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VIA EMAIL AND COURIER

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
26th Floor
2300 Yonge Street
Toronto, ON
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Dear Ms. Walli:

**Re: VECC's Comments on Staff Discussion Paper
Rate Design for Recovery of Electricity Distribution Costs
(EB-2007-0031)**

As Counsel to the Vulnerable Energy Consumers Coalition (VECC), I am writing per the Board's letter of March 31, 2008 to provide VECC's comments on the Staff Discussion Paper titled "Rate Design for Recovery of Electricity Distribution Costs". The comments provided are organized by section and address the specific questions posed by Staff.

Rate Design Principles (Section 3)

3.1 Full Cost Recovery Principle

General Comments

The Staff Paper's characterization of full cost recovery includes considerations of practicality, clarity and lack of controversy. VECC notes that in delineating the attributes of a sound rate structure Bonbright treats these attributes separately and distinctly from the need to yield the total revenue requirement. In VECC's view the need for rates that exhibit the practical attributes identified by Bonbright

goes beyond simple cost recovery. It's a utility's rates (and rate design) that customers see and respond to – not its revenue requirement or cost allocation methodology. Therefore it is important that they be understandable and publicly acceptable if utilities want their customers to respond appropriately and consider the rates to be fair and equitable. Without these attributes, the best theoretically designed rate will not achieve the other objectives that the Bonbright and the OEB have identified.

Fairness Principle

General Comments

The section, as written, seems to overly focus on cost allocation and revenue to cost ratios. The critical point is that, contrary to cost allocation (which deals with the fair allocation of cost between customer classes), the focus of rate design is the fair allocation of cost to customers within the same customer class.

Cost allocation between classes is confounded by the fact judgment is required in establishing cost causality and data limitations may restrict the application of certain allocation methodologies. However, rate design (i.e. intra-class allocation) must deal not only with these issues but also with practical implementation and billing issues. It is much more important that customers understand and accept the rates they are being charged than the cost allocation methodology underlying such rates.

3.2 Efficiency Principle

General Comments

VECC acknowledges the desirability of aligning the “pricing signals” provided through distribution, transmission and commodity charges. However, it would be inappropriate to set distribution rates so that they “sent” the wrong signal regarding the cost drivers for distribution. Such an approach would likely mean that the rates did not meet the fairness principle and could also lead to issues regarding full cost recovery.

It may be reasonable, in the interest of consistency with transmission and commodity pricing, to have a distribution rate design that is less than optimal. However, the rate design should not send pricing signals that are fundamentally incorrect.

3.3 International Experience

General Comments

In VECC's view the lack of international experience and precedents regarding distribution pricing highlights the need for the Board to take a cautious approach. Any significant departure from the current approach to customer classification and rate design needs to be approached with caution and widely explored with the both distributors and customers. While a proposal may fit Milton's circumstances, VECC suggests that this is insufficient testing to establish the approach is robust enough to apply to all (or even the majority) of Ontario's electricity distributors.

Customer Classifications (Section 4)

4.1 Issues Relevant to Establishing Customer Classes

General Comments

On page 22 the Discussion Paper sets out a number of factors that could give rise to cost differences significant enough to justify the creation of separate classes. VECC notes that the list does not include "demand diversity". If customers are going to be billed based on their own peak demand then customers in the same class should generally have the same degree of "coincidence" with the measures of "peak demand" that drive their utility's costs. Otherwise, the resulting rates can not yield a fair intra-class allocation of costs.

The introduction of smart meters will allow this issue to be fully considered for the first time. In VECC's view it would be inappropriate to make a final determination on customer classification without exploring this matter. Indeed, VECC finds it surprising that the subsequent sections appear to reach conclusions on the appropriate basis for customer classification without any consideration of customer load data (even Milton's).

4.2 Options for Customer Classes

General Comments

As indicated by VECC's comments regarding Section 4.1, the discussion of options appears to focus entirely on what assets a customer uses without acknowledging that how the customer uses the assets could also be a valid determinant in establishing customer classes. While there may be no distinctive differences that can be attributed to customer type (i.e., residential vs. general service) or to customer size, VECC believes that this is an issue that needs to be explored. Furthermore, with the advent of smart meters, utilities will be in a position to do so for the first time.

VECC is not in a position to comment on the technical merits of the discussion on pages 23-25 regarding how/why customers are supplied at different voltages. However, VECC is concerned that generalizations as to how customers are served may only apply at a very high level and that the circumstances of individual utilities may be very unique. VECC looks forward to receiving and reviewing the submissions of individual distributors on these matters.

Response to Questions

- *Interruptible Rates (page 28)*

Board Staff has raised a number of questions regarding the appropriate role/treatment of interruptible customers. VECC does not see any merit in establishing a separate interruptible rate class. Interruptible (distribution) rates should only be offered in circumstances where they make sense for the local distributor. In such instances the appropriateness of the discount is likely to be based on offsetting the need for future investment in distribution facilities. In such cases it makes little sense to set up a separate class for purposes of cost allocation – which is focused on the assigning embedded (historical) costs to customers. Ideally, interruptible customers should receive a discount (off the standard rates applicable to their class of service) based on the benefits to be gained. If interruptible (distribution) rates make sense for the utility then they should be available to all customer classes where it is practical and economic to implement them.

4.3 Evaluation of Options for Customer Classes

Response to Questions

- *Is a service voltage distinction practical and such a classification logical for distribution systems (page 29)*

VECC has some concerns regarding the practical application of a service voltage classification:

- While Milton seems to be able to categorize all of its customers by service voltage, it is not clear that other utilities will be able to readily do the same. Indeed, in response to interrogatories regarding its 2008 Rate Application, Hydro One Networks acknowledged that it did not know for certain at what voltage level its Residential and GS < 50 kW customers were served¹.
- Unless there is a material difference in the costs customers incur themselves for transformation, it may difficult to explain why two customers of the same size should be charged materially different rates, when they have no control over the voltage they are connected at.

VECC believes these issues need to be explored more fully before a proposal such as that put forward by Board Staff can be adopted.

¹ Exhibit H, Tab 12, Schedule 38, part (o)

- *The appropriate levels of division and whether these are more appropriate as distinct classes or sub-classes (page 29)*

As VECC has noted, the other dimension of costs that has not been considered is load diversity. This could lead to a further subdivision of customers and could require new classes. A cost allocation would be required to establish if there was any difference in cost between subclasses of an existing customer class. However, the need for further divisions is likely to be utility-specific and it is unlikely that any generic rules regarding further division of classes can be established.

- *If not connection voltage, what is the best approximation to it: the demand, the amperage or a combination of demand volume and service voltage (page 30)*

VECC considers demand to be the best alternative.

Rate Design Issues (Section 5)

5.1 The Role of Cost Allocation

General Comments

The Paper states that cost allocation is the primary reference point for designing rates. In VECC's view it is a good starting point and one of the key reference points. However, to suggest it is the primary reference point could lead to erroneous results. For example, if costs are allocated based on each customer class' summer (August) peak demands, then primary reliance on cost allocation would suggest that customers should be billed for demand costs based strictly on their demand in August. However, there are a number of reasons (besides just the inherent inaccuracy of cost allocation studies) why this may not be appropriate from an overall rate design perspective.

5.2 Fixed-Variable Split

General Comments

The Paper (page 33) appears to suggest there is conflict between i) stable bills and equal billing and ii) customers' preference to be able to control/influence their bills. VECC does not see any conflict. For customers who use electricity for space conditioning, bills are likely to vary significantly from month to month, even when customers take actions to manage their use of electricity. Within this context, the added desire for bill stability and the need for equal billing (particularly for low income or fixed income customers) is perfectly understandable.

VECC believes there are sound reasons to be circumspect regarding the use of the minimum system approach (see page 34) regarding customer charges:

- The definition and the calculation of minimum system costs are two aspects of cost allocation that involved considerable judgment.
- A customer frequently has difficulty understanding how his/her connection to the system involves any facility costs upstream of the service connection unless power is actually used.
- Utilities generally do not set their monthly service charges at a level that would also recover minimum system costs².

The Paper raises the question (pages 35) of implementing a high fixed charge. Consistent with the comments offered above VECC does not support such an approach.

The Paper also raises the option of adopting fixed charges based on known customer usage (e.g., last year's peak/energy use). The rationale being that this would still encourage customer's to manage their electricity use (as it will affect next year's bills) but provide distributors with more revenue certainty. VECC is of the view that considerably more thought would have to be given to the implications of such an approach before it was adopted. For example:

- It is not clear how customers (residential or otherwise) would be billed for their first year of occupancy.
- For some commercial and most industrial customers electricity use varies with the level of output/sales. This approach would disconnect the two and may lead to significant financial reporting issues.

VECC agrees that coincident peak pricing (i.e., using 1-CP as the billing determinant) is not a viable option for distribution cost recovery (see page 37). Indeed, for smaller customers "coincident peak" is not even the primary cost driver for many of the facilities used to serve the customers. The Paper itself acknowledges this in its discussion on page 40.

Response to Questions

- *Is there a necessary connection between long run variable costs and variable rates*
- *Are variable charges an effective means of controlling long-run variable costs in the rate setting context*
- *Do customers respond to variable rates (page 33)*

VECC believes that it is important to make the connection between long-run variable costs and variable rates. To do otherwise will not provide customers

² Note: This comment is based on the service charge levels used in Manitoba, British Columbia and Quebec as well as a general understanding of utility rate setting practices.

with the proper price signals as to what their consumption decisions (which can involve long-term investment decisions) mean in terms of utility costs.

The literature suggests that customers do respond to variable rates, although their responses are inelastic. It is also important to note that all customers do not respond the same. There is a wide range in terms of observed response depending upon level of electricity use, the uses electricity is put to by the customer, customer income and other attributes of the customers' circumstances.

Finally, if there is any question that customers do not respond to variable rates then the introduction of smart metering and TOU rates for small volume customers could prove to be a waste of millions of dollars.

5.3 Revenue Stability

Response to Questions

- *Comment on revenue stability mechanisms (page 39)*

VECC does not believe there is a need for additional revenue stability mechanisms. It also notes that the genesis of the LRAM associated with CDM activities was not "revenue stability" per se but rather to ensure that there were no related disincentives to distributors delivering conservation programs to their customers.

The last paragraph in section 5.3 suggests an approach that involves interim billing and true up at year end. In VECC's view such an approach is not appropriate and would constitute retroactive rate making. Customers should know the rates they are going to pay before they make their consumption decisions.

5.4 Billing Determinant Options

Comments

The Paper suggests (page 39) that if the objective of rate design is to provide a price signal consistent with short run distribution efficiency then it would rely heavily on a fixed charge. VECC notes that this would not always be the case. In those circumstances where new capacity installation is imminent the short-run costs could be quite high – leading to a heavy reliance on the variable charge. The fact that short-run costs can vary significantly over time depending upon the immediate circumstances of the utility highlights one of the problems with using a short-run perspective when considering efficiency. A longer run perspective is likely to lead to more stable rates.

VECC agrees that a customer's non-coincident peak is likely the most practical billing determinant from a cost causality perspective. Furthermore, it would be reasonable to include a time of use perspective that reflects the critical times from a distribution system perspective.

VECC generally agrees that if TOU rates are to be adopted for distribution charges then the TOU periods should be the same as for the RPP pricing in order to facilitate customer acceptance and understanding. However, as discussed previously, an issue arises if the distributor's critical peak times are not captured by this TOU period definition. In such instances, it may be appropriate for the distributor to not apply a TOU design to its distribution charges.

Rate Design for the Single Phase Customer Class (Section 6)

Comments

The Paper states (page 42) that "the allocated costs per kW will be the same for all customers in the new Single Phase Secondary Class since they all use the same distribution facilities". This results from the fact that these customers have all been placed in the same class and not from the fact that they all impose the same cost per kW on the distributor's system. As noted earlier, this grouping of customers assumes that they all have the same "coincidence" with the upstream demand profile for the distributor. If this is not case, then there will be intra-class cross-subsidies.

6.1 to 6.5 Single Phase Secondary Class Rate Design Options

Comments

Consistent with its previous comments, VECC does not support the recovery of distribution charges through a 100% fixed monthly charge. VECC sees a role for a fixed monthly charge in recovering customer-related costs. However, even in this case VECC does not believe that the fixed charge should be increased to the point where it recovers all of the minimum system costs. The rationale for this approach has already been discussed under section 5.2.

VECC does not see "capacity-based" charges as being workable for small volume customers. The Paper adequately speaks to (pages 36-37 and 44-46) a number of the problems with such an approach.

The Paper presents (pages 48-49) a number of different ways rates could be designed based on customers' demand and also discusses (pages 49-50) the introduction of TOU-based distribution rates. VECC is concerned that simultaneously introducing significant changes to both customer classification and rate design could lead to customer confusion and material bill impacts. It

may be useful to take a staged approach to rate design with the first step being a redefinition of customer classes with a move to TOU distribution pricing.

6.6 Single Phase Secondary Customer Rate Changes

Response to Questions

- *Should distribution customers pay rates that are more reflective of the costs they cause due to load factor differences based on each distributor's cost allocation study?*
- *Should the revenue-to-cost ratio for the New Single Phase Secondary Class be constrained in any way by the prior revenue-to-cost ratios of the existing Residential and GS classes (page 52)?*

If the proposed billing determinant means that differences in load factor or demand diversity would lead to material intra-class cross subsidies then consideration should be given to either:

- a) Redefining the customer classes to reflect these differences or
- b) Choosing an alternative billing determinant that captures these differences.

With newly defined customer classes will come new revenue to cost ratios. In VECC's view, the need to manage bill impacts will constrain the extent to which these revenue to cost ratios can be changed on a year over year basis. In addition, there is effectively a need to "harmonize" the rates for all those customers within the newly defined customer class. This later issue is not really an issue related to cost allocation and revenue to cost ratios but may require bill impact mitigation in the short term.

The bill impact analysis presented in Tables 4 and 5 presumes that low use customers have low load factors and that higher volume customers have higher load factors. This may not always be the case.

6.7 Residential Sub-Class

Response to Questions

- *Need to maintain a residential sub-class as a means of identifying residential customers for purposes of billing treatment that is available only to residential customers under current legislation (page 55)?*

There is clearly a need for distributors to be able to identify these customers in their billings systems such that the appropriate legislative treatment can be implemented. In a general sense this is no different than being required to separate out those customers who have contracted with a retailer for different treatment. The need for a separate sub-class will depend upon whether the different billing treatment requires outputs from the cost allocation methodology.

Rate Design for the Three Phase Secondary Class (Section 7)

Comments

The Paper presupposes (page 56) that the cost differences between single phase and three phase service are sufficiently large to justify a new customer class. However, no information has been provided to indicate that this is the case. Also, the introduction of such a class assumes that the cost allocation methodology can readily identify these cost differences. Again, even if there is a cost difference, it is not apparent to VECC that the information readily exists to reflect such differences into the Board's cost allocation methodology.

Rate Design for the Primary/Sub-Transmission Classes (Sections 8 & 9)

Response to Questions

- *Appropriateness of Options*

VECC notes that the definition of Sub-Transmission appears to differ from that used in the Board's current cost allocation methodology. This is an issue that involved significant debate during the development of the cost allocation methodology. VECC anticipates that there will be issues with the definition of the class as proposed if, for example, customers served at the same voltage and with the same load size are classified differently depending upon the distributor that serves them.

It is more feasible (due to the small number and the increased technical sophistication of the customers concerned) to use "contract" versus actual demand as a billing determinant for these classes. However, the use of actual demand is likely more acceptable from the customer's perspective. However, might be possible to introduce a combination where a surcharge applies if a customer's contract demand (as established through the Connection Agreement) is exceeded.

Rate Design for Embedded Distributors (Section 10)

Response to Questions

- *Is there any need to maintain a separate class for embedded distributors (page 65)*

The Paper suggests that one source of cost differences between embedded distributors and other similarly sized customers could be proximity to the host distributor's connection to the transmission system. In VECC's view such a concept represents a departure from the current principle of postage stamp rates for customers served by the same distributor. If this principle is to be ignored for embedded distributors then why not also for secondary customers who happen

to be located in subdivisions or areas close to their distributor's connection with the transmission system?

In VECC's view there would a legitimate reason for a separate embedded distributor customer class if their load characteristics are such that the costs to serve on a billed kW (assuming kW is the billing parameter) are materially different. This is something that would have to be established on a case by case basis using the host distributor's cost allocation methodology.

- *Appropriateness of the rate design options (page 66)*

VECC does not see the use of "contract demand" as being applicable to embedded distributors.

TOU rates would be appropriate as they could subsequently be reflected in the embedded distributor's charges to its customers.

Rate Design for Load Displacement Generation (Section 11)

Comments

In VECC's view, unless there are demonstrable benefits to the local distributor (in terms of distribution cost savings), there is no rationale for treating load displacement generators as being different from other customers in terms of the design of the applicable distribution rates. If their load profile is such that it gives rise to a different cost per kW (again assuming kW is the billing parameter) then there is justification for a separate customer class. Furthermore, if load displacement generator customers create added cost for the distributor, then these should be borne by these customers. If there is an overall system (as opposed to local distribution) benefit to be gained from these customers then that is something that should be reflected in the contract arrangements between these customers and the OPA.

VECC does not understand the reference to load diversity and the supposed credit it should create for load displacement generators. At the distributor level, the issue would be limited to whether there are sufficient displacement generators in a single distributor to create "diversity" amongst the generators themselves, if they were considered a separate customer class. However, they would also receive "diversity benefits" if they were included in an existing customer class.

Rate Design for Unmetered Scattered Load (Section 12)

Response to Questions

- *Should a separate unmetered scattered load class be mandatory*
- *Merits of billing unmetered scattered load on the basis of customer and connections*
- *Justification for separate classes for Street Lighting and Sentinel Lighting*

If there are the known material differences in the cost to serve associated with these customers there is merit in establishing a separate rate. To the extent the identification the cost differential requires the application of a cost allocation methodology, there is also merit in establishing a separate customer classes.

VECC suspects that the costs to serve Street Light and Sentinel Light customers are more closely related to the number of connections (as opposed to number of accounts) and the rate design should be based accordingly.

Rate Design for Metered Scattered Load (Section 13)

Response to Questions

- *Should a diversity benefit be reflected in the rates paid by customers with metered scatter loads in multiple locations*
- *Should customers with metered scattered loads in multiple locations be able to aggregate their bills and be charged a single fixed charge that reflects the reduced costs associated with the single bill.*

VECC's response to both questions is no. Diversity benefits are already inherent in the rates charged to all customers in the same customer class. There is no added benefit to the distributor (in terms of diversity) arising from the fact that the same company owns a number of locations.

The distributor must track the usage at each connection regardless of who owns it. VECC questions whether the savings associated with having to send only one bill (for multiple locations) would offset by much the additional effort that may be required to aggregate the bills.

Revenue Recovery of Distribution System Losses (Section 14)

Response to Questions

- *Appropriate way to adjust the commodity for distribution system losses.*

Once smart metering is in place, VECC sees some merit in pursuing the question of whether distribution losses should vary by time of use. The determination of overall distribution loss factors is by no means a science and is typically based on an historical average. Furthermore, it is made up of both technical losses

which may vary with load level³ and non-technical losses which probably don't. In VECC's view this concept requires more analysis, but is worth pursuing.

Thank you for the opportunity to comment and if you have any questions please contact either Bill Harper (416-348-0193) or myself (416-767-1666).

Yours truly,



Michael Buonaguro
Counsel for VECC

³ There is likely a fixed level of technical losses associated with the operation of the distribution system such that the relationship between load and losses is not clear.