



Suite 1600  
1 First Canadian Place  
100 King Street West  
Toronto, Ontario  
Canada M5X 1G5  
Telephone (416) 862-7525  
Facsimile (416) 862-7661  
www.gowlings.com

**Tom Brett**  
Direct (416) 369-4628  
tom.brett@gowlings.com  
File No. TO209150002

January 9, 2006

**BY E-MAIL AND COURIER**

Mr. John Zych  
Board Secretary  
Ontario Energy Board  
2300 Yonge Street  
27th Floor  
Toronto, Ontario  
M4P 1E4

Dear Mr. Zych:

**Re: RP-2005-0020/EB-2005-0529 - 2006 Distribution Rates – Generic Proceeding**

Please find attached APPrO's submission in the Generic Issues Proceedings. I will send 10 hard copies by courier later this morning.

Yours sincerely,

A handwritten signature in black ink that reads "Tom Brett".

Tom Brett  
Counsel  
APPrO

TB:jc

cc. Lee Harmer  
Michael Millar  
Applicants and Intervenors

TOR\_LAW\6209333\1

**GENERIC ISSUES PROCEEDING - RP-2005-0020/EB-2005-0529**

**SUBMISSIONS ON STANDBY RATES**

**BY THE ASSOCIATION OF POWER PRODUCERS OF ONTARIO (“APPRO”)**

**INTRODUCTION**

1. APPrO represents over 98% of the electricity generators in Ontario, including many smaller generators who develop and operate distributed generation projects, and others that are interested in doing so.
2. These projects are both load displacement projects behind the metre at a particular load, or projects which are connected to the distribution system but are not sited at a load.

Some of the distributed generation projects are cogeneration projects in that they produce heat or cooling (or both) in one form or another.

The projects vary in both size and fuel type and range from smaller projects less than a megawatt to projects such as the GTAA cogeneration project with forecast capacity of over 120 megawatts.

**THE PROCEEDING**

On November 2, 2005, the Board launched its own motion to deal with certain generic issues raised by the applications of the electricity distribution companies for distribution rates to be effective as of May 1, 2006. The Board established an Issues List for the proceeding, which included the following issues:

**“3. Generalized Standby Rates for Load Displacement Generation**

**Background**

The importance of standby rates will increase as the adoption of load displacement generation increases. For many utilities, it will be impractical to calculate customer-specific standby rates due to the number of customers and the difficulty of isolating costs. Generalized or standard rates could be developed but different utilities could take different approaches in the absence of policy guidelines.

**Issues**

Should the Board develop a standardized methodology for stand-by rates?

Should the Board permit utility-specific approaches to the design of stand-by rates?

If so, what should that design basis be?

**2.2 Revenue Losses Attributable to Unforecasted Distributed Generation****Background**

Concerns have been raised regarding the load and revenue effects of the accelerating adoption of distributed generation, the effects of which may be material and are difficult to forecast, and therefore warrant subsequent disposition by way of a deferral account.

**Issues**

Should utilities be permitted to record in a deferral account foregone revenue amounts attributable to unforecasted load losses arising from distributed generation.”

APPrO’s submission will address mainly issue 3, but will touch on issue 2.2 as well.

**GOVERNMENT POLICY**

The current Government of Ontario has consistently supported distributed generation. In a major speech to the Empire Club of Canada on April 15, 2004, Energy Minister Duncan stated:

“Distributed generation, which is also attractive from a security perspective, holds significant promise for the environment, as it suggests an electricity system that minimizes massive transmission networks, and focuses resources only where they are absolutely necessary. Our desire is to help Ontarians unlock the potential for efficient electricity generation that is around them, and we will remove barriers, free up resources and bring new thinking and new ideas to the challenges that lie before us. ....”

During the Third Reading of the Electrical Restructuring Act, 2004 (“Bill 100”) the Minister stated:

“Where possible and economically feasible, it is desirable that Ontario move to a more distributed system of electricity generation, where clean

generation capacity is situated close to the consumers who require the power.”

The Ontario Ministry of Energy, in its December 21, 2004 discussion paper, “Electricity Transmission and Distribution – a Look Ahead”, indicated that

“the government recognized that the development of a diversified, clean, and renewable energy portfolio in Ontario lends itself to the development of distributed generation facilities.”

On August 18, 2005 the then Minister of Energy, Dwight Duncan, wrote to the Ontario Energy Board and the Ontario Power Authority as follows:

“I am requesting that the Ontario Energy Board and the Ontario Power Authority cooperate in developing the terms and conditions for a standard offer program for small generators embedded in the distribution system that use clean or renewable resources.”

The letter noted, in assigning responsibilities to the two agencies, that

“The Ontario Energy Board, in accordance with its authority over connection policies and delivery obligations of distributors, will focus on the necessary changes to codes and connection requirements, and on ensuring non-discriminatory access to the electricity system.” (our emphasis).

The letter closed with the exhortation

“Please begin this work immediately and report to me by the end of 2005 on your findings, recommendations and proposed implementation plan.”

In late 2004, the Government of Ontario established the OPA to help alleviate a severe shortage of generation. In its recent Supply Mix Advice Report to the Minister of Energy, the OPA recommended:

- A “smart gas” strategy that would emphasize the use of gas in cogeneration, combined heat and power, and distributed generation, and result in the construction of another 1500 MW of gas-fired generation, in addition to existing planned procurements.
- 500 MW of biomass-powered generation, with 470 MW in addition to current

procurements (including methane from municipal landfills and wastewater plants and gasification of municipal solid waste).

- 1,500 MW of additional waterpower resources by 2025, with 1,350 MW in addition to procurements under way.
- 5,000 MW of wind-powered generation by 2025, with 3,600 MW in addition to procurements already under way.

(Supply Mix Advice Report, Volume 1, pp. 62-63)

A substantial part of these proposed new generation facilities will be connected to the distribution system. Implementation of these facilities in a timely manner will require rates, instruments and practices on the part of the LDCs, and the OPA itself, that incent rather than deter, distributed generation.

The Energy Conservation & Supply Task Force, the recommendations of which formed the basis of much of the current government's energy policy, recommended as part of its action plan "a diverse supply and demand mix, including renewables, distributed generation, and conservation" (p. 86). In discussing distributed generation, it listed some of the benefits of distributed generation, as follows:

"By supplying power near load, it is possible to avoid or defer transmission and distribution investments that would otherwise be needed to supply electricity to the load. Reductions in transmission and distribution line losses may also occur due to reduced transmission and distribution distances. At times of system stress DG can enhance system reliability.

Distributed generation projects are generally smaller, and require less capital than larger, centralized plants. Being easier to finance means more generation developers could undertake such projects, leading to the inherent benefits of competition.

Distributed generation projects can generally be permitted and constructed faster than larger installations.

Natural gas and some renewables are well suited to serve as distributed generation capacity. Distributed generation also allows more scope for use of innovative fuels." (p. 54)

It recommended, inter alia, that

“Ontario should move towards a market with rules that promote investment in distributed generation. (p. 71)

Distributed generation facilities should be able to compete on a level playing field with other supply and demand side initiatives. The level playing field should include consideration of system benefits including security of local supply, energy efficiency and emission reductions, and local commercial and industrial competitiveness. (p.72)

The OEB should issue guidelines that encourage the timely and economic connection of distributed generation facilities. Any resulting stranded transmission and distribution costs should be recovered from the ratepayers.” (p. 82)

## **STANDARD METHODOLOGY FOR RATES**

APPPrO recommends that the Board institute a proceeding to develop a standardized methodology for stand-by rates and a regulatory framework for distributed generation, for several reasons.

First, at the moment 16 of 95 LDCs in Ontario have stand-by rates, and, as noted in the Board staff’s recent Discussion Paper on the Standard Offer Program for Eligible Distributed Generation, they incorporate many different approaches and a variety of charge determinants, including actual or anticipated maximum demand, per KW reserved, capacity reserved, KVA rating, manufacturer’s rated output of the co-generator, various measure of demand, or a monthly service charge. Some of these rates were established long ago, prior to the restructuring of the market, are no longer appropriate, and need to be reviewed. The same is true for the proposals some utilities have made for new standby rates in this case.

Moreover, some utilities which do not now have stand-by rates have proposed stand-by rates in this proceeding which in effect “gross bill” the load, in other words, charge the same rate for stand-by as they would if they were actually supplying the electricity to the load. This approach is unacceptable to APPPrO as it is not demonstrably cost based, conflicts with the Board’s net billing decision with respect to transmission network rates (RP-1999-0044), and does not take into account the benefits distributed generation provides for distributors in the view of most objective observers, which benefits are not now allocated in whole or in part to those generators.

Under current conditions, such rates are clearly significant disincentives to investment in distributed generation and run counter to current government energy policy to incent additional generation as a first priority through all available means, including the creation of a standard offer contract for distributed generation (which should be available within a few weeks).

Third, introducing a stand-by rate now is premature, as any such rate should be developed in the context of the utility's other distribution rates, which in turn should be based on a comprehensive cost allocation analysis now being conducted by the Board. Any generic stand-by rate should be developed as part of the standard cost allocation methodology proceeding now under way. APPrO notes that Hydro One shares its view on this matter [OEB Staff Interrogatory of Hydro One #2, p. 1 of 1]. Any stand-by rate should also be informed by the upcoming OPA Standard Offer for green and clean generation, in particular the degree to which the price it offers for distributed generation reflects the benefits of distributed generation to the electricity system.

Fourth, the Board's generic methodology may need to accommodate generator projects of different sizes. It may be easier for example for a utility to identify incremental costs occasioned with a large 100 MW generator on its system than identifying such costs for a host of smaller generators scattered on various feeders throughout its system. More assumptions may need to be made in the latter case.

Fifth, one of the options that should be considered in the proposed proceeding is not to have a stand-by rate at all.

#### **UTILITY BENEFITS OR AVOIDED COSTS FROM DISTRIBUTED GENERATION**

While a stand-by rate, if one is deemed appropriate, should be viewed in the context of the utilities' rate structures and cost allocation generally, the decision whether to have a stand-by rate at all should take into account the fact that generators, whether sited at loads or embedded "at large" within a distributor's system, also create benefits to the distributors and their customers, which are not now recognized in the financial arrangements between them. These benefits need to be taken into account in the establishment of, and the size of, any stand-by rate.

The Distributed Generation Task Force, a group that includes many distributors, has summarized these benefits to distributors as follows:

“Benefits to Distributors” - Reduced line losses, power factor correction, voltage stabilization and improvement, reduced/avoided/delayed capital expenditure on distribution equipment, potential for improved ability to respond to system-wide outages, in other words, improved reliability, other system benefits of a technical nature, depending on specific circumstances.”

In addition, distributed generation reduces utilities’ transmission charges, the benefits from which currently flow through to all utility ratepayers and not to the distributed generators that caused them. Distributed generation can also reduce transmission congestion.

In designing stand-by rates, including deciding whether to have one at all, these benefits need to be considered. It is well accepted that distributed generators can in some circumstances be an alternative to additional distribution or transmission assets, whether they be additional feeder lines, capacity banks, transformer stations or the like, particularly in a growing utility. For example, Hydro One has estimated the value of avoided distribution capacity on its system due to Conservation and Demand Management to be \$6.50 per year per KW of avoided demand (RP-2004-0203/EB-2004-0533, June 15, 2005 letter to the OEB) [Greater Toronto Airport Submission, December 8, 2005, RP-2005-0020]. And it is well recognized that distribution system losses, while different from one utility to another, are substantial, and average about 4%.

These benefits, or avoided costs, are a reality and, subject to what has been done to date, the utilities should be required to develop estimates of the avoided costs of each type which arise from generation projects being installed on their systems.

To the extent that the OPA and the Board have not already done so in their report to the government on the standing offer program, the Board should determine the manner in which each of these benefits or avoided costs should be calculated. The Board should also gain a clear understanding of how utilities will and should take distributed generation into account in their system planning, including the diversity benefit.

At the same time, APPrO recognizes that the utilities will lose revenue as a result of the installation of load displacement distributed generation in their service territory. Distributed



generation investments have a similar impact on utility revenues as conservation and demand management investments. However, the CDM investments provide some, but not nearly all, of the benefits to utilities that distributed generation does. The current regulatory framework holds gas and electric utilities whole against lost revenue due to customers' CDM activities caused by utility programs by way of a Lost Revenue Adjustment Mechanism. The OEB should implement some comparable method to hold utilities whole with respect to their revenues, but this relief should take into account the benefits (or avoided costs) utilities receive from distributed generation, to the degree that those benefits are not recognized in the OPA's Standard Offer.

Once the Board has adopted a standardized methodology for stand-by rates, utilities should apply that methodology to their own circumstances. A utility that wished to depart from the Board approved methodology would have to fully justify its choice, unlike some applicants in this case who have summarily dismissed the Board's proposed cost-based model in the Distribution Rate Handbook (Chapter 10.6) as unsuitable.

Some distributed generators do not displace load, but rather simply supply power to the distribution system. At the moment those generators must pay Hydro One a monthly administration fee of between \$56.94 and \$273.22 for the life of the project, say 25 years, over and above the original connection fee. Each such facility has a miniscule "station load", and its output to the distribution grid is normally at least one hundred times larger. It should not, therefore, be charged such a substantial on-going fee in light of the benefits it provides the distributor, as discussed above. Hydro One has proposed a reduction to the monthly administration fee in this proceeding. For small generators, the charge is a significant financial burden.

## **CONCLUSIONS**

In APPrO's view, the Board should have a proceeding to develop a generic methodology for the calculation of stand-by rates that is informed by the work of its ongoing cost allocation proceeding.

The proceeding should also address the benefits the LDCs receive from distributed generation, the nature of a mechanism to hold the LDCs whole against loss of revenues due to the

installation of on-site distributed generation and, in light of such benefits and such a mechanism, and the degree to which the benefits have been recognized in the standard offer, whether there is a need for a stand-by charge at all.

Pending the outcome of that proceeding, the Board should

- decline to approve any of the proposed new stand-by rates or amendments to existing rates; and
- suspend any existing LDC rate that operates on “gross billing” basis.

**ALL OF WHICH IS RESPECTFULLY SUBMITTED.**

January 9, 2006



---

Tom Brett

Counsel to APPrO