Making Ontario’s Electricity Market Work

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Objectives of Electricity Restructuring

- Disappointment with outcomes can result from having unclear objectives
  - UK targeted and achieved reduced prices
  - Ontario prices were already too low - $25 billion Ontario Hydro debt
- Ontario restructuring objective was to remove investment risk from customers
  - A long-term objective that gets lost in the short time horizons of public politics
Ontario’s Original Failure to Deliver Restructuring Benefits

• original restructuring had the right end point
  - full wholesale and retail competition
  - maximize wholesale market liquidity through participation of aggregated retail loads
  - liquid market allows hedging of investment risk

• but had a flawed implementation plan
  - inadequate measures to prevent market domination by incumbent generator (OPG)
  - retail customers inadequately protected
    » no information to compare competitive supply offer with “do nothing”
    » “do nothing” (default) supply was spot market pass-through
    » complex “unbundled” bills reflected economic theory but not consumer attitudes

• consumer backlash translated into political intervention
  - retail prices frozen
  - apparent reversal of government policy created uncertainty which resulted in:
    » massive loss of liquidity in wholesale market
    » cessation of all investment
Ontario’s Second Restructuring – Focus on Implementation

• a parallel “administered pricing” system has been added to the existing competitive pricing system
  ▪ OPA is central to the administered pricing system

• objective is to manage the migration of risk away from consumers and toward investors
  ▪ avoids the need for a “leap of faith” that the “big bang” of market opening will result in adequate liquidity to assure investment while transferring risk

• as competitive market grows administered pricing will shrink and risk will be transferred
  ▪ OPA is a transitional organization with the objective of making this happen
OPA Core Functions

- **power system planning**
  - medium and long term planning for capital additions to generation and transmission

- **conservation bureau**
  - developing and implementing CDM programs

- **generation development**
  - facilitating investment in new generation and CDM projects

- **retail services**
  - smooth pricing based on real costs
Power System Planning

• responsible for medium and long term planning as basis for:
  ▪ procurement of generation and conservation projects by OPA
  ▪ construction of transmission by transmission system owners

• Government has reserved right to prescribe the mix of energy sources for generation and conservation targets
  ▪ early action under planning mandate will be undertaking some analysis to inform government decision on energy sources and conservation targets
Conservation Bureau

- development and delivery of conservation and demand management (CDM) programs
- OPA will be providing support to CDM initiatives in two ways
  - Conservation Bureau funding for pilot projects
    - to overcome “first-mover” hurdles for new technology
    - seed funding to move from concept to commercially free-standing
  - Generation Development support in parallel with new supply
Generation Development

• some $20-$30 billion new investment needed over the next 10-20 years
  ▪ OPA contracts with new generators to provide long-term pricing assurance
  ▪ allows developers to obtain financing – OPA a “creditworthy counterparty”

• support will be provided only to the extent necessary to make investment feasible
  ▪ generators will have to buy and sell in competitive market to make ends meet

• OPA creditworthiness derives from its authority to recover all costs paid to generators from customers
  ▪ Province is not obligated

• effectively, generation development role transfers risk away from investors and on to customers
  ▪ amount transferred will be just sufficient to achieve the desired investment
Retail Services

- acts as the shock absorber to recover full cost of power purchases through smooth retail rates
  - subsidizes rates during peaks, collects surcharge during valleys
  - retail rate based on forecast of prices
    » any balance due to forecasting error collected/rebated in subsequent period
- anticipate migrating away from pure financial smoothing toward conventional hedging through purchasing portfolio of longer-term purchases in wholesale electricity market
- migration is an important element to risk born by customers
Market Evolution and Risk Migration

• separate responsibility for supply of default customers from (90+) distributors and consolidate into 5 Load Serving Entity (LSE) licenses
• specify rate structure and auction off licenses for fixed term to lowest bidders
  ▪ bid prices become the rates
• licensees at risk for forecasting and volume
  ▪ no deferral account necessary
• licensees will hedge risk by contracting forward
  ▪ creates market for generators to sell forward into
  ▪ reduces support necessary from OPA
• similar to approach used in several US states and Alberta
• retail customers relieved of risk in two ways:
  ▪ elimination of deferral account removes forecasting and volume risk
  ▪ improved wholesale market liquidity reduces support payments to generators (which are recovered from customers as a market uplift charge)
Summary

• competitive restructuring must be implemented in a fashion that is acceptable to customers
  ▪ all customers – including low-volume residential and small commercial customers

• Ontario’s new hybrid structure is intended to migrate toward a competitive structure
  ▪ administered pricing channel to be managed to progressively enhance competitive pricing channel

• overall purpose is to ensure adequate new investment in infrastructure while transferring investment risk away from customers in a controlled way