

# Electricity Governance: Markets, Experts or Politics?

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# Governance Choices

- Markets
  - Restructured, competitive supply by IOUs with purchase by Load-Serving Entities, rules and regulations by ISO, RTO, PUC, FERC, etc.
- Experts
  - Monopoly or competition with rate regulation and planning by utilities/PUC.
- Politics
  - Ontario (public ownership, direction);
  - Some provinces, other countries.

# Practical Choices

- In fact most jurisdictions rely on a combination of all three.
  - While electricity was historically a natural monopoly, recently we have recognized that markets can perform some functions well. Many places use markets some.
  - Electricity is complicated; bad decisions yield visible high costs or power failures. No successful operation without some expert input – engineers, economists.
  - Electricity prices are politically sensitive. Consumers and industry react. Most operators are subject to some political oversight.

# Where Has Ontario Been?

- For most of the 20<sup>th</sup> century, power supplied by HEPCO, Ontario Hydro, distributed by MEUs.
  - Public ownership, little market, varying expertise, much politics.
- 2002 Restructuring
  - Competitive supply; expert planning; regulation of distribution, transmission, some generation.
- 2014: more politics, less expertise, less market than in May, 2002.
  - Most power is now contracted to OPA.

# Why Did We Restructure?

- Macdonald ACCOES 1996:
  - “. . . vertically integrated monopoly structure . . . with Ontario Hydro as the dominant player . . . is no longer suited to moving Ontario forward.”
  - Competitive climate requires lower prices.
    - Ontario rates no longer as favourable vs. US rates.
  - Changing technology (e.g. CCGT) means generation is no longer a natural monopoly.
  - Customer demand for flexibility in services & products.
  - Environmental concerns.
- In short, we can't stand rising prices and the existing system can't fix them.

# Proposed Electricity System Goals

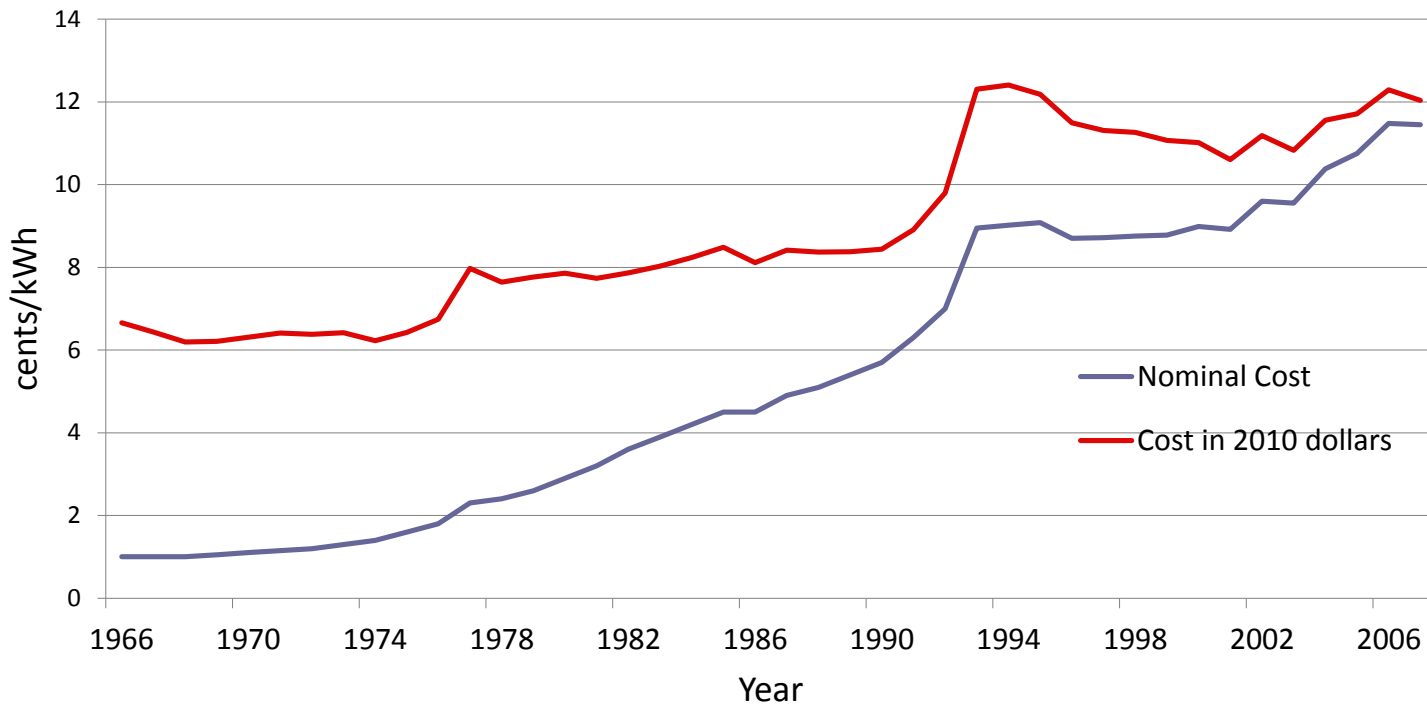
- Efficiency: power at least cost, innovation.
- Fairness: among customer classes, stakeholders.
- Reliability: high standards.
- Transparency: public understanding.
- Robustness: electrical, economic and political.
- Environmental: reflect environmental concerns in capital and operating decisions.

# Current Problems

## (Why talk about Governance?)

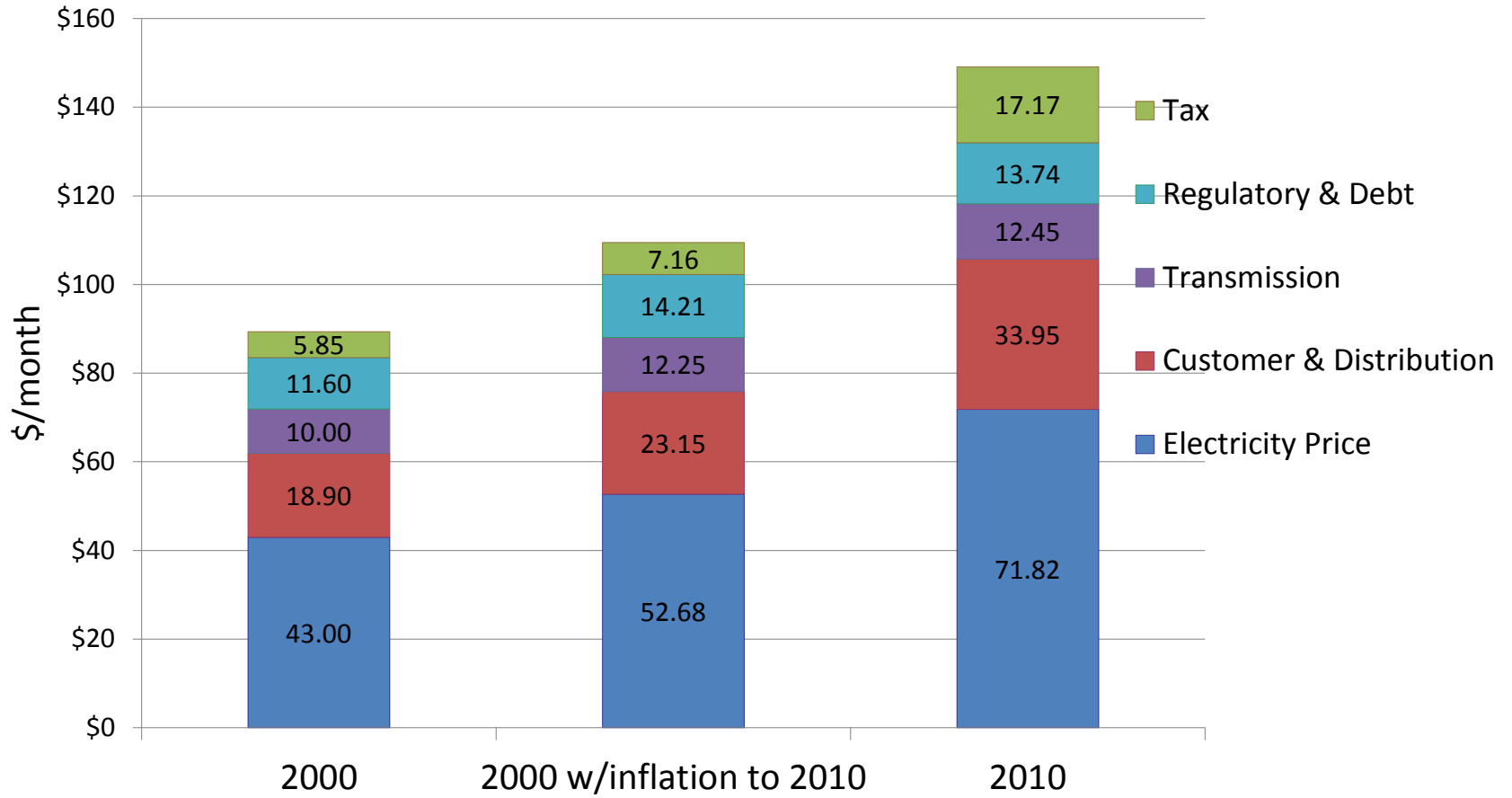
- Rising prices
  - Relentless rise in real cost and price over 50 years.
  - Real and relative rise recently and forecast to 2020.
- Prices do not reflect costs
  - Few users are exposed to the true short-run marginal cost, HOEP.
  - The GA allocation to large users over-prices peak load reduction.
- Apparent waste and mis-management
  - Gas plant cancellations.
  - High green power costs.
  - Increased ministerial control of planning
  - Reduced authority of the OEB to control costs.
- Complexity and lack of transparency.
  - How many understand OEFC, debt retirement, GA . . . ?
  - LTEPs fail to provide information for public to assess plans.
- We have neither market nor planned electricity sector.

# Figure 1 Long-term Ontario Average Residential Price





# Figure 2 Monthly Toronto Residential Cost Breakdown 2000, 2010



# 2013 LTEP Bill Forecast

- Figure 7, p. 18, 'Typical Residential Electricity Bill Forecast'
  - \$125 in 2013 rising to \$167 in 2016: 34% increase.
  - \$181 in 2020: 45% increase.
  - This is much faster than the rate of inflation.
- Text emphasis:
  - 2013 LTEP forecasts lower prices than 2010 LTEP.
  - Backing off on FIT program helps reduce prices.
- No **analysis** of the contributions of various sources to the cost increases.
- Nothing in the 2013 LTEP would help the public assess alternative growth paths, scenarios.
  - Figure 9, cost of options, not discussed in the text.

# Why Are Prices Rising?

- Government price cap relaxed 2004.
- Environmental commitment
  - Off-coal, on to renewables.
- High nuclear costs
  - Darlington, some retrofits.
- Excessive RESOP, GEA/FIT costs (after 2010)
  - Expensive green power: 80.2, 44.3, 54.9, 34.7 cents.
  - Costs for connection, surplus power, etc.
- Gas plant cancellations (future impact)
  - Feed into future price increases.

# System Planning

- OPA authorized to plan
  - OPA filed the IPSP with OEB in 2007
  - Minister ordered the OEB to stop reviewing IPSP.
  - Minister presented LTEP November, 2010 along with Supply Mix Directive.
  - Minister presented revised LTEP in 2013.
  - Ministerial planning not subject to OEB review.
- The planning process is largely political rather than technical.
  - Note the extensive self-congratulation and negligible comparative cost information in the LTEP 2010.

# Assessment

- The 2002 restructuring failed to create a truly competitive market and subsequent government intervention has made it less so.
  - Most new generation is contracted to OPA, not market-based.
  - Few users face true marginal costs.
- 2010 LTEP shows why government needs to be less involved in the electricity system.
- Our present system is not efficient, does not contain costs, pays too much attention to short-run politics, too little attention to long-run planning and efficiency.

# Where Should We Go?

- We need less Ministerial intervention.
- This requires less government ownership.
- So, we need further divestment of government ownership of generation, transmission, distribution so private involvement will tie government hands.
  - Consider ways to do this.
- Planning should be returned to the OPA with OEB review.

# Where Should We Go? (2)

- Ministerial directive powers should be reduced to setting general goals:
  - Relative importance of cost control, environmental protection, etc.
  - No input into choosing technologies or projects.
- Restore OEB mandate to focus on cost control subject to environmental concerns backed by benefit-cost analysis or at least cost-effectiveness analysis.
- Purchase power by a competitive process. OPA or LDCs with OEB review.

# Where Should We Go? (3)

- Reduce government involvement in appointing board members: OEB, OPA, etc.
- Consider A.J. Goulding CD Howe Commentary 389 recommendations: LDCs as LSEs and capacity market to guide investment.
- Electricity prices will continue increasing because of past mistakes so help consumers cope with conservation, demand response.
  - Add CPP or CPR and utility control to TOU.
  - Encourage information displays, smart controls.