EB-2007-0031

# **Ontario Energy Board**

# Staff Discussion Paper Rate Design for Electricity Distributors: Overview and Scoping

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# **Ontario Power Authority Comments**

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# BACKGROUND

The Board initiated a consultation process on March 30, 2007 to consider the need for, and approaches to, changes in distribution rate design in light of industry changes and emerging issues. Board Staff have prepared a discussion paper ("the Discussion Paper") in support of this initiative. The Board has requested comments from interested stakeholders regarding the underlying principles; the classes of service; and the rate design components and issues as contained within the Discussion Paper.

#### OPA COMMENTS AND RESPONSES

The OPA is cognizant of the impact of rate design on a utility's ability to recover its costs, as well as on consumer behaviour and the potential competition between these goals. The OPA sees the potential in this proceeding to impact both distributed generation and conservation in Ontario and its comments are confined to these two areas.

#### 5.2 Fixed and Variable Rates

With regard to this issue, the Discussion Paper asks:

"What are the principles that should inform the decision on fixed and/or variable rates?"

Given the Government of Ontario's commitment to building a "culture of conservation" in the province, the OPA suggests that one of the principles that should be considered when establishing fixed versus variable rates is the impact of the resulting rate structure on conservation efforts.

The OPA agrees with the assertion on page 21, paragraph 4 of the paper, which states that high fixed rates frustrate conservation efforts. The increased "visibility" of variable rates to consumers allows them to respond more directly to price signals and to be more aware of the effects of their conservation efforts.

The OPA understands the concerns of LDCs regarding the ability to recover costs in an environment of declining volumes. The Report of the Board on the Regulatory Framework for Conservation and Demand Management by Ontario Electricity Distributors in 2007 and Beyond, dated March 2, 2007 endorses the use of an LRAM to recover revenues lost through conservation efforts. The use of the LRAM mechanism facilitates cost recovery by the LDCs in the event that variable rates result in greater than anticipated revenue loss through conservation.

# 5.4 Cost Model for Generation

The Discussion Paper asks:

"Should the Board pursue an analysis of use-of-system rates for distributed generation to investigate rates and determinants?"

The OPA submits that this consultation process presents an excellent opportunity to examine the issue, which has been raised in other forums recently. In Hydro One's application for interim rates for distributed generators, (EB-2005-0528), the Board considered the issue of volumetric rates for Hydro One's distributed generator customers. In that proceeding, the Board admitted the merit in considering the company's proposal, although it required supporting detailed cost and benefit information.

In the Cost Allocation Methodology proceeding (EB-2005-0317), the Board examined the issue of cost allocation for load displacement generation ("LDG"), but did not examine distribution rates for merchant generators or hybrid facilities. The Board's Report established a methodology to accurately and reliably allocate costs to LDG customers, while leaving the issue of cost recovery through rate design to this consultation process.

The OPA supports an examination of rate design alternatives for distributed generators, including use-of-system rates as discussed on pages 26 and 27 of the Discussion Paper. However, the Board should not confine itself to considering use-of-system rates as the only potential solution to addressing issues raised by distributed generation.

The current rate treatment of distributed generators acts as a barrier to entry. The fixed monthly charges to these customers could impact a potential generator's decisions on where to locate, or whether to enter the market at all. The attached table of payments and revenues for distributed solar generators with a RESOP contract illustrates the variability and inequity in these charges throughout the province, which could impact the location of distributed generation. Smaller projects receive a smaller proportion of revenues than that received by larger projects due to the relative size of the fixed charge to the revenues received. Furthermore, the proponent of a small solar project connected to Hydro One receives negative revenues, which would preclude investment in most areas of the province.

While generator customers pay the entire cost of connection up front, load customers' connection costs are recovered over time by the distributor through rates as specified in the Distribution System Code, sections 3.1.4 and 3.1.5. Charging the same rates to these two customer types has the result of double-charging distributed generators for their connection costs.

The inadequacy and unfairness of the current customer treatment becomes evident through a review of Compliance Bulletin 200703, dated April 27, 2007. The Bulletin notes that a customer-based generator that is either directly connected to the system, or indirectly connected in parallel to the associated load is metered and billed separately from the load in accordance with the distributor's rate order for that rate class. This customer pays two monthly fixed charges, in contrast with an embedded retail generation facility that is indirectly connected in series (or, behind the load meter). Such a customer is not treated independently for settlement purposes and would pay only one monthly fixed charge, applicable to both the load and the generator.

The inequity noted above may also create a perverse incentive for the generator to choose the connection configuration that results (for generators with RESOP contracts) in higher administrative costs for the LDC.

The practice of charging distributed generators on the same basis as load customers is inappropriate and does not reflect the costs to serve these customers, nor does it reflect the benefits to the system that these customers provide. These include, but are not limited to: increased generating capacity; reliability enhancements; reduced line losses, and; investment deferrals. A thorough examination of distributed generators as a separate category of customers would be appropriate to develop a billing method which recognizes their true costs and, where possible, their benefits.

Distributed generation will play an important role in meeting the supply challenge in Ontario through to 2027. Full examination of these issues now may facilitate further development of this supply source.

The OPA would welcome the opportunity to be involved in a process to develop rates for these customers that properly recognizes the true cost to serve this customer class while reducing barriers to entry.

The OPA wishes to thank the Board for this opportunity to provide its comments on the Discussion Paper, and would be happy to provide further clarification if needed.

# Impact of Fixed Charges on Revenues to Solar PV Generators

#### **Toronto Hydro**

kW Capacity	1	2	10
Monthly fixed charge	\$ 12.68	\$ 12.68	\$ 12.68
Generator revenue from RESOP	\$ 45.36	\$ 90.72	\$ 453.60
Monthly payment to generator	\$ 32.68	\$ 78.04	\$ 440.92
% of payment to revenue	72%	86%	97%

#### **Thunder Bay Hydro**

kW Capacity	1	2	10
Monthly fixed charge	\$ 10.98	\$ 10.98	\$ 10.98
Generator revenue from RESOP	\$ 45.36	\$ 90.72	\$ 453.60
Monthly payment to generator	\$ 34.38	\$ 79.74	\$ 442.62
% of payment to revenue	76%	88%	98%

#### **Bluewater Power**

kW Capacity	1	2	10
Monthly fixed charge	\$ 13.90	\$ 13.90	\$ 13.90
Generator revenue from RESOP	\$ 45.36	\$ 90.72	\$ 453.60
Monthly payment to generator	\$ 31.46	\$ 76.82	\$ 439.70
% of payment to revenue	69%	85%	97%

### Hydro One Networks

kW Capacity	1	2	10
Residential - normal density monthly			
fixed charge	\$ 57.72	\$ 57.72	\$ 57.72
Generator revenue from RESOP	\$ 45.36	\$ 90.72	\$ 453.60
Monthly payment to generator	\$ (12.36)	\$ 33.00	\$ 395.88
% of payment to revenue	-27%	36%	87%

## Assumptions:

Solar PV is 15% available (capacity factor)