



Richard P. Stephenson
T 416.646.4325 Asst 416.646.7417
F 416.646.4335
E richard.stephenson@paliareroland.com
www.paliareroland.com

August 23, 2007

File 10329

VIA COURIER

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto, Ontario
M4P 1E4

- Chris G. Paliare
 - Ian J. Roland
 - Ken Rosenberg
 - Linda R. Rothstein
 - Richard P. Stephenson
 - Nick Coleman
 - Margaret L. Waddell
 - Donald K. Eady
 - Gordon D. Capern
 - Lily I. Harmer
 - Andrew Lokan
 - John Monger
 - Odetta Soriano
 - Andrew C. Lewis
 - Megan E. Shortreed
 - Massimo Starnino
 - Karen Jones
 - Robert A. Centa
 - Nini Jones
 - Jeffrey Larry
 - Brydie C.M. Bethell
 - Emily Lawrence
 - Danny Kastner
- HONORARY COUNSEL
Ian G. Scott, Q.C., O.C.
(1934 - 2006)

Dear Ms. Walli:

Re: Distributed Generation Rates and Connection (EB-2007-0630)

The Power Workers' Union ("PWU") represents a large portion of the employees working in Ontario's electricity industry and has the utmost interest in initiatives that impact the energy industry and the provision of on going service quality and reliability to customers. Attached please find a list of PWU employers.

The PWU is committed to participating in regulatory consultations and proceedings to contribute to the development of regulatory direction and policy that ensures on going service quality, reliability and safety at a reasonable price for Ontario customers. To this end, attached please find the PWU's comments on Board Staff Discussion Paper on distributed generation rates and connections and on an EES Consulting Inc. report entitled *Discussion Paper on Distributed Generation (DG) and Rate Treatment of DG*.

We hope you will find the PWU's comments useful.

Yours very truly,
PALIARE ROLAND ROSENBERG ROTHSTEIN LLP


Richard P. Stephenson

RPS:pg

encl.

List of PWU Employers

Atomic Energy of Canada Limited (Chalk River Laboratories)
Barrie Hydro
BPC District Energy Investments Limited Partnership
Brant County Power Incorporated
Brighton Beach Power Limited
Bruce Power Inc.
Corporation of the City of Dryden - Dryden Municipal Telephone
Corporation of the County of Brant
Electrical Safety Authority
EPCOR Calstock Power Plant
EPCOR Kapuskasing Power Plant
EPCOR Nipigon Power Plant
EPCOR Tunis Power Plant
Erie Thames Services Corporation
Goldman Hotels Inc. - Hockley Highlands Inn & Conference Centre
Great Lakes Power Limited
Grimsby Power Incorporated
Halton Hills Hydro Inc.
Hydro One Inc.
Independent Electricity System Operator
Inergi LP
Innisfil Hydro Distribution Systems Limited
Kenora Hydro Electric Corporation Ltd.
Kincardine Cable TV Ltd.
Kinectrics Inc.
Kitchener-Wilmot Hydro Inc.
Lake Superior Power (Brookfield Power)
London Hydro Incorporated
Middlesex Power Distribution Corporation
Milton Hydro Distribution Inc.
Mississagi Power Trust (Brookfield Power)
New Horizon System Solutions
Newmarket Hydro Ltd.
Norfolk Power Distribution Inc.
Nuclear Safety Solutions
Ontario Power Generation Inc.
Orangeville Hydro Limited
PUC Services Inc.
Sioux Lookout Hydro Inc.
Sodexo Canada Ltd.
TransAlta Energy Corporation - O.H.S.C. Ottawa
Vertex Customer Management (Canada) Limited
Whitby Hydro Energy Services Corporation

**DISTRIBUTED GENERATION RATES AND CONNECTION
(EB-2007-0630)**

COMMENTS OF THE POWER WORKERS' UNION (PWU)

1. Background

By a letter dated July 13, 2007, the Ontario Energy Board ("OEB" or the "Board") initiated a consultation process with respect to rates and connection issues in relation to distributed generation ("DG"). The Board indicated that the consultation process is expected to culminate in a rates and connection policy framework for DG. The policy framework will in turn provide the basis for subsequent rate applications from electricity distributors on these issues, or the basis for potential proposed amendments to the Board's regulatory instruments.

The Board's letter also invited written comments from interested parties on Board Staff Discussion Paper ("Staff Discussion Paper") and on a report prepared by EES Consulting Inc. ("EESC") entitled *Discussion Paper on Distributed Generation (DG) and Rate Treatment of DG*. EESC's report provides an overview of DG technologies, the role of DG in the electricity sector, and the treatment of DG in Ontario and in selected jurisdictions around the world. It also examines the potential benefits of, and barriers to, DG, identifies policy issues and makes recommendations regarding the treatment of DG in Ontario. The Staff Discussion Paper discusses rates and connection policy in relation to DG.

The Staff Discussion Paper indicates that certain issues relating to the treatment of DG are also included in the Board's comprehensive Review of Electricity Distribution Rate Design (EB-2007-0031). In this respect, Board Staff state that examination of the issues outlined in the Staff Discussion Paper has been advanced to allow for the development of, at a minimum:

- (1) Transitional policy direction on standby rates for customers with load displacement generation;
- (2) DG customer rate classification; and
- (3) The recovery of connection costs for DG.

Board Staff also indicate that while the current initiative is intended to provide greater regulatory predictability in the short term, the results of this initiative may need to be revised depending on the outcome of the comprehensive rate design

review. Alternatively, the Board may decide to defer implementation of the results of this initiative to 2010 or 2011.

2. Power Workers' Union's Comments

2.1 Introduction

The PWU believes that DG, if and when done correctly, can have a number of potential benefits such as avoiding or deferring transmission and distribution investments, reductions in transmission and distribution losses and improved reliability. However, the identification and quantification of such benefits and the development of cost/benefit models that are technically acceptable to stakeholders for the purpose of designing market mechanisms and policy instruments must first be dealt with. This requires sufficient experience and data to assess DG costs and benefits.

Given that the significant increase of interest in DG is largely a recent phenomenon, it is not surprising that, as the EESC report found, many jurisdictions are just beginning to address the issue. The approaches taken differ between the jurisdictions. In fact, there is no consensus on the cost/benefit aspects of DG. What there is consensus on is that the installation of DG systems in and of itself does not result in the customarily cited benefits of DG such as improved reliability and deferral of transmission and distribution investments. Rather, benefits of DG are dependent on a host of factors including location, timing, DG performance, fuel supply and type of technology. When these factors are not ideal, in fact, DG can have the opposite of its desired effect, i.e. increased investment in transmission and distribution, and reduced reliability. Therefore, it is crucial to system reliability and cost that DG is not solely politically driven and implemented regardless of cost and that it is not subsidized where it is not economically viable. The PWU submits that the Board should not develop regulatory instruments and market mechanisms related to DG that is based on "presumed" rather than substantiated system-wide benefits of DG. It is important for the Board to determine whether there is a sufficient data and knowledge base to quantify costs and benefits in a robust and equitable manner.

The second major issue that adds to the complexity of the DG cost/benefit issue is the allocation of DG costs and benefits among the different stakeholders including DG customers, DG owners, distributors, ratepayers, or society. Ideally, once costs and benefits are identified and quantified their allocation should be based on the principle that they should accrue to those who caused them. In this regard, the PWU notes that Board Staff and the EESC report state that, in terms

of rates, the status quo fails to recognize the potential benefits associated with the presence of load displacement generation. It is argued that failure to

recognize such benefits amounts to disincentive to DG development. Given that most of the costs associated with DG for the purpose of determining standby rates are easily identifiable and quantifiable, and since the necessary experience and data on DG cost already exists, it is understandable that the current rates primarily reflect costs. On the other hand, the data on the benefits of DG are too scanty and unreliable to quantify and model for the purpose of designing rates based on costs net of benefits. The challenge of accurately establishing the causes of the benefits and the stakeholder(s) that should share the benefits also remains unresolved. Therefore, the question that the Board should ask is whether or not it is practical at this point in time to recognize DG benefits in the current rates. Related to this question is the issue of whether or not all the measures which the Province, the OPA, the Board and the IESO have taken so far to incent DG should be recognized in designing rates that are proposed to reflect DG benefits.

The PWU believes that the major issues which Board Staff invited comment on including standby rates, revenue losses due to load displacement generation and recovery of connection costs, should be considered in the context of a clear understanding of the foregoing issues. The PWU, in its participation in regulatory processes, has consistently emphasized that outcomes should not compromise system service quality, reliability, and safety provided to the consumers of Ontario. In this respect, the PWU submits that it is essential that basic economics is not ignored so as to ensure that distributors are not exposed to financial harm that would compromise safety, reliability and service quality, and also not to undermine the interest of ratepayers who could be exposed to unreasonable rate increases.

Based on the concerns described above, the PWU believes that further analysis is needed in the area of DG benefits and the following comment of the PWU on the specific issues identified by the Board Staff is not intended as endorsement of immediate implementation of Board Staff and EESC proposals but rather as inputs towards the Board's efforts in developing the appropriate rate design in the longer-term, likely as part of the comprehensive rate design review.

2.1.1. Standby Rates for Customers with Load Displacement Generation and Rate Classification

The PWU notes that existing standby rates incorporate many different approaches to the establishment of the level of the charge and a variety of billing determinants, including actual or anticipated maximum demand, kilowatts of reserved capacity, kVa rating, and various monthly service charges.

The PWU sees merits in Board Staff's position that the rate structure and the methodology used to calculate standby rates should be consistent while recognizing that this does not mean that standby rate levels should be the same across all electricity distributors. The standardized rate structure and methodology should be one that encompasses all the necessary parameters that may be relevant to each distributor in its dealings with load displacement generation and also one that leaves sufficient room for factors that may influence the value and magnitude of those parameters. Examples of such factors may include location, performance, technology, and fuel type.

The PWU also submits that standby rates should be cost-based. In this regard the PWU notes that the EESC report has proposed that such costs should be net of the benefits from load displacement generation. It is also indicated that the reason why such benefits should be recognized is so that the rates don't create artificial barriers to DG. As indicated earlier, while the PWU accepts in principle that benefits should be recognized, the PWU does not believe that the necessary data and acceptable models are available to make benefits part of the rate structure in the short-term. As more experience is gained, the necessary information and data are acquired, and models are developed, the standby rates could be reviewed to include benefits. Therefore, the PWU submits that the following points should be taken into account in designing rates that recognize benefits in the long-term:

a. Progress has already been made in removing regulatory barriers

As the Staff Discussion Paper indicates, the Board has taken measures on several fronts to remove regulatory barriers to the implementation of DG and to provide a more supportive environment for DG projects. These, for example, include amendments to the Distribution System Code ("DSC"), simplifying the generation license application, waiving or reducing registration fees and one-time license application fees. The PWU believes that these measures on their own constitute incentives to DG.

b. DG owners are also one of the primary beneficiaries of DG

Any recognition of benefits for the purpose of incenting DG should also recognize that DG owners benefit from energy cost savings through the operation of self-generation, improved reliability through the provision of back-up power in the event of an outage, and other benefits such as the ability to employ high-efficiency cogeneration.

c. Avoid double-credit for DG Benefits

As the EESC report indicates, consideration of impacts of DG on the distribution system should acknowledge actions in the area of supply and

backbone transmission which may impact the costs and benefits related to DG installation. For example, some DG providers sell power through the OPA, which has a 20-year contract with DG providers. Moreover, DG providers already enjoy incentives provided by the OPA in the form of higher than market prices for the power they supply to the system. The PWU shares the EESC's view that the DG may already receive payment for some of the benefits provided on the distribution system and, therefore, the OPA payments (supply side incentives) must be considered when analyzing the costs and benefits of DG so as not to provide "double credit" to DG for any system benefits they might provide.

d. Benefits should not be presumed

DG alone cannot ensure benefits such as system reliability and deferred or avoided capital investment. A good example would be when DG is not suitably located.

e. Insufficient data and experience

In the longer-term, a system-wide approach for determining DG costs and benefits could be adopted as better, more readily accepted methods, models, and data are developed that can accurately determine the location and time dependent benefits.

In addition to the above general points, the following are PWU's responses to Board Staff's specific questions on standby rates and benefits:

Stand By Rates

- *What might be a reasonable billing determinant for recovering demand-related costs?*

As the EESC report indicates (page 48), DG customers have a relatively poor load factor which could pose revenue risk on the distributor. It is important to ensure that the distributor has a stable and predictable revenue stream from the DG customers. In this respect, the PWU submits that the demand charge should be calculated based on an annual contract demand. If the annual contract demand is not based on the maximum capacity of the DG resource but rather is based on, say, a 12-month historical billing demand of the customer, there should be provisions that would ensure that the distributor recovers sufficient revenue in a predictable manner. Such provisions could take the form of a minimum monthly contract demand or a surcharge for demand exceeding the contract demand set for the customer.

- *Should standby charges be further differentiated between backup, maintenance and supplemental services?*

The PWU submits that there should not be any differentiation between backup, maintenance and supplemental services. The PWU does not believe that there is sufficient information available to distributors with respect to the factors that determine the reliability of DG and, therefore, on the frequency of demand for the three types of standby services, which affect load shapes and hence service cost. Moreover, the costs of constructing facilities to stand ready to serve standby customers are the same regardless of how frequently or infrequently the customers use those facilities.

On Potential Benefits of DG

- *How should any distribution and transmission benefits provided by load displacement generation be identified and quantified?*

The PWU notes that the EESC report proposes two options for determining benefits of DG: the marginal cost approach and the incremental approach. The PWU's concern is not over the merits of these approaches or for that matter of any other approach. Rather, the PWU's concern is that the approaches presume that the benefits of DG, when quantified will be either zero or positive. For example, the proposed incremental approach calculates the distributor's revenue requirement with or without the DG customer. Any cost savings between the two scenarios would represent the benefit of DG and be attributed to the DG customer. This would make sense if in the first place distributors have the opportunity to identify from a system perspective the locations where DG would be most cost effective to eliminate system losses, defer capital transmission and distribution projects, and reduce the need for ancillary services. In the absence of such a situation, the cost savings due to DG may be negative. This raises the question of fairness in two ways. First, it treats DG that does not create any benefit (zero benefit) the same way that it treats DG that in fact causes negative savings (negative benefits). Secondly, in terms of cost recovery related to the DG, and depending on which rate class such costs are recovered from, allowing DG with no system savings to operate would result in ratepayers paying for the operation of a DG that is not cost effective. In this respect, benefits should be customer specific, with the magnitude and value assessed by the distributor and negotiated with the DG.

- *Should a different approach be adopted depending on the size of the customer?*

The PWU believes that the same principle should apply to all DG regardless of size. The idea of grouping DG that is smaller than a certain size for special

treatment is arbitrary in that it does not reflect the actual contribution of specific DG to the system.

- *Should any benefit provided to customers with load displacement generation be recovered from all customers? If so, on what basis should this be done?*

While aware of the complexity of accurately determining the beneficiaries of DG, the PWU submits that the benefits provided to customers with load displacement generation should be recovered from customers that have benefited from the savings realized. For example, if the savings/benefits are for the entire distribution network, recovery should apply to the distribution network customers as a whole.

- *Is a separate classification warranted and, if so, should it apply to all customers with load displacement generation, or to a subset of these customers as suggested in the EESC Report?*
- *Are there other criteria that should be used to justify a separate rate classification for a subset of these customers?*
- *What would be an appropriate threshold for a generator rate class?*

The PWU notes that the EESC report recommends creating a separate class for DG customers with generation capacity above 500 kW and where a DG customer generates more than 10% of its total load. It also recommends that customers, for example, with a generation capacity of less than 500 kW, or greater than 500 kW but which make up less than 10% of the customer's total load, remain on current rate schedules.

The PWU also notes that the EESC report conducted a review of the current standby unit costs in Ontario and compared total revenues paid by the DG customer under current standby rates with fully allocated costs. Based on the initial analysis of the data provided by the cost allocation filing, the report found that there is a very small difference in unit cost when separating the standby customers from the existing classes. In addition, a comparison of benefit-cost ratios showed that the standby rate customers pay close to their allocated cost of service. The only reservation that the report has with respect to its finding is that the cost allocation filing did not provide data on DG benefits.

The PWU, therefore, submits that the only apparent rationale for having a separate DG customer class is the desire to recognize DG benefits in standby rates. Given the current lack of data and acceptable models that can identify and quantify benefits, both of the findings of the EESC report cited above do not warrant a separate classification. The PWU submits that DG customers should remain in the rate classes that they are in currently.

2.1.2. Revenue Losses Due to Load Displacement Generation

Typically, the distributor spends capital to install capacity to serve the load, and even if that load is reduced due to the DG, the maximum capacity must continue to be available for the load's needs if the DG is out of service (e.g. for maintenance and repairs) or shuts down. The distributor is exposed to revenue risk if it is not able to recover an adequate amount of capital to generate its required returns. In this respect, the customer with load displacement generation should continue to be treated as a load customer. In turn this would mean that the costs of having assets standing ready to be used if and when the generation facility is unavailable should be recovered through a standby rate calculated based on the maximum incremental load that the customer with load displacement generation could put on the system.

However, the PWU notes Board Staff's concern that this approach could act as a barrier to the development of DG. However, it is consistent with a cost-based approach and therefore presumably where such costs act as a barrier in the development of DG, the DG project lacks economic feasibility. As indicated earlier, the PWU believes that basic economics should not be ignored in encouraging DG.

2.1.3. Recovery of Connection Costs

The DSC provides that DG is responsible for paying the direct cost of connecting their facilities to the distribution network and any other costs related to system reinforcement beyond the connection point. Moreover, DG that connect directly to the distribution system pay connection costs up front; the costs of the assets to serve generators are considered user pay fees and are not added to the rate base of the distributor.

Board Staff note that there are concerns that the current system can act as a barrier to DG development as connection costs are sometimes material particularly for small DGs. There is also the concern that in the case of residential class customers, including customers with load displacement generation behind the meter, connection costs are recovered from all distribution customers through rates and this lack of consistency amounts to discrimination against DG.

On the other hand, Board Staff also indicate that there are concerns that relieving generators of the obligation to pay for all connection costs would result in uneconomic projects going forward.

The PWU submits that the status quo is the best way to prevent uneconomic DG projects from going forward. If connection costs are included in rate base and recovered from all customers, both the distributors and the DG will not have the

incentive to be cost effective, for example, in making decisions with respect to the siting of DG. The PWU shares the views of Board Staff that the current system minimizes the level of connection costs, minimizes cross-subsidization and also minimizes the distributors' exposure to stranded costs in the event that a generator reduces its use of the system or goes out of business. With regard to Board Staff's concern that the current system does not recognize system benefits arising from DG, it should be clear that recognizing such benefits by allowing recovery of connection costs through rate base, will not address the problem of allowing uneconomic DG projects going forward. Moreover, such an approach will require the identification and quantification of the assumed benefits and as noted earlier in this submission, this is far from clear at this stage. It is however possible to allow the distributor to have the option of reaching a negotiated agreement with individual DG on ways of minimizing the burden of paying the connection cost upfront when the distributor determines that there are explicit quantifiable benefits attributable to the specific DG.

These are the PWU's comments on the Staff Discussion Paper and EESC's report related to DG rates and connection.

667551_1.DOC