

**Demand-Side Management and Demand Response
In the Ontario Energy Sectors
Staff Report to the Board
February 9, 2004**

OZZ Corporation Observations and Comments

Ontario Energy Board Staff have produced a thorough and comprehensive report. OZZ Corporation's observations and comments are intended to re-enforce the conclusions presented where we are in agreement, offer additional information, and suggest alternative approaches where we believe they merit consideration. Where we have not commented no inference of support nor non-support should be made.

Report Reference: Section 2 Recommendation, Page 7, and supporting analysis

We agree with the recommendation. We would observe that public policy approaches should facilitate the most cost effective market based means of delivering the programs and services needed to achieve the objectives.

For example, while it is our understanding that the current regulatory framework permits all customers to request and have installed interval (smart) meters, some residential, single phase meter customers have been quoted the commercial meter price by their suppliers, a price difference in the order of \$2100.

We believe that a better objective than "reduce(ing) overall electricity prices to consumers" would be to reduce overall electricity costs to consumers. Focusing on prices alone, neglects the impact of reducing the quantity of electricity used, which, under any pricing regime, represents the single largest factor on the electricity bill.

Report Reference: Section 3 Recommendations, Page 11, and supporting analysis

We believe that the role of the 'Central Agency' should be to develop the objectives of DSM and DR activities, monitor outcomes, and provide success based funding for the achievement of those outcomes. We do not believe that a Central Agency "should be responsible for the design and delivery of DSM and DR activities in Ontario's energy sectors." In our view, this could lead to inordinate bureaucracy, long implementation times, and proscriptive as opposed to creative approaches.

We strongly support the measurement and "contracting for an independent audit of results". Auditing in and of itself is necessary but not sufficient. Without

concomitant, rigorous measurement in all sectors, results cannot be verified and therefore their validity cannot be ascertained.

Report Reference: Section 3.2 Recommendations, Page 19, and supporting analysis

We strongly support the recommendation that LDC's and transmitters be allowed to act as delivery agents for optimizing their distribution systems. One of the realities of the recent changes to the electricity market in Ontario is the abandonment of Integrated Resource Planning, and Local Integrated Resource Planning. As a result, significant opportunities related to the substitution of additional central generation by DSM, DR, and DG have been lost.

The report rightly notes that I²R losses are a key aspect of transmission and distribution losses, and furthermore that they increase in proportion to the square of demand. This is exacerbated by the fact that summer system loads occur during the hottest times of the day, when transmission and distribution capacities are at their lowest points. Sending the proper price signals to customers to allow them to reduce demands during these peak periods, and providing them with the tools to benefit from their behaviours is, in our view, a vital component of a provincial conservation strategy.

Report Reference: Section 3.4 Recommendations, Page 23, and supporting analysis

We question why the proposed non-bypassable consumption charge for electricity should be applied to self-generators. Shouldn't self-generators by the very fact that they are relieving the system of their own loads, with all the associated benefits to the system and other customers NOT have to be subject to a charge, which if they were subject to it, would seem analogous to double taxation?

Report Reference: Section 4.1 Recommendations, Page 27, and supporting analysis

We do not understand why economic DR should only "be put in place for 3-5 years as a transitional measure." If DR makes economic sense six years from now, it should be able to maintain its rightful place among the array of conservation measures at that time.

Report Reference: Section 4.2 Recommendations, Page 32, and supporting analysis

We support the fact that it may not make sense to undertake a complete changeover of all four million plus electricity meters in the province all at once. We disagree, however, with the comment that "There is no demonstrated

economic justification for mass-deployment of interval meters among existing residential customers based on load shifting.” One need only look at Italy where all 28 million meters are being changed to interval meters to appreciate that there may indeed be an economic rationale for doing so. Furthermore, the report itself provides evidence that at least in part supports this position, specifically in the area of improving overall system efficiencies, and reducing transmission and distribution losses. Without providing the appropriate price signals, measurement tools and means of responding, results in this area are likely to be less than optimal.

An obvious fact of Ontario market opening was the lack of measurement and associated control technologies available to the residential and small commercial markets. There is ample evidence to demonstrate that these two segments drive peak loads and that without the appropriate incentives (and disincentives), it has also been amply demonstrated that customers’ willingness to modify behaviour is limited at best. This is such a fundamental economic reality, we are surprised that it is still debated in Ontario.

In the alternative, we would propose that all new residential and small commercial buildings be mandated to install interval meters, and further that when existing properties are sold, a change out of the existing meter to an interval meter be mandated. It would be further possible to change non-intelligent meters to smart meters when LDC’s exchange meters in the normal course for re-calibration and re-certification.

Finally, moving from the current, non-intelligent meters, to semi-intelligent Time of Use meters is not defensible given the marginal incremental cost difference between TOU meters and interval (meters), the fact that large deployments will further decrease this cost difference, and that TOU technology is already obsolete considering technologies that are presently exist in the market place.