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**Susan Frank**

Vice President and Chief Regulatory Officer  
Regulatory Affairs

BY COURIER

October 18, 2006

Ms. Kirsten Walli  
Board Secretary  
Ontario Energy Board  
Suite 2601, 2300 Yonge Street  
P.O. Box 2319  
Toronto, ON M4P 1E4

Dear Ms. Walli:

**EB-2006-0226 – Determination under Sections 1.8 and 3.2 of the Retail Settlement Code & Clarification of Settlement Rules for Embedded Retail Generators – Hydro One Comments**

Hydro One is pleased to provide the attached comments on Clarification of Settlement Rules for embedded retail generators in the Standard Offer Program (SOP).

Please find attached an original and eight copies of Hydro One's submission. An electronic copy will be sent to you by email.

Sincerely,

A handwritten signature in cursive script that reads "Susan Frank".

Susan Frank

**IN THE MATTER OF** the *Ontario Energy Board Act, 1998*,  
S.O. 1998, c. 15 (Sched. B);

**AND IN THE MATTER OF** a proceeding pursuant to  
subsection 70.2 of the *Ontario Energy Board Act, 1998*  
to amend the Distribution System Code and the Retail Settlement Code

**SUBMISSION OF HYDRO ONE NETWORKS INC.  
REGARDING THE BOARD'S DETERMINATION UNDER SECTION 1.8 AND  
3.2 OF THE RETAIL SETTLEMENT CODE  
CLARIFICATION OF SETTLEMENT RULES FOR EMBEDDED RETAIL  
GENERATORS**

**OCTOBER 18, 2006**

Contact Information

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Hydro One strongly recommends that the Board reconsider its Clarification of Settlement Rules for Embedded Retail Generators in the Standard Offer Program (SOP). Hydro One recommends that the Board revise the clarification to state:

"Retail embedded generators with an OPA contract will be paid in accordance with the contract. Load Customers (including load customers with a "behind-the-meter" generator) will be charged by distributors for the electricity that the load customer consumes. "

This is the same statement contained in the Board's document with the last phrase in parentheses "(as set out on the load customer's meter)" deleted.

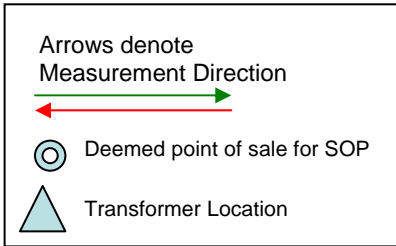
Hydro One also recommends that to ensure clarity of understanding by all participants, the Board attach the metering and settlement configurations as developed and recommended to the OPA by the Electricity Distributors Working Group (EDWG) and indicate which configuration should be used for behind-the-meter installations. These configurations are available to the OEB representatives on the EDWG and are attached as Appendix 1.

Hydro One understands that the intent of behind-the-meter SOP installations is that (i) the load customer is charged LDC rates for its full consumption (without consideration of the SOP generation) and (ii) the SOP generator is paid according to its OPA contract. This is different from net metering which is another, separate option for customers who prefer that arrangement.

If the Board intends to apply the net metering concept to behind-the-meter SOP generators there are a number of concerns for all parties involved.

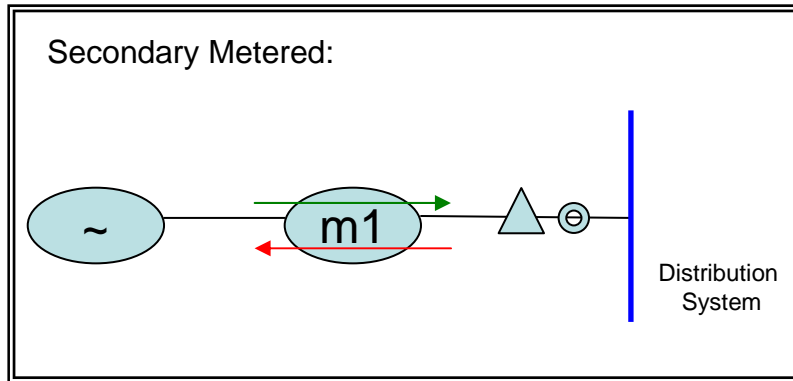
1. Introducing the net metering concept in the SOP program would make settlements more complicated and would likely result lost revenue for LDCs (volumetric distribution charges) and under-collection of other NCEC charges (RTSR, WMSC & DRC). To hold all parties neutral, variance accounts to track the lost revenue would be required for all impacted parties.
2. The proposed settlement rules are unclear about how (or even whether) the load customer will pay for the energy it consumes.
3. If the OPA contract with the generator is adjusted to deal with the energy consumed by the load, it will likely remove the certainty of the SOP revenue stream due to adjustments at the HOEP. The financial uncertainty for SOP generators, where the revenue stream is not guaranteed, will create a barrier to such investments.
4. The proposed settlement rules do not take into account that the generator and the load customer may be separate legal entities. The proposed rules will likely result in benefits flowing to the load customer that the generator would expect to receive. This will create a need for a contract between these parties and ongoing administrative burden for settlements between the load customer and generator.

Hydro One understands that direction from the government and the Electricity Distributors Working Group is that net metering is not available to SOP generators. Load customers and generators who wish to have generation located behind the load customer meter have the option to select net metering or the SOP program.



# Standard Offer Program Meter Configuration Options **APPENDIX 1**

## 1. Pure Generator Customer



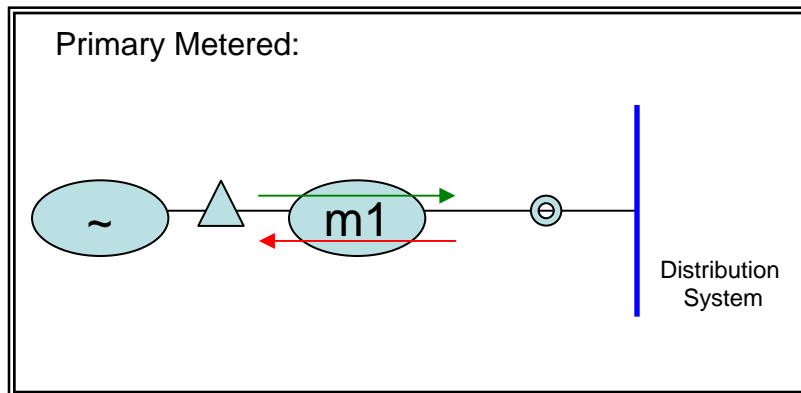
### Settlements:

Energy delivered reduced by Site Specific Losses. Paid @ SOP Rate

$$(Kwh / (1+SSL)) \times \text{SOP Rate}$$

Energy consumed increased by LDC approved loss factor. Billed at HOEP.

$$(Kwh \times (1+LDCL)) \times \text{HOEP}$$



### Settlements:

Energy delivered- No adjustment required. Paid @ SOP Rate.

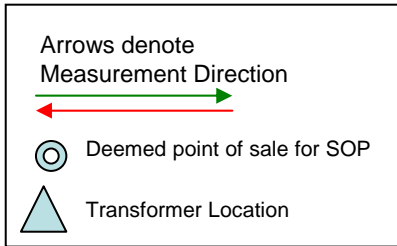
$$Kwh \times \text{SOP Rate}$$

Energy consumed increased by LDC approved loss factor less 1% for primary metering discount. Billed @ HOEP.

$$(Kwh \times (1+LDCL)) \times .99 \times \text{HOEP}$$

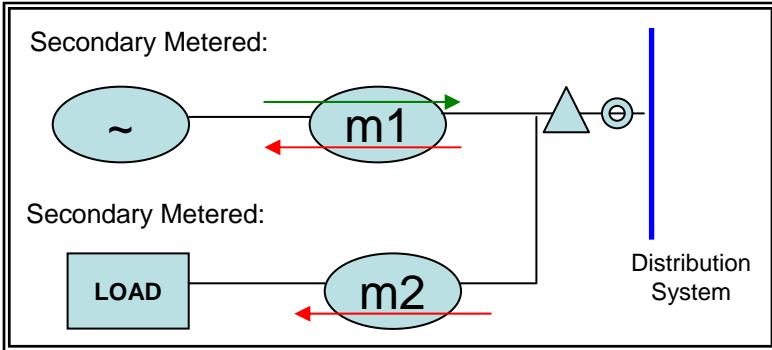
Note: Load Customer (Station Service) is also required to pay for additional energy related charges: WMSC, DRC, Network Service, Line & Transformation, and Distribution Variable Charges.

Note: Load Customer is also required to pay for additional energy related charges: WMSC, DRC, Network Service, Line & Transformation, and Distribution Variable Charges.



# Standard Offer Program Meter Configuration Options

## 2. Generator and Load Customer – 2 Meters



### Settlements - Generator:

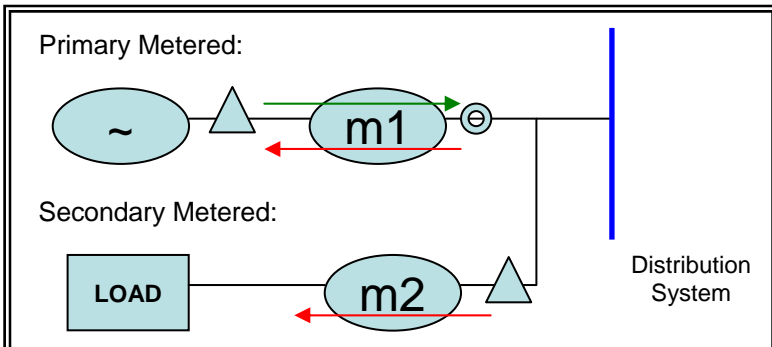
Energy delivered reduced by Site Specific Losses  $(Kwh / (1+SSL)) \times SOP \text{ Rate}$

Energy consumed increased by LDC approved loss factor  $(Kwh \times (1+LDCL)) \times HOEP$

### Settlements - Load:

Energy consumed increased by LDC approved loss factor.

$(Kwh \times (1+LDCL)) \times HOEP$  or  $(Kwh \times (1+LDCL)) \times RPP$



### Settlements - Generator:

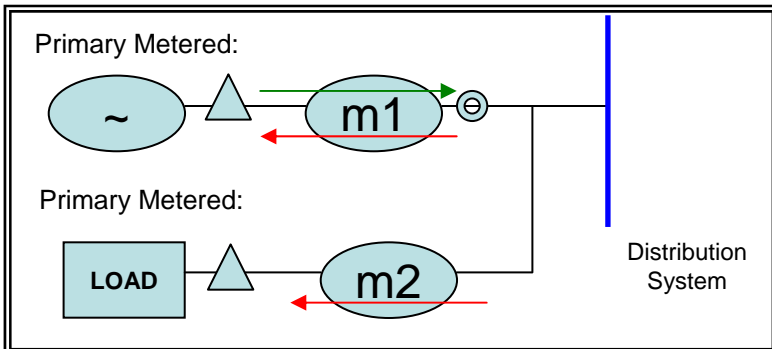
Energy delivered no adjustment required  $Kwh \times SOP \text{ Rate}$

Energy consumed increased by LDC approved loss factor less 1% Primary Metering discount.  $(Kwh \times (1+LDCL)) \times .99 \times HOEP$

### Settlements - Load:

Energy consumed increased by LDC approved loss factor.

$(Kwh \times (1+LDCL)) \times HOEP$  or  $(Kwh \times (1+LDCL)) \times RPP$



### Settlements - Generator:

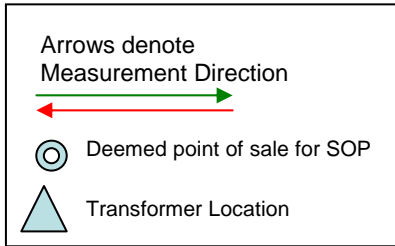
Energy delivered no adjustment required  $Kwh \times SOP \text{ Rate}$

Energy consumed increased by LDC approved loss factor less 1% Primary Metering discount.  $(Kwh \times (1+LDCL)) \times .99 \times HOEP$

### Settlements - Load:

Energy consumed increased by LDC approved loss factor less 1% Primary Metering Discount.

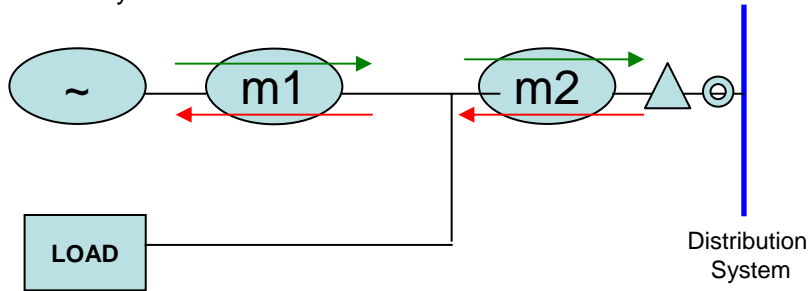
$(Kwh \times (1+LDCL)) \times .99 \times HOEP$  or  $(Kwh \times (1+LDCL)) \times .99 \times RPP$



# Standard Offer Program Meter Configuration Options

Embedded Generator and Load Customer (under exceptional circumstances only)  
(See spreadsheet for calculation formulas and methodology)

Secondary Metered:



**Settlements - Generator:**

Energy delivered reduced by Site Specific Losses  $(m1 \text{ Kwh} / (1+SSL)) \times \text{SOP Rate}$

Energy consumed increased by LDC approved loss factor  $(m1 \text{ Kwh} \times (1+LDCL)) \times \text{HOEP}$

**Settlements - Load:**

Energy consumed increased by LDC approved loss factor.

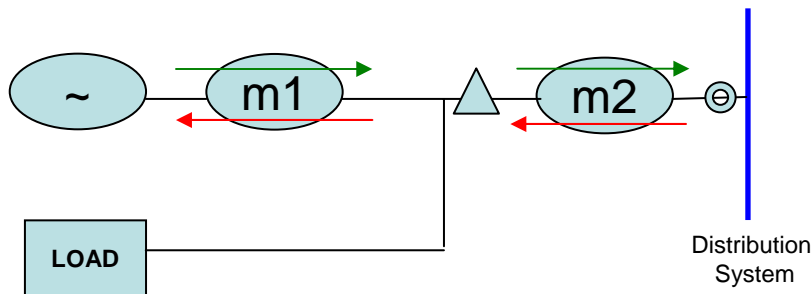
$((m2 - m1 \text{ consumed Kwh}) \times (1+LDCL)) \times (\text{HOEP or RPP})$

**Settlements - Load:** (when m1 delivered coincident with m2 consumed or m2 consumed = 0 coincident with m1 delivered)

Energy consumed increased by LDC approved loss factor.

$((m2 + m1 \text{ consumed Kwh}) \times (1+LDCL)) \times (\text{HOEP or RPP})$

Primary Metered:



**Settlements - Generator: (same as above)**

**Settlements - Load**

Energy consumed increased by LDC approved loss factor.

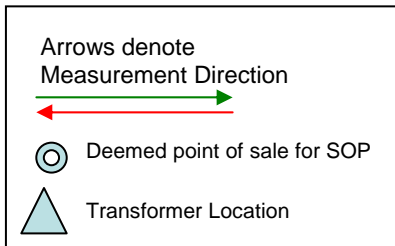
$(((m2 \times .99) + m1) \text{ consumed Kwh}) \times (1+LDCL)) \times (\text{HOEP or RPP})$

**Settlements - Load:** (when m1 delivered coincident with m2 consumed or m2 consumed = 0 coincident with m1 delivered)

Energy consumed increased by LDC approved loss factor.

$(((m2 \text{ consumed Kwh} \times .99) \times (1+LDCL)) + m1 \text{ Delivered}) \times (\text{HOEP or RPP})$

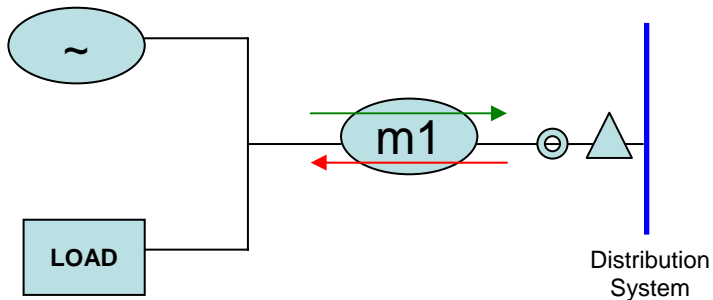
Note: Load Customer is also required to pay for additional energy related charges: WMSC, DRC, Network Service, Line & Transformation, and Distribution Variable Charges.



# Standard Offer Program Meter Configuration Options

## 4. Generator and Load Customer – 1 Meter (Simple Net Metering)

Secondary Metered:



**Settlements:**

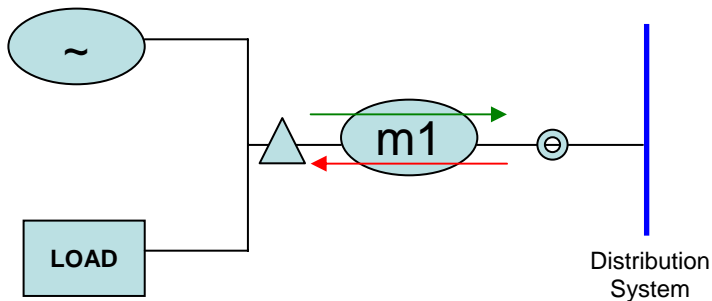
Energy delivered with no adjustment for Losses. (O. Reg. 541/05, s. 8 (2))

$Kwh \times (RPP \text{ or } HOEP) \text{ Rate}$

Energy consumed increased by LDC approved loss factor.

$(Kwh \times (1+LDCL)) \times (RPP \text{ or } HOEP) \text{ Rate}$

Primary Metered:



**Settlements:**

Energy delivered with no adjustment for losses. (O. Reg. 541/05, s. 8 (2))

$Kwh \times (RPP \text{ or } HOEP) \text{ Rate}$

Energy consumed increased by LDC approved loss factor less 1% for primary metering discount. Billed @ HOEP.

$(Kwh \times (1+LDCL)) \times .99 \times (RPP \text{ or } HOEP) \text{ Rate}$

Note: Net Metering Regulations also require calculating credit to customer on Additional Charges: WMSC, DRC, Network Service, Line & Transformation, and Distribution Variable Charges.