

> How Can LDCs Adapt to a Brave New World

Norm Fraser, Chief Operating Officer, Hydro Ottawa

Council for Clean and Reliable Electricity
October 15, 2014





ABOUT HYDRO OTTAWA

- > 315,000 residential and business customers in Ottawa, Canada's capital
- Third largest municipal-owned electrical utility in Ontario with 1100 km² of service territory
- SAIFI and SAIDI less than 1.25
- Chartwell Best Practices Outage Communications Award



- Electricity Distributors Association Customer Service Excellence Award
- Ontario Energy Association Excellence Award Large Company of the Year
- National Capital Region's Top Employers
- Fifty Most Engaged Workplaces













- > The utility business, stable for decades, is changing quickly
- > Utilities have invested in modernization and customer service initiatives, but...
- In many ways, this is based on the traditional wires and poles business model

The entire business - policy makers, regulators and the utilities,

must adapt, and quickly





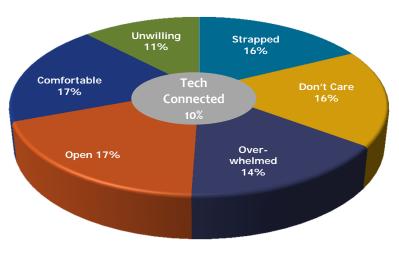
Our customers are becoming more sophisticated and have increasing expectations

Evolving

From....

- Hard-wired
- Passive
- Standalone
- Centralized
- Few players
- Work in isolation
- Save energy
- Patient

And groupings that are identifiable....



To.....

- Smart
- Informed
- Interconnected
- Distributed
- Many interests
- Cooperative
- Save and make energy
- Impatient

The majority of customers look to their utility for energy advice, but this relationship isn't guaranteed



- Technologies are advancing rapidly on both sides of the meter, adding complexity...
- Increasing business, operational and reputational risks...
 - Loss of customers, revenue and service territory
 - Erosion of margins
 - Reduced capacity to invest in remaining infrastructure
 - Requirement to accept stranded investments from customers exiting grid

Power flow control

Enhanced Automation

Distributed Resources

Distributed Storage

Intelligent Loads

Micro Grids

Smart Homes

Electric vehicles

Energy Efficient Devices

Utility

Developer

tomer

on contrant

Deployments outside of the traditional utility framework are focused on capturing a share of the existing revenue stream



- Intelligent technology growth has been explosive and will continue
- The acceptance of new technologies has been higher among consumers than utilities
- Utilities are lagging behind because of risk-averse cultures and the regulatory uncertainty surrounding utility investment decisions
- > The technologies will have the potential to become more competitive than the traditional utility
- The explosion of new entrants in home automation will reduce the relationship between the utility and the customer



- Micro grids could start a slow and agonizing death for the unresponsive utility (and the regulators).
- The problem will be exacerbated if the utility is compelled to remain the supplier of last resort
- We are missing out on the opportunity to deploy technology that could reduce costs, enhance reliability and improve customer satisfaction
- The strategies relating to "distributed competition" will likely be unique to each utility
- Failure to respond on the part of the utilities or their regulators will ultimately lead to a fragmentation of the system and customers, and a degradation of electric supply



ACTION REQUIRED AND QUICKLY

- It is in the interest of the utilities and their regulators to find a structure and philosophy that enables the rapid adoption and integration of new technologies
- Utilities must develop strategies that are forwardthinking, adaptive, nimble, collaborative and customerfocused
- This must be done while ensuring an appropriate level of prudence in decision making



THE NEW UTILITY MODEL

- > There is a need for a clear and compelling strategy for the utility
 - A significant increase in the speed and agility of the organization and its decision making processes
 - Internal education and the development of new habits and behaviors at several levels within the organization
- Early work with regulators and key stakeholder groups will be critical
 - Early movers will have greater latitude is acquiring technology rights and partnerships and may have more latitude in working with regulators
- Developing and implementing a responsive strategy will place a significant burden on existing utility leadership teams
 - The pull from existing day-to-day limits the ability of utility leadership to see what they are not seeing in technology, the growing gaps in performance, and the emergence of the significant threats to the business



SUMMARY

- The utility business model will be seeing what is possible for both the customers and utilities and understanding the business models of potential competitors
- Utilities have the opportunity to succeed a shift in thinking is essential



Special thanks to Stewart Ramsay and Mikel Vanry Vanry and Associates, Inc.

San Francisco, Vancouver

(604) 732-4010

> THANK YOU

