Developing a Renewed Regulatory Framework for Electricity

- Distribution Network Investment Plans (EB-2010-0377)
Distribution Network Investment Plans: Purpose of Policy Development

- to ensure that distributor network investment plans are demonstrably economically efficient and cost-effective; and paced so as to match required expenditures with fair and reasonable rate adjustments and predictable changes to the elements of customer bills affected by the plans.
Distribution Network Investment Plans: Objectives Of Policy Development

- articulating the regulatory concepts, principles, investment plan assessment criteria and processes the Board should utilize in assessing infrastructure development plans; and
- mapping the above to the Board’s (existing or revised) plan content requirements so that plans clearly demonstrate that expenditures have been identified, prioritized and paced in a manner acceptable to the Board
Distribution Network Investment Plans: Context

- Evolution and dissemination of asset management practices & tools
Distribution Network Investment Plans: Context

- Aging network assets affect O&M costs & reliability

Switchyard civil structures

KEMA Inc.
Distribution Network Investment Plans: Context

- **New load connections**
  - spatial expansion of service territory
  - increased customer density per circuit km
- **Declining use per customer**
  - price/bill effects
  - embedded efficiency improvements in new technology
  - impact of government CDM policy
- **Shifting network and circuit load profiles**
  - TOU effects
  - Peaksaver impact
  - evolving customer demographics
- **Evolving power quality & reliability demands**
  - sensitive technologies & end-use requirements
Distribution Network Investment Plans: Context

- Green Energy Act imposed Dx (and Tx) obligations, including to:
  - connect renewable generation facilities subject to applicable technical, economic and other requirements being met; and
  - provide information about system ability to accommodate renewable generation
Distribution Network Investment Plans: Context

- Multiple objectives create potential for multi-purpose investments
  - Accommodate new load connections
  - Accommodate renewable generation connections
  - Improve reliability
  - Enhance power quality
  - Lower O&M outlays
  - Smart Grid
• A number of source documents refer to plan-related regulatory policy or requirements; e.g.:
  – *Filing Requirements: Distribution System Plans - Filing under Deemed Conditions of Licence* (EB-2009-0397); March 2010
  – *Filing requirements for electricity transmission and distribution companies’ cost of service rate applications, based on a forward test year (Chapter 2)*; Updated June 2010
  – *Filing requirements for incentive regulation mechanisms for annual rate adjustments (Chapter 3)*; Updated July 2010
  – *Distribution System Code*
Distribution Network Investment Plans: Issues for Consideration

Around what guiding themes or concepts should plans be formulated by distributors and/or assessed by the Board?

e.g:

• **Optimization**
  – corporate, operational and customer service goals; legal and regulatory requirements
  – Technical, operational, safety, reliability, power quality and customer service objectives (targets; end states)
  – subject to constraints (technical; resource; funding; etc)

• **Integration**
  – plan elements meet multiple, prioritized objectives

• **Transparency / Clarity**
  – Project selection methodologies, inputs and outputs

• **Proportionality of information provided**
  – reflect plan complexity; level and timing of rate/bill impacts
Distribution Network Investment Plans: Issues for Consideration

- What criteria are appropriate for assessing the prudence of which types of investment?
- Under what conditions should similar projects designed to meet different objectives be evaluated using different criteria?
- How should costs, benefits and risks that are not readily measurable be evaluated?
- Etc.
Distribution Network Investment Plans

• Questions
• Comments
• Discussion