

## Kamloops

May 10, 2017

### 1. Introductions

- a. Attendees emphasize the importance of energy to modern civilization and are interested in the following topics:
  - i. Coordinating with FortisBC Energy Inc. (FEI) to support economic and population growth while also helping to meet Greenhouse Gas (GHG) emissions reduction targets; attendees are specifically interested in increasing FEI's community outreach regarding these topics.
  - ii. Where FEI is evolving in the future and what role it will play in the BC energy landscape.
  - iii. Ensuring that all entities in BC plan long term for meeting their energy and emissions objectives; this also includes breaking down long term goals into manageable chunks to ensure that action is taken towards meeting these goals.
  - iv. The relative costs of the various energy sources.

### 2. Planning Environment

- a. What feedstock sources support Renewable Natural Gas (RNG) supply?
  - i. Sources range from agricultural waste, to waste landfills and wastewater; municipalities thus play an important role in potential RNG supply.
  - ii. Technological advancement, such as the ability to cost effectively derive RNG from wood waste, may significantly increase RNG supply potential.
  - iii. RNG production may have to compete with other end uses for feedstock; for example, biomass is currently used for electricity generation or to directly generate heat in industrial boilers.
  - iv. FEI should target Public Sector Organizations (PSOs) for its RNG program as these organizations have GHG emissions reduction targets.
- b. Public utilities are able to socialize development costs and should thus be able to drive sustainable energy solutions via long-term investments; they could even help exceed provincial energy objectives.
- c. Attendees are nervous about fuel switching initiatives in general because they risk stranding infrastructure:
  - i. Fuel switching should occur within an overall strategic energy plan that encompasses multiple jurisdictions.
  - ii. Otherwise, lack of coordination could result in promoting energy sources for inappropriate end uses (where these sources are used inefficiently) and may run counter to GHG emissions reduction goals.
  - iii. A centralized entity should be responsible for such systemic coordination of our energy needs, our energy supply and our environmental goals.
- d. In Kamloops, most GHG emissions result from transportation as limited industry exists within city boundaries:
  - i. FEI supplies pulp and paper, agriculture, and mining industries in the Kamloops area.
  - ii. Fleet operators lack adequate information on which vehicles should be switched to electricity and which vehicles should be switched to natural gas in order to

achieve maximum GHG emissions abatement at reasonable cost (vehicle use rather than vehicle type may be the key factor).

- iii. This information gap needs to be closed quickly because fleets are renewed relatively frequently.
- e. Many municipalities do not take GHG emissions reduction actions seriously because they are focused on economic growth.

### 3. Demand Forecasting

- a. How do LNG export projects impact FEI's demand forecasting?
  - i. Large-scale LNG export projects likely require their own pipeline infrastructure, so these projects are likely to procure their own natural gas commodity and pipeline infrastructure to connect them to this supply; as such, these projects are unlikely to impact FEI directly but may impact regional natural gas demand-supply balance.
  - ii. Smaller LNG export projects, such as the Woodfibre LNG Project, are likely to procure their own natural gas supply (including capacity on upstream infrastructure) but may wish to use FEI's infrastructure to access this supply:
    - 1. FEI expects to negotiate individual supply agreements with such customers.
    - 2. Such customers would be expected to cover the costs for any FEI infrastructure expansions that directly result from their incremental natural gas demand.
    - 3. Such customers would also be expected to contribute towards the maintenance of the overall FEI infrastructure.
    - 4. Thus, such customers are expected to exert downward pressure on natural gas rates since they improve the utilization of FEI's infrastructure.
    - 5. However, downward rate pressure from the natural gas demand of these customers is expected to be less than downward rate pressure from more peaky demand, such as residential customer natural gas demand.

### 4. Demand Side Management

- a. If new technologies and practices deliver better energy performance, their use should be mandated by regulation rather than supported by rebates; an independent third party should test technologies to determine whether their performance is superior to existing solutions.
- b. Stakeholders should also provide more support for energy technology development.