



Ensuring manufacturing continues to power Ontario's economy



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Agenda

- About Rodan Energy
- Power market overview
 - Market Design 3.0
 - Bill 135
- Ensuring manufacturing continues to power Ontario's economy
 - Reducing and managing total energy spend
 - Power costs and global adjustment
 - Cap & trade

About Rodan

- North American smart grid integrator, demand side enabler and energy intelligence provider.
- Helping reduce your total energy spend
- Strong presence across Canada with developing presence across North America
- Offices in Mississauga, Calgary, Kitchener/Waterloo and Houston
- Focus on metering, demand response, utility services and energy management
- Customers – power producers, distributors and large users
- OEA 2013 Company of the Year Award
- Canada's Top 100 Small & Medium Employers 2015



About Rodan

- Clients
 - 60+ utilities and ISOs throughout North America
 - 40+ Power Producers (nuclear, hydro, gas, coal, wind, solar, storage, biomass)
 - 200+ large commercial, industrial and institutional customers
- Monitor \$12 billion in annual electricity consumption and production
- Developed and manage 500MW of DR resources
- Enhance Energy Analytics with recent acquisition of



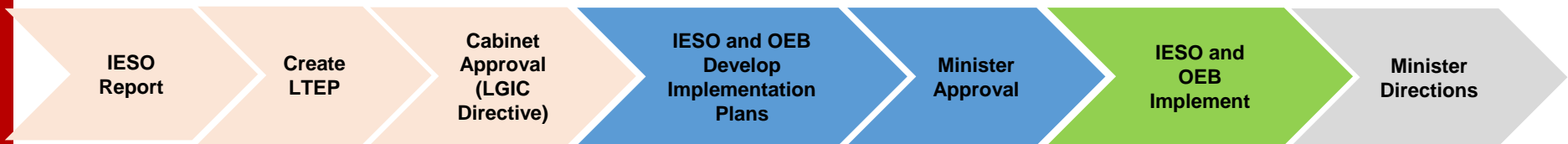
Power Market Overview

Market Design stages

- 1.0 – 1998-2002 - Market Opening
- 2.0 – 2003-2015 – Coal shut-down; OPA procurements; Green Energy Act; and Smart Grid. Robust (but costly) independent market
- 3.0 – IESO Markets
 - system resources procured via market mechanism (on the verge) = cost reductions; but
 - Bill 135 (Amendment to *Green Energy Act*)– potential for Minister to direct procurements

Summary of Proposed LTEP Framework

- Bill 135 basically codifies the LTEP process that we went through two years ago - with a broad, robust consultation process
- The LTEP process would include the following elements.



Creating the LTEP and Cabinet Approval

- LTEP process kicked off by an IESO-led technical report to set the stage for the LTEP process.
- The Ministry of Energy leads the creation of the LTEP, including consultations, and working with the IESO.
- An LGIC directive would be issued to the IESO and OEB outlining the goals that they should achieve and asking them to develop an implementation plan to meet these goals.

Implementation

- IESO and OEB would develop Implementation Plans to outline how they intend to achieve the objectives laid out in the LGIC directive.
- Minister of Energy would review the implementation plan to ensure it meets LGIC directive objectives.

Procurements and Programs

- IESO and OEB move forward with the procurement of resources and creation of programs as outlined in the approved Implementation Plans.

Minister's Directions

- Minister retains direction-making authority related to implementing procedures for consulting, establishing programs or funding, and undertaking reviews.

Giving Ontario a fighting chance

Leveling playing field for ON manufacturers

- Ensure market-based procurements
 - government should not be prescriptive
 - Independent Electricity System Operator
- Compensating for higher costs of ON clean electricity system and carbon cap and trade
- Carbon tax for imported goods based on, among other things, carbon in power system
- Rebates for low carbon footprint in other jurisdictions

Reduce your Total Energy Spend

- Reduce energy spend with effective demand management tools and strategies
- Demand Response & Global Adjustment management
 - Not for the faint at heart
 - Complexity growing
 - DR – market based
 - GA - > participation > complexity to hit peak
 - Cost are too great for missing the 5 CP
 - Enhance DSM capacity - ensure you have all the tools to minimize costs

Thank You!

Q&A?



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