RP-2004-0196

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c.O.15, Sch. B;

AND IN THE MATTER OF a Directive dated June 23, 2004 by the Minister of Energy requiring the Board to develop and report on an implementation plan for smart metering in Ontario.

COMMENTS OF THE

SCHOOL ENERGY COALITION ("Schools")

ON THE

SMART METER INITIATIVE DRAFT IMPLEMENTATION PLAN

Introduction

1. These are the comments of the School Energy Coalition with respect to the Smart Meter Implementation Plan Draft Report of the Board for Comment issued November 9, 2004 by the Ontario Energy Board.

2. Schools, which represents Ontario's public funded school boards on energy issues, has been directly involved in the OEB's Smart Meter initiative since the initial letter from the Board on July 19th, 2004. As significant consumer of electricity, schools have a direct interest in energy policies that will have impacts on rates and energy usage in the province. Schools have also been early adopters of time-of-use metering and related monitoring systems, and so have a specific interest in the outcome of this process.

3. Schools applauds the Board efforts in responding to the Minister's directive on smart meters, and supports the principles of smart metering, believing that there are significant benefits to schools, and to all participants in the provincial electricity market.

4. Overall, Schools believes the Draft Implementation Plan is a good start in the process of implementing a smart meter system to cover the entire province. The work groups (on one of which Schools participated - the Communications and Data Interface Technology working group) have provided a good foundation of information and analysis to assist the process in moving forward. It is our opinion however that there is much that remains uncertain going forward, and will require continued effort on behalf of all stakeholders.

5. We note here, and we discuss again later on, the surprising omission of ratepayer groups as members of the steering committee working with the Implementation Coordinator. This is the single most glaring mis-step in this report, and we strongly urge the Board to ensure that ratepayers – those who are paying the bills, in the end – are properly represented going forward. Just as they added to this working group process, so too their perspective is critical going forward.

6. In addressing the Draft Implementation Plan, Schools has organized its comments along the lines of the four main components of the report – Implementation, Smart Metering Costs, SMS Minimum Requirements and Non-Commodity Time of Use Rates. In addition, the Board has indicated its interest in hearing from participants their thoughts on the process itself, and Schools has provided some submissions on this at the end of our document.

Implementation

7. The Board's Draft Implementation Plan deals primarily with implementation management, procurement, deployment scheduling.

8. The recommendation in the report with respect to procurement and implementation management calls for:

a) Local Distribution companies to continue their responsibility in meter services and to form buying groups for the procurement of meters and possibly other aspects of implementation.

b) An Implementation Coordinator be established to oversee the LDC procurement process, and to ensure the progress of smart meter installations meets the provincial targets. The report recommends that this role not be assigned to the OEB due to it's inherent conflict in rate setting, but that the yet-to-be established Ontario Power Authority take on this responsibility.

9. In Schools view, the recommended approach to implementation management has some merit, but it also has much uncertainty.

10. In the context of the smart metering initiative, Schools generally agrees with the recommendation that LDC's maintain responsibility for meter services. Given the time frames and goals of the initiative, the alternatives as outlined in the document do not seem to be viable alternatives. However, as Schools stated in its initial submissions, a market for meter services should be encouraged, and to that extent third parties should not be precluded from providing services above and beyond the base functionality of the smart meter system. Sophisticated energy consumers should have the option to purchase and own equipment or services that will enable them to meet their own energy goals.

11. The dual recommendations to encourage LDC's to organize themselves into buying groups and for the establishment of an Implementation Coordinator carries the greatest uncertainties for the success of the plan. Without a stronger directive from the OEB, the ability of the LDC's to form the buying groups that the report envisions is in our opinion fraught with danger. As was evidenced in the case of Market Transition, which had similar requirements in the way of necessary systems and process changes, as well as in the urgency of implementation, LDC's did little to form coalitions to improve the efficiencies and reduce the costs of the Market Transition exercise. There are many examples of this in RP-2004-0042 et al. For example, Hydro One explained lack of co-ordination between utilities as follows"

"The aggressive market opening, I think, killed a lot of it, as well as all the changes taking place amongst the utilities at the time. Hydro One did work with and talk with some of the other utilities, and it quickly became apparent that we all had different starting places, we had different systems in place. Some had just put in customer systems; some needed to buy them, and given nobody was really certain where it was going, getting alliances and partnerships together just didn't seem to happen."[Tr. 1: 782]

There are many other examples in the Regulatory Assets proceeding of similar statements by the applicant utilities. There is a danger that LDC's will see the Smart Meter Initiative in the same way - as another market transition that has an urgency component and dissimilarity in utilities so as to make cooperation and coordination with other utilities not feasible.

12. Schools agrees that a single purchasing agent is likely not the best option for this initiative, despite the apparent savings and efficiencies that might come out of such a structure. We acknowledge that there needs to be some flexibility in the types of systems purchased and installed. But Schools believes that unless the LDC's are more forcefully directed to group themselves into buying groups, it may not happen. We believe that this may be an appropriate role for the Implementation Coordinator, ie. initiation and management of LDC buying groups.

13. We suggest that buying groups be formed according to customer makeup of the LDC's. That is, LDC's serving more urban customers group together while those serving primarily suburban customers form another group. There may be further sub-groups according to geography. This grouping makes sense in that the data communications technology is likely to be the most different according to customer density.

14. The role of the Implementation Coordinator, as outlined in the report, is one of crucial importance in the success of the smart meter initiative. For it to work as planned however, there is an urgent need to set up the appropriate structure now. Appendix B3 of the report provides an extensive list of tasks for the Implementation Coordinator. No doubt, there are many tasks not listed. In order for the management of the implementation plan to be successful there is a need to have a formal structure and responsibilities set up very soon.

15. It is noted that among the list of responsibilities envisioned for the Implementation Coordinator is the establishment of a steering committee made up of key stakeholders in the implementation. It is notable that among the stakeholders listed in the B3 appendix ratepayers are not accounted for. Schools have made it known in other processes before the Board that we believe that effective regulation of the monopolistic electricity distribution sector is only accomplished by having all players at the table. Stakeholder representation on the steering committee throughout the implementation of smart meters should include ratepayer representatives. What other process excludes the only stakeholders who are actually paying the bills for all of this?

16. Similar to the issue noted above with respect to the recommended voluntary nature of LDC's joining buying groups, the office of the Implementation Coordinator needs to be given "teeth" and resources if management of the process – reviewing procurement processes, costs, communication and ensuring compliance – is to succeed. Without sufficient authority, the coordinator role will be nothing more than a figurehead (or perhaps lightening rod). The Implementation Coordinator's office will also require technical expertise in metering systems – either in house or through an independent third party - in order to properly vet LDC procurement plans and ensure that the technology being rolled out across the province is able to meet the requirements of the smart meter system on a consistent basis.

17. The last portion of the implementation chapter deals with the recommended deployment strategy. Clearly, all new and replacement meter installations should be smart meter installations, thus minimizing stranded metering costs. Schools also agree with the recommendations that the MUSH sector receive high priority for smart meter installation, as they stand to gain significantly from the ability to monitor and reduce load, and as the high volumes and relative homogeneity of this sector offers a shorter path to maximum system benefits for all ratepayers.

18. Finally, there are a number of issues indicated as "Key Success Factors" in the report beginning on page 29. Schools agree that a clear, consistent and properly executed communication plan is imperative to the success of this initiative. It also requires close

alignment with the Regulated Price Plan currently under development at the OEB. Without an ongoing communication and education plan Schools believes that the key benefits – reduction in system and peak demand – will not be realized and the investment in smart meter technology will be wasted.

19. Schools also agree that distributors should be entitled to the recovery of all prudently incurred costs for implementing the initiative. Clear guidelines and policy from the OEB are definitely needed, but utilities should not expect that their spending on smart meter systems will not be scrutinized. The process for effective and efficient ratemaking is not suspended by the imperative of the smart meter initiative. Further comments on costs are provided below.

Smart Metering Costs

20. In reading the report on the issues of the costs of the smart meters initiative, it is clear to Schools that there is a high degree of uncertainty in any of the estimates of either the costs of implementing the system or in the benefits that the system will deliver. As there are no comparable examples of an implementation of the nature contemplated in this initiative, there are hard data on which to draw conclusions with any degree of certainty. As evidenced by the details of the report, there remains disagreement of participants in the cost working group on both the costs of the implementation and on the benefits. In fact, there are many variables which could have significant impacts on the cost/benefits, including reliability of technology, maintenance costs, and customer reactions.

21. Nevertheless, the government has provided clear direction that the smart meter initiative is to go ahead, and Schools agrees, even with the uncertainties around costs, that overall and in principle the benefits will likely outweigh the costs.

22. What this significant cost uncertainty points to however is a very strong need to monitor and control the costs of this ambitious program. Whatever the structure of oversight, the accurate and clear public reporting of costs, and benefits, need to be regularly monitored and reported so that ratepayers know that the exercise is resulting in benefits to them.

23. Further, it is the view of Schools that the Board should establish hard caps on spending on smart meters, both on a unit basis and expressed in rate impact terms for each LDC. Monitoring is not enough, if the result is to stand idly by while costs escalate. The Board should, we believe, establish cost points which, if reached, require LDCs not just to report publicly, but to come back to the Board or the Implementation Coordinator to get approval for their excess spending.

24. On the issue of how costs should be recovered, the Board's report lists four principles for considering options:

    a) Cost recovery mechanisms should be reasonable and timely;
    b) Allocation of costs should be fair and related to benefits;
    c) Recovery should promote economic efficiency, where possible;
    d) Recovery should be consistent among distributors

25. Schools agree with these principles, with the exclusion of principle (b). In fact, allocation of costs should be fair and related to cost causality, not benefits. We note that typically cost causality and benefits (in the broadest sense, including direct, indirect, and system benefits) are closely aligned, but the test of cost causality should not be abandoned for the smart meter exercise.

26. Accordingly, Schools are in agreement that the incremental costs of the smart meter implementation should be allocated to rate classes according to the costs caused by that class. Furthermore, Schools believes that recovery of costs annually from only those customers who have a smart meter installed is too cumbersome, and perhaps inappropriate, in this case. If the smart meter initiative only included the installation of meters, this format of recovery may be appropriate. However, as the implementation will involve aspects beyond just the meter – principally the communication networks and data storage, which will be installed initially with the intent to service the entire population – it would be appropriate in this case to spread the annual costs across all customers in a class.

27. On the issue of stranded costs, Schools have remarked earlier about the need to minimize

these costs. Those stranded costs that are unavoidable should be recoverable from ratepayers. Schools believes that an appropriate treatment of these costs is to move them out of utility rate base, into a regulatory asset account, and to depreciate them over a 15 year period. This works to minimize the impact on ratepayers of the smart meter initiative, which they will be paying for in rates.

28. In some instances, customers will have invested their own funds in meter equipment. To the extent that any smart meter installation strands customer costs, it is expected that the smart meter funding will recompense these costs. Schools would not expect that this component of smart meter costs would make up a large component of overall smart meter spending, and would ensure that customers who have already invested in advanced metering – usually with the intent of conserving energy – are not unfairly treated.

SMS Minimum Requirements

29. Chapter 4 of the report outlines the minimum technical and informational requirements for the smart meter system.

30. Schools agree that hourly data reads for all smart meters should be a minimal requirement. Despite details on the forthcoming RPP being unknown, and despite the likelihood that commodity pricing will not initially at least be hourly, the future evolution of electricity pricing – more retail options, time-of-use distribution and transmission rates, critical peak pricing, etc. – demands that the metering and billing functions remain flexible. Fixed TOU meters will not allow for this flexibility.

31. As mentioned previously in this submission, and in Schools previous submission to the Board, the smart meter initiative will only be successful if consumers change their energy consumption behaviour. This will only occur if users can see how they are using energy. Hourly data will allow customers to better understand their energy use profiles and to alter them in response to pricing signals. The availability of longer-term usage history will allow users to better understand their seasonal use of energy and to see the impacts of conservation measures.

32. For these reasons, Schools agree that this data should be available to customers, or a customer's representative (eg: retailer or third-party energy service provider), at no additional cost, and the representative should be required to pass on this data to their customers in a timely manner.

Non-Commodity Time-of-Use Rates

33. Chapter 5 of the report addresses the potential for non-commodity time-of-use rates, as was requested by the minister in his directive. Schools are a firm believer in cost allocation based on cost causality. To the extent that non-commodity distribution and/or transmission expenses differ by time of use, we are generally in favour of charging on that basis. However, Schools believes that given the scope of the issue at hand, especially when combined with the concurrent exercises currently before the Board in the form of the 2006 Distribution Rate Handbook and the forthcoming 2007 cost allocation review, now is not the time to institute new rates for time-of-use distribution or transmission.

34. The smart meter system, as outlined in the report, will provide the level of detail required for development as well as billing purposes should such rates be designed in the future.

Comments on Process

35. The active participation of Schools in this OEB process has been driven by schools interest in energy policy and by virtue of the fact that as a group they represent a large consumer of electricity in the province. A significant portion of schools operating budgets go towards energy costs, with over $250 million per year spent on electricity.

36. It is also driven by the fact that school boards have been leaders in experimenting with time of use rates, meters, and monitoring systems. This means that they have specific experience in the area, and they also have substantial existing investments in systems and equipment.

37. Schools believes that the inclusion of all stakeholders in this process – utilities, equipment vendors, retailers, Measurement Canada, and ratepayer groups – has benefited the process and made it more robust than it would have been if only utilities were involved.

38. Going forward, schools believe that all stakeholders need to continue to be involved in the implementation. Furthermore, Schools has made it clear in other proceedings that funding for those stakeholders who require funding to contribute fully should be continued.

39. The working group process chosen for this process worked fairly well in Schools opinion, with one major shortfall. The working groups were developed to address particular components of the smart meters issue, but there were significant amounts of overlap in information requirements between the groups. For example, the Data and Communications group had significant informational needs on meters, although there was a separate work group addressing the meter technology. The process for sharing data among the workgroups was not particularly efficient, with, in fact, little information shared. Schools feels that the Board should strengthen information sharing between working groups in future processes by either posting minutes to the OEB's website in a more timely fashion, or having summary reports prepared by OEB staff and posted. The inclusion of general meetings of groups together, as was done with success in the 2006 EDR process, would also be a method of dealing with this problem.

40. The Board hosted a "Vendor Day" during the process which according to the invitation for participants was intended "to present case studies of successful implementations of smart metering technology." Unfortunately, most of the presentations amounted to a pitch for a particular technology or system, with very little information on what worked or didn't work in other jurisdictions. Schools appreciates that the Board cannot dictate what participants present, but the day would have been more useful to all if there had been more factual details on experiences elsewhere. Hindsight suggests that, for similar future events, it could be usefully divided into a morning where vendors make their pitches, and an afternoon where utilities and customers present their experiences with the subject area, and the things to watch for.

41. Overall, Schools believes that the process so far has been useful to the Board in developing an implementation plan for smart meters. We appreciate the opportunity to be included and request that we, and all stakeholders, continue to be involved in this important process.

All of which is respectfully submitted on behalf of the School Energy Coalition this 6th day of December, 2004.

SHIBLEY RIGHTON LLP

Per: _____

Jay Shepherd