Toronto Community Housing Corporation 931 Yonge Street Toronto, ON M4W 2H2

Tel: 416-981-4373 Fax: 416-981-4383



VIA E-MAIL & COURIER

August 22, 2007

Ms. Kirsten Walli Board Secretary Ontario Energy Board 2300 Yonge Street, 27th Floor Toronto, ON M4P 1E4

Dear Ms. Walli,

Re: Distributed Generation: Rates and Connection Ontario Energy Board File No.: EB-2007-0630

In response to your invitation for written comments to the Staff Discussion Paper issued dated July 13, 2007, I am writing on behalf of the Toronto Community Housing Corporation (TCHC) to express our view on the Standby Rates and Connection Fee relating to setting a balanced policy framework to encourage distributed generation in Ontario and, in particular, multifamily residential sector in Toronto.

Toronto Community Housing Corporation is in the process of redeveloping and revitalizing Regent Park community in Toronto downtown east with a new Community Energy System which will ultimately consists of high energy efficiency boilers and chillers, combined heat and power and alternative energy sources to supply central heating, cooling and electricity to over 5500 residential units and a mix of commercial retail spaces and recreational facilities. As such, the setting of a balanced and appropriate Standby Rate and the proper recovery of connection costs for distributed generation in a multifamily residential sector is of important consideration to TCHC at current Regent Park redevelopment as well as future potential sites for similar large-scale revitalization involving Combined Heat and Power system.

I would like to highlight a few major comments and recommendations on the related issues in your Staff Paper for your consideration:

- Building a combined heat and power plant to serve residential load is uniquely challenging and faces many cost and institutional obstacles. The imposition of standby charges on distributed generation in residential settings will severely hamper investment in both greenfield and retrofit sites and will preclude the wider system benefits of distributed generation in residential developments.
- 2. The OEB staff discussion paper refers to the potential for increased grid-reinforcement and stranded costs incurred by the host LDC and to the importance of mechanisms to recover costs to "keep the LDC whole". While such costs to the LDC may be an issue for new CHP projects to be located on sites with existing commercial or industrial loads, CHP in residential applications is totally different.

Typical electric power load factors for residential developments are 30-35%, not approaching the 50-90% load factors typical of commercial and industrial loads. CHP projects in new or existing residential developments will certainly not increase any requirements for grid-reinforcement or other LDC infrastructure beyond the physical connection.

- 3. TCHC at Regent Park has a unique opportunity to consider deploying CHP to serve a mix of private market and social assisted housing units. If investment in a CHP project cannot be made cost-effective at Regent Park, the prospects for CHP in residential settings are bleak to non-existent in Ontario for the foreseeable term.
- 4. The potential for demand response, both peak shifting and peak shaving, in residential developments is sometimes minimized and dismissed because of perceived difficulties in inducing behavioural change and going beyond the voluntary actions of individuals. CHP projects contribute directly to demand response capability. CHP in residential developments should be promoted and assisted by both the wholesale electricity system and the host LDC.
- 5. Any increases to residential load factors above the typical 30-35% range will reduce the overall system infrastructure requirements of the host LDC. Currently, the installed and plug-in peak loads of residential units are growing rapidly and can exceed 20 kW per residential unit. Such increases in peak loads of residential units will lower residential load factors even more. Historically, the non-coincident contribution to the LDC's peak has remained below 2.5kW per unit. Regulatory incentives, not just "keeping the LDC whole", should be provided to LDCs from the wholesale system to actively assist in the deployment of CHP on residential sites.
- 6. CHP serving residential loads will invariably be sized by thermal energy needs with electrical output being a secondary byproduct. All CHP electrical output during peak hours will significantly raise the effective load factor experienced by the LDC from that residential development. The regulatory framework should provide incentives to maximize energy efficiency on the residential site, not just the thermodynamic efficiency of an electrical generation project.
- 7. CHP serving residential loads will improve residential load factors and will defer or reduce the host LDC's future infrastructure needs. Residential loads served by CHP should be assessed lower distribution service charges by the host LDC.
- 8. There should be a further recognition of and compensation for the CHP's contribution to reducing the host LDC's non-coincident peak, which is over and above the benefits to the wholesale system currently recognized in the Ontario Power Authority's existing and proposed contracts under its Standard Offer Program.
- 9. For a CHP project serving a residential development, there should be no standby charges.

Thank you for the opportunity to share our views on the important topic of promoting distributed generation in multifamily residential sector which we believe will be of significant benefit to the value of distributed generation across the different sectors. We would be pleased to discuss these comments and recommendations further. Please keep us informed of the next step of the consultation process.

Yours truly,

Philip Jeuna

Manager, Energy Management

Asset Management Unit

Toronto Community Housing Corporation