

Media Release

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Professor calls on UARB to consider alternatives to NSPI's proposed 10.22 percent residential rate increase

(Dalhousie University, Halifax, Nova Scotia) "NSPI's proposed residential electricity rate increase of 10.22 percent should not be approved by the UARB", says Dr. Larry Hughes, a Dalhousie University professor, who has recently completed a report that examines alternatives to NSPI's proposed 10.22 percent rate increase in their Domestic Service Tariff.

"Flat rates, such as NSPI's Domestic Service Tariff, have at least two shortcomings," says Hughes. "First, flat rates do little to encourage changes in consumption patterns as there are no penalties associated with over-consumption." Changing the way we use electricity is important, given the known environmental impacts of electrical generation. Hughes went on, "Second, customers with low energy consumption can and do cross-subsidize customers with high energy consumption." In his report, Hughes shows how customers who are large consumers of electricity during peak periods (such as the early evening) can be subsidized by customers who use small amounts of electricity.

Hughes has based his research on data supplied by NSPI; some of his findings include:

- Over 60 percent of NSPI's residential customers consume less electricity than the residential average of 9,400 kilowatt-hours per year.
- Almost half of residential electricity is consumed by 20 percent of residential customers.

Hughes is recommending that NSPI replace its flat metering rate with an alternative known as the inverted block rate. A typical inverted block rate, such as those used in California, divides a customer's total electricity consumption into one or more blocks: each block is associated with a price and a maximum number of kilowatt-hours, both of which increase with subsequent blocks.

“The inverted block rate allows a utility to price its electricity to encourage conservation, address the issue of cross-subsidies, and reduce the impact of rate increases on low- and fixed-income customers”, said Hughes. A customer's electricity bill reflects the amount of electricity consumed in each block: the more you use, the more you pay per kilowatt-hour of electricity. Reducing consumption means paying less for each kilowatt-hour of electricity consumed.

In his report to be released this evening at the UARB Public Hearings on NSPI's proposed rate increases, Hughes has created an example of an inverted block rate consisting of five distinct blocks using NSPI's residential data. Electricity consumed in the first block is charged 8.71 cents per kilowatt-hour, increasing to 10.65 cents per kilowatt-hour in the fifth block. Using the example inverted block rate, over 80 percent of NSPI's residential customers would pay less per kilowatt-hour of electricity consumed than under NSPI's proposed new rate. Hughes developed the model to be revenue neutral, meaning that NSPI would suffer no financial penalty for changing from the flat rate to the inverted block rate.

Hughes states that NSPI's existing residential metering technology would remain unchanged under the inverted block rate, although NSPI would have to modify its billing software to reflect inverted block rate billing.

The three key findings of Hughes's report are:

- Increasing each block's price per kilowatt-hour can be a mechanism to encourage customers to reduce energy consumption, since a reduction in energy consumption means a reduction in the price per unit of energy.
- Cross-subsidies can be reduced or eliminated for customers with low energy consumption and disproportionately lower demand during the system peak.
- The impact of rate increases, such as the one proposed by NSPI, on low-income, low-energy consumption customers can be decreased using the inverted block rate.

Hughes says, "There is an alternative to NSPI's proposed residential rate increase of 10.22 percent. However, it will mean that NSPI will have to adopt the inverted block rate structure, replacing its outdated and inherently unfair flat rate. The inverted block rate is the first step on Nova Scotia's path to energy sustainability."

Copies of Dr. Hughes's UARB submission can be obtained from:

www.dal.ca/~lhughes2/environment/nspi_ibr/index.html

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