

# PUBLIC INTEREST ADVOCACY CENTRE LE CENTRE POUR LA DEFENSE DE L'INTERET PUBLIC

ONE Nicholas Street, Suite 1204, Ottawa, Ontario, Canada K1N 7B7

Tel: (613) 562-4002. Fax: (613) 562-0007. e-mail: piac@piac.ca. http://www.piac.ca

Michael Buonaguro Counsel for VECC (416) 767-1666

January 11, 2010

VIA MAIL AND EMAIL

Ms. Kirsten Walli Board Secretary Ontario Energy Board P.O. Box 2319 26<sup>th</sup> Floor 2300 Yonge Street Toronto, ON M4P 1E4

Dear Ms. Walli:

Re: Board Staff Discussion Paper re: Rate Protection and the Determination of Direct Benefits under Ontario Regulation 330/09
Board File Number: EB-2009-0349
Vulnerable Energy Consumer Coalition's Comments

As Counsel to the Vulnerable Energy Consumers Coalition (VECC), I am writing, per the Board's Notice of December 14<sup>th</sup>, 2009, to provide VECC's comments regarding the above Staff Discussion Paper. The comments are organized in accordance with the sections of the discussion paper. Each section also provides responses to the specific questions indentified in the Discussion Paper.

#### Section 1 - Introduction

In VECC's view this section properly identifies the rationale for Regulation 330/09, namely to recognize that the development of renewable generation "will not be distributed evenly among the service territories of electricity distributors" and that, in the absence of such a cost sharing mechanism, the cost burden of distribution system investment would not be shared equally amongst all distributors (and their rate payers).

### Section 2 – Setting the Context

Under the revised Act (section 79.1 (1)) and related Ontario Regulation 330/09, "direct benefits" are established in order to determine the rate protection to be provided to ratepayers of distributors that are making "an eligible investment for purposes of connecting or enabling the connection of a qualifying generation facility to its distribution system". In VECC's view what's important to note is that:

- a) there is no specific reference to the investments being part of the Plan required under Section 70 (2.1) of the Act, and
- b) a determination is to be made within the context of a rate order.

In VECC's view these are both important contextual considerations when determining direct benefits.

The first part of this section (pages 3-4) notes that the investments required by distributors in order to facilitate and connect renewable generation are likely to vary widely such that a single methodology for estimating benefits may not be appropriate. VECC generally agrees.

VECC notes that the draft filing requirements for Distribution System Plans issued on December 18, 2009 (EB-2009-0397) provide a materiality threshold which serves to determine whether distributors will be required to file a Detailed GEA Plan. While, as noted above, there is no direct link between such Plans and the requirement to determine "direct benefits", in VECC's view it would be useful if any requirements regarding the use of alternate methodologies for establishing "direct benefits" were harmonized with these materiality thresholds.

Board Staff states (page 4) that eligible investments would include not only the initial capital investment but also any *up-front* OM&A costs necessary for the purposes of "enabling the connection of a qualifying generation facility". In VECC's view the inclusion of up-front OM&A costs is a matter of interpretation. However, since the section 79/1 (1) makes reference to providing rate protection in circumstances where a distributor incurs costs to make an eligible investment, VECC submits that the Staff interpretation is reasonable. Furthermore, the interpretation is appropriate given that under IFRS distributors will be restricted in the future in terms of the types of costs that can be capitalized.

The Discussion Paper notes (page 4) the potential overlap between smart grid spending and spending for purposes of connecting and/or enabling the connection of renewable generation. In order to ensure clarity, VECC submits that the Board should direct distributors to specifically identify those costs incurred in accordance with the provisions

of DSC that are the result of either expansion or renewable enabling activities and clearly distinguish them from other Smart Grid investments.

The Discussion Paper also notes (page 5) that not all investments made to accommodate renewable generation will qualify as an "eligible investment". VECC agrees that the determination of "direct benefits" should be limited to those investments associated with eligible generation where the new costs responsibility rules (per the October 2009 Amended DSC) apply.

The Discussion Paper notes (page 5) that it is the "practice" for distributors to pass the costs of upstream investments on to the connecting generator. However, as the Paper notes the DSC is actually silent on this issue. Given that the Paper proposes to exclude any such investments from the determination of "direct benefits", VECC submits that that the Board should formalize this expectation. In the alternative, the Board should be open to including such costs in the determination of "direct benefits" in those circumstances where they have not been passed on the connecting generator.

Finally, in terms of context, VECC notes that amount of rate protection to be provided equals the costs associated with eligible investments less the amount that the Board determines to be a "direct benefit". In VECC's view this means that the onus is on the Board to determine that a direct benefit exists and that, otherwise, the distributor (and its ratepayers) is to receive compensation for the costs of associated with eligible investments. As result, the Board will need to be very explicit in terms of its requirements since a "poorly" supported case for direct benefits could ironically result in the distributor <u>not</u> being responsible for the costs.

#### Section 3 - Direct Benefits

#### <u>Sections 3.1 & 3.2 – Rationale for Direct Benefits / Identifying the Direct Benefits</u>

VECC agrees with the Board Staff's proposal that only direct benefits and, specifically, those related to costs that would otherwise be recovered through rates should be taken into account. Such an approach is consistent with rate protection principle and rationale underlying the Regulation. A key point/principle that must be recognized is that the exercise is not one of simply allocating eligible investment costs between load customers and generation but rather one of identifying and monetizing the direct benefits to load customers of the costs associated with the eligible investments.

The discussion (page 7) of the benefits associated with reduced Network Transmission and WMSC charges fails to recognize that unless there is actually reduced investment in transmission facilities as a result of additional distribution connected renewable generation there are no cost savings or benefits overall. Rather there is simply a redistribution of the existing costs. This is particularly the case for WMSC charges where renewable generation is unlikely to have any impact and may, indeed, increase the costs incurred by the IESO to administer the Ontario electricity market.

One implication is that the Table on page 5 summarizing the possible impact on wholesale market service costs for distributors is incorrect. For those distributors whose share of energy supplied by distribution-connected renewable generation is zero, there will actually be an increase in wholesale market service costs paid (Note: This is because the WMSC rate will be higher since the billing determinants for those distributors with renewable generation will be lower). This also means that the benefit accruing to distributors with renewable generation is not equivalent to the reduction in billing determinants for Transmission Network charges and WMSC multiplied by the respective rates, since the respective rates will now be higher than they would otherwise have been.

VECC submits that the fact total costs are likely simply being redistributed as opposed to being reduced should be recognized in the determination of "direct benefits".

The discussion on page 8 deals with the improved capability of the distribution system for load customers. In principle VECC agrees that spending on Expansion and Renewable Enabling Improvements can benefit load customers. In the case of System Expansion investments, consideration will have to be given as to what extent such investments delay/replace spending that would otherwise have been needed due to either load growth or asset renewal. In the case of Renewable Enabling Improvements, the fact that the investments have not been made to date suggests that the benefit to load customers is less than the costs. As a result, in this case it is likely to be more difficult to attribute a dollar value to the benefits. This issue will be addressed further under Section 3.3.2.

**Issue for Comment #1**: In addition to the two types of direct benefits identified above (i.e., reduced transmission and WMSC charges, improved capability of the distribution system), should the Board take into account any other direct benefits that accrue to customers of the distributor making the investment?

Given that the Discussion Paper proposes to include reduced Network Transmission charges as a "direct benefit", it is not at all clear why there was no suggestion that any reduction in Connection Line and Connection Transformation charges also be included as a direct benefit since renewable generation less than 2 MW is excluded from the billing determinants for these charges. Admittedly, these benefits would be subject to the same limitations as noted above for Network charges.

## <u>Section 3.3.1 - Quantifying Direct Benefits - Reduced Network Transmission and WMSC Charges</u>

On pages 9-10 the Discussion Paper examines the merits of using an ex-ante versus an ex-post approach to estimating the direct benefits associated with reduced network transmission and WMSC charges. VECC agrees with the position that forecasts of

such benefits could encompass significant errors and that a calculation (or a subsequent true-up) based actual results is preferred.

However, VECC is concerned that the delay in reflecting actual data may be even longer than indicated. The example given suggests that the ex-post calculation would be based on a one-year lag (i.e., include 2010 benefits in 2011 rates). However, the timing of the rate approval for a given test year is such that the data required to do an ex-post calculation for the preceding year may not all be available in a timely fashion to permit a calculation based on actual values.

Even with this delay, VECC considers the use of actual data to be preferable given the uncertainty associated with any forecast of benefits. For those distributors where there are significant dollars involved the Board should offer the option of using forecast values in conjunction with a variance account (as discussed at the bottom of page 9/top of page 10). It would be up to the distributor to determine and demonstrate that its circumstances warranted the additional administrative burden associated with managing and clearing a variance account.

The Discussion Paper suggests (Footnote #6) that ex-ante forecasts would need to be based on non-weather corrected forecast of renewable generation output. In VECC's view production of such a forecast would be particularly problematic and requires expertise that distributors definitely do not possess and which, in all likelihood, does not exist anywhere to the level of precision required. Indeed, VECC submits that any such forecast which looked out over the coming 12 months would be speculative at best. In VECC's view, this reinforces the case for determining the "benefits" on an ex-post basis.

The Discussion Paper indicates (page 10) that the benefits would be calculated based on the impact of renewable generation on the IESO's billing determinants for transmission network and WMSC charges. As noted in the VECC comments regarding sections 3.1 & 3.2, the calculation of the "benefits" is not that straightforward. The calculation must also account for the fact that the Transmission Network and WMSC rates are higher and reduce the calculated benefit accordingly. This reduction is something that will likely need to be calculated by the Board based on an estimate of the overall impact on the respective billing determinants arising from the impact of renewable generation for all distributors. In VECC's view, if the Board is unable to make this adjustment then a question arises as to whether deemed benefit is "readily quantifiable" and therefore meets the eligibility criteria set out on page 6.

There are a couple of other issues regarding the calculation of the benefits associated with reduced network transmission and WMSC charges that need to be addressed. While all renewable generation connected to a distribution system has the potential to reduce these charges all such generation may not trigger additional distributor costs for expansion and/or renewable enabling investments. Furthermore, even if such costs are triggered, the benefits could (particularly for individual cases) exceed the costs. An issue therefore arises as to whether the "benefit" calculation should be done on an

aggregate basis on a more disaggregated basis such as by generator or by cluster of generators associated with each particular expansion investment. In either case, as a matter of principle, the rate protection calculation (per Section 3 (1) of Ontario Regulation 330/09) should not result in a negative value. If the arithmetic produces a negative value then the amount of rate protection to received should be set at zero.

In terms of the level of disaggregation that should be used in calculating the benefits, it is VECC's view that an aggregate approach which only looks at the impact on the total impact on the distributor's bill for network transmission and WMSC charges is inappropriate as it fails to determine "the direct benefits that accrue ... as a result of all or part of the eligible investment made or planned by the distributor". More specifically, using an "aggregate approach" would not properly match benefits with eligible investments. VECC recognizes that undertaking to perform the calculation on a project by project basis would likely to too onerous. Furthermore, it would require having to allocate the any eligible investments in distribution system expansion among the individual generators served by a particular expansion.

In VECC's view, the appropriate approach is to consider clusters of renewable energy projects, where each cluster is served by the same system expansion investments. The calculation of direct benefits would then be done as follows:

- First the eligible investment in each system expansion would be determined (EI).
- The "benefits" associated with the improved capability of the distribution system for load customers due to any eligible investment in the system expansion would be determined (B1).
- The benefits due to reduced network transmission and WMSC charges arising from the renewable generators connected to the "system expansion" would then be determined (B2).
- The rate protection associated with each system expansion would then be determined (EI-B1-B2).
- To the extent the benefits exceed the eligible investment the residual could be applied against any eligible renewable enabling investments up to a maximum of the value for B2.
- For those renewable generators where no eligible system expansion investment is required, the benefits due to reduced network transmission and WMSC charges would only be applied against the costs of any eligible renewable enabling investments.

VECC acknowledges that the above approach is not perfect in that it assumes renewable enabling investments are attributable to all renewable generation. However, it does properly match the costs for system expansion with the attributable benefits.

**Issue for Comment #2:** Are there any circumstances under which a distributor should be permitted to deviate from the proposed ex-post approach and use an ex-ante (i.e., forwarding looking forecast) approach?

Please see the second paragraph in the comments under Section 3.3.1.

<u>Section 3.3.2.1 - Quantifying Direct Benefits – Improved Capability of Distribution</u> System for Load Customers – Proposed Approach

**Issue for Comment: #3:** Are there any potential refinements to the proposed Guiding Principles discussed above?

VECC agrees with the second proposed guiding principle, i.e., that the level of detail and analysis should be commensurate with the circumstances of the distributor. However, at the same time the appropriate economic signals must be provided to a distributor regarding the "value" or more detailed analysis. In order to do so, any simplified approach employed by distributors and/or adopted by the Board for estimating direct benefits should err on the side of over estimating such benefits. This would produce a result where the simplified (low cost) approach results in a reasonable but likely lower level of rate protection than if a higher cost approach was used. Distributors could then properly weigh their own circumstances and determine if more detailed analysis was warranted.

VECC also agrees with the fifth proposed guiding principle and the proposition that renewable enabling improvements can provide a benefit to load customers. However, VECC is concerned that such benefits may not be readily quantifiable as required by the first proposed guiding principle. As noted earlier, the fact that such investments have not already been made by the distributor would suggest that the value/benefit of such investments to load customers is less than the cost of the investment. As result, only a portion of the investment should deemed as a "benefit". The problem then arises as to how this portion should be calculated. Unless such investments were already included in the distributor's long term capital plan and are now simply being advanced, VECC submits that there may be no reasonable way the benefit to load customers can be calculated even if the distributor was willing to undertake an extensive analysis. As result, the Board should consider either dropping this principle or limiting its applicability to those circumstances where a value can be readily determined.

**Issue for Comment #4**: Should any additional Guiding Principles be considered by the Board?

At this time, VECC does not a have any suggestions regarding additional guiding principles that should be considered.

**Issue for Comment #**5: Are there any potential refinements to the proposed criteria discussed above for the purpose of estimating the direct benefits?

The criteria identify separately the circumstance where new customers are served by an eligible investment (pages 12-13) and the circumstance where the eligible investment accommodates future load growth (pages 13-14). In VECC's view unless care is taken this could result in double counting the benefits to load customers. If a "benefit" is determined to exist on the basis that the eligible investment will help accommodate expected load growth (per pages 13-14) then the extent to which the facilities are used to serve "new" load customers has already been determined.

What the Board may need to consider is whether certain materiality thresholds are required to address those circumstances where actual load growth (i.e., connection of new load customers) turns out to be significantly different than forecast. This would be similar to the circumstances discussed in the third full paragraph on page 13 and could lead to either an increase or a reduction in rate protection going forward.

VECC does not agree with the proposition (page 14) that the ability to integrate renewable generation is directly related to the size of the generators. The cost integrating a number of small generators located in the same area/region of a distributor's service territory may well be equal to or greater than that of integrating one single generator of an equivalent size overall. What is likely more critical is the MWs of generation being integrated on an individual feeder or (to a lesser extent) by individual sub-station.

Care will need to be taken to make sure that Renewable Enabling Improvement investments are not also included in the eligible investments deemed to be replacement assets (under Asset Condition). Similarly, care will have to be taken to ensure the Asset Condition criteria does not capture investments also included under Customer Load Growth. The example offered in the Discussion Paper is the replacement of a 15 MVA transformer with a 25 MVA transformer. It would be inappropriate (and result in double counting) if a Load Growth benefit was attributed to the investment as a result of the increase in capacity and then the entire cost of the 25 MVA transformer was also used to determine an Asset Condition benefit.

**Issue for Comment #6:** Are there any other criteria that the Board should potentially take into consideration or should certain criterion listed above not be taken into account? In proposing the addition and/or elimination of certain criteria, a solid business case should be made for the Board to consider the merits.

VECC has no suggestions for additional criteria at this time.

**Issue for Comment #7:** Is a ranking or weighting of the criteria above necessary? If so, please propose an appropriate ranking or weighting, from most to least applicable, and provide a supporting justification.

VECC does not believe that a ranking or weighting of the criteria is necessary or even appropriate. The criteria effectively identify different considerations that should be made by a distributor in its determination of direct benefits. For some, the calculations may be more easily performed and, therefore, the Board should expect the criteria to be addressed by most, if not all distributors. For other criteria more detailed and costly analysis may be required and the Board's expectations should be limited to those cases where the findings are expected to be material. While electricity distributors are in the best position to comment on the difficulty of applying the various criteria to their situation, it is VECC's view (based on its experience participating in various cost of service rate application reviews) that the Asset Replacement and Customer Load Growth (including investments not used by Qualifying Generators) criteria would be the "easiest" to apply. The other criteria (including Service Quality Improvements) would be more problematic.

**Issue for Comment #8:** Are there any information limitations that may prevent certain distributors from providing an assessment of any criteria above?

The discussion regarding Service Quality Improvements (pages 14-15) suggests that the benefits to load customers associated with Renewable Enabling Improvements will be greater if the improvement is located in high (customer) density portion of the distributor's service territory. VECC agrees that this is likely true in principle. However, as noted in its comments regarding the fifth guiding principle, VECC questions whether it is at all practical to quantify the <u>benefits</u> to load customers of Renewable Enabling Improvements whether they are in high or low density areas. In VECC's view the unavailability of information regarding customer density (per page 15) density is only one of the shortcomings in the data needed to properly estimate such benefits.

**Issue for Comment #9:** In the absence of having the best available information possible (e.g., recently completed study), are there any factors above for which a distributor would not be able to provide a reasonable estimate?

Again, it is VECC's view that unless the Renewable Enabling Improvement investments were already included in a distributor's long term capital plan there is inadequate information available to determine the benefit to load customers of renewable enabling improvements. Admittedly one could go through an exercise of "allocating" the cost of such investments between load and generator customers based on MWs or some other parameter. However, such an exercise would <u>not</u> provide an estimate of the benefit accruing to load customers from such investments.

**Issue for Comment #10:** What information should all distributors already have on hand (e.g., for distribution planning) that would allow for a reasonable estimate that is specific to certain areas of a distributor's territory of: (1) load growth; and (2) customer density?

This issue is best addressed by the electricity distributors. However, VECC has noted during its participation in cost of service rate proceedings that there is wide variation across distributors in terms of their approach to load forecasting or even capital planning. As a result, in VECC's view it would not be reasonable for the Board to assume that all distributors develop load forecasts for more than just rates setting purposes or that all distributors have capital plans that extend beyond the (next) budget year.

**Issue for Comment #11:** Where provincial ratepayers have provided rate protection and the asset is not ultimately used by the distributor as an eligible investment, Board staff proposed that the amount of rate protection should be reduced accordingly going forward to reflect the use of the investment for other purposes. In such cases, are there any circumstances under which the amount of rate protection provided by provincial ratepayers should not be reduced? If so, please explain.

Under circumstances where renewable generators do not materialize as originally assumed for purposes of incurring eligible investments, it is VECC's view that the amount of rate protection should not be varied unless the demand from load customers using the associated "expansion facilities" has materially changed from that assumed for purposes of determining the initial level of direct benefits.

Under Ontario Regulation 330/09, it is the responsibility of the Board to determine the direct benefits associated with eligible investments. The decision to make the eligible investments was predicated on the basis that a certain amount of renewable generation would materialize and the associated assets would be required to integrate that generation into the distribution system. Presumably, the initial calculation of direct benefits recognized that this investment also obviated the need for (future) investments to serve load customers and calculated the value accordingly. This value does not change simply because the generation failed to materialize as anticipated. Unless the anticipated usage of the assets by load customers changes from that assumed in the initial calculation there is no reason to presume the direct benefits have changed.

In VECC's view this issue also raises a larger matter that is whether the calculation of direct benefits should be done on an ex-ante, on an ex-post basis or on an ex-ante basis with true up through a variance account. A related matter is whether how the determination and recognition of direct benefits will be integrated with the "funding adder for renewable generation connection" and the subsequent true-up that the Board has made provision for (Guideline G-2009-0087). In VECC's view an ex-ante approach with a true-up through a variance account would be the best way to proceed at this point for those distributors who anticipate significant levels of "eligible investment". For those distributors with only minor levels of investment an ex-post approach should be used. VECC's preference for these approaches, as opposed to a strictly ex-ante approach, is predicated on the current uncertainty associated with the quantity of new renewable generation that will evolve in response to the OPA's programs and precisely where it will occur. In this regard, VECC notes that location is extremely important as this will dictate

the actual level of eligible investment that will occur. However, accurate forecast of such information may be difficult for distributors to provide at this time, Indeed, the Green Energy Plan recently filed by Hydro One (which the Staff Discussion Paper identifies as the most comprehensive one filed to-date (page 3)) has not identified specific MWs by location/feeder and the associated investments specifically required. Rather its forecast of eligible investments has been done on a more generic basis. This is because there is considerable uncertainty as to the response to the new OPA programs as well as uncertainty regarding how many of the applications received will actually result in installed generation.

<u>Section 3.3.2.2 - Quantifying Direct Benefits – Improved Capability of Distribution</u> <u>System for Load Customers – Potential Future Option</u>

**Issue for Comment #12:** Should the Board consider a certain standardized approach? If so, how should the approach be standardized?

In VECC view a standardized approach using "rules of thumb" may be appropriate for distributors with minimal levels of eligible investment. However, as the Board Staff Discussion Paper notes (page 18), there is currently no information available on which to base a "standardized approach". More importantly, there is no information available to suggest that a standardized approach is reasonable. For example, experience will provide a range values for direct benefits (due to improved distribution system capability) as a percentage of total eligible investment associated with system expansion and renewable enabling improvements. However, if the range is unduly large it may be inappropriate to use "single value" in a standardized approach.

In VECC's view experience with individual distributor applications is required before one can make a final determination as to the applicability of a "standardized approach". However, the merits of such an approach are worth investigating once the required information is available.

**Issue for Comment #13:** Would a certain percentage of expansion investments and a certain percentage of REI investments (using a historical "baseline" specific to each distributor) provide a reasonable estimate on a go forward basis?

See comments regarding preceding issue.

**Issue for Comment #14**: If the Board decided a standardized approach would be appropriate for certain distributors:

(i) What timeframe would be suitable for implementation?

(ii) What would an appropriate threshold be to determine which distributors could proceed under a standardized approach and which distributors should be required to continue under the more rigorous assessment discussed in section 3.3.2.1?

A suitable timeframe is one that allows the Board to: a) collect sufficient information (i.e., receive and review sufficient applications) to provide a reasonable range of values direct benefits as function of eligible investments and b) assess whether or not the standardized approach (involving standard percentages) is appropriate. VECC's initial views are that such an analysis should involve the results from at least 15-20 distributors and that the distributors involved should represent a reasonable cross section of the types of distributors in the province (as determined using the cohorts the Board has established for benchmarking).

As noted earlier in these comments, it is VECC's view that the threshold for determining the applicability of a "standard approach" should mirror that adopted by the Board for purposes of determining when a Detailed GEA Plan is required (per EB-2009-0397).

Thank you for the opportunity to comment. If you have any questions please contact either Bill Harper (348-0193) or myself (767-1666).

Yours truly,

Michael Buonaguro Counsel for VECC