Ontario Energy Board
27th Floor
2300 Yonge Street
Toronto, Ontario
M4P 1E4
ATT: Kirsten Walli, Secretary

May 29, 2008.

Dear Ms. Walli,

Re: Staff Discussion Paper on Rate Design for Recovery of Electricity Distribution Costs. Board File No.: EB-2007-0031

In accordance with the OEB's e mail and web posting of March 31, 2008, ECMI submits its comments on the Staff Discussion Paper on Rate Design for Recovery of Electricity Distribution Costs. Board File No.: EB-2007-0031 also dated March 31, 2008.

In considering the Board staff Discussion Paper, ECMI has attempted to address the profound and significant issues and opportunities from both overview and philosophy perspectives.

Two paper copies are enclosed. An electronic copy in Adobe Acrobat has been sent by email to boardsec@oeb.gov.on.ca.

Requested contact details are as follows:-
Roger White, President
Energy Cost Management Inc.,
1236 Sable Drive,
Burlington, Ontario, L7S 2J6

E-mail address: rew@worldchat.com
Phone number: 905 639 7476
Fax number: 905 639 1693

Respectfully submitted for the Board's consideration,

Original signed by R. White

Roger White
President

Re: Staff Discussion Paper on Rate Design for Recovery of Electricity Distribution Costs
Board File No.: EB - 2007- 0031

ECMI agrees with Board staff that we must seize the opportunity provided by the present situation and changing technology. As this process is forward looking, ECMI's comments will be focussed on how the principles underpinning classification and costing might evolve for the new millennium. ECMI accepts that it is important to address:

- full cost recovery for the distributor;
- fairness to customers; and
- efficiency for static and dynamic use of the system.

Full cost recovery can be determined to apply only at the overall revenue requirement level. ECMI agrees this revenue is required to provide viability for the distributor and a reliable distribution system for customers.

Fairness to customers can be interpreted to underpin price stability, one of the primary statutory mandates of the OEB and fairness can also be interpreted as establishing equity between customers.

Efficiency for static and dynamic use of the system is the most important opportunity created with the pending changes in technology and the introduction of smart meters. Many rate designers mired in yesterday's technology think that the only way to capture dynamic use of the system is through the use of a demand charge. This is not the case. If a super peak period energy charge is established over a narrow enough number of hours on a peak period days (say Monday to Friday excluding statutory holidays) it effectively, and ECMI would argue more effectively, establishes a demand charge reflecting system use. The shoulder peak periods should be established adjacent to the super peak periods with the possibility of establishing a stand alone shoulder period on weekends over an appropriate number of hours on the weekend days. Off peak hours would be all hours not captured by the super peak or shoulder periods. These variable rates would apply to all customers with the following **possible** exception of atypical users such as:

- Merchant Generators
- Customers with material embedded generation
- Embedded deliveries to other distributors, and
- Customers with material load (scale adjustment if required)

For these customer groups, the variable charges might be established through direct assignment or modification to the regular super peak, shoulder peak and off peak variable energy rates. For intermittent loads of a material size, it may be appropriate to establish a minimum capacity charge to be applied for notionally reserved distribution system capacity.

Customer specific service charges (customer charges) could be used to capture avoidable costs such as:

- Billing and collecting
- Metering single phase or 3 phase

- Secondary conductors LDC owned or customer owned (if the cost of secondary conductors is not included in the variable components identified below)

Once the revenue from the atypical users and customer specific service charges is established, the balance of the revenue requirement could readily be recovered through 3 variable energy rates.

For LDCs with transmission, bulk, primary and secondary systems, the distribution charges could be established with:

- a transmission component (for customers supplied directly from the transmission system), then
- added to a bulk system component (for customers supplied directly from the bulk system), then
- added to the primary distribution component (for customers supplied directly from the primary distribution system), then
- added to the secondary distribution component (for customers taking power from secondary facilities).
- Transformer allowance should be treated as an adjustment (discount) for customer owners of transformation equipment.

This approach of super peak, shoulder peak and off-peak pricing of distribution system costs could readily be used to complement commodity pricing with the weighting between the 3 prices dependent upon the supply situation. If 50% of the energy was supplied from solar generation, then it is unlikely that there would be a peak supply premium, particularly if the balance of the energy were supplied by nuclear generation.

The question of the need for a 3 phase customer classification should be considered in the following context. When considering delivery configuration the 3 phase system is sometimes considered unique and if scale as suggested in item 4 above is addressed the following may assist in those considerations. When a distributor builds a distribution system the notion that the 3 phase system is a luxury system is not consistent with the power system in Ontario. Generation is done at the 3 phase level for good and technical reasons. In Ontario, the deliveries by large generators to the transmission system are 3 phase and deliveries by the transmission system to distributors are universally or almost universally 3 phase. If a distributor delivers power to customers using 3 phases it is recognised that the metering costs and wire delivery costs are generally higher than they would be for a single phase supplied customer. The distributor typically decides whether power will be delivered from a single phase supply or a 3 phase supply. In some cases customer equipment requires a 3 phase or polyphase supply. Where the distributor requires that the customer supply be 3 phase, this is usually a scale related issue. The scale is typically captured such that once a customer's load exceeds a certain level, say 100kW or 250kW, the distributor will require a 3 phase supply. Customers taking a 3 phase supply are typically responsible for a higher cost protection scheme which responds to loss of 1 or 2 phases by isolating the supply to all 3 phase loads. At the same time once a 3 phase supply is established to a customer the distributor's issue around phase balancing on its distribution system are reduced by not having to worry

about balancing the single phase lines on a feeder as it relates to the 3 phase customer. For those distributors that have a bulk or notional sub transmission system, the operation of those identified systems is consistent with the language applied to the 3 phase system above.

The questions of density and overhead versus underground distribution systems, which are material drivers of distribution system cost in ECMI's view, should be treated as adjustments to the 3 part variable rate structure identified above.

ECMI's submission of May 29, 2007 could be used as a starting point for mechanics which might underpin the approach included above.