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# The Status of “Competition” Policy in Electricity Markets

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# Expectations for a Competitive Electricity (or Any Other) Market

- Consumers and firms respond to market signals
  - Short run – consumption and production decisions based on prices that equilibrate to eliminate excess demand
  - Long run – investment decisions by producers and consumers driven by expected profits (or expected savings) based on prices that reflect market conditions
- Lower prices (cost minimization)
  - Other deregulated industries, e.g., airlines and trucking, had unambiguous price reductions
- Innovation in electricity markets in response to market forces

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# Questions

- Do the electricity markets we observe bear any semblance to competitive markets?
- Are we simply replacing one form of regulation for another?
- Is this contributing to confusion in the discussion of “competition” policy?
- What are some implications for antitrust?

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# “Competition” Model for Electricity

- Principal purpose: to obtain benefits of competition in generation; secondarily, to obtain benefits of competition in customer services
- Principal method: separation of competitive from monopolistic sectors
  - Competitive sectors: generation and customer service
  - Monopolies: wires – transmission and distribution
- Retail choice

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# Retail Competition

- Little retail switching activity
- Joskow – finds price reduction using “admittedly crude empirical analysis”
- Blumsack, Apt and Lave (CMU) – find no measurable evidence of any benefit to consumers
  - Price declines, where they have occurred, result of state mandates

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# Retail Competition

- Demand side of market is not well developed
  - Limited ability of consumers to respond to market signals in short or long run
  - Consumers unable to respond to price changes, because prices not flexible
- Without flexible prices, no incentive to adopt “smart” technologies
- Exacerbates problems of market power, reliability, inadequate investment

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# Wholesale Competition

- Open-access requirements (Order 888)
- Some divestiture of generation
- Regional Transmission Operators (RTOs) to operationally separate generation from transmission
  - System operation and dispatch/spot energy markets/other functions
- Standard Market Design (SMD)

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# Generation

- Supposed to be competitive part of the industry
  - Widespread concerns about market power
  - If market power is a pervasive problem, what's the point?
- Legacy regulatory regime – over-investment
- New regime – under-investment
  - Prices too low to cover costs of new capacity – even when supplies are tight (Joskow)
  - Stringent market monitoring (notwithstanding concerns about investment incentives)
    - Price caps, refunds, fines etc.
    - Scrutiny of market-based rates
    - “highly administered markets in which competitive prices prevail by decree, rather than through competition” (CMU)
- Reliance on extra-market mechanisms for investment decisions
  - Resource adequacy (capacity) requirements – shifts risk back to consumers

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# Transmission

- Critical to success of “competition”
- Vertical deintegration by creation of RTOs
- RTOs: non-owner entities that manage large transmission grids
  - Independent from generation – response to discrimination
  - Independent from transmission owners – incentive issues
    - Nobody ever washed a rental car (attributed to Larry Summers)
  - Quasi-regulatory agencies

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# Transmission

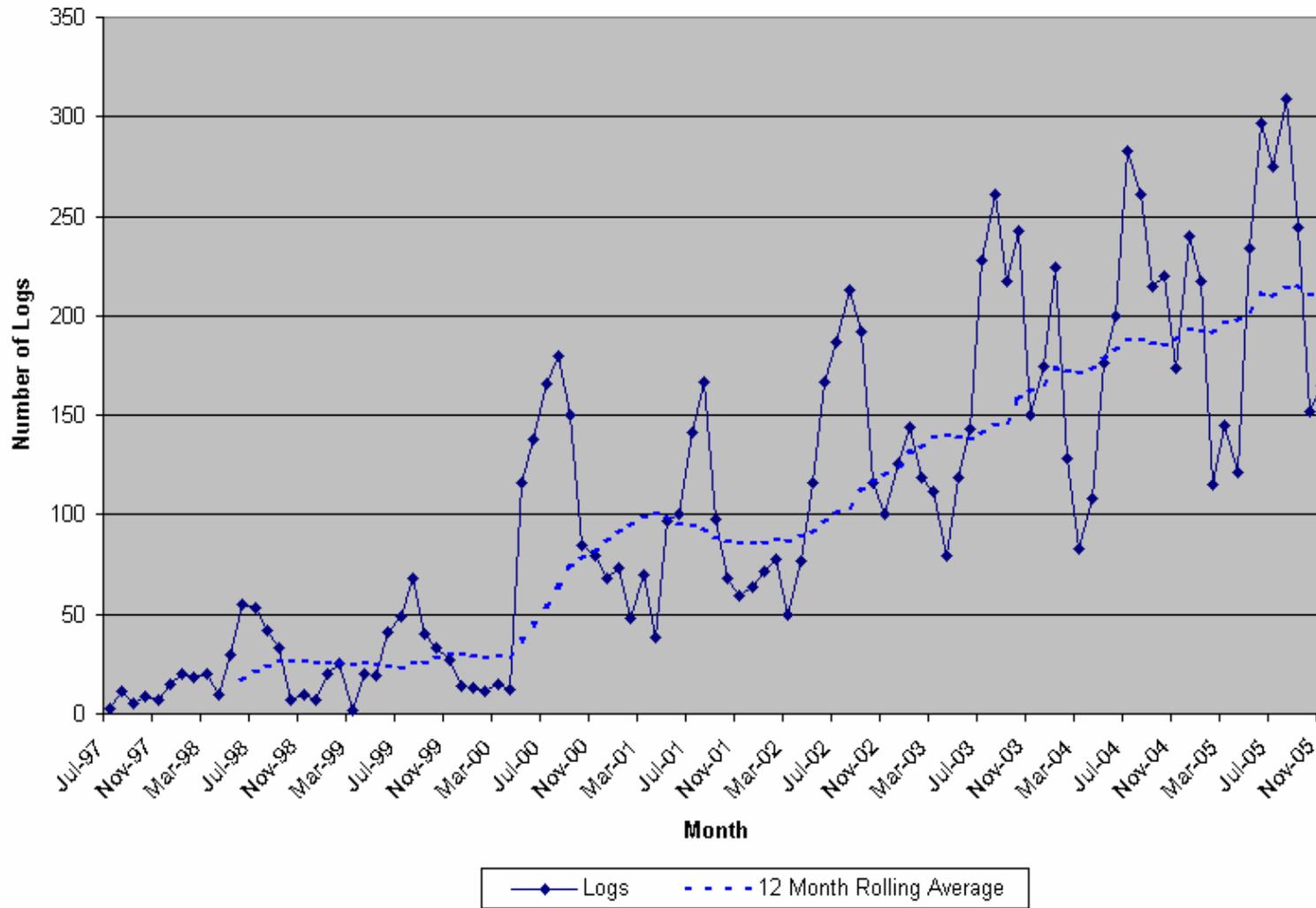
- Disapproval of Transco model
- SMD highly prescriptive approach
- No opportunity for innovation in market design
- Incentive pricing?

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# Transmission Pricing

- Multiple goals
  - Efficiently allocate available capacity and eliminate congestion
  - Provide incentives for investment
  - Cover embedded costs
- Locational Marginal Pricing (LMP)
  - Adopted by RTOs
  - Appears to achieve none of goals
- Growth in TLRs (administrative rationing of scarce capacity) indicates LMPs failing at primary goal of equilibrating local transmission markets

## Total Number of TLR logs Reported by Month



Source: NERC

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# Transmission Investment

- Nodal pricing hasn't produced investment incentives
- Increasing congestion
- Lagging investment
- Reliance on extra-market mechanisms for investment decisions
  - regional planning by RTOs supplemented by regional state committees

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# Energy Policy Act of 2005

- Institutionalizes status quo
- Contains new regulatory authorities
  - Expanded merger authority under “public interest” standard – not consistent with move to competition
  - Expanded reliability regulation – no market emerging
  - Market transparency rules – potentially anti-competitive
  - Market manipulation rules – at best, difficult to define

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# Evaluating the New Regime

- Whatever it is, it doesn't look a lot like competition
- Misleading to compare legacy regulation with competition
- New regulatory regime – question is whether it is better than old one
- Need to evaluate new institutions (RTOs), their incentives and performance
- Need to evaluate effects of vertical deintegration

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# Vertical Deintegration

- Possible Benefits
  - Solution to discrimination problem
  - More competitive generation markets
- Possible Costs
  - Loss of economies of scope
  - Coordination problems
  - Loop-flow problems
  - Reliability

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# Antitrust Policy

- Recognize it takes place in a highly regulated environment
- How concerned should we be about market power when prices not high enough to induce needed investment?
- Be cognizant of effects on investment incentives

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# Summary

- Electricity markets do not have characteristics of competitive markets, to a significant extent because of method of “liberalization”
- Prices do not perform their normal functions in new regime
- Neither demand nor supply side of market working very well
- Investment in generation and transmission determined by extra-market processes