

November 26, 2009

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
P.O. Box 2319
2300 Yonge Street
Suite 2700
Toronto, ON M4P 1E4

Via RESS and by courier

Dear Ms. Walli:

Re: EB-2009-0326 Notice of a Proceeding to determine a just and reasonable rate to recover the costs associated with embedded generators having a nameplate capacity of 10 kW or less

EDA Responses to Interrogatories

The Electricity Distributors Association (EDA) is the voice of Ontario's electricity distributors. The EDA staff has consulted with its members on the six sets of interrogatories received from the intervenors.

The EDA members would like to provide the following responses and comments. These responses and comments were developed by the EDA's Regulatory Council and FIT Program Working Group.

In conclusion, the EDA members have been active and enthusiastic partners in helping the government and OPA develop and launch the FIT program. We look forward to the successful conclusion to this proceeding and to the increasing success of the FIT program.

Yours truly,

"original signed"

Maurice Tucci
Policy Director, Distribution & Regulation

Attach.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

INTERROGATORY 1:

Preamble: The Table included the EDA's proposal identifies a number of expense-related accounts where it is noted that "Generators will cause costs in this area. However, if LDCs are able to recoup these costs through another OEB mechanism, then they can be omitted. If not, then the cost will have to be included"

a) Please clarify what the other OEB mechanisms are that the EDA is referring to.

b) Why are these particular accounts (e.g., Maintenance of Overhead Services and Maintenance Supervision & Engineering) considered eligible for funding through another OEB mechanism but expenses such as the following are not and therefore proposed for inclusion in the microFIT charge:

- Operation Supervision and Engineering
- Load Dispatching
- Maintenance of Meters

c) In the event that an LDC is unable to "recoup" the costs associated with these accounts through "another OEB mechanism", is it the EDA position that they should be included in the microFIT charge?

d) If the response to part (c) is yes, would this be done during Phase 2 of the EDA rate design approach?

**RESPONSES TO
VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES**

RESPONSE:

a) EDA members were referring to general recovery through standard rates and direct charges where applicable.

b) In developing their response, EDA members have followed the cost allocation methodology regarding new costs from new customers.

The accounts referenced (Maintenance of Overhead services and Maintenance Supervision and Engineering) are required primarily to recover costs associated with the age of equipment in service. At present, these costs are already recovered through existing rates for load customers and the adjustment of existing rates for load customers is not part of this proceeding.

The additional expenses are new and incremental costs associated with microFIT generation and consequently are not currently recovered through existing rates from load customers.

c) EDA members follow the accepted principle that load customers pay for the maintenance of the system. Should the OEB initiate a proceeding to change this situation, EDA members will review and comment on the proposal.

d) An answer is not required here.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

INTERROGATORY 2:

Preamble: The Table included in the EDA's proposal calls for the inclusion of Capital-related costs attributable to Amortization, PILs, Debt Return and Equity Return in the microFIT charge.

a) Please confirm that the only assets for which the EDA is proposing to attribute amortization, PILS or return with the micro-Fit charge are a portion of General Plant assets. If this is not the case, please identify any other assets and the reason why such costs for them should also be attributed to the microFIT charge.

b) The EDA has assumed that the generator will pay for the metering required and therefore no amortization needs to be included in the microFIT charge. Please provide a schedule (similar to the Table submitted but based on assets) that lists all the asset categories applicable to distributors and identifies those asset categories where distributors may incur costs in order to connect/service microFIT generators? Please confirm, in each case, whether the EDA has assumed the capital associated costs will be paid for by the generator or through the Global Adjustment (per Regulation 330/09)?

c) Please confirm that, under the Board's Cost Allocation Methodology, General Plant is allocated using asset values prior the exclusion of contributed capital. If this is the case, does the EDA agree that the allocation base for General Plant cost should include assets funded by generators or through the Global Adjustment? If not, why not?

**RESPONSES TO
VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES**

RESPONSE:

- a) EDA members understand that any amortization costs included would be related directly to new incremental assets and depreciation directly attributed to the connection costs of microFIT generation.
- b) This proceeding is related to a fixed monthly service charge for microFIT generation. As per regulation, renewable energy investments are paid for through the Global Adjustment. Connection costs for a microFIT generator is the responsibility of the generator customer.
- c) The EDA members confirm that as stated in the Board Directions on Cost Allocation Methodology For Electricity Distributors, September 29, 2006, General Plant is allocated on a pro rata basis using a composite of distribution fixed assets, with no adjustment for contributed capital. EDA members agree that the allocation base for General Plant should include assets funded by generators, such as meters, or through the Global Adjustment.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

INTERROGATORY 3:

Preamble: The EDA states (page 2) that the same cost elements are applicable to all microFIT customers regardless of the nature of the connection.

a) If a microFIT generator connects indirectly to a distributor's system (i.e. shares the connection service with the load customer) does the EDA expect there will be additional capital costs incurred for:

- The service connection – Only the meter
- The local transformer – Only if the transformer is of the incorrect size

If yes, please explain why and under what circumstances. Also, what is the EDA's understanding as to how these facilities will be funded (i.e., through rates, through generator contributions or through the Global Adjustment per Ontario Regulation 330/09)?

b) If a microFIT generator connects directly to the distributor's system, please confirm that there will be capital costs incurred for the service connection and, in all likelihood, for a line transformer. If not, please explain why.

c) With respect to part (b), what is the EDA's understanding as to who is responsible for the associated capital and O&M costs for these facilities (i.e., the Generator, the Distributor's Rate Payers or Province-wide consumers via the Global Adjustment)?

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

RESPONSE:

a) EDA members understand that if a transformer needs to be replaced to accommodate the connection of a specific microFIT generation facility, the costs would be collected through a connection charge.

Other costs related to distribution plant (e.g. shared transformation) would be collected under OReg 330/09.

b) EDA members believe that a line transformer would only be required if an existing one could not be used due to size or location limitations. The revised DSC requires the LDC to provide the first \$90 / kW of installed Generation capacity. – A transformer is considered an expansion cost for renewable generation.

c) This proceeding is to determine a fixed customer service charge for microFIT generation. EDA members believe that this question is beyond the scope of this proceeding.

Note – The DSC states:

3.2.5A Notwithstanding section 3.2.5 but subject to section 3.2.5B, a distributor shall not charge a generator to construct an expansion to connect a renewable energy generation facility: if the expansion is in a Board-approved plan filed with the Board by the distributor pursuant to the deemed condition of the distributor's licence referred to in paragraph 2 of subsection 70(2.1) of the Act, or is otherwise approved or mandated by the Board; or in any other case, for any costs of the expansion that are at or below the renewable energy generation facility's renewable energy expansion cost cap.

As such – any transformation costs specific to a single generator would not likely be in a Distributor's Plan. Therefore, the proponent would be responsible for all costs above the Expansion Cost Cap.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

INTERROGATORY 4:

Preamble: The EDA proposes (page 3) that, initially there be a single provincial charge where “for each of the identified cost components, the figures allocated to it by all the LDCs in Ontario would be summed and the average calculated”.

- a) For each of the twelve elements, please describe how the value for each individual distributor would be determined.
- b) The proposed process involves identifying the costs for each distributor and then “averaging” the results. Would it not be simpler to use the individual distributor results to determine distributor specific microFIT charges.
- c) Please outline what the EDA sees as the time-line for Phase 1 and Phase 2 of its proposal.

RESPONSES TO VULNERABLE ENERGY CONSUMERS COALITION INTERROGATORIES

RESPONSE:

a) The OEB would be able to identify the values for these elements from the existing data from LDC cost allocation filings.

b) In its Procedural Order No.1, the OEB directed LDCs to use their existing, OEB-approved residential monthly service charge. In developing the proposal outlined in their communication, dated November 5, 2009, EDA members followed the implicit direction of the OEB and used the residential monthly service charge model as its starting point.

The two-phase model presented by EDA members has been proposed to permit individual LDCs, the OEB and the Ontario electricity industry to gain experience with the work and costs involved in this new type of generation facility. As this experience is established, individual LDCs would be able to apply for an LDC-specific charge if for some reason they believe the provincial rate is unsuitable to their particular circumstances.

EDA members believe that they have followed the OEB's direction and have provided a mechanism to determine a just and reasonable rate, with a mechanism that can be used to adjust the rate on an individual LDC basis.

c) EDA members have provided a proposed timeline in their submission, dated November 5, 2009.

RESPONSES TO ALASI INC. INTERROGATORIES

INTERROGATORY 1:

A) What specific, if any, increase in supervision and engineering might be required for FIT contracted micro embedded generation facilities as compared to Net Metered EG facilities?

B) Does the ESA's role in inspecting and qualifying an EG facility not suffice in ensuring a safe EG facility for connection to your members distribution networks and therefore results in additional costs to your members and if so please identify and explain these costs?

C) What are the estimated costs and additionally the variance in costs among your membership in regard to Load dispatching as a result of the connection of an embedded generation facility under FIT versus the similar facilities under Net Metering?

RESPONSES TO ALASI INC. INTERROGATORIES

RESPONSE:

A) The success of the FIT program as envisioned by the OPA and the Ministry of Energy and Infrastructure will result in a much larger number of micro embedded generation facilities than there are currently net metered facilities.

Specifically, under OReg 541/05 - Net Metering,

7. (1) A generator of electricity is an eligible generator if,

(a) the generator generates the electricity primarily for the generator's own use;

As a result, customers installing net metered facilities have usually installed systems which were small enough to ensure that all energy generated was consumed with little energy actually reaching the grid.

Due to higher contract prices available through the FIT program, it is envisioned that many generation facilities will be larger than the load associated at the site, as well as a significant amount of new generation installed that is not associated with any existing load. Consequently, EDA members believe that these new FIT generators are significantly more likely to be injecting energy into grids that were not specifically designed for two-way operation.

The added costs of supervision and engineering is tied to the requirement of tracking the location, size, and operating status of each of the generation connections to the system. This is important to ensure the provision of proper and timely information to the field crews in the event of system outages and repair work; system engineering design; ongoing coordination of protection settings at the associated DS feeders; proper balancing of phases on the feeders to maintain system optimization; increased monitoring of power factor and frequency issues which may be augmented due to improperly adjusted DC to AC inverters.

RESPONSES TO ALASI INC. INTERROGATORIES

- 1 B) The ESA's role is to ensure that the system is installed as per the requirements of the Ontario
2 Electrical Safety Code. Primary consideration is related to proper installation and design, to ensure
3 public safety. The LDC responsibilities begin upon the connection of the DG system as noted above
4 in the response to question 1.A)
5
- 6 C) EDA members have not calculated these specific costs as they are currently unknown. This is the
7 primary reason why the EDA members are suggesting a two-phase approach to the issue of setting the
8 initial fixed rate.

RESPONSES TO ALASI INC. INTERROGATORIES

INTERROGATORY 2:

Reference: EDA_EVD_20091105 Attachment – Customer Premises; Operation and Labour & Materials and Expenses

A) Can you identify scenarios under which labour would need to be dispatched specifically to an EG facility beyond the dispatch of labour to a community as the result of a more general system anomaly?

B) What are the incremental costs of islanding the EG facility when the labour force has already been dispatched to that community?

C) What materials and material costs do your members foresee requiring in the service of a micro embedded generator and how do these materials and costs differ from those required by and for a Net Meter EG facility, and do these costs vary across your membership?

RESPONSES TO ALASI INC. INTERROGATORIES

RESPONSE:

A) LDC staff will visit the location of the microFIT generation facility as a direct consequence of the existence of that generation facility. EDA members believe that often these visits will be independent of any load customer. Thus, these costs are incremental.

For example: during a general system anomaly, prior to making repairs to the systems, LDC staff will need to ensure that there is no back-feed from any system-connected generation facilities. It is accepted that upon initial installation and commissioning testing the systems will be tested to ensure disconnection from the grid when no voltage exists. As with all mechanical systems, there will be failures. If a back-feed is identified, crews will need to physically visit each individual generation facility, manually activate the external disconnect switch, and isolate the system until repairs can be performed. This type of visit would not be required if the generation were not present.

B) Islanding refers to the condition of a DG unit continuing to power a location or customer load even though power from the grid is no longer present. The incremental costs would be directly related to the number of systems installed in the affected area given the potential need to visit each site individually before performing repairs to the system. It would be worth noting that time spent in identifying and isolating a system that has failed to disconnect itself will directly impact the time required to restore power to the general public.

C) Depending on the size of the generator, the site may require an increase in transformation and service connection. Costs for metering, transformers and labour will vary by distributor and by distribution / service voltage. This is the primary reason why EDA members are suggesting a two-phase approach to the issue of setting the initial fixed rate.

RESPONSES TO ALASI INC. INTERROGATORIES

INTERROGATORY 3:

Reference: EDA_EVD_20091105 Attachment – Maintenance of Meters

A) Given that the OPA FIT rules state the LDC shall own any meter associated with the microFIT Project, why should an EG customer purchase the meter and or pay to replace the meter that is the property of the LDC?

B) What are the variances in meter costs among your membership?

C) What is the expected useful life of the meters to be employed for EG facilities and if these vary across your membership please explain and provide costs and technical specifications for each.

RESPONSE:

A) It is the EDA members' understanding that section 6.2.7 of the Distribution System Code requires that the meter be paid for by the generator. The long-term replacement of the meter is the responsibility of the LDC; hence the amortization of the cost.

B) At present, EDA members do not have the variance data collated. As more experience is gained with this program, these costs could be identified and collated.

C) Most digital meters in Ontario have a Measurement Canada seal life of 10 years. This is new technology and consequently, it is difficult to project an expected useful life beyond seal life established by Measurement Canada at present.

RESPONSES TO ALASI INC. INTERROGATORIES

INTERROGATORY 4:

Reference: EDA_EVD_20091105 Attachment – Meter Reading

A) What are the incremental costs to your members of recording the metered data from a second meter at a location at which they are already in attendance?

B) What is the variance in costs for meter reading activities among your membership and why does this variance exist?

RESPONSE:

A) At present, EDA members do not have this data collated. The costs will vary by LDC and by technology being utilized.

B) At present, EDA members do not have this data collated. Variance in costs are driven by the technology being used, the frequency of data gathering, the staff used to perform the function, the costs of contracts if performed externally, and the amount of data to be recorded.

RESPONSES TO ALASI INC. INTERROGATORIES

INTERROGATORY 5:

Reference: EDA_EVD_20091105 Attachment – Customer Billing

A) While we appreciate that some of your members may have previously invested in billing and customer management systems and software that are either at capacity or inflexible in their ability to add and or capture additional items without additional investment, on what basis should your members customer billing management system investment costs be borne by EG customers alone rather than by their entire customer base?

B) Where any of your members are unable to cost effectively create and manage customer accounts for EG customers under FIT Contracts, would those members be amenable to having other Ontario LDCs or private third parties provide those services if it were permitted by the OPA and the OEB?

RESPONSE:

A) EDA members do not believe that this was a cost envisioned to be borne by the EG customers. The Green Energy and Green Economy Act stated that LDCs should recover costs of CIS upgrades related to DG through their green energy investments.

B) This proceeding is to determine a just and reasonable rate for microFIT generation projects. The process by which individual LDCs create and manage their customer accounts is outside the scope of this proceeding.

RESPONSES TO ALASI INC. INTERROGATORIES

INTERROGATORY 6:

Reference: EDA_EVD_20091105 Attachment – Amortization Expense – General Plant Assigned to Meters

A) What is the amortization period assigned to meters that will be deployed for EG facilities and if this varies across your members please provide the minimum and maximum?

B) The FIT Rules state that the LDC shall Own the meters, and therefore why should an EG customer purchase the meter on behalf of the LDC?

RESPONSE:

A) EDA members understand that the smart meter recovery requirement has been previously prescribed by the OEB.

B) This question appears to be a repeat of question 3A. Therefore, the response to this question has been provided in the response to question 3A.

RESPONSES TO ALASI INC. INTERROGATORIES

INTERROGATORY 7:

Reference: EDA_EVD_20091105 Attachment – Admin & General

A) In that a FIT contracted micro EG facility will sell 100% of its generated output to the OPA, and the OPA will subsequently sell that electricity to the LDC, who in turn will sell that electricity to the associated load customer, what is the total cost per kWh that is actually incurred by the LDC in the resale of the micro EG facility generated electricity to the associated load customer and what is the total “found revenue” or undispersed cost in this regard?

B) How do these additional revenues that have no related incurred cost compare to your members expectations of administration and staffing expense that will be incurred in relation to Micro EG facilities both in the short term and after the microFIT EG processes and procedures have improved in the future?

RESPONSE:

A) There is NO found revenue. LDCs collect the HOEP from all customers which is used cover the initial costs of paying the FIT contract. The OPA only provides the LDC with the difference between the HOEP and the FIT contract price.

B) There are no additional revenues. Please refer to the response to question 7A).

RESPONSES TO ALASI INC. INTERROGATORIES

INTERROGATORY 8:

Reference: EDA_EVD_20091105 Attachment – Allocated PILs, Allocated Debt Return, &, Allocated Equity Return

A) What portion of these expenses cannot be applied under the resale of the Micro EG generated electricity back to the Associated Load Customer, and why?

RESPONSE:

A) These expenses are related to the metering specific to the DG facility and the need to replace that metering. These costs should not be passed on to the consumer.

RESPONSES TO ALASI INC. INTERROGATORIES

INTERROGATORY 9:

If a settlement facility and mechanism is provided by the OEB that ensures that your members remain whole in recovering any and all actual costs incurred in relation to microFIT EG facilities, would your members have any objections or concerns regarding the facility or mechanism selected by the OEB?

RESPONSE:

EDA members have been active and enthusiastic partners in helping the government and OPA develop and launch the FIT program. The participation of EDA members in this proceeding is to seek to ensure the full and fair cost recovery for the increased costs directly related to this new category of LDC customer.

**RESPONSES TO THE FEDERATION OF
ONTARIO COTTAGERS' ASSOCIATIONS INTERROGATORIES**

INTERROGATORY 1:

Under Meter Expense, the EDA states the meter will be purchased by the generator. Can the EDA point to any OEB, OPA or gov't decision requiring the generator to purchase the meter?

RESPONSE:

It is the EDA members' understanding that section 6.2.7 of the Distribution System Code requires that the meter be paid for by the generator.

**RESPONSES TO THE FEDERATION OF
ONTARIO COTTAGERS' ASSOCIATIONS INTERROGATORIES**

INTERROGATORY 2:

If the generator is required to purchase the meter, please provide some additional rationale for collecting PILs, Debt Return, Equity Return and amortization expense for a meter in which the LDC has no capital?

RESPONSE:

It is the EDA members' understanding that the rules that govern this program require that the meter will be owned by the LDC.

**RESPONSES TO THE FEDERATION OF
ONTARIO COTTAGERS' ASSOCIATIONS INTERROGATORIES**

INTERROGATORY 3:

Under the Operating and Maintenance categories, please provide additional explanation for increased overhead and underground line and transformer expenses attributable to microFIT generators, which simply reduce the load on these components?

RESPONSE:

It is the EDA members understanding the microFIT program will involve many generation facilities larger than the load associated at the site (unlike existing net metering facilities), as well as a significant amount of new generation installed that is not associated with any existing load. Consequently, EDA members believe that these new microFIT generators are significantly more likely to be injecting energy into grids that were not specifically designed for two-way operation. As a result, it is anticipated that overhead and underground line and transformer expenses will increase. EDA members have proposed the two-phase approach to permit individual LDCs, the OEB and the Ontario electricity industry to gain experience with the work and costs involved in this new type of generation facility.

**RESPONSES TO THE FEDERATION OF
ONTARIO COTTAGERS' ASSOCIATIONS INTERROGATORIES**

1 **INTERROGATORY 4:**

2 Under Operation Supervision and Engineering and Load Dispatching, please provide additional
3 explanation as to how these costs are increased by virtue of microFIT generators?

4

5 **RESPONSE:**

6 Please refer to the response to Interrogatory 3.

**RESPONSES TO
LONDON PROPERTY MANAGEMENT ASSOCIATION INTERROGATORIES**

INTERROGATORY 1:

Does the EDA agree with the Hydro One proposal of using a fixed charge, being equivalent to the fixed charge credit provided to Unmetered Scattered Load (USL) customers? Please explain fully.

RESPONSE:

In its Procedural Order No.1, the OEB directed LDCs to use their existing, OEB-approved residential monthly service charge. In developing the proposal outlined in their communication, dated November 5, 2009, EDA members followed the implicit direction of the OEB and used the residential monthly service charge model as its starting point.

**RESPONSES TO
LONDON PROPERTY MANAGEMENT ASSOCIATION INTERROGATORIES**

INTERROGATORY 2:

If the Board were to accept the approach recommended by Hydro One, does the EDA believe that two-phase approach should still be used? If yes, please explain why.

RESPONSE:

The two-phase model presented by EDA members has been proposed to permit individual LDCs, the OEB and the Ontario electricity industry to gain experience with the work and costs involved in this new type of generation facility. As this experience is established, individual LDCs would be able to apply for an LDC-specific charge if for some reason they believe the provincial rate is unsuitable to their particular circumstances.

**RESPONSES TO
LONDON PROPERTY MANAGEMENT ASSOCIATION INTERROGATORIES**

INTERROGATORY 3:

a) The EDA has proposed the inclusion of a number of cost items to be recovered through the MicroFIT generator customer charge. Given that some of the assets used by the MicroFIT generator customer are currently allocated to the residential and GS < 50 kW customer classes, should there be a reduction in the costs allocated to these customer classes? If not, why not?

b) If the Board were to accept the EDA proposal, should there be a credit (either to the load customer or to the generator customer) for the shared facilities/assets used by the load customer and the generator customer? If not, why not?

RESPONSE:

a) EDA members are only proposing the inclusion of those cost items which are incremental and directly related to the connection of new generation.

b) EDA members are only proposing the inclusion of those cost items which are incremental and directly related to the connection of new generation.

**RESPONSES TO
LONDON PROPERTY MANAGEMENT ASSOCIATION INTERROGATORIES**

INTERROGATORY 4:

The EDA proposal indicates that the generator [meter?] will be purchased by the generator.

a) Please clarify whether the meter would be owned by the LDC or the generator customer.

b) Would the meter be owned by the LDC and could the generator be required to pay an aid to construction for the meter? Please explain.

c) Is the meter the only incremental facility required by a MicroFIT customer regardless of whether they are directly or indirectly connected? Please explain.

d) If the connection of a micro-generator does not use the same facilities as the main account of the customer, should there be a different rate class for those customers? Please explain.

RESPONSES TO LONDON PROPERTY MANAGEMENT ASSOCIATION INTERROGATORIES

RESPONSE:

- a) It is the EDA members' understanding that the rules that govern this program require that the meter will be owned by the LDC.
- b) It is the EDA members' understanding that section 6.2.7 of the Distribution System Code requires that the meter be paid for by the generator.
- c) It is not possible to provide a definitive answer to this question. The size of the generator, the presence of other microFIT generators in the immediate surroundings and other factors may require an increase in transformation and service connection.
- d) In its Procedural Order No. 1, the OEB directed LDCs to use their residential monthly service charge as an interim rate for these new accounts. The rationale was that the "Board would be unable to set a final charge ... by the OPA's roll-out date for its microFIT program." In its submissions, dated November 5, 2009, the EDA members stated that a single provincial microFIT generator customer charge "... would allow the OEB to expeditiously develop a rate that can then be used by LDCs for those customers who have already begun participation in the FIT program." EDA members understand that there may be different cost drivers in those cases where new facilities are added when no existing load customer exists. The EDA members have proposed a two-phase approach with the intent to permit the industry to gain experience with these types of facilities. It is envisioned that the two-phase approach will allow for a more accurate alignment of costs as the industry gains more experience with the volume of generation anticipated to result from the introduction of the FIT program.

RESPONSES TO LONDON PROPERTY MANAGEMENT ASSOCIATION INTERROGATORIES

INTERROGATORY 5:

- a) How does the EDA propose that the Board deal with revenues and costs associated with the MicroFIT rate under the incentive regulation framework?
- b) Does the EDA propose that the rates approved by the Board in this proceeding (and/or the methodology to determine them) remain in place until the Board and LDCs gain experience with this class of customers and they are dealt with as part of the next generic review of cost allocation methodologies? If not, why not?
- c) It [If?] a distributor is under incentive regulation, or files a cost of service application without an allocation of costs to the new MicroFIT generator rate class (because of insufficient information), does the EDA agree that all revenues collected through the charge(s) to these MicroFIT customers should be recorded in a deferral account the [to?] rebate to customers in the future? If not, please explain why not especially in light of the fact that any costs associated with the MicroFIT customers would be allocated to other customer classes until a generic cost allocation study that incorporates such a class can be completed.

**RESPONSES TO
LONDON PROPERTY MANAGEMENT ASSOCIATION INTERROGATORIES**

RESPONSE:

- a) EDA members understand that this issue should be part of a future OEB proceeding regarding IRM. This proceeding is to establish a fair and just rate to recover the costs associated with microFIT generation facilities.
- b) This was the intent behind the EDA members recommending a two-phase approach.
- c) EDA members would only support a variance account that track revenues if a companion variance account is established to track costs. In this way, both costs and revenues can be compared to help in establishing an appropriate rate in the future (phase 2). Tracking both costs and revenues will also ensure that incremental costs related to the addition of this new customer class are not merely transferred to all customers and that the LDC is not financially penalized by significant uptakes in new generation.

RESPONSES TO LONDON PROPERTY MANAGEMENT ASSOCIATION INTERROGATORIES

INTERROGATORY 6:

- a) Does the EDA believe that “smart” meters are required for all microFIT generator customers, regardless of whether they are connected directly or indirectly and regardless of the type of generation being proved? Please explain.
[EDA members believe that the term “smart” meter is intended to refer to meters that provide hourly data.]
- b) Would the information provided by “smart” meters related to the amount and timing of generation be useful to the EDA members for distribution planning, cost allocation, or some other function? If yes, please explain.
- c) Would the information provided by “smart” meters be useful for determining any benefits resulting from distributed generation associated with MicroFIT generators such as losses and reduced capacity constraints? If not, why not?

RESPONSES TO LONDON PROPERTY MANAGEMENT ASSOCIATION INTERROGATORIES

RESPONSE:

a) EDA members believe that LDCs will require hourly data for all microFIT generation to ensure proper settlement with the OPA through the IESO. Settlement requires that the LDC apply the Hourly Ontario Energy Price (HOEP) to the generator output and claim the difference between the HOEP and the FIT contract price from the OPA through a monthly filing with the IESO. This ensures that the OPA is not “overpaying” and also ensures proper allocation of the incremental costs of the generation payments to the Global Adjustment.

EDA members also note that hourly data will permit the identification of situations where microFIT facilities are inappropriately claiming revenue, e.g., a solar facility claiming generation revenue at 1:00 a.m.

b) EDA members believe that the hourly data will assist in reducing the incremental costs related to the addition of new distributed generation. The addition of such systems in the amount and capacity envisioned by the GEGEA will significantly increase the level of distribution planning, system monitoring and control. Hourly meters will be a critical component in managing these new incremental activities.

c) EDA members believe that the hourly data will assist in reducing the incremental costs related to the addition of new distributed generation. The addition of such systems in the amount and capacity envisioned by the GEGEA will significantly increase the level of distribution planning, system monitoring and control. Hourly meters will be a critical component in managing these new incremental activities.

**RESPONSES TO
LONDON PROPERTY MANAGEMENT ASSOCIATION INTERROGATORIES**

INTERROGATORY 7:

The EDA proposal calls for the calculation of a province wide charge based on the calculation steps provided in the evidence.

a) Why cannot individual distributors calculate their customer-weighted average for cost components 1 to 12 shown and sum the 12 individual figures to arrive at their own utility-specific customer charge?

b) The averaging of the cost components over all provincial distributors would result in revenues in excess of costs for some distributors and costs in excess of revenues for others. Does the EDA believe this is appropriate and acceptable?

c) Please compare the 12 cost components proposed by the EDA for recovery through the MicroFIT generator rate monthly charge with the cost categories that would be reflected in the Hydro One proposal (i.e. the cost categories that are reflected in the USL fixed charge credit.

**RESPONSES TO
LONDON PROPERTY MANAGEMENT ASSOCIATION INTERROGATORIES**

RESPONSE:

- a) In its Procedural Order No. 1, the OEB directed LDCs to use their residential monthly service charge as an interim rate for these new accounts. The rationale was that the “Board would be unable to set a final charge ... by the OPA’s roll-out date for its microFIT program.” In its submissions, dated November 5, 2009, the EDA members stated that a single provincial microFIT generator customer charge “... would allow the OEB to expeditiously develop a rate that can then be used by LDCs for those customers who have already begun participation in the FIT program.” The EDA members have developed the two-phase approach with the intent to permit the industry to gain experience with these types of facilities. It is envisioned that the two-phase approach will allow for a more accurate alignment of costs as the industry gains more experience with the volume of generation anticipated to result from the introduction of the FIT program.
- b) The two-phased approach was proposed by EDA members to address this situation should it occur.
- c) EDA members are not in possession of the details of the cost categories used by Hydro One in their establishment of the USL fixed charge, at present.

RESPONSES TO OEB STAFF INTERROGATORIES

INTERROGATORY 1:

With respect to cost item (1) Operation Supervision and Engineering provided in the 1st reference, please provide further details to augment the explanation provided in the 2nd reference to justify its inclusion in the calculation of the microFIT generator charge. These details should include but not be limited by the following:

Reasons for the increase in supervision and engineering to address the increased work load due to the installation of micro-generators (2nd reference), and

Correlation between the percentage increase in total cost of this item vs. the percent of current load customers that install micro-generators, and

Correlation between the increase in total cost of this item and size of distributor, e.g. small, medium and large, and

Threshold if any in terms of number of micro-generator installations before which the cost of this item would not increase.

RESPONSES TO OEB STAFF INTERROGATORIES

1 **RESPONSE:**

2
3 The anticipated additional costs of supervision and engineering are tied to the requirement of tracking the
4 location, size, and operating status of each of the microFIT generation connections to the distribution
5 system. It is important to ensure the provision of accurate and timely information to the field crews in the
6 event of system outages and repair work; system engineering design; ongoing coordination of protection
7 settings at the associated DS feeders; proper balancing of phases on the feeders to maintain system
8 optimization; increased monitoring of power factor and frequency issues which may be augmented due to
9 improperly adjusted DC to AC inverters.

10
11 Systems and processes need to be in place regardless of the number of microFIT systems added.
12 Once systems are designed, the directly related work increases proportionally with the number of
13 systems installed. For example, the greater the number of systems installed, the greater the
14 number of locations that field staff are likely to have to visit in the case of an outage before
15 repairs can be performed.

16
17 Additionally, as more systems are installed, the greater the likelihood there can be an imbalance
18 in phase loadings given the LDC has no ability to predict who and how many load customers
19 will install microFIT systems.

20
21 The EDA members fully support the Ontario government's stated policy to encourage the installation of
22 renewable energy generation facilities across the province. However, it is too early to predict if these
23 facilities will be evenly spread across the province or if they will be concentrated in certain areas of the
24 province. Consequently, the EDA members are not able to provide the correlation requested.

25
26 As noted previously, systems and processes will need to be in place regardless of the number of microFIT
27 systems added. Consequently, there will be a minimum level of costs involved. However, the directly
28 related work increases proportionally with the number of systems installed, and thus, the EDA members
29 do not believe that there will be a hard threshold for costs.

RESPONSES TO OEB STAFF INTERROGATORIES

INTERROGATORY 2:

With respect to cost item (2) Load Dispatching provided in the 1st reference, please provide further details to augment the explanation provided in the 2nd reference to justify its inclusion in the calculation of the microFIT generator charge. These details should include but not be limited by the following:

Reasons for the need to hire new operators for the system control centre to understand and manage the two-way flow of electricity due to the installation of micro-generators (2nd reference), and

Correlation between the percentage increase in system control operators vs. the percent of current load customers that install micro-generators, and

Correlation between the increase in total cost of this item and size of distributor, e.g. small, medium and large, and

Threshold if any in terms of number of micro-generator installations before which the cost of this item would not increase.

RESPONSES TO OEB STAFF INTERROGATORIES

RESPONSE:

The traditional electricity distribution system was designed for the electricity to flow in only one direction. The additional complexity that will result from a large number distributed generation facilities being added to the system will require an increase in the knowledge and expertise of existing LDC operations staff and may require, in the case of some LDCs, the hiring of additional staff.

As noted previously, systems and processes need to be in place regardless of the number of microFIT systems added. Once systems are designed, the directly related work (and costs) increases proportionally with the number of systems installed. However, at present EDA members are not able to predict how many load customers will install microFIT systems.

Again, systems and processes need to be in place regardless of the number of microFIT systems added. Once systems are designed, the directly related work (and costs) increases proportionally with the number of systems installed. However, at present EDA members are not able to identify whether the number of microFIT facilities will be directly correlated to the size (small, medium and large) of LDC.

As indicated previously, the work and costs directly related to these systems increase with the number of systems installed.

RESPONSES TO OEB STAFF INTERROGATORIES

INTERROGATORY 3:

Over and above the cost items provided in the 1st and 2nd references, please explain if the following cost items were considered in the calculation of the fixed charge for micro-generators. If these items were considered, please explain the rationale for their exclusion in the determination of the microFIT rate. If these items were not considered, does EDA agree that they should be included in the determination of the microFIT rate?

Depreciation on Account 1860 – Meter Assets

Meter Expense – Account 5065

RESPONSE:

EDA members understand that the customer is required to pay for the meters, thus the meter costs were excluded. Please also refer to the response to Vulnerable Energy Consumers Coalition interrogatory 2a).

EDA members understand that the customer is required to pay for the meters, thus the meter costs were excluded.

RESPONSES TO OEB STAFF INTERROGATORIES

1 INTERROGATORY 4:

2
3 The evidence states (1st reference) that the EDA members believe that the same cost elements are
4 applicable to all microFIT customers, regardless of whether they are directly connected, indirectly
5 connected, or owned by the load customer entity or owned by a different entity. Please provide rationale
6 to substantiate this conclusion and the further conclusion that the generator charge should be the same
7 regardless of connection-type or ownership scenario.

8 9 10 RESPONSE:

11
12 This OEB proceeding is to “determine a just and reasonable rate...for the recovery of costs
13 associated with an embedded generator”. In its Procedural Order No. 1, the OEB directed LDCs
14 to use their residential monthly service charge as an interim rate for these new accounts. The
15 rationale was that the “Board would be unable to set a final charge ... by the OPA’s roll-out date
16 for its microFIT program.” In its submission, dated November 5, 2009, the EDA members stated
17 that a single provincial microFIT generator customer charge “... would allow the OEB to
18 expeditiously develop a rate that can then be used by LDCs for those customers who have
19 already begun participation in the FIT program.” The EDA members have based their responses
20 on their experience with existing embedded micro generation facilities, and drawing on their
21 experience with all of their customers. The EDA members have proposed a two-phase approach
22 with the intent to permit all LDCs to gain additional experience with these types of facilities and
23 to permit individual LDCs to request a rate different to OEB-established provincial rate during
24 cost of service rate application, should the LDC’s experience and costs substantiate this.

RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES

1 **INTERROGATORY 1:**

2
3 Service Classification – Issue #1
4

5 Please advise whether, in the opinion of EDA, the costs caused on the distribution system from an under
6 10 KW renewable generator that does not qualify for microFIT would be different from costs caused by a
7 similar renewable generator that does qualify for microFIT, for example because of Ontario content
8 qualification.
9

10
11
12 **RESPONSE:**

13
14 EDA members believe the costs for engineering would be similar. Depending on the connection
15 configuration, there could be a difference in metering costs as well as administration costs related to
16 billing and settlements.

RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES

INTERROGATORY 2:

Please advise whether the proposal of the EDA is intended to apply to embedded renewable microgenerators hosted only by residential and GS<50KW load customers, or whether that proposal is also intended to apply to qualifying generation hosted by GS>50KW and large use customers.

RESPONSE:

The OEB has stated this proceeding is for microFIT generation projects only, without any reference to the load customer. The revised DSC states an LDC is to create a new account for microFIT generation. This consultation is to establish a reasonable charge for that account class.

RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES

INTERROGATORY 3:

Cost Elements to be Covered – Issue #2

With reference to the cost categories referred to in the EDA submission at pages 4 and 5:

- a) Please explain why the costs associated with Operation Supervision and Engineering and Load Dispatching related to the change to a two-way grid are not part of the overall costs to the LDC of their Green Energy Plan, and thus included in recovery either in socialized costs or in general recoveries from customers under that shift.
- b) Please explain the extent, if any, to which costs to visit the premises of a generator hosted by a load customer (under the two “Customer Premises” headings) are incremental to the existing costs in those categories allocated to the associated load customer.
- c) Please estimate the extent to which Meter Reading Expense and Customer Billing Expense applicable to a generator with an associated load customer are incremental to the existing costs for meter reading and customer billing allocated to that load customer.
- d) Please describe the general plant that would be allocable to meters paid for by the customer.
- e) Please identify the specific categories of rate base that the EDA believes should be allocated to embedded renewable microgenerators, and confirm that, if no rate base is allocated to this class, no PILs, debt return, or equity return should be allocated to this class either.
- f) Please explain further the rationale “Generators will cause costs in this area. However, if LDCs are able to recoup these costs through another OEB mechanism, then they can be omitted. If not, then the cost will have to be included.” and provide an explanation of the other OEB mechanisms referred to.

RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES

RESPONSE:

- a) The EDA members understand that the GEP plans are to include costs related to the planning and expansion or redesign of systems to enable the connection of renewable facilities. The cost items suggested to be recovered through this rate review are directly related to the incremental work created by the specific connections and not envisioned as being recovered through another rate mechanism.
- b) LDC staff will visit the location of the microFIT generation facility as a direct consequence of the existence of that generation facility. EDA members believe that often these visits will be independent of any load customer. Thus, these costs are incremental.
- For example: during a general system anomaly, prior to making repairs to the systems, LDC staff will need to ensure that there is no back-feed from any system-connected generation facilities. It is accepted that upon initial installation and commissioning testing the systems will be tested to ensure disconnection from the grid when no voltage exists. As with all mechanical systems, there will be failures. If a back-feed is identified, crews will need to physically visit each individual generation facility, manually activate the external disconnect switch, and isolate the system until repairs can be performed. This type of visit would not be required if the generation were not present.
- c) Irrespective of the configuration (series or parallel), there are additional meters to be read. This data must be used to update the LDC total system load (as per the RSC) in order to calculate proper settlements with the IESO as well as calculate the proper payments to the generator. Hourly data from the generator must be tracked against the Ontario Hourly Energy Price, and the difference between these total dollars and the total calculated at the contract price is to be recovered from the OPA by the LDC through monthly reporting to the IESO. This is all incremental workload specifically required to properly ensure that the contract payments are allocated appropriately across the market.

RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES

- 1 d) As stated in the OEB Directions on Cost Allocation Methodology For Electricity Distributors,
2 September 29, 2006, General plant includes the capital cost and depreciation (if applicable) associated
3 with buildings, leasehold improvements, land, land rights, general computer equipment, office
4 furniture and transportation equipment.
5
- 6 e) EDA members are referring to meters (for replacement purposes) and transformation (if required) in
7 those cases when an upgraded transformer is required.
8
- 9 f) EDA members were referring to general recovery through standard rates and direct charges where
10 applicable.

RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES

INTERROGATORY 4:

Please provide a list of cost categories that in the opinion of the EDA are applicable to embedded renewable microgenerators, and in the case of load customers are allocated to the volumetric charge, together with reasons why each of those cost categories should not be included in the charges levied on embedded renewable microgenerators.

RESPONSE:

In their submission, EDA members have not suggested that costs should be recovered through a variable component. The costs in administration for microgeneration units are not expected to vary in relation to the amount of energy produced. The costs are driven merely by the fact that the generator exists and that incremental meter reading and billing costs are incurred.

RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES

INTERROGATORY 5:

Rate Design – Issues #3 and #4

Please advise the extent, if any, that in the opinion of EDA a charge by LDCs to embedded renewable microgenerators that differs from one LDC to another would influence the siting decisions for those generators, together with any information in the possession of the EDA supporting its opinion on this point.

RESPONSE:

Although some have already seen and been approached by companies that are actively moving ahead in arranging to lease roof space to place (non-consumer owned) facilities, EDA members do not have enough experience to formulate an opinion on this question.

RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES

1 **INTERROGATORY 6:**

2
3 Please advise whether, in EDA's view in light of its two-phase proposal, it would be acceptable to
4 distributors for the Board to establish a single, province-wide rate for renewable embedded
5 microgenerators based on the average of all residential fixed charges in the province, which would then
6 apply for each LDC until it comes forward in a cost of service proceeding with an updated cost allocation
7 study that identifies an LDC-specific rate. Please provide EDA's reasons for or against that approach.

8
9
10 **RESPONSE:**

11 In its Procedural Order No. 1, the OEB directed LDCs to use their residential monthly service charge as
12 an interim rate for these new accounts. The rationale was that the "Board would be unable to set a final
13 charge ... by the OPA's roll-out date for its microFIT program." In its submissions, dated November 5,
14 2009, the EDA members stated that a single provincial microFIT generator customer charge "... would
15 allow the OEB to expeditiously develop a rate that can then be used by LDCs for those customers who
16 have already begun participation in the FIT program." The EDA members believe that this approach will
17 assist the OEB in establishing a just and reasonable rate in a timely manner, whilst providing LDCs and
18 the OEB the opportunity to gain experience with this new category of customer.

RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES

INTERROGATORY 7:

Please provide the EDA's perspective on the proposal by Hydro One to use the fixed monthly charge for Unmetered Scattered Load, and any information available to the EDA on how that charge would track the costs caused on the distribution system by embedded renewable microgenerators.

RESPONSE:

EDA members are not in possession of the details of the cost categories used by Hydro One in their establishment of the USL fixed charge, at present and thus cannot provide any response to how this charge would track the costs.

RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES

INTERROGATORY 8:

Implementation – Issue #5

Please advise on what basis, and in what amounts, embedded renewable microgenerators are currently (i.e. prior to the Board's interim rate for this class) charged by the EDA's members, if at all, and estimate the change in their monthly charges to those generators (i) if the EDA's proposal is adopted, and (ii) if the Board's interim rate is maintained. A general range of results would be useful in this regard. It is not necessary to go to the time and expense of developing a table of individual LDC impacts.

RESPONSE:

EDA members believe that the fixed monthly charge would be lower should the EDA proposal be adopted when compared to the OEB interim rate plan. The OEB interim rate plan uses the existing monthly fixed charge for the residential class. Given that the EDA proposal only includes a limited number of these cost components, the resulting rate would inevitably be lower.

RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES

1 **INTERROGATORY 9:**

2
3 Please estimate the implementation costs that would arise, and the timing of any changes required, for a
4 typical LDC if the proposal of ALASI Inc. were adopted and a separate line item on the bill were
5 implemented.
6

7 **RESPONSE:**

8
9 EDA members are unable to provide an estimate of the implementation costs at present. The proposal
10 would require modifications and changes to billing systems. It is not possible to “identify” a typical LDC
11 in this circumstance. Further, the proposal will require additional consultation with the Ministry of
12 Energy and Infrastructure and possible amendments to the Regulations governing the standardized bill
13 presentment (Ont. Reg. 275/04).

RESPONSES TO SCHOOL ENERGY COALITION INTERROGATORIES

INTERROGATORY 10:

Please provide estimates from the EDA's members of the expected timing of the first microFIT projects to come in service in their service areas, if known, together with any documentation relating to that timing.

RESPONSE:

EDA members have received a varying number of enquiries regarding the microFIT program and specific microFIT projects. At this time, it is premature to provide an "estimate" due to variation in numbers and readiness of microFIT proponents.

As this is an OPA program, documentation regarding proposed connection dates identified by preliminary applications should be requested from the OPA.