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# May 27, 2016

### VIA COURIER and RESS FILING

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

Dear Ms. Walli,

#### Rate Design for Commercial and Industrial Customers Re: (EB-2015-0043)

Power Workers' Union ("PWU") represents a large portion of the employees working in Ontario's electricity industry. 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 ongoing service quality, reliability and safety at a reasonable price for Ontario customers. To this end, please find the PWU's comments on the issues identified in the Board staff Discussion Paper entitled Rate Design for Commercial and Industrial Electricity Customers: Aligning the Interests of Customers and Distributors (EB-2015-0043).

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

Yours very truly, PALIARE ROLAND ROSENBERG ROTHSTEIN LLP

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File 23941

#### List of PWU Employers

Algoma Power AMEC Nuclear Safety Solutions Atlantic Power Corporation - Calstock Power Plant Atlantic Power Corporation - Kapuskasing Power Plant Atlantic Power Corporation - Nipigon Power Plant BPC District Energy Investments Limited Partnership Brant County Power Incorporated **Brighton Beach Power Limited** Brookfield Power Wind Operations Brookfield Renewable Power - Mississagi Power Trust Bruce Power Inc. Canadian Nuclear Laboratories (AECL Chalk River) Compass Group Corporation of the County of Brant Covanta Durham York Renewable Energy Ltd. Entegrus **Erie Thames Powerlines** Erth Corporation Great Lakes Power (Generation) Great Lakes Power Transmission Grimsby Power Incorporated Halton Hills Hydro Inc. Hydro One Inc. Independent Electricity System Operator Inergi LP InnPower (Innisfil Hydro Distribution Systems Limited) Kenora Hydro Electric Corporation Ltd. Kinectrics Inc. Kitchener-Wilmot Hydro Inc. Lake Superior Power Inc. (A Brookfield Company) London Hydro Corporation Milton Hydro Distribution Inc. New Horizon System Solutions Newmarket Hydro Ltd. Norfolk Power Distribution Inc. Nuclear Waste Management Organization Nuvia Canada Ontario Power Generation Inc. Orangeville Hydro Limited Portlands Energy Centre PowerStream PUC Services Rogers Communications (Kincardine Cable TV Ltd.) Sioux Lookout Hydro Inc. SouthWestern Energy The Electrical Safety Authority TransAlta Generation Partnership O.H.S.C. Westario Power Whitby Hydro Energy Services Corporation

# Rate Design for Commercial and Industrial Electricity Customers: Aligning the Interests of Customers and Distributors

## **Comments of the Power Workers' Union**

# I. INTRODUCTION

1. On April 2, 2015, the OEB released its policy on *A New Distribution Rate Design for Residential Electricity Customers* (EB-2012-0410) which directed electric distributors to structure residential rates so that all the costs for residential distribution service are collected through a fixed monthly charge. In the same policy, the Board announced that its general policy for rate design would be to increase the amount of revenue collected through the fixed rate, and reduce the amount of revenue collected through the usage rate. Accordingly, the Board indicated in the new policy that it intended to review the rate design for low-volume general service customers (generally small businesses) and coordinate that rate design with changes in the larger general service categories, following the same policy reasons.<sup>1</sup>

2. The PWU participated in EB-2012-0410 – consultation on rate design for residential electricity customers - and supported the Board's intent to pursue a fixed rate design as a solution to revenue decoupling to ensure certainty of revenue that distributors need to execute their capital and work programs and plan their investment in the distribution system. The PWU's support for a fixed rate design as a solution to revenue decoupling of the existing mechanisms and the positive impacts that such a rate design would have on consumers, distributors, public policy and regulatory efficiency.

<sup>&</sup>lt;sup>1</sup> EB-2012-0410: Board Policy, A New Distribution Rate Design for Residential Electricity Customers, page 2

3. On May 28, 2015 the Board launched the next phase of the policy initiative to update the rate design for commercial and industrial customers ("C/I customers") and on March 31, 2016 it released a Staff Discussion Paper entitled *Rate Design for Commercial and Industrial Customers: Aligning the Interests of Customers and Distributors* ("Discussion Paper") and *Appendix A: Analysis of Rate Design Options*. The Discussion Paper sets out a series of options for the design of electricity distribution rates for C/I customers.

# A. Proposed Rate Design Options

4. The Discussion Paper presents six rate design options proposed and analyzed by Board Staff:

- a. fully-fixed monthly charge
- b. time-of-use kWh
- c. energy usage blocks (cell phone plan)
- d. minimum bill
- e. three part demand rates
- f. time of use demand rates

As Table 1 below indicates, not all the proposed design options apply to every rate class:

	Design Option		GS>50	Int	Lrg
1	Fully fixed charge				
2	Time of Use energy				
	Fixed charge				
	Rate 1 for on-peak kWh				
	Rate 2 for Off-peak kWh				
3	Energy usage blocks	V			
	• Customers choose a level of fixed charge for blocks of on-peak				
	use				
	Overage charges				
4	Minimum bill:	V	V		
	Bill is the higher of the minimum bill level or the calculated bill	kWh	kW		
5	Three part demand rate		V	٧	V
	Fixed charge				
	<ul> <li>Rate 1 for maximum demand during peak period</li> </ul>				
	Rate 2 for maximum demand at any time				
6	Time of Use demand		V	٧	V
	Fixed charge				
	<ul> <li>Rate 1 for maximum demand during peak period</li> </ul>				
	<ul> <li>Rate 2 for maximum demand during the off-peak period</li> </ul>				

Table 1: Design Options and Application to Classes

Source: Discussion paper

5. The Board is inviting stakeholders to comment on the proposed rate design options. The Board states that it will consider the comments provided and perform additional analysis to develop a recommended approach. The Board has also indicated that there will be opportunities for further input before an OEB policy is finalized.

## II. PWU COMMENTS

6. The PWU's comments stem from the PWU's energy policy:

Reliable, secure, safe, environmentally sustainable and reasonably priced electricity supply and service, supported by a financially viable energy industry and skilled labour force is essential for the continued prosperity and social welfare of the people of Ontario. In minimizing environmental impacts, due consideration must be given to economic impacts and the efficiency and sustainability of all energy sources and existing assets. A stable business environment and predictable and fair regulatory framework will promote investment in technical innovation that results in efficiency gains.

# A. PWU General Comments

7. The PWU agrees with the Board that the current distribution rate designs for the C/I customers are 'out of sync' and not fully linked to distribution cost drivers i.e. the number of customers and demand, both connection and peak. The current rate design, particularly for those classes like GS<50 kW where distribution rates are based on energy consumption in kWh, has very little to do with the distributors' costs to serve those customers and therefore there is no connection to the value of the service provided to the consumer. The PWU is, therefore, encouraged by the Board's preference for a general policy that would increase the amount of revenue collected through the fixed rate and reduce the amount of revenue collected through the usage rate.<sup>2</sup>

8. The PWU also recognizes that it would be problematic to impose fully fixed charges on all C/I customers as in the case of residential customers. There could be adverse consequences such as intra-class cross-subsidization and significant bill impacts particularly on low volume customers, impacts not necessarily justified by the customers' contribution to cost – such as contribution to demand. In this respect, the more practical approach would be to apply fully fixed charges where they are feasible; increase the share of the fixed portion of the rates where such portions are currently small, including the possibility of setting a threshold for the minimum distribution revenue that should be generated from fixed charges; and tie rates to demand (system or individual) for the variable portion of the charge.

9. The PWU's main objective in this submission is to identify issues for the Board's consideration as it weighs comments received from stakeholders towards the selection and implementation of the appropriate rate design option.

<sup>&</sup>lt;sup>2</sup> EB-2012-0410: Board Policy, A New Distribution Rate Design for Residential Electricity Customers, page 2

### a) Avoid One-Size-Fits-All Approach: Increased Fixed Rates through Flexibility

10. The approach to achieve an increase in the fixed portion of distributors' revenue should recognize the individual circumstances of each distributor as well as the specific characteristics of the different customer classes. For example, distributors vary in terms of the contribution that a particular customer class such as GS <50 kW or Large User makes to the distributor's revenue (for example, some distributors do not have Large Users); the portion of the revenue collected through a fixed charge (e.g. ranging from 1.5% to 78.1% for the GS<50 kW);<sup>3</sup> the definition of a class (for example Intermediate customers are defined differently by different distributors, often reflecting differences in system configuration.

11. The PWU therefore recommends that, rather than selecting one of the alternative design options and mandating that all distributors use it, the Board should allow distributors to choose from amongst the proposed rate design options provided that the chosen rate design option ensures that the portion of the distributor's revenue collected through a fixed charge is increased. Such flexibility will allow the distributor to choose a cost-effective rate design that fits the specific realities of its service and the interests of its customers. This is consistent with the PWU's submission in EB-2010-0060 and EB-2012-0410 where we emphasized the need for flexibility and making revenue decoupling mechanisms available to distributors on an optional basis to address utility-specific circumstances.

12. Considering the many practical implementation issues associated with each rate design option and the diversity of utility-specific circumstances such as disparity in the distributors' degree of reliance on volumetric/fixed charges under the current rate design, it would be appropriate to pursue a flexible approach that would encourage distributors to move towards a fixed rate design of their choice.

<sup>&</sup>lt;sup>3</sup> EB-2015-0043, Staff Discussion Paper, March 31, 2016

#### b) Bill Impacts and Mitigation

13. The PWU has reviewed the bill-impact analysis presented in Appendix A, which relies on information collected from a small number of distributors. The analysis shows that impacts vary depending on the rate design option considered and the customer being analyzed for bill impact. In some cases, impacts are very asymmetrical (increases vs. decreases) and in others they are close to symmetrical. The impacts also vary with respect to the type and magnitude of the impact affecting the majority of customers in the class.

14. The PWU believes that cautions have to be taken in using the examples provided in the bill-impact analysis for the purpose of choosing the appropriate rate design/set of rate design options.

15. First, as the Board acknowledges, the customer impact analysis is based on historical data supplied by a small number of distributors. The analysis, as helpful as it is, does not necessarily represent an accurate and reliable estimate of what the outcomes would be. This problem goes beyond the understandable but unavoidable issues arising from sample size and methodology of analysis. The bill impacts presented in the Discussion Paper do not take into account the impact of the proposed rate design options on consumer behavior which, in turn, will impact system use and energy consumption, and hence those customers' bills. This in turn can have unintended impact on the ability of distributors to recover their distribution costs.

16. Secondly, the distribution cost component of customers' bills account for about 20 per cent of their total electricity bill. A valid argument can be made that the price signals given by the current distribution rates have a limited impact in achieving one of the Board's objectives, i.e. aligning the interests of customers and distributors towards maximum/efficient use of the distribution system. The reality is that Ontario electricity customers are concerned with 'the total bill' that has shown significant increases in recent years due largely to significant increases in the non-delivery portions of the bill. It should be expected therefore that customers, particularly large volume users, will

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continue to react more to the price signal sent by electricity price and other charges by looking for more and more innovative ways that would reduce their cost – e.g. more conservation, demand response, distributed generation, storage, etc. In this manner, the price signal sent by the non-delivery components of the bill will continue to determine how and how much customers use the distribution system than the price signal sent by the distribution rates.

17. Thirdly, to the extent that the chosen distribution rate design sends a signal to energy demand and even energy consumption, the reaction or decision of customers particularly of large volume users can still be one that adds to the threat of distribution revenue erosion. The distributor's ability to recover its predominantly fixed cost of existing and new infrastructure can be threatened by reduced consumption and this may in turn necessitate rate increases. The customer's decision to reduce consumption and demand even further can lead to a situation where more and more customers leave the grid or start to rely on their own distributed energy resources. The implication is that fewer and fewer customers that have no choice but to stay with the system will be burdened with increasing costs. This creates the potential for stranded assets.

18. Therefore, bill impacts presented in Appendix A should not lead to choosing rate design options that are more biased towards the reduction of demand and energy use than ensuring the full recovery of the distributors' fixed costs. For example, the PWU is concerned with rate design Options such as 5b (Three part demand rate in which one peak demand period is suggested to be narrow –i.e. from 3-9pm); Option 6b (wherein the Off-peak charge is suggested to be free) and the Minimum Bill Option (wherein fixed charge is suggested to be zero). While these options can encourage DER and peak-shifting, they are also likely to pose a risk to distribution revenue sufficiency and certainty of cost recovery by the distributor.

19. The undeniable fact is that some consumers will pay more and others will pay less regardless of the rate design chosen. Moreover, the Board has instruments to mitigate bill impacts. For example, the Board can provide sufficient lead time to implement proposed rate designs.

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#### c) Be Open to the Possibility of New Classes/Sub-classes

20. The PWU notes that the Board's current intent is to maintain, to the extent possible, existing rate classifications in order to avoid causing changes to the underlying cost allocations by class.<sup>4</sup> The PWU appreciates the Board's reasons for its desire to maintain the current classifications; however, the Board's goal of achieving its competing objectives (cost-causality, financial integrity, bill impact, customer choice, public policy objectives, etc.) may require the Board to be open to the possibility of new classes/sub-classes in the context of the proposed rate design options where doing so makes sense.

21. A good example is the GS<50kW class. The current distribution rates for this class are based on energy consumption in kWh and as such have very little to do with the distributors costs to serve the customers in the class. Customers in the GS<50 kW may vary in the manner they use energy and the system; however, compared to the other C&I classes they are largely low volume customers and as the Board notes in the Discussion Paper, such customers have more appreciation for predictability of rates and bills.<sup>5</sup> In this regard, there is no doubt that a fully fixed charge (or an increased fixed charge) would provide stability and predictability to consumers' bills; moreover, it would encourage the customer to appreciate the fact that most of the costs resulting from distribution service are fixed in nature, particularly in the short term. Also, but for differences with respect to load profile and load factor, the GS<50 kW class customers are similar to residential customers (who are/will be charged fully fixed rates as per the Board's current policy) in terms of the types of assets that they access for service.

22. On the other hand, a fully fixed charge for the GS<50 kW, while superior in terms of its simplicity, understandability, consumer bill predictability and distributor revenue stability, the PWU also recognizes the potential of a fully fixed charge to negatively impact the lower volume consumers in the class and benefit the higher volume customers. In other words, the potential for intra-class subsidization is real. In this regard the PWU submits that the Board consider creating a new class/sub-class for the

<sup>&</sup>lt;sup>4</sup> Discussion Paper, page 3

<sup>&</sup>lt;sup>5</sup> Discussion Paper, page 10

higher volume users in this group of customers and apply a rate design that combines a fixed charge that is higher than the level currently set by the Board's allocation method and two variable rates –one based on maximum demand during peak period and the other based on maximum demand at any time. For the lower volume users in the group, the Board may consider a fully fixed charge. This proposal is somewhat similar to what has been suggested by some distributors in the past.<sup>6</sup> The PWU notes that this proposal would require that the larger sub-class in the GS<50 kW be taken off their current smart meters and put on compatible demand meters. This in turn suggests that there are cost- and implementation-related consequences, the significance of which would vary depending on the number of distributors and customers that would be affected and the cut-off point that is used to create the class/sub-class. The Board therefore should hear from stakeholders on this subject and weigh the benefits of the proposal against the cost and implementation consequences.

# B. PWU Comment on Proposed Rate Design Options

In this section the PWU responds to the Board's request to rank the proposed rate design options. The PWU's response is consistent with the PWU's concerns and preferences reflected in the foregoing discussion in section A.

### a. General Service Under 50 kW of Demand

The Board is proposing the following rate design options for the GS<50 class:

<sup>&</sup>lt;sup>6</sup> London Hydro letter to the OEB dated August 10, 2015

	Design Option	Advantages
1	Fully fixed charge	This option is the simplest and helps a customer understand the fixed nature of distributor assets.
2	<ul> <li>TOU option</li> <li>Fixed part based on OEB's Cost Allocation Model Minimum System with Peak Load Carrying Capability ("PLCC") adjustment</li> <li>Variable part based on kWh in RPP on and off-peak time periods – will be the same across both winter and summer periods</li> </ul>	This option values peak capacity in a simple way that customers will already be familiar with from time of use commodity pricing.
3	<ul> <li>Energy use blocks</li> <li>Fixed part of contract peak kWh blocks that a customer will choose from and pay accordingly</li> <li>High variable part that will apply if the customer goes over their self-selected demand threshold</li> <li>There is no delivery charge for kWh used overnight and on weekends (off-peak)</li> </ul>	This option tries to bring a level of contract pricing to smaller volume customers. It fixes the distribution charge for each customer while valuing peak capacity.
4	<ul> <li>Minimum bill:</li> <li>Zero fixed charge</li> <li>100% variable rate with a minimum bill that represents the current use of 20% of customers</li> </ul>	This option encourages conservation by keeping a high variable charge while providing the distributor with a fixed revenue stream.

#### Table 2: Rate Options for GS<50

The PWU's ranking of its preferred rate design options for the GS<50 kW are as follows:

- 1. Option 1: Fully Fixed Charge
- 2. New added Option (optional):
  - a. Fully Fixed Charge for consumers consuming energy that is less than a certain threshold such as 3500 -4000 kWh
  - b. For the remaining group: An increased Fixed Charge and a combination of two variable rates – one based on maximum demand during peak period and the other based on maximum demand at any time (similar to Option 5a)
- 3. Option 2-Time of Use Energy Rate
- 4. Option 3 (Energy Use Blocks) / Option 4 (Minimum Bill)

### b. General Service Over 50 kW

The Board is proposing the following rate design options for the GS>50 class:

	Design Ontion Advantages			
4	<ul> <li>Minimum bill:</li> <li>Zero fixed charge</li> <li>100% variable rate with a minimum bill that represents 20% of customers</li> </ul>	This option encourages conservation by keeping a high variable charge while providing the distributor with a fixed revenue stream.		
5a	<ul> <li>Three part demand rate</li> <li>Fixed part based on OEB's Cost Allocation Model Minimum System with PLCC adjustment</li> <li>Variable 1 based on maximum demand during peak period</li> <li>Variable 2 based on maximum demand at any time</li> <li>Peak is 7 am to 7 pm</li> </ul>	This option values connection demand and aggregate demand separately. It is expected to be fairer and provide more revenue stability than peak		
5b	• Peak is 3pm to 9 pm	and on-peak alone.		
6a	<ul> <li>Time of Use</li> <li>Fixed part based on OEB's Cost Allocation Model Minimum System with PLCC adjustment</li> <li>Variable 1 based on maximum demand during peak period</li> <li>Variable 2 based on maximum demand during the off-peak period</li> <li>Peak is 7 am to 7 pm</li> </ul>	This option values peak capacity. Staff has modelled options that do or do not value off-peak capacity.		
6b	Variable 2 is 0			

Table 3: Rate Options for GS>50

The PWU's ranking of its preferred rate design options for the GS>50 kW are as follows:

- 1. Option 5a: Three Part Demand rate with broad peak (7am-7pm)
- 2. Option 5b: Three Part Demand rate with narrow peak (3pm-9pm)
- 3. Option 6a: Time of Use (Fixed + V1 + V2)
- 4. Minimum Bill

### c. Intermediate Customers

The Board is proposing the following rate design options for the Intermediate Customer Class:

	Desigr	ı Option	Advantages
5a	Three part demand rate		This option values
	•	Fixed part based on OEB's Cost Allocation Model Minimum	connection demand and
		System with PLCC adjustment	aggregate demand
	•	Variable 1 based on maximum demand during peak period	separately. It is expected to
	•	Variable 2 based on maximum demand at any time	be fairer and provide more
	•	Peak is 7 am to 7 pm	revenue stability than peak
5b	As 5a		and off-peak alone.
	•	Peak is 3pm to 9 pm	
6a	Time o	f Use Fixed part based on OEB's Cost Allocation Model Minimum System with PLCC adjustment Variable 1 based on maximum demand during peak period Variable 2 based on maximum demand during the off-peak period Peak is 7 am to 7 pm	This option values peak capacity. Staff has modelled options that do or do not value off-peak capacity.
6b	As 6a •	Variable 2 is 0	

Table 4: Rate Options for Intermediate Customers

The PWU's ranking of its preferred rate design options for Intermediate Customers are as follows:

- 1. Option 5a
- 2. Option 5b
- 3. Option 6a

### d. Large Customers

The Board is proposing the following rate design options for the Large Customer Class:

	Design	Option	Advantages
5a	Three part demand rate		This option values
	•	Fixed part based on OEB's Cost Allocation Model Minimum	connection demand and
		System with PLCC adjustment	aggregate demand
	•	Variable 1 based on maximum demand during peak period	separately. It reflects cost
	•	Variable 2 based on maximum demand at any time	causality.
	•	Peak is 7 am to 7 pm	
5b	As 5a		
	•	Peak is 3pm to 9 pm	
6a	Time o	f Use	This option values peak
	•	Fixed part based on OEB's Cost Allocation Model Minimum	capacity. Staff has modelled
		System with PLCC adjustment	options that do or do not
	•	Variable 1 based on maximum demand during peak period	value off-peak capacity.
	•	Variable 2 based on maximum demand during the off-peak	
		period	
	•	Peak is 7 am to 7 pm	
6b	As 6a		
	•	Variable 2 is 0	

 Table 5: Rate Options for Large Customers

The PWU's ranking of its preferred rate design options for the Large Customers Class is as follows:

- 1. Option 5a
- 2. Option 5b
- 3. Option 6a

All of which is respectfully submitted.