher production cost and higher mark-up from market power



Causes of the Californian debacle

- Under-investment + cheap hydro from NW
- high demand growth in WSCC
- Huge swing in hydro supply (=12 nukes)
- Regulatory disapproval of contracts
- Price caps imposed with perverse effects
- High Western prices ⇒ bankruptcy

Preconditions for ESI liberalisation

- rTPA + ownership unbundling: CEC ✓
- adequate and secure supply: CEC
 - network adequate and reliable
 - production capacity adequate
 - security of supply of primary fuel
- power to regulate competition: CEC ×

Competition policy for utilities

"competition where possible, regulate where not"

- Leave markets to competition legislation?
 - -Ex post, penalties \Rightarrow legalistic, slow
 - dominance ~ 40+% of market
 - information collected only for case
- ⇒ need *ex ante* regulatory powers
- UK licences as useful model

Mitigating market power in US

- Federal Power Act 1935 requires prices that are 'just and reasonable'
- Selling at market-related prices requires:
 - utility and affiliates do not have market power
 - competitive prices are just and reasonable
 - can withdraw right if there is market power
 - can re-impose cost-based prices caps

Contrast with Europe

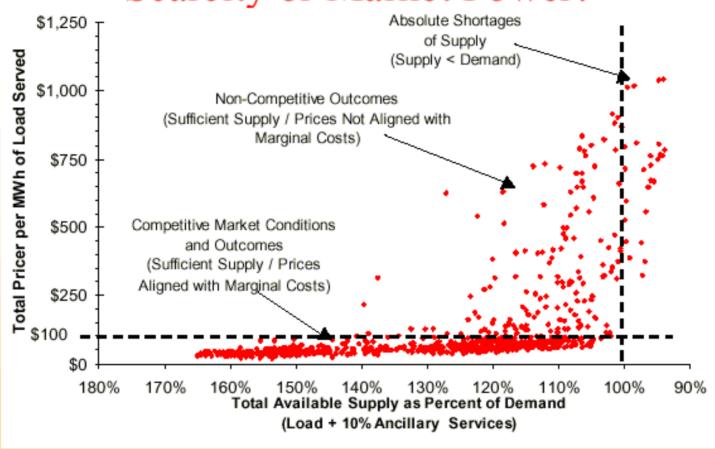
- no prior legislated cost-based regulation
- no concept of 'just and reasonable' prices
- little power to control wholesale prices
- often limited power to get information
- ⇒ weak market surveillance
- competitive tests derive from other markets

Competition problems in EU ESI

- dominant incumbents (Fr, Be, It)
- merger wave (EdF, E-on, RWE)
- inadequate interconnect transmission
- illiquid or absent wholesale markets
- under-staffed or no regulator
- access to information patchy
- lack of regulatory enforcement power



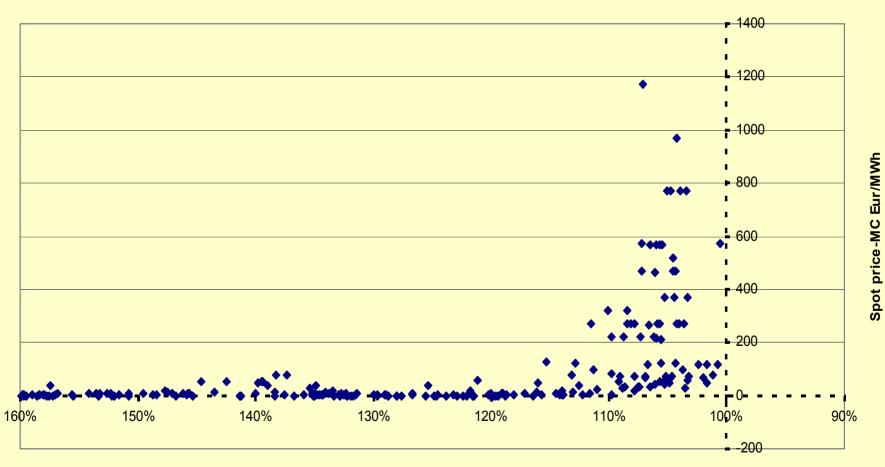
Scarcity or Market Power?



^{*} Source: Report on California Energy Market Issues and Performance: May-June, 2000, Prepared by the Department of Market Analysis, August 10, 2000

Electricity prices in Europe

Price mark-up vs availability



Total available supply as % of demand (Load+10% ancillary services)

Possible scenarios - 1

- lack of markets + domestic franchise ⇒ contracts necessary
 - reduces short-run market power, hedges spikes
 - yardstick regulation of PPAs countervails
- incumbents + opaque markets deter entry
- ⇒ horizontal, vertical integration ⇒ old German-style equilibrium: safe but costly?

Possible scenarios - 2

- new Directive ends franchise
- ⇒ generators integrate into supply
- remove counterparties to entry contracts
- ⇒ reduce spare capacity
- limited interconnection ⇒ market power in national markets
- ESI now 400 bn euros, high prices costly

Solutions

- increase interconnect capacity rapidly
 - 'excess' T is public good
 - dilutes market power in short run
- ⇒ long run EU-wide shortages?
- Need credible counter-party for investment
 - Generation capacity is public good
- ⇒ keep domestic franchise?

Conclusions

- Challenge: create effective competition
- Market structure changes hard to reverse
- ⇒ Be cautious of mergers
- Need pro-competitive regulators
- CEC should help, not hinder

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