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2007-05-15

Ms Kirsten Walli
Board Secretary
Ontario Energy Board
Suite 2700, 2300 Yonge Street,
Toronto, ON M4P 1E4

and by email: boardsec@oeb.gov.on.ca

Dear Ms. Walli:

Re: Board file EB-2007-0031, Electricity Distribution Rate Design Review;
LIEN comments on board staff paper dated 2007-03-30

FRC Canada ("FRC") represents the Low-Income Energy Network ("LIEN") in matters before the Ontario Energy Board (the "OEB or the "Board"). Further to the Board's letter of March 30, 2007, initiating a review of Electricity Distribution Rate Design (Board file: EB-2007-0031), and to LIEN's letter dated 2007-04-12 stating its desire to participate in this proceeding and its request for a finding of cost eligibility, at LIEN's request FRC hereby offers comments in response to the staff paper entitled "Rate Design for Electricity Distributors: Overview and Scoping" and to the questions set out therein. In preparing these remarks, FRC has benefited from consultation with its colleague Ms. Judy Simon of IndEco Strategic Consulting Inc.

1 Introductory comments

In setting out its comments on the Board staff paper, FRC intends to make comments as they arise naturally in the order of the material presented by Board staff. Similarly, as the questions which are summarized in section 6 of the staff paper arise in the context of the paper, we will respond to them. We note that the paper is an overview and scoping document. As such we will assume that many details that must be researched, or at least brought together in one place, in order to make informed decisions, will be addressed in a process that follows this overview and scoping. Given our experience that clear terminology and language assist understanding and good decision-making, we will take this early opportunity to comment on some of the terminology that arises from the Board staff document as well as to provide responses to the staff's questions.

As context for this review, we begin by noting that, based on rates for Toronto Hydro effective 2007-05-01, for a residential customer consuming 1000 kWh of electricity during the two month period of an electricity bill, the portion of the bill representing electricity distribution service is approximately 33% of the total bill including GST. That is, electricity distribution is the second-largest component of the customer's bill after the energy "commodity" portion (at about 43%). We understand that these percentages can differ significantly from one distributor to another. Nonetheless, given the relative importance of distribution service to residential customers, LIEN welcomes this review.

Given the extent of the review as outlined in the Board's letter of 2007-03-30, we expect this process to be dynamic and that, as we learn more about the distribution systems in Ontario and the needs of various stakeholders, LIEN's position and the positions of the various stakeholders may change, if only by becoming more specific. This is the spirit in which we offer our preliminary comments. We look forward to participating in all aspects of the process, allowing our views to evolve, and having another chance to present our views and positions before the Board must make its decisions on electricity distribution system rate design.

FRC and its colleagues in related companies have advocated since the early 1990s for a review of electricity pricing from first principles with, in particular, a review of customer classes and an examination of cost behavior with a view to using this knowledge in the design of good electricity pricing. Although not impossible to perform such a review before the breakup of the old Ontario Hydro, the existence today of stand-alone entities for generation, transmission, and distribution, and a new regulator of distribution rates, cannot but help make such a review more manageable.

2 "Rationale for rate design review initiative" - comments

As a starting point for this review, we accept the Board staff's overview of developments and emerging issues. Many of the documents which are referred to in section 2 of the staff paper are the product of previous work of the Board and rightly should inform this review. Where they represent processes in which LIEN was not involved we have commenced our own review to ensure adequate familiarity with the previous work.

In our view, a thorough review of **customer classes** is needed and is a principal rationale for reviewing electricity distribution system rate design. Reliable data concerning the attributes of customer service are required in order to establish appropriate customer classes for rate design. One must examine natural clustering of customers based on customer service attributes such as annual average consumption of electricity, peak consumption of electricity, consumption of electricity on or near system peak, location of customer, and the range of costs to serve a customer. This examination may be carried out at the distributor level, but practicality and a desire for simplicity would suggest that it be done by regions or over the entire province (or at all three levels if the data has been gathered and it is just a matter of combining it differently). See also sub-section 4.2.

Changes to the OEB Act have given the Board greater scope to bring new approaches and new criteria to the design of rates. This in itself is a rationale for the current review. LIEN has argued, and continues to hold, that **social considerations and ability to pay** can have a legitimate role in designing and setting utility rates at the OEB. We note that rates in the broadest sense include terms and conditions of service that accompany a numerical price or rate for that service. It may be sufficient to address the needs of low-income electricity consumers through provisions in the terms and conditions accompanying a numerical rate or price for utility service. Also, application of good economic rationale can, in some instances, be sufficient to satisfy the needs of its low-income constituents without explicitly considering customer means. However, it is appropriate that some utility services/programs be offered only to low-income consumers, as is current practice in Ontario utilities. See also section 3 and section 5.

We agree, of course, that rate design should fairly apportion the **responsibility for cost recovery** (addressed further in section 4). Clearly, as Board staff notes, distributed generation, including own-use generation as well as common **generation that is embedded within existing distribution systems**, presents a challenge to distribution system pricing.

Pricing distribution service to embedded (including "distributed") generation will be important in order to ensure fair pricing for residential customers and LIEN's constituents. See also sub-section 5.7.

LIEN has supported **conservation and demand management** ("CDM"), whether initiated within distribution utilities or initiated through programs outside of the utilities (e.g. through the OPA). Changes in utility pricing that may be required as a result of CDM may be different depending on whether the CDM programs originate inside or outside of the utility. For example, CDM carried out either by the LDC, the OPA or the OPA in partnership with other entities such as federal and/or provincial agencies (e.g. the affordable housing program) is likely to require similar treatment. However, federal programs run in LDC jurisdictions in Ontario in the absence of Ontario partnerships may require different treatment because of the possible reduced level of control over measuring and verifying savings. LIEN has supported sheltering the utility from the risk of CDM-related changes in demand for their services.

Determining the revenue lost due to CDM programs, that may be recovered in rates may be primarily a revenue requirement issue. The lost revenue is calculated and posted to a balance sheet account for subsequent disposition in distribution rates. Concerning rate design, however, in our view, any lost revenue attributable to CDM programs, for which the utility may be kept whole, should be recovered through a **surcharge on the commodity component of the distribution rate**. Such an approach is logical since the revenue has been lost directly by reduced distribution of electric energy (kWh), the commodity; furthermore, such an approach enhances the signal to customers to conserve.

As a somewhat obvious "alternative incentive" for distribution utilities to reduce throughput/deliveries, one could consider setting distribution prices for marginal throughput below marginal cost. (This obtains when the fixed customer charges are set very high.) As the staff paper notes, utilities may like the stability of high fixed charges. However, in our view, this would give the wrong signal to the consumer concerning conservation. It would also place an undue burden on customers that can least afford to pay high fixed costs. Other alternatives will have to be explored.

The Board has made reference to the need for a shareholder incentive to encourage distribution utilities to participate in CDM programs. Adjustments can be made to keep the utility whole and to countervail the incentive to sell more electricity For example, in the US, especially in jurisdictions lacking in CDM experience, decoupling price from revenues has become an increasingly popular rate design mechanism to remove the disincentive to conserve. For CDM see also sub-sections 5.2 and 5.10.

We accept the importance of addressing the remaining issues set out by Board staff in section 2 of the staff paper. Our comments on the remaining issues are made as we comment on sections 3, 4 and 5 of the staff paper and address the specific questions raised by Board staff.

3 "Principles of rate-making" - comments

The staff paper refers to ratemaking principles attributable to Bonbright[1]. In general we agree with the principles of rate-making outlined in section 3 of the Board staff paper. We would simply make two observations concerning terminology. "Cost causality" for the purpose of rate design should be a forward-looking concept. It

[1] Bonbright, James C., Principles of Public Utility Rates, Columbia University Press,

should address the question of what are the drivers that currently cause, and will cause, the cost to change. This is in contrast to the concept of cost causality found in some FERC/FPC electricity reference material. There the phrase was used in a backward looking sense addressing the question of what planning purpose was served in incurring the costs (especially facilities costs[2]). Our experience at the OEB would let us assume that Board staff is using the phrase in the first sense, a sense with which we are comfortable.

As a second observation, we accept the concept addressed by staff (and by Bonbright) that discrimination can be "due" or "undue". In many situations, for example in many statutes, criteria are set out to assist in making the determination as to whether discrimination is due or undue. In Ontario, with respect to electricity, phrases such as non-discriminatory are encountered and may seem as though they are absolute in their prescription. We suggest that "non-discriminatory" should be interpreted as "not unduly discriminatory". In other words, we doubt that the drafters of the legislation were trying to rule out "due discrimination"[3].

Q: Are there any 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?

Read broadly, the principles summarized by Board staff would seem to be all-encompassing. Bonbright, Kahn[4] and others talk about the role that several different types of costs may play in assessing the fairness of rates or prices. In our view, for example, it would be implied "in principle" that in designing rates one should give consideration to various concepts of cost (average, incremental, short-run, long-run, historical, inflation-adjusted, and so on). The principles summarized are not independent of one another, nor exhaustive. If this important requirement to examine various cost concepts is not elevated to the level of a separate "principle", then we suggest it nonetheless deserves mention under the "principle of fairness".

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[2] This approach would serve to increase the costs classified as "energy" or "variable" (variable with the energy transported/delivered) and made it perhaps easier to argue for higher variable components in the rates designed. However, other rational arguments existed to accomplish the same objective. In our view, that concept of cost causality was confusing in its application. FRC and its related companies have suggested simply speaking of "cost behaviour" and looking for factors and parameters that will drive (or cause) cost behaviour as electricity is delivered today and in the future. Hence, if consuming more electricity will drive increases in certain costs, then pricing based on energy (kWh) to recover those costs makes sense; and if the need for facilities to serve a peak consumption level will drive certain costs then pricing based on the basis of peak capacity requirement (kW) makes sense. Rationale for the "split" between these two factors in pricing can be explored (and will be); however, the use of these parameters *per se* arises from an examination of the utilities' cost behaviour going forward.

[3] In the Electricity Act the phrase "non-discriminatory" applies to access to physical systems and to information. There may be differences in cost to provide that access to different customers. If so, in permitting access, is that not a basis for "due" discrimination in setting rates or charges for that access? Bonbright provides approaches to assist in assessing whether discrimination in pricing is due. (There are also due considerations such as safety or privacy that would be expected to be exceptions to any absolute prohibition on discrimination. The Electricity Act mentions the privacy exception.).

[4] Kahn, Alfred E., The Economics of Regulation: Principles and Institutions, John Wiley & Sons, Inc.: New York, 1970, and various papers in The Public Utilities Fortnightly and other journals.

The principles summarized by Board staff could just as well be called "objectives". Is the obverse true? Do the statutory objectives set out for electricity rate making, such as consumer protection, necessarily become "principles" for the design of rates in Ontario? The Board is well aware of LIEN's view that consumer protection is an important principle for the design of utility rates in Ontario. Beyond that, the Board is aware of LIEN's view that consumer means (as measured by income level) may be examined in order to protect certain consumers and to determine whether rates are fair.

In addition to the principles addressed by Board staff, we note that Bonbright also discusses “value of service” pricing. “Value of service” is a concept of consumer preference which does not necessarily have any relationship to cost. In some situations value of service pricing together with some knowledge of marginal or incremental costs can be used together to achieve commonly agreed-upon objectives of rate-making. Such, for example, is the case when average cost methodologies would fail to recover an appropriate overall revenue requirement for the utility. LIEN would suggest that it is also the case when certain social objectives are mandated in rate-making. So, just as, in the design of rates, the principle of "stability" can sometimes trump a principle of "cost relatedness" (cost-relatedness being "fairness" or "cost causality" mentioned in Board staff's list), "value of service" may also be a permissible and important "principle" to be considered.

4 “Stages of rate-making” - comments

The staff paper speaks of establishing rates for monopoly services, and the regulators’ role. In speaking of monopoly services, since it will be important as we discuss the relevance of costs in this review process, we would observe that regulated monopoly services are not necessarily natural monopolies but are often monopolies created simply for public convenience or necessity. Hence, cost relationships that we may understand for natural monopolies may not obtain for utility services which we are examining. (Cost relationships will likely further be complicated by historical cost investment at dollars of different value from those of today.)

4.1 Revenue Requirement

Here, we would make an observation on terminology as we understand it, in respect of “cost of service” and in respect of “incentive ratemaking” (both of which terms arise in section 4.1 of the staff paper). In a cost of service regime, whether one begins by examining a historical test year or a forward/forecast test year, one may set rates for one year or for several years. In our understanding, incentive rate-making as considered by the OEB uses a cost of service approach to determine a revenue requirement for a "base" year and then considers and prescribes certain formulaic approaches for changing rates going forward from that base year for some prescribed number of years. We also understand that there is some consensus that every several years going forward rates will be "re based". In other words, after some years, a cost of service approach will once again be used to determine a revenue

requirement for a new "base" year and incentive measures will once again be prescribed for changing rates going forward.

Essentially then, in our understanding, in a cost of service regime one may set rates for more than one year, and incentive rate-making in Ontario utilities remains grounded in a cost of service approach.

4.2 Customer Classes

The staff paper notes that the current customer classifications are based on the end-user of the electricity. In our view, these customer classifications historically were used because it was thought that the attributes of service that drove costs of the system were sufficiently different among these end-user groups. In this review we may have data that suggest modification of these classifications, perhaps setting cut-off levels between classes based on customer-required service voltage ("customer required" rather than “actual” voltage, we would say, since the distribution company may find it economical to serve the customer from a higher voltage subsystem than is necessary for service of that customer).

End user and end use are of course not the same thing. Parenthetically, we note that the Board has previously addressed the issue of whether “end use”, per se, should have any bearing on setting rates and rejected it. In other words, it should not matter whether the customer uses electricity for heating, for lighting, or for running motors. What matters is how the customer takes the electricity and what costs it imposes on the distribution system. End use in itself should not be a criterion or principle that guides rate design.

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

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

Service classifications should be determined after examining attributes of service that significantly affect the costs of providing that service.

A distribution system must be able to meet the peak service requirements of its customers individually and collectively. We expect that peak service requirements of individual customers, whether determined by estimation or by metering, would provide important relevant information for determining service classifications.

However, we have not yet reviewed the data for individual customer peak service requirements, or for other customer attributes that might be relevant considerations for determining customer classes. We trust that there will be an opportunity in this process to review this information and carry out sufficient analysis to determine appropriate service classifications. That activity should also guide the determination of whether there should be sub-classifications or simply one or more additional classes.

The question of "diversity benefits" raised in the staff paper can be quite complex. We know that there is essentially a benefit to the system that arises from not having to build a system that can serve the peak needs of each customer at the same time. Since we do not build such a system, we do not know exactly what the diversity benefits are. We don't need to. When we say we are allocating diversity benefits among customers, we are really allocating various capacity costs of the system, and in particular, common costs of capacity, and we are allocating them in a way that reflects a fair sharing, recognizing the role diversity plays. The question becomes what starting assumptions should be made about the allocation of capacity costs in performing a cost allocation study as a first step in the design of electricity rates.

We also note that, to the extent that a utility may "buy back" capacity on peak it may do this by different means. The net result is that the customer in paying a lower rate (net of the buy-back amount) is making a lower contribution to the recovery of system capacity costs (distribution system capacity costs and arguably capacity costs of upstream transmission otherwise payable by the distributor too).

We expect that as we move through this process, of the two methods of allocating diversity benefits noted in the staff paper, LIEN will have a preference for the second, a method which effectively spreads diversity benefits over the entire system rather than focusing on separate customer classes.

The staff paper in this section begins to discuss methods of setting up "rate" classes/ classifications. Yet the discussion really just goes on to look at the various attributes of the service that might be used to delineate customers into classes, i.e. by those attributes and not by the rates they are assigned to pay. In our view rate classifications are a derivative of deciding on the rates that will be designed. Those customers taking service at a certain rate or price (or from a certain rate schedule) define a rate class. "Customer classification" and "service classification" seem adequate for this discussion.

Whether one is talking about service classifications based on voltage or amperage, one must decide whether the customer should be classified based on his required peak voltage or amperage, or classified on the basis of the actual peak voltage or amperage of the service equipment. Our preliminary sense of fairness suggests the former rather than the latter. We say this recognizing that the distribution company may, for its own reasons and not those of the customer, find it more economical or practical to serve the customer with equipment capable of higher voltage or higher amperage than the customer would really require to serve its peak. Hence, we would not favour the second alternative presented in the paper, i.e. classification on the basis of the customer's connection[5].

[5] The connection may have been installed to serve a much higher load of a previous customer at the same location, or to anticipate some possibility of a higher load future customer, but not at all represent the connection needed for the current customer. Alternatively, the connection facilities may be oversized because that is what was available economically at the time of installation.

4.3 Cost Allocation

The staff paper provides a good overview of the cost allocation process. The various lists provided are illustrative but not necessarily exhaustive, nor were they represented as such. We have addressed some additional points in our comments above and will not repeat them here.

We note that the "categorization or classification" in this section is of costs according to cost behaviour, e.g. whether they are variable in the short-run with energy delivered or variable in the long run with peak transportation and delivery requirements. The classifications based on demand, energy, and number of customers essentially addressed whether those costs will change based on peak demands, quantity of energy consumed/taken (irrespective of whether on peak or not), or the number of customers connected, respectively.

5 "Rate Design" - comments

5.1 Rate Design Components

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

In considering rate design components or options in this question we were somewhat uncertain as to how we should interpret a "component". Is one component of rate design the "consideration of principles"? Within that there would surely be many options, i.e. many principles and many different balancings of those principles. In comments above, we noted the importance of customer protection as a principle required by statute.

Is the "documentation of customer attributes and system attributes" another component of rate design? We also addressed above that the customer attribute of means (measured by income level) may constitute a new criterion for consideration in rate design. Options here include what attributes to focus on and what specific data should be collected. Customer attributes and system attributes are of assistance in designing both services and the rates chargeable for them. As we explained previously, consumer preference and value of service to a customer are also attributes that can play a role in designing rates.

Is the "assessment of the costs" another component of rate design? Assessment of costs would include examining costs by customer class and, as well, examining the behaviour of costs in order to identify parameters that drive cost incurrence, with the clear intention of using those parameters as billing determinants? There are many options in determining the total cost to be associated with a customer class, as evidenced by the electricity distribution cost allocation review process. The staff paper has addressed various parameters that explain the behaviour of costs and will be useful as a basis for designing rates.

We have made suggestions above concerning other principles or criteria that should be considered in rate design, one being “consumer preference” or “value of service”.

5.2 Fixed and variable rates

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

In our view, assuming essentially all customers will have smart meters, customers should provide the utility with revenue that depends on a component variable with the amount of energy taken (kWh), and also revenue that depends on the customer’s required peak capacity. (There could also be a rationale for a component independent of these two parameters.)

As noted above, over longer time periods, requirements for peak capacity are also variable, whether because customers at a location change or because individual customer consumption patterns change. One measure of a customer’s peak capacity requirement is the customer’s peak consumption during a recent past period. Another, of course, is a peak capacity that the utility contracts to provide and the customer contracts not to exceed. The former may be a preferable measurement for smaller customers and the latter preferable measure for large customers. This merits further discussion. In our view, there should be some discussion of rate discounts that might be applied to reward customers that give utilities control over air-conditioning loads and certain other heating loads. Such discounts would seem best applied to the fixed component of a customer’s rate.

When rates are set for a group of customers, it would seem preferable that the fixed charge for the smallest customer does not over-contribute to the recovery of the fixed costs imposed by that customer on the system. Hence, an average cost approach to determining a fixed charge does not seem appropriate, nor does an approach based on a need to fully recover costs of some minimum system upstream of the customer connection.

Consistent with recovering a significant portion of fixed costs through a rate per kilowatt-hour, is the contribution of such an approach to signalling conservation of energy.

5.3 Billing determinants

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

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

In general, and assuming smart meters, the same billing determinants could be used for all customers in the main customer classifications as known today. We see volume of energy received (in kWh) as a primary billing determinant along with a measure of peak capacity required (in KW)[6].

As observed above, however, a billing determinant such as peak capacity required (kW) may be determined differently for smaller customers and large customers. This may reflect a need for simplicity on the one hand, versus a need to know with some certainty the maximum capacity a large customer will require and a need for a penalty if the customer exceeds a specified level.

Until we have participated in further discussion and review of data, we choose to offer no views as to what billing determinants should be for customers such as for generation facilities embedded within the distributor system or for scattered loads for which smart meters may make no sense.

5.4 Cost model for generation

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

Our preliminary view, based on principles enunciated earlier, would be that the Board should indeed pursue such an analysis now or in the near future. At this stage, we have not reviewed the revenues generated for the distributor from existing rates and charges. A better understanding of this will no doubt assist us as to the judging the urgency of such an analysis.

5.5 Consistency of the rate design

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

Our preliminary view is that it is desirable and possible to adopt a "rate design model", i.e. an overall approach to rate design, that is consistent across the province. If one aspect of the model does not apply to a certain distributor, say because they have no customers of a type specified in the model, that of course would not negate the consistency.

At this stage of the discussion and review we would not go so far as to say that the components of the model should incorporate the same numerical values. Whereas it would seem to make sense to pool provincewide data in order to arrive at consistency of customer classes, it might make less sense to require that numerical values of individual rates should be the same provincewide. (The latter seems more evident in light of our comments on rate harmonization in the next subsection.)

5.6 Rate harmonization

Q. Is one single rate order (or a few regional rate orders) to be used by all

[6] "Required" versus "actual" capacity in place, as was discussed in a previous section.

distributors a desirable outcome?

The costs which a distributor must recover from its customers can vary widely across the province. Costs can depend on the terrain in the region served by that distributor and on the density of customers located within the region served. Costs can also depend on the efficiency of the distributor and on historically embedded costs of facilities and of debt capital.

There are good arguments that customers of a distributor should be entitled to any historical cost benefits of the local system. Similarly, it would follow that customers should also pay also for any embedded disbenefits. There may even be good arguments that, after amalgamation of distributors, rates should continue to be set separately for the original distribution areas. However, the latter does not happen.

Instead, when utilities amalgamate, forces are at work to harmonize rates over the entire region served by the new corporate entity. If having different rates for different geographical regions in the province were clearly desirable, then forcing a consistent rate structure and rates across the province would seem clearly undesirable. Moreover, harmonizing rates for customers just because they are served by the same corporate entity would seem to have little rationale, per se.

Imposing harmonization of rates across the province may mean that more customers are likely to face rates that generate revenues significantly different from the actual costs to serve them. On the other hand, many customers, and perhaps even more politicians, may be very happy that they don't have to explain why distribution rates are different from one area to another.

The staff paper sets out the three options under the topic rate harmonization. Of the three options, our preliminary view would be to favour what we understand to be the third option: "all distributors with similar customer characteristics use the same classifications and rate design" (rate structure at least).

LIEN will give this further consideration before taking a firm position on the importance of consistency of a rate design model and of harmonization of rates across the province.

5.7 "Designer Power"

Q. Should distributors offer various levels of service?

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

In our view distributors should be able to offer various levels of service to customers that request service different from the established standards. (Similarly, generators embedded within or near the distributor should be able to sell services to the distributor.)

A challenge will be in pricing of these services. In setting some prices it will be appropriate to consider a full cost approach. In setting some other prices (e.g. for interruptible service) it may be more appropriate to consider incremental or avoided costs, or to give considerable weight to "value of service".

5.8 Marginal Cost

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

In our view, it is possible to let marginal cost concepts (SR and LR) influence the design of public utility rates without necessarily setting such rates at marginal cost. Long-run marginal costs are very difficult to forecast and are subject to the risk of being quite irrelevant under certain possible changes in technology. Bonbright is right that pricing services of a natural monopoly at marginal cost would not recover a total cost revenue requirement, all costs measured in the same dollars. However, given traditional regulatory approaches to determining the total cost revenue requirement, pricing at marginal cost could very well recover considerably more than the revenue requirement.

After some consideration of marginal cost concepts, and some consideration of public policy, it may be possible for the regulator to determine what rates would be "fair" and desirable at the margins of customer consumption, be it at the margin of monthly consumption of energy (in kWh) or at the margin of consumption of (requirement for) capacity (say in kW). Knowledge and considerable judgement will then be required to price the remainder of consumption.

In answer to the question posed in the staff paper, we doubt that there is much to be gained by estimating/forecasting long-run marginal costs or investigating a rate design model based stringently on such forecast costs. However, we would support the application of marginal cost concepts to directionally guide the setting of the various components of a rate design.

5.9 Locational pricing

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

In a general sense, we have already commented on the pros and cons of having different rates for different distributors and, hence, different rates based on the different locations of those distributors. We have suggested that the Board should investigate this concept of locational pricing, the concept described by Board staff.

Other discussions of "locational pricing", of which we are aware, relate to special pricing for transportation of electricity over constrained parts of the transmission or distribution system. Although, in theory, there may be greater efficiency in setting locational prices than in adding facilities to remove the transportation constraint, in our view, locational pricing if adopted will usually be temporary and physical constraints

will exist for only short periods of time. We doubt that there is much to be gained by the Board investigating this type of locational pricing for distribution systems. At present, we have seen no data to suggest that such pricing would be justified. If such data were brought forward we accept that it would have to be addressed in this review.

5.10 Impact of the simplified bill

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

Assuming that coming out of this process the variable component of distribution rates recover a significant portion of fixed costs, then achieving a conservation and/or demand management effect through rate design would have greater potential success if the fixed and variable components of the monthly bill for distribution were shown separately on the bill. However, we observe that even with the simplified bill, customers see a total bill that is based on the distribution rate design, and that a high total bill will directionally encourage conservation.

We note that customers can also see their change in consumption associated with that total distribution bill in the utility-provided comparison data (shown on the customer bill), of energy used in one billing period compared with the energy used in the same period a year before. This information, together with showing the total distribution charge, may be sufficient to encourage conservation in lieu of adding two more lines to the customer's bill. On the other hand, the additional two lines on the customer bill would be appreciated by some customers, and customers that find that to be too much information may well have ignored the lesser amount of information that is currently provided. In our view, the Board is right as part of this review to consider providing the additional information.

In closing, LIEN and its representatives thank the Board and staff for providing this opportunity to comment on the Board staff paper dated 2007-03-30 concerning a review of Electricity Distribution Rate Design for Ontario. LIEN and its representatives wish to assist the Board in this review through participating in discussions, serving on a working group if one is created, and providing further comments as the review evolves.

Respectfully,

ORIGINAL SIGNED

Malcolm Jackson

MJ/hs Ref.: EB-2007-0031, LIEN Comments re Board Staff paper dated 2007-03-30.doc