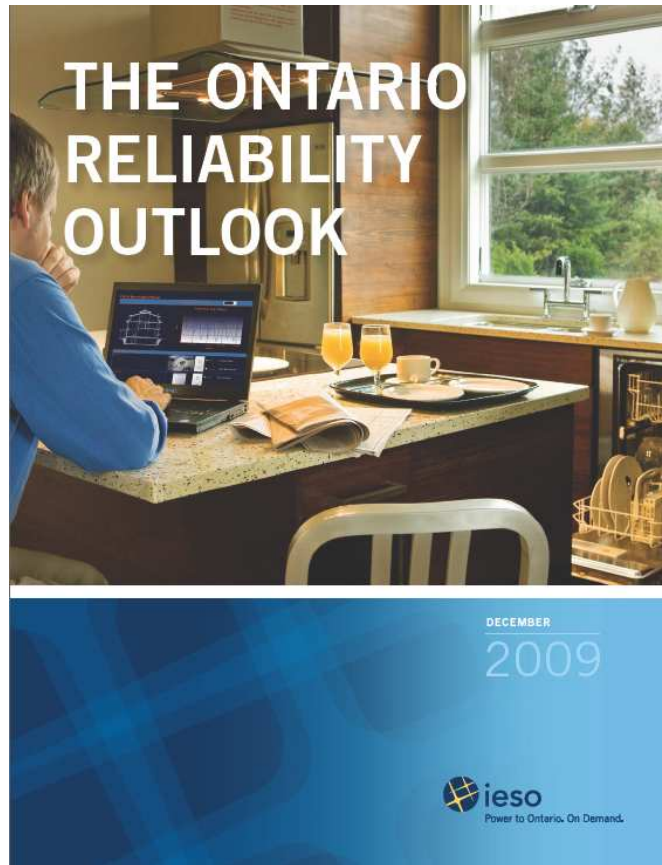


# Ontario Reliability Outlook Stakeholder Advisory Committee

January 20, 2010

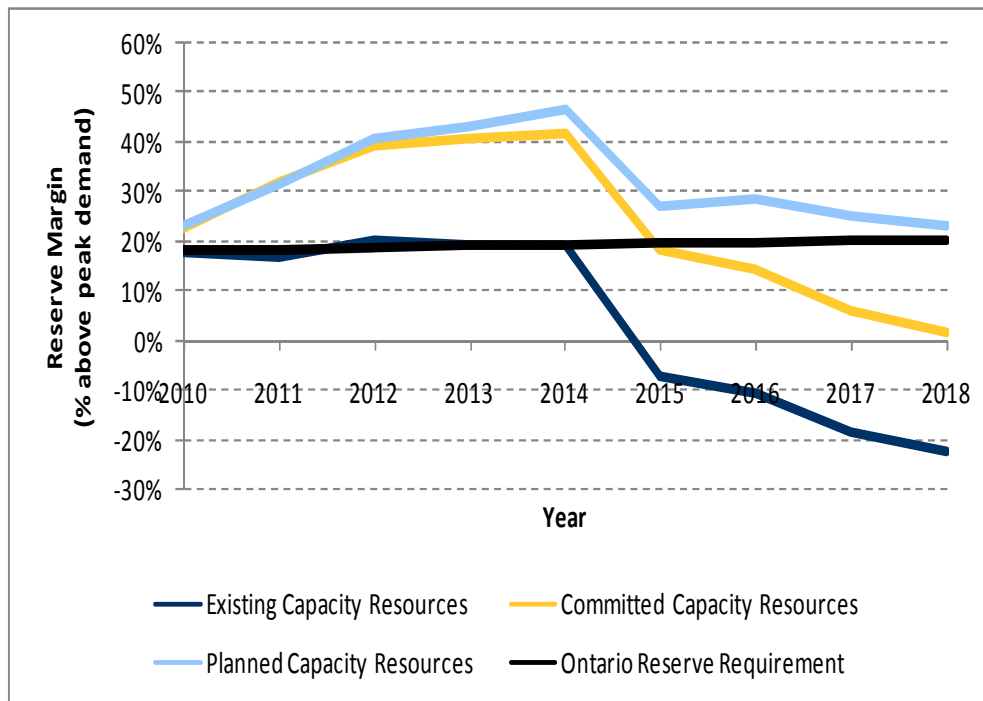




Ontario's electricity system is becoming more participatory, distributed and sustainable – challenging the industry to respond and innovate

Priority Areas:

- Resource Adequacy
- Integration
- Transmission
- Consumer Engagement



To 2014:

- Good gas performance
- GTA concerns addressed

Beyond:

- Nuclear aging
- Coal conversions

- Significant strides in adapting to new supply mix
  - 1,100 MW in wind at a 28 per cent capacity factor
  - 4,700 MW of new gas generation
  - Total GHG from coal and gas down 40 %
- Surplus Baseload Generation conditions likely to persist
- Over 8000 MW of FIT applications
- Need to maximize the flexibility of *all* resources



- Progress on regional concerns:
  - York Region, GTA, North/South, new Quebec intertie
- Critical to the growth of renewable generation and nuclear replacement
  - 2500 MW capacity currently available
  - 20 new transmission projects on the horizon
  - Nuclear decisions pending
- Timely and appropriate approval processes are needed



- Load control has the potential to provide added flexibility
- The stage is being set:
  - Half of provincial demand on hourly prices
  - Three million smart meters installed; time-of-use prices being rolling out
  - Technologies – smart appliances, home energy systems, PHEVS, coming on to the market
- More meaningful price signals are needed to increase responsiveness
- Engage and educate consumers to become more active in the way they use energy



- Enhanced forecasts
  - Centralized wind forecasting – and – solar forecasting
- Co-ordination with OPA Contracts: RESOP, NUG and FIT
- Visibility and co-ordination with LDCs
  - Create a common understanding of distribution and transmission system needs to effectively manage embedded generation
  - Establishing processes and communications – including telemetry and improved forecasts
- Flexibility through Energy Storage
- Leverage Inertias
  - Collaborate with neighbouring jurisdictions in managing variability