

May 15, 2007

Board Secretary Ontario Energy Board PO Box 2319 2300 Yonge Street Suite 2700 Toronto, ON M4P 1E4

Via email to BoardSec@oeb.gov.on.ca and by courier

Dear Board Secretary:

Re: EB-2007-0031 Review of Electricity Distribution Rate Design

The Electricity Distributors Association ("EDA") is the voice of Ontario's electricity distributors.

Enclosed is the EDA response to the Board's Staff Discussion Paper on Rate Design for Electricity Distributors: Overview and Scoping - EB-2007-0031. The report was based on membership input and was prepared with the assistance of Navigant Consulting Inc.

Please direct any questions or comments to Maurice Tucci at 905-265-5336 or at mtucci@eda-on.ca.

Yours truly,

Debora Steggles Vice President, Policy and Government Relations

Encl.

EDA Response to OEB Staff Discussion Paper EB-2007-0031 Review of Electricity Distribution Rate Design

1 Introduction

This is the Electricity Distributors Association's (EDA) response to the Ontario Energy Board Staff Discussion Paper on "*Rate Design for Electricity Distributors: Overview and Scoping*" (EB-2007-0031, March 30, 2007) (the "Discussion Paper"). EDA members ("members" or "we") are encouraged that the Ontario Energy Board ("OEB" or "Board") is undertaking this important initiative. It is particularly timely given the coming widespread installation of smart meters, which will change the way in which electricity use can be measured and charged for. We look forward to working with the Board and other stakeholders in developing an approach to distribution utility rate design that will best serve the electricity consumers of Ontario.

The intention of this response is to assist the Board in focusing the next stage of the rate design review by providing the perspective of EDA members on the issues raised in the Discussion Paper. This includes identifying those policy options that are promising, and others that are clearly inappropriate and need not be considered in subsequent phases.

We have grouped the issues raised in the Discussion Paper into five categories:

- Basic Principles
- Consistency of Rate Design and Rates (both between and within distributors)
- Derivation of Customer Bills (including both billing determinants and service classifications)
- Specialized Customer Requirements
- Scope of Further Study

For each of these groupings, we provide a general discussion of the views of the members, and specific responses to the many questions identified in the Discussion Paper.

2 Basic Principles

EDA members agree that Bonbright's eight principles form a sound basis for electricity rate design. However, these principles are subject to a broad range interpretation, even by Bonbright himself.

Like Bonbright, the EDA members give primacy to the principle that "the rates of any given utility enterprise, taken as a whole, must be designed as far as possible to cover

costs as a whole including (or plus) a fair return on capital investment" (pp. 293-294). We understand this principle to apply in both a static and dynamic sense. That is, the total rates should recover total costs not just under static test year conditions, but also under dynamic, real world, conditions. This implies that, as far as practical, rates should be based on billing determinants that are closely related to cost drivers, as otherwise actual revenues would depart from actual costs under actual demand conditions. Since almost all of a distributor's costs are fixed from year to year, and those costs that do vary are largely a function of the addition or loss of customers rather than usage by individual customers, it follows that distribution rates should provide a stable source of revenue from each customer that varies little from year to year. Thus, charges based on energy consumption or monthly peak demand that are likely to vary from year to year depending on the weather, are not the ideal basis for distribution rates.

We note that Bonbright's discussion is based on the rate design of a single company (or what Bonbright sometimes calls a "utility enterprise"), not a combination of companies or subdivisions within a company. We agree with Bonbright that each company is the most appropriate basis for determining distribution rates, because each company reflects and embodies the specific and actual costs of providing service to the combination of customers and customer classes within that company's service territory.

Given Bonbright's focus on the company in rate design, it follows that the level and structure of rates and charges for the other elements of Ontario's electricity supply industry (e.g. generation and transmission) should not influence *distribution* rate design.

2.1 Response to Questions

1. Are there principles, beyond the generally accepted, traditional principles of rate design listed above, that the Board should consider in designing distribution rates? What is the new principle's importance relative to the others?

Bonbright's eight principles provide a solid and time-tested foundation for rate design. However, these principles are subject to interpretation. EDA members, like Bonbright himself, would give primacy to the principle that rates must recover the company's full cost of providing services, including a fair return on investment. Distribution rates should thus be based on distribution costs, not on generation or transmission costs or on social equity goals except to the extent that such costs or goals have been internalized in the distribution revenue requirements.

5. What are the principles that should inform the decision on fixed and/or variable rates?

Since distribution costs are largely fixed, distribution rates should provide a stable revenue stream that does not fluctuate with variations in weather or other factors

that have little impact on distribution costs. Distribution rates should be based on distribution costs, not on generation, transmission, economic development, social, or other considerations, except where such considerations have been internalized into the distribution revenue requirements.

3 Consistency of Rate Design and Rates

3.1 Consistency Between Distributors

The Discussion Paper discusses several aspects of rate consistency, including the possibility of common rates at a regional or provincial level with a revenue-sharing mechanism to reconcile revenues with revenue requirements. EDA members feel strongly that each distributor should have its own rates based on its own revenue requirements. There are several reasons for this:

- There is no strong reason to impose rate harmonization between different distribution companies; little or no value would be created. Transmission rates were harmonized in Ontario for good reasons, but these reasons do not apply to service at the distribution level.
- Uniform rates between different distribution companies would:
 - reduce accountability and transparency,
 - create cross-subsidies between customers in different areas paying the same rates but creating different costs for their distributors
 - not reflect differences in the quality or level of service provided, for example between distributors with predominantly underground or predominantly overhead service, and
 - break the link between costs and rates, which could promote inefficiency.
- Overall cost savings would be minimal if any. Savings to the OEB would be small, since there would be no change in the number of revenue requirement cases to be heard; the only change would be on rate design and rate-setting. The sharing mechanism would add an ongoing administrative burden which would offset any regulatory savings.

It should be noted that Bonbright assumed that rates would be determined at the company or utility enterprise level, not harmonized across multiple companies. In fact, rate harmonization would violate six out of Bonbright's eight principles (all except "clear" and "practical"). EDA members believe that harmonizing rate *levels* across utilities is not a viable option and should not be considered further.

EDA members believe that the current system, in which rates are set by the same body (the Board) and therefore reflect the same basic principles and a similar approach, but also the special circumstances of each distributor, is serving Ontario electricity consumers well, and any new system should not depart greatly from it. A step in the

direction of greater consistency in rate *design* (but not rate *levels*) might be appropriate, as long as each distributor can continue to propose special rates to reflect its individual situation. EDA members are confident that a standard rate design could be established that would fit the vast majority of Ontario electricity consumers, with the proviso that individual distributors can adjust the standard design to fit the needs of particular groups of customers. In particular, distributors should be able to propose adjustments to the boundaries between their service sub-classifications that better reflect service characteristics and/or cost responsibility.

3.2 Consistency Within A Distributor

The Discussion Paper also raises the question of consistency of rates *within* a given distributor, and in particular the possibility of locational rates, though it is not entirely clear what "locational" means. We would distinguish between two types of location-related rates:

- Distance-based rates, in which rates are set separately for each customer or for small groups of customers based on their distance from the distributor's connection with the transmission grid (as a proxy of their use of the distribution system).
- "Zonal" rates, in which the distributor's service area is divided into a small number of zones, with separate rates for each zone.

Most EDA members do not consider density-based rates to be a form of locational rates, but rather a matter of service classification. The present discussion therefore does not apply to density-based rates.

In the opinion of EDA members, distance-based rates are not appropriate for distributors, for several reasons:

- They do not send an appropriate price signal. Under the current system, customers with high expansion or enhancement costs are required to make a capital contribution. This sends an appropriate price signal at the time that the choice of location is made. Once the choice of location is made, on-going locational price signals, such as distance-based rates, have little impact on further choices regarding a customer's use of distribution services.
- They can be unstable. Distance from the transmission supply point can change, for example, if another supply point is added. This would lead to instability in rates and revenues.
- Distance-based rates would be administratively burdensome and difficult to implement, since separate rates would need to be calculated for each customer.
- Depending on how distance-based rates were implemented, how much a customer pays might depend on the order in which the customer was connected. This could lead to queuing, which is administratively more difficult, and can lead to rate

instability as system expansions for one customer alter the distance-based parameters for subsequent customers.

The default rate design should be "postage-stamp" rates throughout a distributor's service area, with zonal rates allowed where justified by significant differences in service costs. Distributors currently have this option, and should retain it. Some examples of situations where zonal rates might be justified are:

- Where there are large differences in customer density
- Where a particular area is very expensive to serve, such as an island requiring a submarine cable
- Where there are significant differences in service levels, perhaps arising when two disparate utilities merge. For example, one distributor might have primarily underground service and higher rates, while another has entirely above-ground service and lower rates. Requiring rate harmonization in cases like this could be an obstacle to amalgamation and the resulting cost savings.

Zonal rates should require justification on a case-by-case basis, with postage-stamp (nonzonal) rates as the default. It should be noted that distributors will tend to prefer fewer and simpler rates, because they are much easier to administer. If a distributor believes that zonal rates are necessary in its service area, that recommendation should be given serious consideration.

3.3 Response to Questions

9. How important is consistency of the rate design model across the province?

A standard rate model suitable for the majority of customers across the province would be desirable, as long as distributors retain the flexibility to propose rates that depart from this model to address their unique circumstances.

10. Is one single rate order (or a few regional rate orders) to be used by all distributors a desirable outcome?

A distributor's rates should be based only on its own costs. Rate harmonization and revenue sharing across multiple distributors are not desirable, as they would reduce accountability and transparency, create substantial administrative costs for the OEB and distributors and create cross-subsidies between customers in different areas receiving different levels of service.

14. Should the Board investigate locational rates for any customers connected to a distribution system?

Uniform ("postage-stamp") rates within each distributor should be the norm, with zonal rates allowed where justified by special circumstances. Distance-based rates should not be considered for distribution services.

4 Derivation of Customer Bills

4.1 Principles

The Discussion Paper raises a number of issues regarding how a customer's usage is translated into a bill, including what service classifications are appropriate, and what billing determinants should be used for each service classification. The EDA notes that the present system of service classifications and billing determinants reflects the past and present metering capabilities. With new smart meters about to be installed across the province, it is appropriate to take a "clean slate" approach.

EDA members strongly believe that distribution rates should be based on distributor costs, and *not* on any other factors, such as

- Economic development (e.g., special rates for certain threatened industries)
- Conservation in other parts of the electricity sector (e.g., using distributor rates to encourage energy/kWh conservation)
- Social equity considerations (e.g., special rates for low-income users).

There are other, more direct, means available to achieve these goals without distorting electricity distribution rates.

A secondary consideration is that customers' bills should be based, as far as possible, on factors that are under their control, such as their electricity use or capacity requirements.

4.2 Billing Determinants

Since distribution costs are largely a function of the size of the maximum customer demand that the system is designed to accommodate, the ideal billing determinants would be ones that reflect this. Hence, EDA members recommend that the Board should give serious consideration to two possible billing determinants – contract demand and *annual* peak demand – that reflect the distribution infrastructure required to serve the customer. These could be measured in either kW or kVA. KVA would be preferable where that information is available, but most meters (including the new smart meters) do not measure it.

For customers whose contract demand is specified, this can be an excellent indicator of distribution costs, in that contract demand is closely related to the capacity that the distribution system is designed to accommodate. Where contract demand is not specified,

as is the case for most residential and small commercial customers, it can be determined based the voltage, amperage and type of connection (i.e, number of phases). This calculation will define the maximum capacity that the customer can demand from the electric distribution system. Charging residential and small commercial customers for the amount of capacity that is provided to them, rather than the amount of electricity that they use, is a topic that should be addressed by the OEB study.

For these customers, a better indicator of the capacity that the distribution system needs to be designed to handle may be *annual* (not monthly) peak demand. This is not a perfect indicator of distribution costs, in that it can vary from year to year while distribution costs do not. One source of variation in annual peak demand is weather. However, annual peak demand tends to be less weather-dependent than the alternatives (such as energy or monthly peak demand), because there is usually at least one very hot or very cold hour in the year during which the customer's demand reaches its design peak, even if temperatures during the rest of the year are more moderate. Another source of variation is conservation and demand management.

One of the issues that would need to be addressed if peak demand is to be used as a billing determinant is the period over which peak demand is to be measured. Distribution costs are driven by instantaneous peak demand, but it is not practical to measure this. In principle, peak demand should be measured over the shortest interval possible. For most customers, this will mean 15 minute, 30 minute, or one-hour blocks. Consideration should be given to either using the same interval (up to one hour) for all customers, or using shorter intervals where meters are capable of it. Intervals longer than one hour should not be considered as they would not be good indicators of distribution costs.

EDA members offer the following comments on some of the other possible billing determinants that the Board may consider:

- Energy (kWh) use has been one of the main distribution billing determinants in the past, because for the many customers with energy-only meters it was the only measure of usage available. It has very little relationship with distributor costs, other than as a poor and indirect indicator of peak demand.
- Monthly peak demand has been used extensively, but annual peak demand is a much better indicator of system impact.
- A customer's coincident peak demand (i.e., coincident with the *distributor's* system peak) bears some relationship to certain distribution costs, but most distribution costs are more closely related to design capacity (however measured). It may be appropriate to use coincident peak demand at the distribution level in cost allocation, but including it as a billing determinant in addition to the customer's annual or monthly peak demand would probably be overly complicated. As well, customers' control over their coincident peak demand is limited because the time of the coincident peak is not known until after the fact. Province-wide coincident peak (i.e., each customer's usage at the time of the province-wide system peak) is not relevant to distribution costs.

• Voltage or amperage rating, taken individually, do not provide a good indication of distribution costs. Taken together, however, voltage, amperage and connection type provide an indication of the customer's maximum possible demand and may be worth further consideration as a possible rate determinant within the rate design study.

Whichever billing determinants are used, consideration should be given to supplementing them with a fixed charge per customer, to reflect costs that are independent of usage.

4.3 Service Classifications

Customers should be divided into different service classifications if and only if they reflect differences in cost causality which are not reflected in the billing determinants. With new meters capable of measuring demand directly, the service classifications used in the past may no longer be relevant. For example, one of the reasons for putting residential and commercial customers in different classes has been that their load factors, and therefore the cost per kWh of serving them, are different. Since it will soon be possible to measure peak demand directly, it is no longer necessary to use kWh as an indicator of system impact, and differences in load factor will become irrelevant.

Billing determinants by themselves may not adequately reflect costs, and it may be appropriate to supplement them by establishing service classifications based on the following customer characteristics:

- Measurement limitations: It may be appropriate to separate customers whose bills are based on contract demand from those with bills based on annual peak demand, since the two billing determinants are not directly comparable. It may be appropriate to further subdivide customers whose bills are based on annual peak based on the interval used in determining peak demand (one hour, 15 minutes, etc.), since peak demands based on different intervals are not directly comparable. Unmetered customers and those with energy-only meters might be put into separate service classifications to the extent that their service characteristics differ from the conventional rate classes. Unmetered customers for whom reasonably accurate estimates of energy consumption and/or demand can be established may remain in the same classifications as comparable metered customers.
- Size: While contract demand and/or annual peak demand are good indicators of distribution cost causality, the relationship is not necessarily linear: the cost per kVA of serving a very large customer is likely to be lower than that of serving several small customers. One approach would be to divide service classifications into several sub-classes based on peak demand, as is currently done with the General Service class. Another approach would be to set rates on a sliding scale so they vary continuously or in small steps as customers increase in size. This approach would avoid the current problem of discontinuities as customers move from one size-related service classification to another.

- Reactive vs. resistive end-uses: Reactive loads tend to be more costly to serve than primarily resistive loads. In the past, this has been one of the reasons for treating residential customers separately from commercial customers. However, there are indications that residential and commercial customers are becoming more similar in this respect, so this distinction may no longer be significant enough to justify separate service classifications. For large customers, power factor-related charges can be used to align cost causality with billed amounts.
- Use of system: Sub-transmission customers use only part of the distribution system, and it may not be appropriate for them to share in the cost of street-level distribution. Determining who is and is not a sub-transmission customer can be very complicated, so the decision on whether to treat them as a separate service classification should be made based on the specific circumstances of each distributor. There is considerable overlap between sub-transmission customers and very large customers, so it may not be necessary to use sub-transmission as a separate distinguishing characteristic.

Service classifications for residential and small commercial customers need to be explored and discussed in subsequent reports, including both the consultant's report and the further Staff Discussion Paper. EDA members agree that the continued use of separate rate classes for residential and small general service customers should depend on whether there are significant differences in the relevant cost drivers. For example, residential customers may have higher secondary costs (more calls to customer service etc.) than small general service customers. OEB's consultant should address such costcausal distinctions as part of their engagement, in order to enable meaningful discussion by stakeholders.

4.4 Response to Questions

2. What is the most appropriate basis for determining the service classifications for Ontario distribution customers?

Service classifications should be based on significant differences in cost causality not captured by the billing determinants. The current system of service classifications may not be appropriate in the future once smart meters become widespread and increase the range of available billing determinants. Factors that could be considered in determining service classifications include:

- Measurement capability for example, distinguishing between customers with and without specified contract demand, and with meters of different capabilities (i.e., able to measure peak or hourly kVA or kW, or only kWh).
- Size, since one large customer may cost less to serve than several small ones
- Use of the distribution system, such as by sub-transmission customers
- Primarily reactive vs. primarily resistive loads, though this may be becoming less significant.

3. Should sub-classifications be maintained? If so, what is the most appropriate method to allocate diversity benefits?

In the current system of distribution rates, sub-classifications are defined primarily on the basis of size, to reflect changes in costs related to customer size. There are other possible alternatives that might be considered, such as declining blocks or formula-based rates within a single service classification, though these may turn out to be unnecessarily complicated. It is not clear at this point which approach would be best.

The issue of the allocation of diversity benefits should more appropriately be addressed as a cost allocation issue not a rate design issue.

6. Should the billing determinants be consistent for all customer classifications?

The billing determinants for each type of customer should be the best indicators available of cost causality for that type of customer. This is likely to result in a two-part rate design, based on a measure of usage of the distribution system, plus a daily or monthly fixed charge.

7. What are the most appropriate billing determinants for each customer classification?

The most appropriate billing determinants are those that best reflect the costs incurred by the distribution utility in serving the customer. Since distribution costs are largely a function of maximum customer demand, the Board should consider contract demand and *annual* peak demand as possible billing determinants. Where available, annual peak kVA is a better indicator of distribution cost than annual peak kW.

5 Specialized Customer Requirements

While much of the Discussion Paper deals with issues affecting all distribution customers, some of the specific issues raised affect only small numbers of customers with specific needs, including

- distributed generation
- customers needing special levels of service
- customers that can provide services to the distributor.

These issues are dealt with in the following sections.

5.1 Distributed Generation

Under the current system, distributed generation facilities pay a capital contribution when they are connected but do not make on-going payments to the distributor, except insofar as they use electricity from the grid. There are at least three problems with this system:

- The distributor incurs administrative costs, including metering and settlement, which are not covered by the generator.
- The generator has no incentive to maintain a good power factor.
- For some generators, the initial capital contribution may be prohibitive.

It would be useful for the Board to consider changes to the current system as part of the distribution rate design review. On-going rates to cover on-going costs for distributed generation should be considered. As well, a framework should be developed through which the distributor can, if it chooses, pay the initial connection costs up front, and recover the cost over time through ongoing charges to the generator. In these situations, generators could be treated like industrial facilities, with risk assessments, letters of credit, etc. used to manage the risk to the distributor. The OEB should explore these various possibilities for funding/financing the costs of assets that exclusively serve distributed generators, with a preference for multiple alternatives at the discretion of the distribution utility, based on the specific circumstances of the distributed generation customer and the magnitude of the connection costs.

Any consideration of rates for distributed generation should take into account the variety of technologies that may be used, each with it unique characteristics and unique impact on the distribution system.

Use-of-system charges should also be considered and these charges should treat distributed generation and load-displacement generation on an equitable basis. Generation installed within a distributor's service territory may take the form of pure distributed generation (no load displacement component), pure load displacement (no sales into the grid), or both (load displacement with the surplus sold into the grid). Furthermore, this can change dynamically with changes in generator output and customer load. Any analysis should consider all of these possibilities and the dynamic interaction between load, generator output and sales into the grid.

5.2 Higher Service Levels

Some distribution customers require a higher level of service than the normal standard. In hospitals, for example, an electricity outage can be life-threatening, and a second feed may be the most cost-effective way to provide security of supply. Currently, the cost of this higher level of service can be covered in two ways:

• The customer can pay part or all of the cost through an up-front capital contribution covering the distributor's time and materials

• The distributor can include part or all of the cost in its rate base, and recover it through higher rates on all customers.

The first approach is fairer, in that the customer receiving the benefit pays the cost, but the cost may be prohibitive for some customers. Both approaches are subject to regulation by the Board, as are all monopoly electricity distribution services.

It would be useful for the Board to provide a framework through which distributors could provide a higher level of service, and recover the cost through customer-specific charges. This should include a streamlined approvals process, since the current approval process is burdensome and discourages provision of these services. However, going further than establishing a framework and approvals process is not recommended. In particular, it would be impractical to create a standard rate for higher levels of service, because costs and customer requirements vary widely, and it would not be appropriate for higher levels of service to be required, because they are not always feasible or cost-effective.

5.3 Purchased Services

In some situations it can be more cost-effective for distributors to purchase services from customers than it would be to provide the same level of service directly; examples are contracting for generation or demand management instead of paying for system upgrades. Power factor correction is another possible application. Allowing distributors to purchase such services would benefit all of the distributor's customers, as long as this is the most cost-effective solution.

It would be useful for the Board to provide a standardized framework for purchasing services from customers, including a streamlined approval process. Requiring distributors to purchase specified services at pre-determined rates is not recommended, as costs and benefits are very site- or area-specific.

5.4 Response to Questions

8. Should the Board pursue an analysis of use-of-system rates for distributed generation to investigate rates and determinants?

An analysis of use-of-system rates for distributed generation would be useful. This analysis should consider that generation connected to the distribution system can operate dynamically along a continuum, ranging from exporting power to the grid to load displacement. Generators should pay rates that reflect administrative costs, such as meter reading and settlement, and that provide an incentive to maintain a good power factor. It would also be useful for the Board to develop a framework and simplified approval process that allows distributors to finance connection costs and recover the cost through customer-specific charges where the situation justifies such treatment.

11. Should distributors offer various levels of service?

Distributors should be allowed but not required to offer higher levels of service, with the actual cost paid by the benefiting customer. Predetermined rates would not reflect actual costs. It would be useful for the Board to develop a framework and simplified approval process that allows distributors to finance these additional costs and recover them through customer-specific charges.

12. Should distributors be able to buy (offer credit for) services from customers?

Distributors should be allowed to purchase services from customers when that is the most cost-effective approach. Payments or credits should be based on the specifics of each situation, rather than on predetermined rates, and should be less than the cost of the alternative. It would be useful for the Board to develop a framework and simplified approval process that allows distributors to do this.

A common theme in all three of the above topics is that it would be useful for the Board to provide a standardized framework and a streamlined approval process through with distributors can address specialized customer needs, while retaining the flexibility to adapt to the their unique circumstances.

6 Scope of Further Study

6.1 Long-run Marginal Costs

One of the questions raised in the Discussion Paper relates to using long-run marginal costs to set distribution rates. It is the opinion of EDA members that long-run marginal costs are *not* a suitable basis for distribution rates, and should not be considered further in the rate design review process. Calculating long-run marginal costs is fraught with practical difficulties in both data collection and methodology. In particular, since distribution costs tend to be "lumpy", long-run marginal costs would tend to vary greatly depending on the exact time frame and methodology used, and the resulting rates would be unstable, conflicting with one of Bonbright's basic principles. EDA members note that long-run marginal costs are not used in setting generation and transmission rates, even though this would be easier than using them in setting distribution rates.

6.2 Simplified Bill

Another question raised in the Discussion Paper concerns using the Simplified Bill to encourage conservation. EDA members observe that the Simplified Bill in its current form is not an effective tool for encouraging conservation, in that the bill does not show consumers how much they would save by conserving. However, EDA members strongly believe that encouraging conservation should be a side effect, and not a primary consideration, in distribution rate design. Well-designed distribution rates will provide price signals to encourage wise use of distribution services; for example, rates based on annual peak demand can encourage customers to manage their electricity use at critical times when it will have an impact on the distribution system.

However, distribution rates should not be used as a tool to encourage conservation of generation and transmission resources. Distribution rates make up only 20% to 25% of a typical customer's bill. There is ample scope within the remaining 75% to 80% to send price signals that encourage the wise use of generation and transmission resources.

How to use the electricity bill to encourage conservation is a separate and important question, but it is not a rate design question. A review of the simplified bill could be undertaken subsequent to the rate design review.

6.3 Topics Not Covered In The Discussion Paper

The Discussion Paper raises several questions about what topics should be covered in the next phase of the rate design review, and in particular whether there are important topics that the Discussion Paper does not cover.

Although the purpose of the rate design review is to start with a clean slate, there will need to be a transition period from the current system to the new system. EDA members suggest that implementation issues should be looked at as part of the rate design review, not as an obstacle to change, but to identify and begin to address possible difficulties. In particular, the administrative costs of implementing a new system should be considered.

The Discussion Paper does not address the issue of loss factors for large users on the distribution system. Although the same loss factor for large users is currently used throughout the Province, such an approach may not reflect true cost causality, and may be contributing to a cross-subsidy between large users and smaller, lower voltage users. This topic might be added to the OEB's list of requirements for the consultant report.

One topic that it noticeable by its absence is the fees charged by distributors for account set-up, easement letters, etc. Since it is estimated that these make up only a small portion of a typical distributor's revenue, EDA members are of the opinion that it is not necessary to consider them as part of the rate design review. However, members note that once a new rate design is established, it may be necessary to review and adjust the current system of fees, as well as the economic evaluation model, so that they are consistent with the new rate design, including service classifications.

6.4 Response to Questions

13. Should the Board investigate a rate design model based on long run marginal costs?

Long-run marginal costs are not a good basis for setting distribution rates, as calculating them is fraught with practical difficulties in both data collection and methodology.

15. Given the simplified bill, can a conservation and/or demand management effect be achieved through distribution rate design?

Distribution rates should be based on sound rate-design principles. Well-designed distribution rates will tend to encourage efficient and effective use of distribution resources; it is neither necessary nor desirable to skew distribution rates to encourage conservation of generation and transmission resources. The way in which all of the various electricity supply cost components are presented on the bill should be reviewed separately, subsequent to the rate design review.

4. Are there other rate design components or options that the Board should consider as it moves forward?

The only topics that EDA members identified as missing from the Discussion Paper are unmetered connections and implementation issues. Unmetered connections need to be addressed within the context of service classifications and the appropriate set of billing determinants, or possibly as a stand-alone topic. Implementation issues should be considered throughout the rate design review, not as a separate topic.

Loss factors for large customers should also be addressed, to the extent that the current policy of assigning a common loss factor to all customers in all service territories creates the potential for cross-subsidy between small and large customers.

7 Relative Importance of Issues

The EDA members have prioritized the basic topics discussed in this response in the following order, from most important to less important.

- **Principles**: It is very important that the Board take a stand on this, and clearly articulate the principles on which rate design will be based. Ideally this should be done before the consultant's report is undertaken, so that the principles can guide the study, rather than be one of the topics to be studied.
- **Consistency of Rate Design**: EDA members recommend that rate harmonization across multiple distributors should not receive further consideration, but that zonal rates within distributors should. While greater consistency in rate design (but not level) is desirable, distributors need to retain the flexibility to address their unique circumstances.

- **Derivation of Customer Bills**: The coming wide-spread installation of smart meters increases the range of options available. EDA members recommend that the Board should give serious consideration to two possible billing determinants contract demand and annual peak demand for use instead of or in addition to the billing determinants currently in use (energy use and monthly peak demand) and any others that may be proposed. Whichever billing determinants are chosen, service classifications should be based on significant differences in cost causality not captured by these billing determinants. The resulting service classifications may be very different from those currently being used.
- **Specialized Customer Requirements**: These are significant and worthy of study, but clearly less important than the above issues because this set of issues affects only a small group of customers. It would be useful for subsequent reports, including the consultant's report and the further Staff Discussion Paper, to recommend standardized frameworks and streamlined approvals processes through which distributors can address specialized customer needs, while leaving distributors with the flexibility to adapt to the their unique circumstances.
- Scope of Further Study: EDA members identified two topics that should be included in the rate design review (unmetered connections and implementation issues), but these are secondary to the articulation of the principles on which the rate design will be based and the main issues of consistency of rate design and derivation of customer bills.