Postage Stamp Rates

Issue

Adding new industrial customers to BC Hydro's system meets Government's desire for new investment, but increases costs for existing industrial customers that may affect their long-term competitiveness.

Background

BC Hydro's rate design is founded on recovering costs primarily through postage stamp rates. Postage stamp rates are a method of cost allocation where any rate class charge is the same anywhere on the interconnected system, regardless of the geographical region in the province. The underlying premise is that all customers jointly develop electricity resources and should equally share in the costs. This is the accepted approach to rate-making in the majority of North American jurisdictions.

BC Hydro currently uses postage stamp rates for its end-use customers in integrated areas. There are several rate classes with the majority falling into three general categories: residential; general service; and transmission service. Generation, transmission and distribution costs are pooled across the province but actual customer rates vary by rate class based on how much it costs to serve each class, known as the Fully Allocated Cost of Service.

There are price discrepancies between rate classes where some customers are subsidized by others. For example, residential customers currently do not pay their full cost of service for their rate class where large general service customers pay more than their cost of service. In addition to this, within each rate class inclining and declining block rates are used to provide incentives to use more or less power depending on the surplus/demand situation of BC Hydro. The objective for trailing block rates has been to keep the rate classes cost recovery revenue neutral to allocated costs for the rate class.

BC Hydro has used postage stamp rates in its rate class design dating back to its creation. In over-supply situations, end-use rates have been used to encourage electricity use, but the general trend over time has been towards the increased use of postage stamp rates and elimination of end-use rates. However, it is important to note that Fortis BC and a few municipal and small private utilities also distribute electricity so the entire province is not covered by BC Hydro's postage stamp rates.

The tariff is triggered if a project has a capacity of 150 MV.A or more. Since the tariff's approval in 1991, no customers have come onto the system with sufficient load to meet the 150 MV.A.

BC Hydro currently mitigates the costs of building and/or upgrading transmission infrastructure for existing TSR customers through Electric Tariff Supplement #6. Customers with a planned

capacity of 150 megavolt amperes or higher are required to contribute the marginal cost of the energy required to serve their load. They are also required to contribute to incremental transmission costs associated with BC Hydro providing service. Once a new customer contributes to the building out of service, they are levied the same rate as other TSR customers. Existing TSR customers only experience a rate impact insofar as BC Hydro invests in new infrastructure or incremental generation must be built or acquired to service new customers.

Discussion

Customer fairness is a key driver in using postage stamp rates. This approach to rate-making provides equal opportunity to obtain electrical service regardless of whether customers are existing or new or where they are located in the system. Postage stamp rates ensure that no one industry or corporation has an advantage over others and that new entrants may compete on an equal basis with existing customers. Postage stamp rates remove economic disincentives that might otherwise exist for new development. Postage stamp rate-making is simple to administer and provides customers with cost certainty relative to other approaches.

The postage stamp rate approach has some disadvantages when applied in jurisdictions with low embedded-cost resources like British Columbia. Incremental generation acquisition and/or transmission infrastructure costs are spread to all customers under postage stamp rates. This can place upward pressure on rates for all customers. However, it is important to note that adding customers when a utility has surplus energy can help mitigate rate impacts by spreading the cost of existing assets to a greater number of customers.

Postage stamp rates do not send signals to develop projects in locations that minimize incremental costs of transmission service because these costs are amortized over all customers. This can be addressed through Locational Marginal Costing which reflects the instantaneous short-run marginal cost of serving one incremental unit of load at that location. This approach could mitigate the rate impact a new industrial customer would have, but it would also represent a higher cost of entry for the new customer, which may affect investment decisions.