

**IN THE MATTER OF a consultation by the  
Ontario Energy Board on Rate Design for  
Electricity Distribution Companies.**

**SUBMISSIONS  
OF THE  
SCHOOL ENERGY COALITION**

1. The following are the submissions of the School Energy Coalition (“SEC”) with respect to the consultation phase in this matter. In these submissions we are providing our comments on the Staff Discussion Paper dated March 30, 2007 (the “Staff Report”), as well as additional input into issues to be considered during the next phase of LDC rate design.
2. As is so often the case, the Staff Report provides a thorough and useful summary of the history of distribution rate design in Ontario, the principles that are in play, and the issues arising in the current Ontario situation. For the most part, therefore, there is no need to provide any input on the Staff Report. It already largely accomplishes the task of providing a jumping off point for the Board’s review of this area.
3. Because of this, our comments will focus on two things:
  - a. Additional issues and emphases that we believe should inform the Board’s approach to this process; and
  - b. A small number of areas in which Staff appear to have assumed away one of the options available to the Board, without a debate on the merits.

We note that, while we don’t agree 100% with everything in the Staff Report, we still believe it to be an excellent first step in the process. Our comments should not be taken to be critical.

**A Threshold Question**

4. In our view, one of the most important issues the Board should address in this review of LDC rate design is the question of postage stamp rates (or pooled rates) for electricity distribution.

5. As the Board will be aware, SEC has often commented on the disparities in distribution bills being paid by like users in different service territories. The differences can be as much as several hundred percent, and are regularly 30-50% or more.
6. For many customers, these differences are not immediately apparent, as they pay their rates only to their local LDC. What is obvious, for example to the typical residential consumer, is the change from one year to the next, or the absolute affordability level of the bill. While residential customers occasionally compare their bills with friends in other locations, the comparative levels of bills are not as routinely or directly seen.
7. Schools are, as distribution customers, somewhat unique in this respect. The customer, the school board, will often have similar schools in the franchise area of more than one LDC, so any significant differences in distribution cost are seen on a regular basis. Further, as schools in the last few years have been focusing more and more heavily on conservation measures to keep their costs down, the different baselines between like schools look increasingly illogical. Not only do the differences raise obvious questions of appropriateness, but they make it more difficult to measure the relative performance of schools in their conservation efforts.
8. The Board is already addressing the differences in LDC cost structure – one of the causes of these disparities – in a separate process (EB-2006-0268) that seeks to benchmark utility costs against each other or against province-wide norms. This current rate design process may, depending on its ultimate direction, deal with another cause of these disparities, different fixed/variable splits between utilities.
9. However, it is submitted that even with these components resolved there remains a broader question as to whether distribution rates should as a matter of policy and/or regulatory efficiency be different from town to town and region to region within the province. While it is true that the actual costs of service for a customer in, say, Muskoka may be different than those for a customer in, say, Ottawa, it is not self-evident that this cost differential should be reflected in different rates. The costs of service of a customer on Bay Street in Toronto may be quite different from those for a customer at Steeles and Weston Road., and yet the rates for the two are the same. They may have been different in the past, but then a political decision to amalgamate the component parts of Toronto led to harmonization of those rates. There is an implicit subsidy from some customers to others when that occurs. Indeed, unless we have individual rates for individual customers, every customer will at all times be subsidizing some others, and being subsidized by still others. The question is one of where to draw the line. It is at least arguable that, on a cost causality basis, those two customers in Toronto should have different rates, while two neighbours across the street from each other, one in Newmarket Hydro's area and the other served by PowerStream, should have the same rates.
10. The question of postage stamp rates is also raised fairly when electricity distributors are compared to gas distributors. Through accidents of history more than anything else, Ontario's gas distributors have large franchise areas. Because of this, most Ontarians have one of three sets of "postage-stamp" type rates for gas distribution.

11. SEC does not at this point have a position on whether postage stamp rates should be adopted across Ontario for electricity distributors. In our view, this is a complex issue in which the Board should have evidence before it, and substantial arguments from all interested stakeholders. SEC, like other stakeholders, would be informed by that evidence and debate, and then would be in a better position at that point to assess whether it supports a full or partial postage stamp approach to distribution rates.
12. What is clear to us, however, is that the Board's decision on whether to adopt the same rates across the province, or not, will have a fundamental influence over the other issues addressed below, such as establishing customer classes, determining fixed/variable splits, and choosing billing determinants. It is therefore submitted that the Board, in establishing its process for redesigning electricity distribution rates, should identify this issue as a threshold question, and invite evidence and argument on this issue prior to developing the process for sorting out the more detailed questions.
13. We note, by the way, that the Staff Report does consider this question, but it would appear to us that province-wide postage stamp rates are, in essence, rejected by Staff as too complex given the large number of LDCs in the province.
14. In our view, the fact that there are many LDCs should not be a barrier to considering whether postage stamp rates should be implemented, either immediately or in the future. Not only is the Board already doing something like this in transmission, but there are many other techniques that could be employed to implement such a policy in distribution, even obtaining additional benefits along the way.
15. By way of example (and this is not a proposal from SEC, but merely one way postage stamp rates could be implemented), the Board could establish rates using the following process:
  - a. Set a common set of classes and rate structures for the province. This is largely in place today, and the current process is likely to complete that.
  - b. Establish the province-wide revenue requirement for electricity distributors. This is just a matter of adding up the individual revenue requirements, and can be done through cost of service or incentive regulation, as is currently the case.
  - c. Calculate the rates in the various rate classes for the entire province based on the province-wide revenue requirement. Essentially, this "pretends" that there is one LDC for the whole province, and sets rates accordingly.
  - d. Calculate the sufficiency or deficiency at those standard rates for each individual LDC based on their projected volumes, customer numbers, and costs.
  - e. Where the common rates create a sufficiency for an LDC, the LDC would make a periodic payment to a common pool so its projected net revenue is equal to its projected revenue requirement.

- f. Where the common rates create a deficiency for an LDC, the LDC would receive a periodic payment from the common pool, again so its projected net revenue is equal to its projected revenue requirement.
  - g. In order to ensure that inefficient LDCs are not unduly subsidized, the payments to LDCs from the pool would be capped at 20% of their revenue from standard rates. If their costs are higher, then unless they convince the Board that they are an exceptional case, those higher costs would eat into ROE. Not only does this mimic the competitive markets, and create a built-in pressure to create efficiencies, but it could also have beneficial impacts on both inter-utility co-operation and sector rationalization. In the case of co-operation, utilities would be more motivated to share best practices because improved performance by their neighbours will reduce rates for all LDCs. In the case of sector rationalization, the cap promotes the acquisition of higher cost LDCs by lower cost LDCs, again much as occurs in the competitive marketplace.
  - h. Because the pooling method is asymmetrical, the result is that there would be a net balance in the pool at the end of each year, which could then be used to reduce rates for all ratepayers in the following year, and so on from year to year until an equilibrium is created.
  - i. We note also that such an approach allows the Board, over time, to adjust the cap so that costs are brought more in line through natural benchmarking.
16. We emphasize that the above example is just that – an example. The basic point is that the threshold policy question of whether to move in this kind of direction – whatever the detailed implementation plan – is one that the Board should consider in a thorough debate at the beginning of this rate redesign process.

### **Basic Principles**

- 17. The Staff Report, quite appropriately, starts with the eight principles from Bonbright, and then raises the issue of whether, in the Ontario context, there are some other possible principles that may appropriate drive rate design.
- 18. In our view, while there is no question that there are other considerations in addition to Bonbright’s classic list, it is important to distinguish between rate design *principles* and government or regulatory *policies*. The former are part of the technical craft of disciplined rate design, and are largely not subject to debate. The latter, on the other hand, are issues of judgment that the Board must assess as part of this rate design process.
- 19. A case in point is the proposed principle “address distributors’ business risk”. The particular business risk of each distributor will be affected in part by the normal business risks associated with electricity distribution, but in most cases the real issues will be ones of size, capitalization, governance model, and similar factors. These are largely driven by political decisions in each local area. The Board must wrestle with the question of whether the risks

and costs resulting from these local business decisions should be borne by the ratepayers of the individual LDCs, or the shareholders who for the most part made the decisions. If the Board chooses the latter, it essentially says to municipalities that if they want to, for example, give up economies of scale to maximize local control of their LDC, they should pay the cost of that decision, not the ratepayers, as a matter of regulatory policy. If the Board chooses the former, having the ratepayers pay the cost of those decisions, it is implicitly deciding that control of those decisions should be left to the political arena. If ratepayers don't like high rates because of local decisions, they can replace their local councillors with ones that will make different decisions.

20. The key here, it is submitted, is that this and other additional "principles" should be identified by the Board and clear, specific decisions on the policy implications should be made.
21. Another case in point is the potential principle "encourage conservation". This, in the rate design process, is a meta-issue (in some respects like postage stamp rates, but at a slightly more specific level) and should be addressed as such. The Board will need to consider the extent to which it is willing to bend the cost causality principle, for example, It will also need to consider whether behavioural signals from commodity prices and bills are sufficient, or whether augmenting those signals through distribution rates is also necessary. These and other components of this issue should be addressed early in the process, and the Board should reach clear policy conclusions.
22. We note that, in addition to the clarity that this approach would create, there is also a significant value from a practical point of view in having a phase of the process in which the conservation issues are an important focus. A number of stakeholders have a specific interest in this area, and other stakeholders obtain specialized advice when conservation-related issues are on the agenda. By identifying and dealing with these issues at an early stage, the Board would allow all of those stakeholders to use their resources wisely. If conservation is determined, in the Board's view, to be a material part of the rate design analysis, then that will affect how those stakeholders participate in subsequent phases, and vice versa.
23. Therefore, we suggest that the Board's rate design process include, at an early stage, an issues process in which questions such as which principles should be applied, and how they should be balanced, can be considered.
24. With respect to the specific additional policy considerations raised in the Staff Report, we agree with Board Staff that all of them are legitimately in need of a proper debate. While in the end SEC may conclude that some (for example differential business risk between LDCs) should not be factors employed in rate design, we agree that the Board needs to address them in a focused way.

### **Customer Classes**

25. The part of the analysis that ties cost allocation to rate design is the identification and structuring of customer classes. The Staff Report provides a useful analysis of the criteria for designing customer classes, and some historical background in Ontario.
26. The Staff Report correctly identifies the most important criterion for class design, ie. homogeneity. Rates are only fair to customers, and costs are only recovered with a maximum level of predictability for the utility, if the customers within a given class have similar characteristics and therefore drive similar costs.
27. What was not clear to us from the Staff Report was whether Board Staff feels that “end use” as a class design criterion is a legitimate choice. While the Staff Report lists it as one of the common criteria, and clearly Ontario uses end use as a class design criterion in both electricity and gas, it appeared to us that Board Staff did not think it was appropriate for consideration in designing future Ontario energy rate classes.
28. SEC does not have a position on whether end use is an appropriate criterion for distinguishing a class of ratepayers. Clearly if it is, then schools are a highly homogeneous group that would warrant consideration in that respect, but whether in the Ontario context that would be good or bad ratemaking is not clear. What is clear, in our view, is that end use should not be rejected as a class design criterion before the evidence is reviewed. If the evidence shows that an appropriately-sized class can be created with a high level of homogeneity and therefore high correlation to cost causality, on the basis of any particular end use (e.g. residential ratepayers), then in our view it would be inappropriate for the Board to reject that result just because it doesn’t like end use rates generally. If end use is the best way to track ratepayers to the costs they cause, then it should be used. If not, it should not.
29. This leads, inevitably, to another general question. What number of rate classes is appropriate? Past practice relating to rate classes is a relic of a pre-computer era, when simplicity had real world implications for utility operation. That is less true today. In theory, an LDC today could have fifty or a hundred rate classes, each closely tracking costs, and operationally there will be little cost for so doing.
30. In our view, the Board should consider the extent to which a greater number of rate classes would achieve the various other policy and regulatory goals in play. If there is a substantial benefit to doing so, then it would be appropriate for the Board to balance the (these days much lower) marginal costs of that type of class structure against the benefits it might achieve. In this regard, we believe it might be useful for Board Staff to carry out, either directly or through consultants, an investigation of this issue in other jurisdictions, so that the Board and all parties have a set of baseline information on which to build this discussion.

### **Fixed/Variable Split**

31. Some utilities and energy policymakers have argued that, from a pure cost causality point of view, very few of an LDC’s costs are in fact driven by volumes, whether those are kilowatt hours, demand, peak demand, or any other volume determinant. Some have in fact proposed that all LDC rates be based on a monthly fixed charge per class of customer, so that their

revenues are highly predictable and many other budgetting problems (LRAM, for example) can be obviated.

32. On the other side of that debate, conservationists oppose such a move because they say it would blunt behavioural/price signals that promote wise use of electricity.
33. It is, we think, undisputed that utility costs are almost entirely fixed. If that is accepted, then in our view the question of whether rates should track those costs should be treated by the Board as another of the meta-issues that should be addressed on an overall basis as part of this process.
34. We note that the availability in this computer age of a larger number of customer classes makes highly or completely fixed rates more feasible. This effect is more apparent still if the Board decides, as we have suggested earlier should be considered, on some form of postage stamp rates for the province. It may further be affected by whether the Board is willing to establish rates on an end use basis.
35. Schools provide an excellent example of how this might work. (As before, this is not a proposal, but an example only.) It may be possible to identify with some precision the costs caused by schools connected to the distribution system throughout the province, and further to identify that those costs do not vary materially based on volume. If that is true, and the overall costs caused by Ontario's 5000 publicly funded schools are, say, \$30 million a year, it is at least worth considering whether a class made up of schools should have a monthly fixed fee of \$500, and no volumetric fees. A school board, when building a school, would know precisely what electricity distribution would cost. In total, all schools throughout the province would pay the costs they cause, plus their share of common costs, so rates would be fair for all schools. While small schools would pay perhaps more than was required, and large schools less, since the customers (school boards) would in all cases have a mix of both, they would not be disadvantaged. LDCs would have highly predictable rates from their local school sector, since they would usually know how many schools they would have in any given year or other period.
36. It is therefore submitted that the Board should identify fixed/variable split, and its cost causality and other implications, as a preliminary issue and engage that debate early in the rate design process.

### **Billing Determinants**

37. Assuming there are further billing determinants other than number of customers (eg. under a 100% fixed rate structure), the Staff Report provides a useful analysis of the various choices available to the Board for the volumetric component.

38. The question of billing determinants is in part a cost causality one, and in part one of measurement. Whether the metric to be used is kilowatt hours, demand, NCP, CP, or some of the many variants of those choices, is driven in part by where the costs come from (eg. is it coincident peak that drives breaker size, or non-coincident peak, or raw demand, or something else?) and in part by the nature of the meters employed and the accessibility and utility of the data they produce.
39. In SEC's view, the question of billing determinants, while highly integrated with the other aspects of this analysis, is much more mechanistic than most of the issues discussed above. Once the Board has determined the principles, and the policy drivers, the billing determinants are, in our view, a result of those determinations, driven by empirical evidence as to what choices achieve the higher level goals.

### **Other Issues**

40. The Staff Report raises a number of specific issues that do not fall into the normal rate design framework.
41. **LRAM.** Clearly the Board's final rate design structure will influence whether any LRAM is required, and if so how it is designed. On this issue, we have nothing to add to what the Staff Report discussed.
42. **Distributed Generators.** The Staff Report notes that generators also often have to access the distribution system, and so can create or increase system costs. This will be increasingly relevant given the Standard Offer Program and other initiatives to promote both large and small scale distributed generation. Under the current system, generators pay their cost of access upfront. The effect of this, bluntly, is that the generators do not pay the ongoing costs of servicing either the capital costs they create, or the operating costs that flow therefrom. This does not necessarily mean that they are underpaying, but it may mean that they are prepaying for certain future operating costs that later are being charged to ratepayers.
43. In SEC's view, the Board must deal with two rate design questions in regards to distributed generation:
  - a. How are the costs caused by generators connected to the distribution system most efficiently and most fairly recovered from those customers?, and
  - b. To what extent should the distributed generator's system benefits affecting the customers, but not necessarily the local distributor, be an offset to the costs the distributed generator causes the system?
44. **Fees and Charges.** We generally agree with the assumption in the Staff Report that revenue requirement should be net of any cost recovery fees or charges.
45. This, in our view, leaves two issues in this area:



- a. To what extent are “cost recovery” fees and charges structured so that they recover at least direct costs, their fair share of indirect costs, a fair share of rate base, and the appropriate level of ROE? To the best of our knowledge, no rigorous analysis has been done on this question. In our view, cost recovery fees and charges should be set at a minimum amount that includes all of these elements. If there is a competitive market for the service, and the charge is more, then that should apply, thus reducing rates for all customers. In any other case, a fully loaded cost recovery should be mandatory. (The related issue, how to set maximums for these fees and charges, flows out of the same analysis.)
  - b. What are the principles under which a cost is to be recovered through a cost recovery charge rather than normal rates? In our view, the Board should consider the appropriate criteria for determining whether something is “included” in rates, or not.
46. **Designer Power.** Whether a customer can elect to pay more in order to get a higher level of reliability, or a higher voltage quality, for example, is not really open to debate. Any customer can pay for those things, through buying hardware or paying private sector service providers, or both. The question is only whether LDCs should be able to provide those services, and if so on what terms.
47. In our view, the question of whether a utility can provide power quality services, or reliability services, is really no longer an open issue. Utilities, either directly or through their affiliates, provide conservation services, commodity supply, and a number of other electricity related functions. If customers are willing to pay a premium for reliability or quality above the norms reasonably provided to all customers, it would seem to us inexplicable that this would be prohibited.
48. We understand the analogy to public access to medical services, and the need for a prohibition against people buying greater access. That is not true in the case of electricity distribution. Some customers have business reasons for needing higher levels of reliability or quality than can reasonably be mandated for all.
49. In our view, the two outstanding issues in this regard are:
- a. How to ensure that the fees charged for this premium service cover at least all of the fully allocated costs of the additional functionality, and if possible provide a net benefit to other ratepayers; and
  - b. How to ensure that identifying power quality and reliability components as “premium” in nature does not indirectly result in the standard distribution service being degraded, ie. designer power should not become a backdoor method of unbundling the standard distribution service.
50. **Marginal Cost Pricing.** The Staff Report includes an analysis of marginal cost pricing vs, fully allocated pricing, and the economic theory behind using the former. The implication is

that the Board should at least consider marginally costing the prices to customers of certain new services on the system.

51. With respect, we do not think that the economic theory behind marginal cost pricing applies in this context. In economic theory, a company should charge at least marginal cost for additional sales of a product or service, even if prior sales have been at a higher price. This, in our view, ignores two key issues.
52. First, this assumes that all shared costs have been recovered through previous sales. If that is not the case, then it is not economically rational for a company to charge marginal cost. They will go out of business.
53. Second, this assumes that those who have bought at a higher cost are locked in and cannot elect to re-enter the market at a lower cost. This assumption works with airline tickets (for the most part) and other products that, once sold, are not cancellable, but would not work with electricity if it were in fact a competitive market. A rational customer would not lock into a higher rate commitment, knowing that lower rates would be forthcoming for others due to marginal costing. Instead, the rational customer would take spot rates for the service, knowing that they would go down as common costs are recovered. This effect is exacerbated where, as with electricity distribution, such a high percent of costs is unrelated to volumes.
54. In our view, therefore, marginal costing of electricity distribution is not a legitimate issue for the Board to consider in this rate design process. There is, we believe, no reasonable scenario in which marginal costing would mimic economically rational behaviour of both suppliers and customers in a competitive market.

## **Conclusion**

55. The School Energy Coalition appreciates having been given the opportunity to participate in this consultation, in which a number of important issues have been aired.
56. We wish to note, in particular, that this is one area of the Board's work in which the interests of ratepayers and utilities are not opposite. Rather, rate design in some respects pits customer groups against each other – the question of who should pay, rather than how much should be paid – but not against the utility. LDCs are largely neutral to rate design, except to the extent that it affects the predictability of their revenues. LDCs will also generally want fairness between their ratepayers (since it makes their lives easier and it achieves one of their own policy goals), so are more in a position similar to that of the Board as opposed to the diverse interest of ratepayers groups.
57. If any further information or clarification would be useful, we would be happy to provide it. SEC intends to participate in any hearing or other adjudicative process the Board may propose to obtain evidence on these issues, and bring them to a conclusion. If the Board plans any further consultative components of this process, including working groups or technical workshops, SEC requests that it be included in those activities.

All of which is respectfully submitted on behalf of the School Energy Coalition this 15<sup>th</sup> day of May, 2007.

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Per: \_\_\_\_\_  
Jay Shepherd