

May 15, 2007

BY COURIER (3 COPIES) AND EMAIL

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Dear Ms. Walli:

**Re: Pollution Probe – Written Comments on Staff Discussion Paper
EB-2007-0031 – Review of Electricity Distribution Rate Design**

Further to the Board's letter dated March 30, 2007, we are writing to provide Pollution Probe's written comments on the Staff Discussion Paper – *Rate Design for Electricity Distributors: Overview and Scoping* dated March 30, 2007. Pollution Probe's written comments are organized as responses to the various questions asked in the discussion paper, and each response will be dealt with in turn.

Issue 3 (p. 11): *Are there any principles, beyond the generally accepted, traditional principles of rate-making listed above, that the Board should consider in designing distribution rates? What is the new principle's importance relative to the others?*

Pollution Probe submits that the design of distribution rates should include the very important current realities of the marginal cost associated with Ontario's electricity system (e.g. marginal cost of new electricity supply and transmission is substantially higher than the average financial cost of current electricity generation and transmission). Accordingly, distribution rates that encourage excessive consumption are no longer in the public interest.

Pollution Probe strongly supports James C. Bonbright's rate design principles as outlined in this section. In particular, Pollution Probe agrees with Professor Bonbright that rates should be cost-related and that they should promote the economically wise and efficient use of resources. As a consequence, Pollution Probe believes that Bonbright's rate design principles are consistent and compatible with the Government of Ontario's desire to promote energy conservation, discourage peak system use, and promote distributed generation.

For approximately one hundred years, it has been Government of Ontario policy to subsidize electricity rates. This policy had an economic rationale when economies of

scale previously existed in the generation, transmission and distribution of electricity (e.g. during the first half of the twentieth century). However, in contrast, the marginal cost of *new* electricity supply and transmission infrastructure today in 2007 is substantially higher than Ontario's current *average* financial cost of electricity generation and transmission.

Pollution Probe thus submits that Ontario needs to reform its electricity rate structure to reflect the current reality of the marginal cost structure of Ontario's electricity system. In particular, distribution rates that encourage excessive electricity consumption¹ are no longer in the public interest.

Issue 4.2 (p. 16): *What is the most appropriate basis for determining the service classifications for Ontario distribution customers? Should sub-classifications be maintained? If so, what is the most appropriate method to allocate diversity benefits?*

Pollution Probe submits that it may be appropriate for service classifications to be determined on a service amperage basis due to the many cost causality advantages (e.g. incentives for higher efficiency, etc.).

According to the Staff Discussion Paper (emphasis added) at pages 15-16:

Under service amperage classifications, there could be many classes. Consistent with the demand approach, *a rate classification based on service amperage* would eliminate the current residential and general service classifications, and new classifications would be established based on customer service amperage such as 200, 400 or 1000 amps, etc. *This has many cost causality advantages.* The advantages over the voltage classes is that customers have some choice over their service amperage. Customers making investment decisions on the electrical equipment they intend to use would consider the ongoing fixed connection fees of the various service amperage ratings. A business case for higher efficiency equipment and facilities would consider the avoided cost of a larger service rating. This would occur either at the design-build stage or when customers require an upgrade due to an expansion of their facilities.

Pollution Probe agrees with these statements and submits that a rate classification based on amperage has cost causality advantages, and it therefore believes that the Board should seriously consider this option. For example, when a home or facility is built or upgraded, the electricity utility could directly encourage energy conservation by collecting a contribution-in-aid-of-construction that is directly related to the home's or the facility's amperage (e.g. higher amperage requires a greater contribution, thus providing a financial incentive to use less power).

¹ e.g. high customer charges, low variable charges, and non-time-of-use rates.

Pollution Probe thus submits that it may be most appropriate for service classifications to be determined on service amperage basis, particularly given the potential for efficiency incentives.

Issue 5.2 (p. 23): *What are the principles that should inform the decision of fixed and/or variable rates?*

Pollution Probe submits that the fixed monthly customer charge should be designed to recover only variable costs that are directly related to the number of customers.

The Board Staff Discussion Paper notes at page 20 that: “[i]n the current distribution rate design, the monthly fixed rate does not have a clear basis in any of the above definitions of customer-related costs.”

Pollution Probe agrees and submits that the fixed monthly customer charge should be designed to recover *only* the utilities’ variable costs that are directly-related to its number of customers (e.g., meter reading, billing and collection costs, etc.). This will allow utilities to promote economically wise and efficient use of electricity by raising their demand (\$ per kW) or energy charges (\$ per kWh) to better reflect the actual cost of providing the electricity.

Issue 5.3 (p. 25): *Should the billing determinants be consistent for all customer classifications? What are the most appropriate billing determinants for each customer classification?*

With respect to large customers, Pollution Probe agrees with the following excerpt from the Staff Discussion Paper at page 24: “For very large customers, some distributors bill based on apparent power measured in kVA. For customers with poor power factor (large reactive power requirements compared to their real power requirements), kVA is a better measure of the assets required to serve their needs.” Pollution Probe thus submits that billing large customers on the basis of their kVA is preferable to billing on the basis of kW.

With respect to customers generally, Pollution Probe also agrees with the following excerpt from the Staff Discussion Paper at page 24: “Hourly data would allow distributors to determine the customers’ individual peak as well as the customer’s contribution to peak at the time of the distribution system peak.” Pollution Probe thus submits that, to the fullest practical extent, a customer’s peak demand charges should be a function of the customer’s demand at the time of system peak.

Issue 5.4 (p. 27): *Should the Board pursue an analysis of use-of-system rates for distributed generation to investigate rates and determinants?*

Pollution Probe submits that the Board should pursue this analysis, particularly to encourage load displacement generation to operate at the time of system peak. Such generation will help to reduce the need for grid-supplied generation, transmission and distribution infrastructure at the time of the system peak.

Issue 5.5 (p. 28): *How important is consistency of the rate design model across the province?*

Pollution Probe submits that, while the Board's general high-level principles of rate design (i.e. Bonbright's) should be consistent across the province, the specific rate design models and actual rates should vary to reflect differences in costs and other factors that vary by municipality or region. For example, southern Ontario has a summer peaking system and northern Ontario has a winter peaking system. Accordingly, distribution demand charges should be a function of customers' demands at the time of their utilities' peaks (which would be summer for southern Ontario and winter for northern Ontario).

Issue 5.6 (p. 30): *Is one single rate order (or a few regional rate orders) to be used by all distributors a desirable outcome?*

Pollution Probe submits that it is not a desirable outcome for there to be a single rate order or a few regional rate orders. Pollution Probe submits that a consequence of the cost causality principle is that the revenue requirement for each utility should reflect its costs, not the average costs of all or a group of Ontario electric utilities. In particular, Pollution Probe submits that, if a utility has higher or lower costs for whatever reason (e.g. a local preference for underground wiring, superior management, etc.), that utility's customers, not all customers, should pay the costs or reap the benefits.

Issue 5.7 (p. 31): *Should distributors offer various levels of service? Should distributors be able to buy (offer credit for) services from customers?*

Pollution Probe submits that distributors should be able to offer various levels of service and that distributors should be able to buy or offer credit for services from customers.

Issue 5.8 (p. 32): *Should the Board investigate a rate design model based on long run marginal costs?*

Pollution Probe submits that the Board should investigate a rate design model based on long run marginal costs. Pollution Probe further submits that Board should investigate the total long run marginal cost of electricity (i.e. generation, transmission, and

distribution) with the ultimate goal of bringing the total price of electricity as close as practically possible to the actual total marginal cost of electricity. In other words, the investigation should *not* narrowly focus on simply aligning distribution rates to the marginal costs of distribution as such a narrow focus may lead to results that are perverse when one fully considers a more holistic context.

Issue 5.9 (p. 33): *Should the Board investigate locational rates for any customers connected to the distribution system?*

Pollution Probe submits that the Board should investigate such locational rates, particularly since such locational rates will encourage energy efficiency and distributed generation investments to be made where they will provide the maximum system benefits.

Issue 5.10 (p. 34): *Given the simplified bill, can a conservation and/or demand management effect be achieved through distribution rate design?*

Pollution Probe submits that, although it will be more difficult, a conservation and/or demand management effect can still be achieved through distribution rate design (as shown by some of the examples provided in these comments).

Conclusion

We trust that these comments are of assistance, and please do not hesitate to contact us if you have any questions or wish to further discuss these or other matters.

Yours truly,



Basil Alexander

BA/ba