Ontario Power Authority

Making Ontario's Electricity Market Work

presented by

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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**

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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**

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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**

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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**

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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**

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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

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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**
  - **<u>all</u> 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**

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