

# Transmission Service and Economic Development

## Issue

Determine the extent to which BC Hydro rates should facilitate Government industrial economic development objectives of job creation (i.e., new investment) and job retention (i.e., load retention).

## Background

Industrial customers represent approximately one-third of BC Hydro's load. These customers come mainly from the forestry, mining, electrochemical and oil/gas processing industries.

The Government's 2002 Energy Plan, *Energy for our Future: A Plan for BC* directed that industrial customers could meet all or part of their load from non-utility supply (independent power producer, market, etc.). It also directed the introduction of stepped electricity pricing to encourage conservation for industrial customers.

In 2003 the Government directed the BC Utilities Commission (Commission) to undertake a public inquiry and make recommendations to Government relating to a Heritage Contract for BC Hydro's existing generation resources, and regarding stepped rates and transmission access. The Government accepted the Commission's recommendations delivered in the 2003 Heritage Inquiry Report.

In 2003, Government issued Heritage Special Direction HC2 to the British Columbia Utilities Commission (HC2) to ensure rate design for BC Hydro's industrial customers is consistent with the Commission's recommendations to Government. HC2 requires these rates be subject to BC Hydro's Tariff Supplements 5 and 6 and other terms and conditions that the Commission considers appropriate.

BC Hydro's relationship with industrial customers is governed by four tariffs: Rate Schedule 1823 (Stepped Rates); Rate Schedule 1827 (customers exempted from stepped rates); Tariff Supplement 5 (TS5); and, Tariff Supplement 6 (TS6).

Rate Schedule 1823 is an inclining block structure where industrial customers pay a Tier One price slightly below BC Hydro's embedded cost for the first 90% of historical consumption and a Tier Two price approximately 65% higher than embedded cost for the final 10% of historical consumption. Historical consumption is determined separately for each customer. The rate is designed to be revenue and customer bill neutral at 100% of the customer's historical consumption level.

The two Tariff Supplements set out the terms and conditions for the service provided under Rate Schedule 1823. TS5 is the Electricity Supply Agreement that establishes what the

industrial customer pays for energy. TS6 is the Facilities Agreement which governs the industrial customer's interconnection to BC Hydro's system, the extent to which new costs are rolled in to BC Hydro's existing rate base and security requirements to protect existing ratepayers. TS6 has proven to be increasingly problematic as time has gone on (See Task Force Issue Papers on TS6-Generation and TS6-Transmission)

A 2012 comparison of industrial electricity rates by Hydro-Quebec ranked Vancouver the fourth lowest among 22 North American cities. Vancouver's ranking with respect to the trending of these rates would depend largely on the base year selected for the ranking.

## **Discussion**

The costs of interconnection and ongoing electricity supply are just two factors that affect business decisions to either invest or remain in British Columbia. Electricity-related costs would be more or less important depending on the industry in question. They are also relative based on what an industrial customer may pay in a competing jurisdiction. Electricity-intensive customers would likely be sensitive any rate increases since most are trade-exposed and cannot relocate their operations

Provincial Energy Objective 2(k) in the *Clean Energy Act* directs BC Hydro, "To encourage economic development and the creation and retention of jobs". Job creation and job retention both are both provincial economic development goals. However, job creation implies interconnecting new load (which triggers additional costs to ratepayers) while job retention implies mitigating rate increases as much as possible (which argues against interconnecting new industrial loads). It is not clear if Government considers these goals equal, or if one has a higher priority than the other.

BC Hydro uses a cost of service model. The vast majority of BC Hydro customers receive embedded-cost electricity which represents the average cost of service. Adding new customers typically requires the acquisition of new resources provided BC Hydro's load and resources are balanced. Incremental resources cost more than BC Hydro's embedded-cost resources. This will cause BC Hydro's cost of service to increase unless Government takes action to prevent it. Increased rates could adversely affect the competitiveness of existing customers, which may threaten job retention. Conversely, limiting the number of new customers connecting to the system will mitigate rate increases, but undermine new investment.