

# End-Use Rates

## Issue

Whether end-use rates are an appropriate tool to achieve Government's economic, environmental and/or social policy goals.

## Background

End-use rates are a method of cost allocation based on the final product or use resulting from electricity consumption. The underlying premise is that a specific end-use for electricity can help achieve Government policy objectives (i.e., encouraging the development of a specific industry, encouraging a specific activity, etc.). These rates have historically been used for residential and large general service customers but not for Transmission Service Rate (TSR) customers.

The Electricity Plus Program (E-Plus) is an example of a residential end-use rate. Program customers received a reduced electricity rate for space and water heating, based on interruptible service. E-Plus was offered from 1987-1990 to help BC Hydro reduce surplus energy. Commercial customers have been offered end-use rates to encourage restaurants to switch to electric ovens, building owners to use direct current for elevator service and foundries to use electricity to melt metals. BC Hydro has eliminated these rates over time, although some customers are "grandfathered" in to previous programs.

There are currently three operational end-use rates: irrigation; street lighting; and, shore power. The irrigation rate encourages the use of spring freshet energy while supporting the agricultural industry. The street lighting rate provides a consistent load during off-peak hours at night which helps with system operation. The shore power rate enables docked cruise ships to use BCH electricity, rather than onboard diesel, to generate power limiting greenhouse gas and particulate emissions, which supports environmental policy. BC Hydro's Fully Allocated Cost of Service studies consistently conclude these rates are cross-subsidized by other ratepayers to the benefit of those receiving them.

Although there are no end-use rates for industrial customers, they have benefitted from government legislation that encourages energy use as well as subsidizing BC industry. Legislation such as the *Economic Development Electricity Rate Discount Act* and the *Critical Industries Act* were implemented during the 1980s as a response to having surplus power and to support industry as it emerged from the recession. Most recently government implemented the *Power for Jobs Development Act* in 1997 to provide specific industries with a preferential development power rate based on available surplus power.

## Discussion

Government has used end-use rates to achieve economic development objectives in the past and may consider using this policy approach in the future. End-use rates benefit targeted customers because they receive a lower rate than other rate classes. This has the negative effect of creating an inequality for customers who cannot access the rate as they bear a greater amount of the costs of BC Hydro generation and transmission.

Adding new energy demand as a result of preferential end-use rates, however, can lower cost of energy in a surplus energy situation. If government were to consider implementing new end-use rates, it might consider limiting the period for which a rate is available to the extent that BC Hydro has surplus energy. A downside to this approach is that industrial customers would be at risk of losing their preferential end-use rate which could adversely impact their ability to compete.

It is difficult to justify the creation of end-use rates for industrial customers for a specific industry or companies without extending benefits to other customers. The choice to create end-use rates, however, could provide incentives that attract new development to the province or achieve environmental benefits resulting from the use of clean electricity.